Adolescent smoking in Wales: the role of school smoking policies and the wider school environment

Stephen Burgess

This thesis is submitted in fulfilment of the requirements for the Degree of Doctor of Philosophy at Cardiff University

December 2006

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106-1346

DECLARATION

This work has not previously been accepted in substance for any degree and is not concurrently submitted in candidature for any degree.

Signed ..... (candidate)

Date ..31/12/06.....

STATEMENT 1

This thesis is being submitted in partial fulfillment of the requirements for the degree of .....(insert MCh, MD, MPhil, PhD etc, as appropriate)

Signed ..... (candidate)

Date ..31/12/06.....

STATEMENT 2

This thesis is the result of my own independent work/investigation, except where otherwise stated.
Other sources are acknowledged by explicit references.

Signed ..... (candidate)

Date .....31/12/06.....

STATEMENT 3

I hereby give consent for my thesis, if accepted, to be available for photocopying and for inter-library loan, and for the title and summary to be made available to outside organisations.

Signed ..... (candidate)

Date .....31/12/06.....

Acknowledgments

There are many people I have to thank for their assistance during the course of this work.

Firstly, I am grateful to the 46 teachers who gave up their time to talk to me about smoking policy and all the staff who completed teacher questionnaires. This project could not have happened without collaboration with colleagues from the Health Promotion Division of the Welsh Assembly Government involved in implementing the 2001/2 Health Behaviour in School-aged Children study in Wales. In particular, I would like to thank Chris Roberts; Anne Kingdon; Jan Bunce and Angela Clements. I would also like to thank all those pupils that took part in the survey.

I would like to thank my supervisor, Laurence Moore, for his guidance over the last few years. I would also like to thank Mick Bloor for his input as second supervisor in the early stages of the thesis, before he left Cardiff. I would also like to thank Amanda Coffey and Chris Taylor for their help.

I would like to thank Liz Renton and Lesley Noaks for their help during the final stages if this thesis and Jane Salisbury and Lindsey Prior for their comments in my progress review.

Many friends and colleagues have helped with support both moral and academic over the years, and without their input, this task would have been even harder. Particularly, I would like to mention those I've shared both offices and many conversations with at various stages of this journey: Anand; Becci; Bryn; Chris; Emmanuel; Ingrid; Jo; Kirsty; Katy; Lena ; Mike; Neil; Nick; Sara; Sarah; Sue and Susie.

Finally, to my wife Anna, thank you. For understanding all those evenings and weekends I had to be in the office. For being a great reference checker. Only you know the real struggle and without you it would have been impossible.

Abstract

Acknowledging adolescent smoking as a current public health priority both in Wales and elsewhere, this thesis investigated the potential role of school smoking policies in moderating adolescent smoking behaviour. The study builds on a literature which suggests that certain characteristics of school smoking policies may be associated with lower adolescent smoking prevalence in schools, but which call for further research into policy contexts. Particularly, this builds on the work of Moore *et al* (2001) whose Wales-based study recommended the further investigation of *policy contexts*, particularly referring to *policy content* and *enforcement*.

This study adopted a mixed-method approach in order to collect more rigorous data on school smoking policies than in many other studies to date. A teacher survey concerning school smoking policies was conducted in schools taking part in the 2001/2 Health Behaviour in School-aged Children (HBSC) study in Wales. Analysis of these data was used to inform interviews conducted with a local 'expert' on smoking policy in the same schools. Interview data were used to investigate key characteristics of smoking policies in schools. Indicator variables were then devised to discriminate between schools on the basis of these characteristics. These were analysed in association with pupil smoking prevalence data collected by HBSC.

The multi-level analysis contradicted much of the existing smoking policy literature, discovering no significant association between any policy-level characteristics and pupil smoking. The study concludes that, by using more in-depth data than many other investigations, it has potentially highlighted that the effectiveness of smoking policies in moderating adolescent smoking may be over-stated in the literature or may have changed in recent years. Interview data revealed between-school variation in the prioritisation of smoking policy and the resulting extent to which policy and its enforcement promoted consistent no-smoking messages and suggested potential areas for future investigation and intervention.

Contents

Total word count:
101,459 (excluding tables, appendices and references)

List of Tables

Lists of Figures

-1-

Introduction

1.1 Adolescent smoking: the public health challenge

The reduction of adolescent smoking is a public health priority both in Wales and elsewhere. Long-term population health improvement is a cornerstone of UK health policy (Wanless, 2002, 2003, 2004; Welsh Assembly Government, 2002a; Welsh Office, 1998a) and improvement in the health of children and young people is fundamental to this target (Wanless, 2003; Welsh Assembly Government, 2002a; Welsh Office, 1998a). If patterns of health and well-being for life can be established among youth, then both their immediate health, and the whole population's long-term health, may be improved (Lynagh *et al*, 1997; Wanless, 2002, 2003, 2004; Welsh Assembly Government, 2002a; Welsh Office, 1998a).

Most adult smokers begin smoking in adolescence (Backinger *et al*, 2003; Brundtland, 2002; Clarke *et al*, 1994; European Commission 2000; Mackay & Eriksen, 2002; Peck *et al*, 1993; Reid *et al*, 1995; Reitsma & Manske, 2004; Thun & da Costa e Silva, 2003; Tubman & Vento, 2001) with the dramatic uptake of smoking between the ages of 11 and 15 being well documented (British Medical Association, 2003; Lantz *et al*, 2000; MacFadyen *et al*, 2003; Reid *et al*, 1995; Royal College of Physicians, 2000; Willemsen & de Zwart, 1999). Once adopted, a smoking habit can be hard to change and is detrimental to health and consequently has been identified as an important public health problem in Britain (HMSO, 1998; Royal College of Physicians, 2000; WHO, 2004a). If smoking uptake can be reduced in adolescence, this will contribute to achieving long-term and short-term public health gains. Schools have been increasingly identified as appropriate sites for tackling adolescent smoking. Perhaps one of the biggest challenges in addressing adolescent smoking is that uptake is influenced by a complex range of factors (Mayhew *et al*, 2000;

Nutbeam & Aaro, 1991; Reid *et al*, 1995) and consequently adolescent smoking prevention is a difficult task for which there is no one "magic" solution (Reid *et al*, 1995; Yach & Ferguson, 1999). This study investigates school smoking policy as one possible approach, among many potential approaches to addressing the public health priority that is adolescent smoking.

1.2 The rationale for investigating the role of school smoking policies in moderating adolescent smoking behaviour

Schools have been increasingly identified as appropriate health promotion contexts by both policy documents and the academic literature on youth health promotion. This has been paralleled by the apparent devolution of responsibility for youth health to our schools. As a result, there has been a research focus on investigating schools in order to identify potentially successful school-based interventions. Smoking is no exception and it is schools that are most often used as the mode of delivering smoking education (Nutbeam & Aaro, 1991). However, the traditional approach of the school has been one of usually didactic education programmes (Lynagh *et al*, 1997; Samdal *et al*, 1998). However evidence on the effectiveness of these methods has been limited (Anderson & Hughes, 2000; Denman, 1999; Lynagh *et al*, 1997; Nutbeam & Aaro, 1991; St Leger, 2001) and investigation into different approaches is recommended. In investigating the potential role of secondary school smoking policy in influencing adolescent smoking behaviour, this study investigates one approach to addressing adolescent smoking, in one social context.

While there has been relatively little published research specifically on school smoking policies, the existing literature does suggest that certain characteristics of school smoking policies are associated with lower adolescent smoking rates and may therefore have the potential to lower smoking should they be applied across all schools. However, this evidence is both contested and limited and many calls are made for more research into school smoking policies. Particularly, this work builds on the work of Moore *et al* (2001), who found an association between policy strength, policy enforcement, and pupils'

smoking behaviour but recommended that research into the relationship between school smoking policy and smoking prevalence should investigate *policy contexts* further, particularly referring to *policy content* and *enforcement*. It is such calls for more research that this study set out to answer.

1.3 Approach and methods of the study

The smoking policy literature has been dominated by quantitative studies which collected data on smoking policy using survey instruments, and reduced these solely to indicator variables for analysis in association with prevalence data. A recent notable exception is the work of Turner and Gordon (2003a - and as Gordon & Turner, 2004a,b) which applied qualitative research to pupil and staff perceptions of policy enforcement. This project combined the use of qualitative and quantitative techniques to answer the literature's call for more in-depth data to inform the debate on school smoking policies. The aim of the study was:

> *To identify and investigate characteristics of secondary school smoking policies and their enforcement which may moderate the extent to which they successfully reduce adolescent smoking behaviour*

In order to achieve this aim, the work set out to achieve the following objectives:

1. To collect rigorous data on the development, content and enforcement of school smoking policy in Wales

    - *Undertake a **teacher survey** to identify patterns of smoking policy and its enforcement within Welsh HBSC 2001/2 schools.*
    - *Undertake **teacher interviews** with school experts within Welsh HBSC 2001/2 schools. These will use survey findings (including inconsistencies in reporting) as a basis to probe more deeply into smoking policies and their enforcement).*

2. To identify characteristics of school smoking policies and their enforcement that may potentially moderate the extent to which policies reduce adolescent smoking behaviour

    - *Transcribe teacher interviews and undertake a thematic analysis of these data in order to develop this conceptual framework*

3. To define new indicators to enhance analysis of the relationship between school smoking policies and adolescent smoking behaviour

    - *Create new **policy indicators** (quantitative variables) that describe variation in characteristics of school smoking policies and their enforcement identified through analysis of teacher interview data*
    - *Use teacher interview data to allocate schools into these variables*

4. To assess the extent to which characteristics of school smoking policies and their enforcement are associated with lower prevalence of adolescent smoking in Welsh schools

    - *Conduct multi-level analyses of the new policy indicators in association with self-reported data on pupil smoking prevalence from HBSC 2001/2 in order to:*
    - *Examine the extent to which various policy-level characteristics are associated with lower levels of adolescent smoking in Welsh schools*
    - *Examine the extent to which smoking policies that produce more consistent no-smoking messages are associated with lower levels of adolescent smoking in Welsh schools*
    - *Examine the extent to which Wider School Environments (as defined by enforcement-level characteristics) that are more supportive of school smoking policies are associated with lower levels of adolescent smoking in Welsh schools*
    - *Examine the extent to which schools where the whole policy context (i.e. policy and its enforcement) is more supportive of producing consistent no-smoking messages are associated with lower levels of adolescent smoking in Welsh schools*

5. To draw conclusions about the potential relationship between characteristics of school smoking policies and their enforcement, and the potential success of those policies

    - *Use the results of the qualitative and quantitative analyses to draw conclusions about the potential relationship between the characteristics of school smoking policies and their enforcement, and the potential success of those policies*

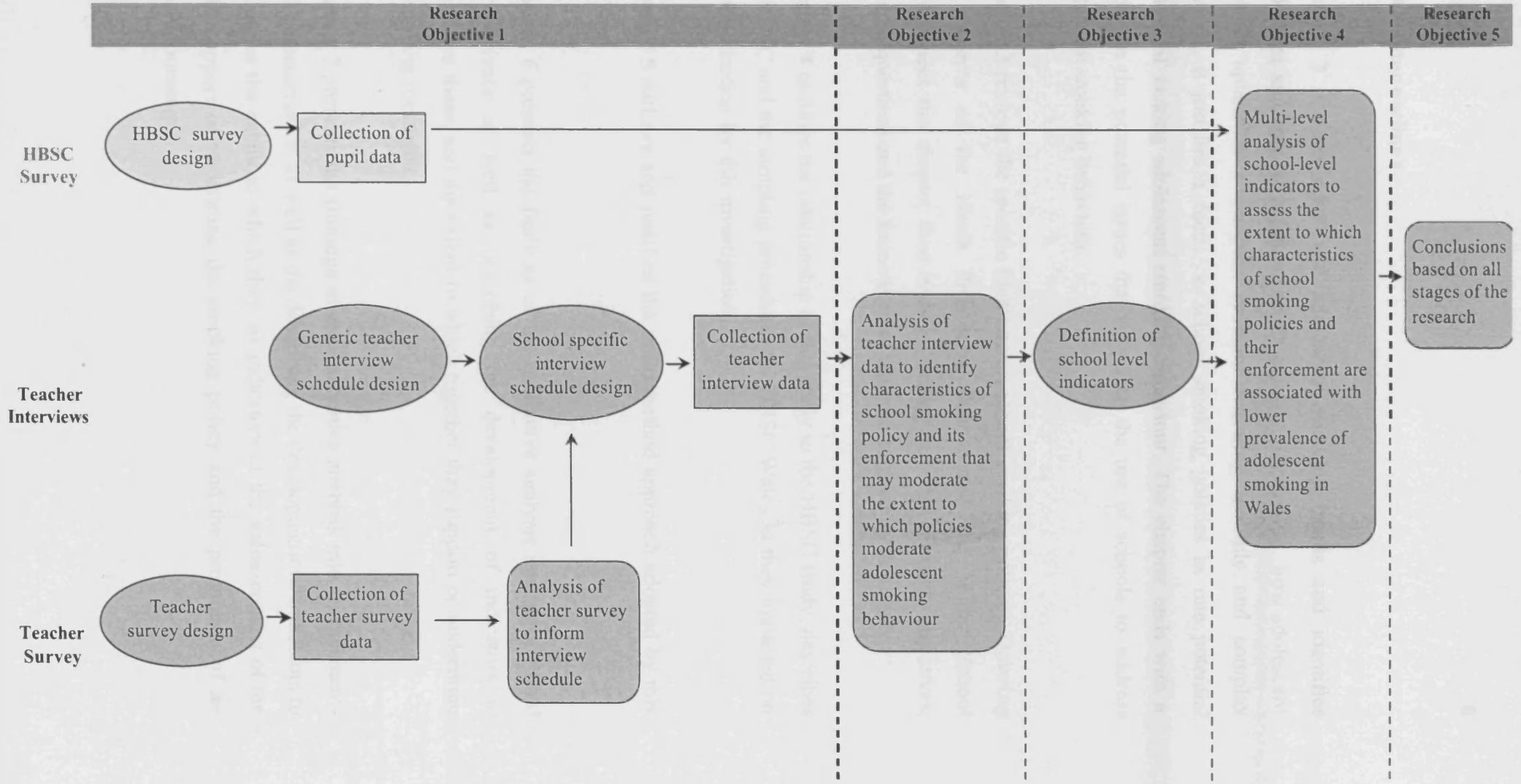
It did this by adopting a framework of analysis that brought together ideas from various literatures that had not before, as far as the author was aware, been applied to Welsh school smoking policies and seldom applied explicitly to studies more broadly. The framework distinguished between policy- and enforcement-level characteristics, assuming that in order to be effective and reduce adolescent smoking behaviour, it was important both for policy-level characteristics to produce consistent messages regarding the importance of no-smoking, and for the Wider School Environment (WSE) (including enforcement-level characteristics) to support this. The study investigated variation in policy- and enforcement-level characteristics (as indicators of the value-context produced by the WSE) and how they supported or undermined consistent no-smoking messages. Together, these created the policy context. As far as the author is aware, published studies of Welsh school smoking policy have rarely, if ever, used such an approach, with such a data set in order to investigate policy before.

Research design was designed to fit in with collaboration with the Health Promotion Division of the Welsh Assembly Government, who were responsible for implementing the 2001/2 Health Behaviour in School-aged Children (HBSC) study in Wales. HBSC is a trans-national study collecting self-reported data on adolescent health behaviours and attitudes, including data on smoking prevalence. Moore *et al* (2001) had tied their study to 1998 HBSC data, and this study took advantage of the opportunity to do the same. A teacher survey collected policy data from HBSC schools. A teacher survey collected data on school policy from up to 5 teachers in each HBSC school. Across the 59 HBSC schools, this resulted in 186 returned questionnaires. These data were then used to inform the next stage of research, teacher interviews. Analysis of data in each school was used to identify areas of interest or conflict in teacher reporting to probe and follow up in the interviews.

Semi-structured telephone interviews were then conducted with local 'experts' on school policy in HBSC schools. Respondents in 46 of the 59 HBSC schools agreed to take part in an interview. Telephone interviews collected data on

policy and its enforcement. These data were then analysed thematically to explore between- and within-school variation in policy-level and enforcement-level characteristics. These were written up and the findings also used to develop indicators that summarised these characteristics and discriminated between schools based upon them. These included an assessment of the extent to which policy-level characteristics, the WSE and the policy context supported or undermined consistent no-smoking messages. Indicators were analysed in association with HBSC self-reported data on pupil smoking prevalence collected in each school. Conclusions were then drawn based on all stages of the research. This process is summarised in Table 1.1 which relates these stages to the Research Objectives. This is discussed further in Sections 5.1 and 5.2.

Table 1.1 Summary of the stages of the project related to Research Objectives



1.4 Chapter outlines

Chapter 2 outlines adult and adolescent smoking trends and identifies adolescent smoking as a public health priority. Describing how adolescent smoking uptake is a complex problem requiring multiple and complex solutions, it justifies a focus on school smoking policies as one potential method of tacking adolescent smoking behaviour. The chapter ends with a caveat on the potential issues that may face the use of schools to address adolescent smoking behaviour.

Chapter 3 reviews the specific literature on school smoking policies. Drawing on concepts of the Heath Promoting School and the Wider School Environment the chapter then ends by setting out the research objectives; research questions and the framework of analysis adopted by this study.

Chapter 4 outlines the relationship of this study to the HBSC study, describes the HBSC and the sampling procedures for HBSC Wales as they impacted on school selection for this investigation.

Chapter 5 outlines and justifies the multi-method approach adopted by this study.

Chapter 6 presents the findings of the qualitative analysis into policy-level characteristics as well as describing the development of indicators to summarise these, and the extent to which together they support or undermine no-smoking messages.

Chapter 7 presents the findings of the qualitative analysis into enforcement-level characteristics, as well as the describing the development of indicators to summarise the extent to which they, as indicators of the value-context of the WSE, support or undermine the smoking policy and the promotion of no-smoking messages.

Chapter 8 presents findings of the quantitative analysis in which indicators described in Chapters 6 and 7 were analysed in association with pupil smoking prevalence data from HBSC.

Chapter 9 discusses the findings and conclusions of the study and in the light of these makes some recommendations for best practice. The chapter also discusses how these findings will be disseminated and makes suggestions for future research.

1.5 Funding

This study was funded by a studentship from the Wales Office of Research and Development for Health and Social Care (WORD) – SO1/022.

-2-

Why investigate school smoking policies?

2.1 Introduction

Chapters 2 and 3 provide a context for this study. Through analysis of adolescent smoking as a public health priority requiring complex solutions, Chapter 2 explains the reason for focussing on school smoking policies as a means to tackling adolescent smoking behaviour. Chapter 3 follows this with a review of the specific literature on school smoking policies and ends by setting out the framework of analysis adopted by this study in order to move the investigation of school smoking policies forward. The research objectives are stated at the end of Chapter 3.

2.2. The importance of addressing adolescent smoking in Wales: contemporary and historical smoking trends

2.2.1 Difficulties in the use of smoking statistics and trend data

There are many contemporary sources of statistics regarding smoking prevalence, the vast majority of which are used in order to support an agenda or position on tobacco usage. As with any statistic, remembering these agendas is crucial. For this reason, only data where some rigour and transparency appears to have been applied to methods of data collection, or where the agendas of those involved in representing the data are transparent, are used in this section. Additional problems are encountered in locating data on long-term smoking rates. The first problem is the lack of a consistent data source. As methods of consuming tobacco have changed with the fashion (Royal College of Physicians, 2000; Gately, 2002), it appears as though data collection has often focused on the mode of consumption in vogue at any one

time. Secondly, it is difficult to find longitudinal data on tobacco usage collected by a single instrument and no direct prevalence data for the UK are available until the second half of the twentieth century (Royal College of Physicians, 2000). Shafey & Guindon (2003) argue that today, because *cigarette smoking* is the most common mode of tobacco consumption in most countries, measuring its prevalence is a good indicator of the extent of the tobacco epidemic. While this may be reasonable for contemporary data, when taking a long-term historical perspective on tobacco use it seems that other forms of tobacco consumption that are now less popular (e.g. snuff, cigars, pipes) should also be considered. However, these data does not appear readily available and as such, this section will focus on cigarette smoking. Two further justifications for this are that by the time regular collection of prevalence data was established, cigarette smoking had become the most popular form of tobacco consumption and secondly, it is cigarette smoking on which this research focuses.

2.2.2 Long-term adult smoking trends

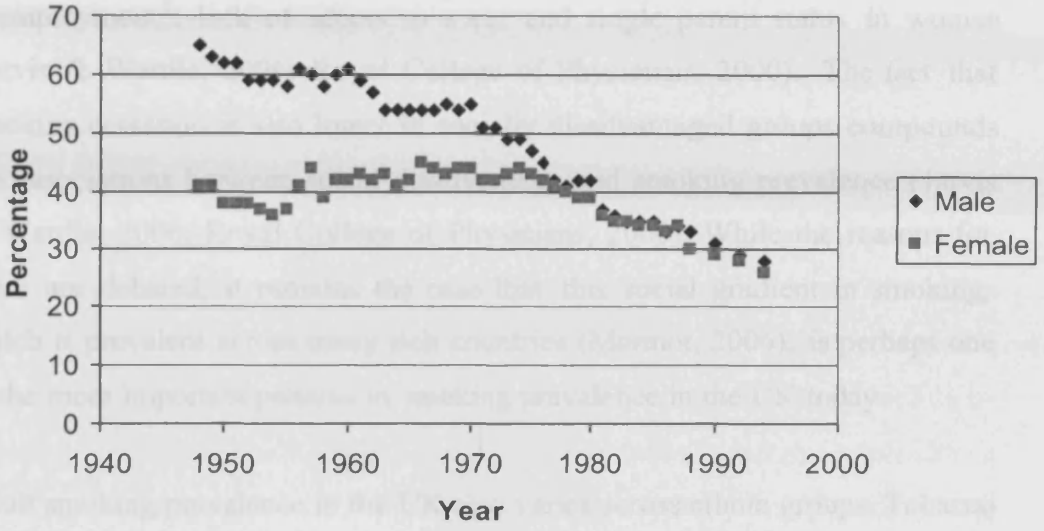
To contextualise adolescent smoking trends, it is useful to outline those of adult smokers. While early data are sparse, UK sources generally agree that the prevalence of adult smoking has decreased across the latter half of the last century. An historical and rigorous set of secondary data, drawing on a broad set of sources, is presented by Forey *et al* (2002:647-687). Table 2.1 and Figure 2.1 summarise some of their most consistent data on smoking prevalence, by gender, from 1948 onwards. This is a combination of data from the Tobacco Advisory Council (TAC) and the Office for National Statistics' (ONS) General Household Survey (GHS). While the combination of tow very different data sources is clearly problematic, other authors have drawn on TAC and GHS data, alongside other sources to investigate historical trends (Mackay & Eriksen, 2002; Royal College of Physicians, 2000).

Table 2.1 Estimated Prevalence of Smoking in Great Britain for Males and Females aged over 15 (1948-1994)

Year	Prevalence		Year	Prevalence	
	Male (%)	Female (%)		Male (%)	Female (%)
1948	65	41	1972	51	42
1949	63	41	1973	49	43
1950	62	38	1974	49	44
1951	62	38	1975	47	43
1952	59	38	1976	45	42
1953	59	37	1977	42	41
1954	59	36	1978	41	40
1955	58	37	1979	42	39
1956	61	41	1980	42	39
1957	60	44	1981	37	36
1958	58	39	1982	36	35
1959	60	42	1983	35	35
1960	61	42	1984	35	34
1961	59	43	1985	35	34
1962	57	42	1986	33	33
1963	54	43	1987	34	34
1964	54	41	1988	33	30
1965	54	42	1989	No data	No data
1966	54	45	1990	31	29
1967	54	44	1991	No data	No data
1968	55	43	1992	29	28
1969	54	44	1993	No data	No data
1970	55	44	1994	28	26
1971	51	42			

Source: Forey et al *(2002:656-663)*

Figure 2.1 Great British smoking trends for males and females aged 15 and over (1948-1995)



Source: Forey et al *(2002:656-663)*

While the end of the twentieth century has seen a general decline in adult smoking prevalence, it has been suggested that this downward trend may have ended in the UK as in other developed countries, with adult smoking prevalence rates stabilising (Edwards, 2004; Kiefe *et al*, 2001; ONS, 2004).

The historical data also illustrate a changing gendered dimension to prevalence trends. Ault smoking in the UK has clearly become a less gendered habit, a pattern that is repeated across Europe (Graham, 1996; Thun & da Costa e Silva, 2003). It has been asserted that gender differences in adult smoking prevalence in the UK are now minimal (Royal College of Physicians, 2000), although ONS emphasise that gender differences do still exist (ONS 2004: 121, 132).

There are other patterns of note within contemporary adult smoking. Higher smoking prevalence is associated with social disadvantage (Bobak *et al*, 2000; Jarvis & Wardle, 2006; ONS, 2004; Ogilvie & Petticrew, 2004; Royal College of Physicians, 2000). This relationship appears to be complex, with many apparently interrelated factors relating to socioeconomic status, disadvantage

and deprivation seemingly at play including low educational attainment, income and occupational class (e.g. Barbaeu *et al*, 2004); housing tenure; crowding; living in rented accommodation; being divorced or separated; unemployment[1]; lack of access to a car and single parent status in women (Jarvis & Wardle, 2006; Royal College of Physicians, 2000). The fact that smoking cessation is also lower in socially disadvantaged groups compounds the associations between social disadvantage and smoking prevalence (Jarvis & Wardle, 2006; Royal College of Physicians, 2000). While the reasons for these are debated, it remains the case that this social gradient in smoking, which is prevalent across many rich countries (Marmot, 2006), is perhaps one of the more important patterns in smoking prevalence in the UK today.

Adult smoking prevalence in the UK also varies across ethnic groups. Tobacco prevalence in ethnic minority groups in the UK differs both from white populations of European origin and between ethnic groups (ASH, 2004a; Bhopal *et al*, 2004; Bush *et al*, 2003). However, Bhopal *et al* warn that some of these differences may be an artefact of study design rather than an accurate reflection of actual prevalence.

There is also regional variation in smoking prevalence (ONS, 2004; Royal College of Physicians, 2000). This can be highlighted in data for general adult smoking prevalence, and in regional variation of gender differences.

2.2.3 Adolescent smoking trends

Having outlined historical and contemporary patterns of adult smoking, it is necessary to look at adolescent smoking patterns. Data on adolescent smoking appear to be less long-term than that for adults with attempts to collect rigorous and regular data, particularly from adolescents themselves, being more recent. The GHS, for example, only collects data from over 16 year olds, questions on smoking uptake being retrospective and with the youngest

[1] ONS claim that the lower prevalence of smoking in people aged 60+, who make up the majority of economically inactive people may largely account for the association of economic activity with smoking status (2004:123). Depending on how unemployment is measured (i.e. whether it only includes those of working age), this may be relevant here.

classification being *under 16* (ONS, 2004). Even where longitudinal data collected from adolescents themselves do exist, they are restricted to a relatively few economically developed countries (Thun & da Costa e Silva, 2003). Throughout the 1990s and early 2000s, two trends have dominated discussion of adolescent smoking across Europe and North America: the rise of adolescent smoking and the greater prevalence of smoking among girls. The extent of these trends is contested and probably varies geographically (and not just because of data collection methods). For example, in the United States (where much data on adolescent smoking are from), Kiefe *et al* (2001) claim that smoking among adolescents is still on the rise, while others claim that considerable increases in the early 1990s have been followed by a decline in adolescent smoking since the latter half of the decade (Backinger *et al*, 2003). Thun & da Costa e Silva (2003) highlight the presence of a geographical dimension to adolescent smoking trends. Similarly, the greater prevalence of smoking among adolescent girls has been documented, being raised as an important health issue that in some places extends as far back as the late 1970s (Husten *et al*, 1996; Lucas & Lloyd, 1999; Royal College of Physicians, 2000). Data presented by the Royal College of Physicians for 1996 in the UK show that 5% more adolescent girls smoke than boys, while the British Medical Association (2003) states that by 2002 an alternative source of data shows that this difference is down to 2%. Care must be taken not to over-interpret such data however as these are both survey estimates with an associated degree of sampling error and it is possible that these figures may be consistent with one another and may not suggest a change. However, in comparison to the British situation, data presented by Husten *et al* show that in the United States, since 1990 the figures for girls and boys are comparable. This allows the reiteration of three important facts. Firstly, data on adolescent smoking trends vary geographically. Secondly, data on adolescent smoking are often collected using different methods and classification of smoking behaviour, meaning that data between places, and times (even over time in the same place), are not always comparable. Thirdly, it is arguable that a lack of (until fairly recently) consistent longitudinal data collected from adolescents rather than retrospectively means that it is too early to be sure about such trends - although a counter argument to this is that the data are clearly showing

some patterns and it is better to work with these data than nothing. One exception to the second two problems that may shed light on the first point, is the Health Behaviour in School-aged Children (HBSC) study (see Chapter 4 for detail on HBSC and the current study's links to it). The 2001/2 study reported data on the prevalence of weekly smoking behaviour across 35 countries (Table 2.2). Of all the data HBSC presents (ever tried smoking; weekly smoking; daily smoking) weekly smoking is presented here as it is a common measure of regular adolescent smoking (Charlton & While, 1994). These data clearly indicate several patterns which are discussed below.

Table 2.2 Percentage of young people reporting smoking at least once a week, by age and country, 2001/2

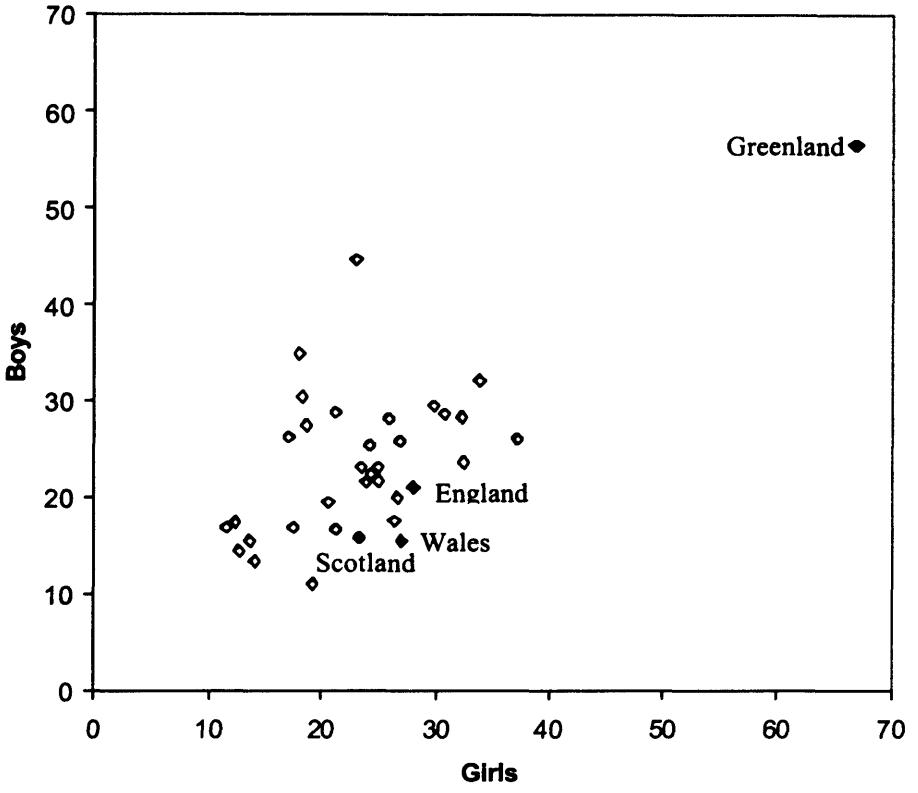
	11 year olds		13 year olds		15 year olds	
	Girls	Boys	Girls	Boys	Girls	Boys
Austria	0.6	1.4	7.4	6.4	37.1	26.1
Belgium (Flemish)	0.6	1.1	7	8.4	23.3	23.1
Belgium (French)	0.3	1	5.3	4.8	23.8	21.6
Canada	1.1	1.7	7.6	5.4	13.5	15.5
Croatia	0.4	0.4	3.9	5.5	24.9	23.2
Czech Republic	1	3	8.6	13.7	30.6	28.7
Denmark	0.2	0.4	4.5	6.2	21	16.7
England	2.5	2.6	14.3	10.1	27.9	21.1
Estonia	1.5	3.7	8	12.8	18.2	30.4
Finland	0.1	0.7	12.4	10.1	32.2	28.3
France	1.2	2	6.4	6.6	26.7	26
Germany	1.1	3.3	14.6	13.6	33.7	32.2
Greece	0.2	0.8	3	4.9	14.1	13.5
Greenland	8.5	4	36.7	18.8	66.7	56.6
Hungary	1.3	4.1	6.1	9.9	25.8	28.2
Ireland	1.6	2.6	8.5	4.9	20.5	19.5
Israel	1.2	5.4	5.4	9.9	11.6	16.9
Italy	0.7	2.6	6.7	8.5	24.9	21.8
Latvia	0.5	1.8	6	16.6	21.1	28.9
Lithuania	0.9	2.3	6.6	10.7	17.9	34.9
Malta	0.9	2	13.6	8.9	17.4	16.9
Netherlands	0.5	0.6	10	6.5	24.3	22.5
Norway	0.6	0.6	6.7	5.8	26.6	20.1
Poland	0.6	3.8	7.4	11.8	17	26.3
Portugal	1.7	4	11.7	13.7	26.2	17.6
Russian Federation	1.4	3	9.8	14.7	18.5	27.4
Scotland	1.1	1.4	10.7	6.1	23.2	15.9
Slovenia	0.5	2.2	4.1	6.2	29.7	29.5
Spain	1.2	2.8	9	7.9	32.3	23.6
Sweden	0.5	0.1	6	5.2	19	11.1
Switzerland	0.8	1.5	6.7	7.6	24.1	25.4
TFYR Macedonia	0.6	1.9	1.1	2.9	12.7	14.6
Ukraine	0.5	4.8	6	15.7	22.8	44.6
USA	1	1.2	4.5	7.4	12.3	17.5
Wales	1.6	2.1	14.8	8.1	26.8	15.5

Source: Godeau *et al* (2004)

2.2.3.1 Geographical variation in adolescent smoking rates

Geographical variation in adolescent smoking can be visualised by plotting the figures for 15 year-old girls and boys against one another (figure 2.2).

Figure 2.2 Scatterplot showing smoking prevalence of weekly smoking in 15 year old girls and boys for 35 countries in 2001/2



The spread of the data points illustrates geographical variation in adolescent smoking rates, with 15-year-old adolescents in Greenland clearly reporting the highest levels of weekly smoking among participating countries (girls, 66.7%; boys, 56.6%). With regards Great Britain, Wales, England and Scotland also display variation in reported smoking rates. Of the three countries, England has the highest prevalence of smoking for both girls (27.9%) and boys (21.1%). For girls, Wales has the second highest prevalence (26.8%) and Scotland the lowest (23.2%). However, for boys this is reversed with Scotland having a marginally greater prevalence (15.9%) than Wales (15.5%) with the lowest.

2.2.3.2 Adolescent smoking cessation gender differences

Recent concern over the higher rates smoking in adolescent girls has been mentioned above. As the last point above hints, the HBSC data can be used to describe trends in adolescent smoking gender differences. Table 2.3 shows the 35 HBSC countries ranked ordered according to how many more boys smoke

than girls, with countries where boys smoke the most being ranked at the top and countries where girls smoke the most at the bottom (i.e. ranked according to girl smoking prevalence minus boy smoking prevalence).

While girls do report more smoking than boys in two-thirds (23, 66%) of countries, this trend is not universal. In addition, the extent of any difference in smoking prevalence between boys and girls varies between countries. At one extreme, in the Ukraine nearly twice as many boys smoke (44.6%) than girls (22.8%), while Wales displays the greatest gender disparity in favour of girls smoking (26.8% compared to 15.5%). In countries such as Slovenia, however, differences in reported weekly smoking are minimal. While girls' smoking is apparently most problematic in Wales, in all three of the home countries more girls report weekly smoking than boys – a trend which has also been reported by the British Medical Association (2003).

Table 2.3 2001/2 HBSC countries ranked according to how many more 15-year old boys report weekly smoking than girls

	Smoking prevalence among girls (A)	Smoking prevalence among boys (B)	Difference ?(A-B)
Ukraine	22.8	44.6	-21.8
Lithuania	17.9	34.9	-17
Estonia	18.2	30.4	-12.2
Poland	17	26.3	-9.3
Russian Federation	18.5	27.4	-8.9
Latvia	21.1	28.9	-7.8
Israel	11.6	16.9	-5.3
USA	12.3	17.5	-5.2
Hungary	25.8	28.2	-2.4
Canada	13.5	15.5	-2
TFYR Macedonia	12.7	14.6	-1.9
Switzerland	24.1	25.4	-1.3
Belgium (Flemish)	23.3	23.1	0.2
Slovenia	29.7	29.5	0.2
Malta	17.4	16.9	0.5
Greece	14.1	13.5	0.6
France	26.7	26	0.7
Ireland	20.5	19.5	1
Germany	33.7	32.2	1.5
Croatia	24.9	23.2	1.7
Netherlands	24.3	22.5	1.8
Czech Republic	30.6	28.7	1.9
Belgium (French)	23.8	21.6	2.2
Italy	24.9	21.8	3.1
Finland	32.2	28.3	3.9
Denmark	21	16.7	4.3
Norway	26.6	20.1	6.5
England	27.9	21.1	6.8
Scotland	23.2	15.9	7.3
Sweden	19	11.1	7.9
Portugal	26.2	17.6	8.6
Spain	32.3	23.6	8.7
Greenland	66.7	56.6	10.1
Austria	37.1	26.1	11
Wales	26.8	15.5	11.3

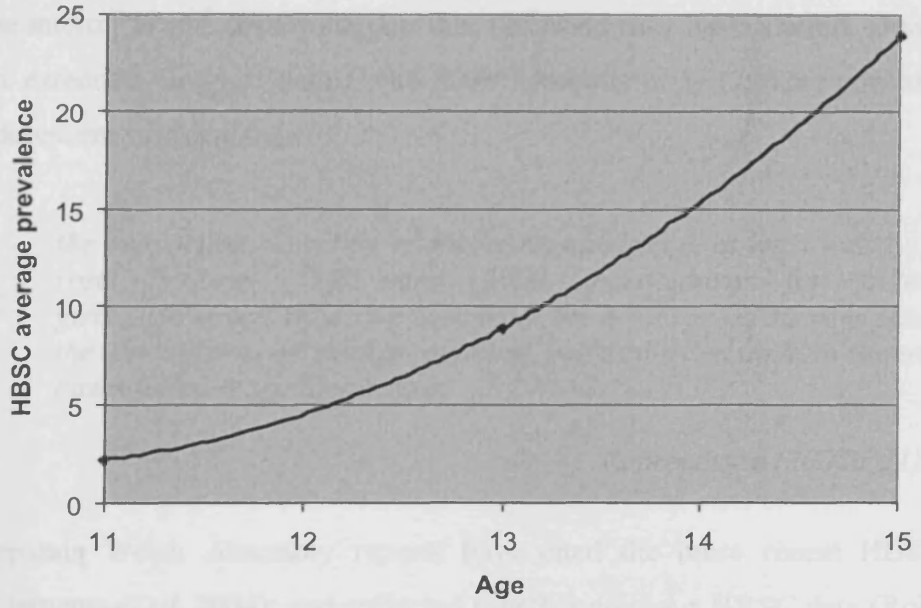
More boys smoke ↓ More girls smoke

Source: Godeau *et al* (2004)

2.2.3.3 Increase in adolescent smoking with age

The final trend illustrated by these data is an important one regarding adolescent smoking: as children get older, they are far more likely to smoke. The dramatic uptake of smoking between the ages of 11 and 15 is well documented both in the UK specifically (British Medical Association, 2003; Royal College of Physicians, 2000) and in the broader context (Lantz *et al*, 2000; MacFadyen *et al*, 2003; Reid *et al*, 1995; Willemsen & de Zwart, 1999) This trend can also be illustrated using the HBSC averages across the 35 countries of young people who report smoking weekly (figure 2.3).

Figure 2.3 Average number of young people from all 35 HBSC countries reporting smoking weekly by age, 2001/2



Note: A trendline has been added to demonstrate the non-linear rise in smoking prevalence with age

2.2.4 Adolescent smoking trends in Wales

While these data are cross-sectional, they do highlight geographical differences in adolescent smoking trends, showing clear regional variation, including within Great Britain. As there is this geographical variation, it is useful to examine adolescent smoking trends within our country of interest,

Wales. In Wales self-reported data on adolescent smoking from adolescents have been collected over recent years and therefore historical trends can be examined. There are two primary sources of information regarding adolescent smoking in Wales: the four yearly international Health Behaviour in School-aged Children (HBSC) study and the interim Welsh Youth Health Survey (see Chapter 4 for an explanation of both of these). Effectively, between them these provide a two yearly survey of a sample of the Welsh adolescent population which includes questions on smoking behaviour.

The data from Wales have presented a mixed picture over the last few years. In 1997, data collected between 1986 and 1996 led Roberts *et al* to claim that, in line with concerns expressed elsewhere in Europe and North America, contrary to the general decline in adult smoking rates, adolescent smoking rates appeared to be on the increase. More recent data derived from HBSC and the interim Welsh survey suggest that this trend may have altered. Drawing on an extended range of data (1986-2000), Roberts *et al* (2002a) now stated of adolescent smoking that:

> *the proportion reporting to smoke regularly (i.e. at least weekly), rose between 1986 and 2000, particularly for older girls...However, it can be seen from the most recent surveys that the prevalence of weekly smoking has stabilised and in some cases fallen (e.g. older boys).*
>
> *Roberts* et al *(2002a:11)*

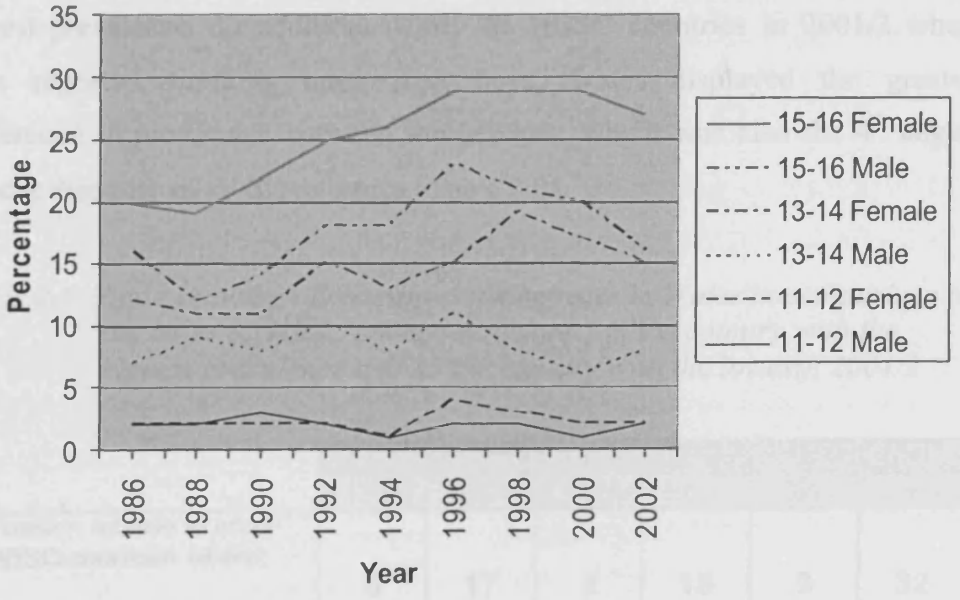
Separate Welsh Assembly reports have cited the more recent HBSC data (Clements *et al*, 2004), and collected together previous HBSC data (Roberts *et al*, 2002a). Table 2.4 and Figure 2.4 show the 2001/2 HBSC data (collected in 2002 in Wales) added to earlier HBSC data. It should be noted that the categories 11-12; 13-14 and 15-16 used in the Welsh reporting of the data correspond to the 11-year-old; 13-year-old and 15-year-old categories used in HBSC reporting above.

Table 2.4 Percentage of Welsh Adolescents Smoking Weekly, By Age Group (1986-2002)

			1986	1988	1990	1992	1994	1996	1998	2000	2002
Age group (years)	11-12	Male	2	2	3	2	1	2	2	1	2
		Female	2	2	2	2	1	4	3	2	2
	13-14	Male	7	9	8	10	8	11	8	6	8
		Female	12	11	11	15	13	15	19	17	15
	15-16	Male	16	12	14	18	18	23	21	20	16
		Female	20	19	22	25	26	29	29	29	27

Source: Roberts *et al* (2002a:12); Godeau *et al* (2004)

Figure 2.4 Percentage of Welsh Adolescents Smoking Weekly, By Age Group (1986-2002)



Source: Roberts *et al* (2002a:12)

The Welsh data clearly reflect several trends experienced more widely, demonstrating that the risk of adolescents being a regular (at least weekly) smoker increases dramatically as they progress through adolescence and secondary school and that girls continue to report higher numbers of weekly

smokers than boys (although the extent of these gender differences vary across time). In addition, as elsewhere in Europe and North America, contrary to a general decline in adult smoking rates, Wales has been concerned with adolescent smoking rates that have appeared to be on the increase. However, rises in weekly adolescent smoking in Wales throughout the 1990s appear to have been followed by a stabilising of, or even a decline in its prevalence.

Despite this recent stabilisation, adolescent smoking remains a large problem in Wales. Table 2.5 shows how Wales' adolescent smoking rates rank in comparison to the other 35 HBSC countries (where 1 is the country with the highest prevalence and 35 the country with the lowest). It can be seen that Wales is in the top quarter of countries with the highest adolescent smoking prevalence for 4 of the 6 categories, with a 5th (13 year-old boys) only just on the boundary of the top quarter of smoking. The only category that Wales does relatively well on is 15 year-old boys, where it is the country with the joint 4th lowest prevalence. In addition, of all the HBSC countries in 2001/2 where girls reported smoking more than boys, Wales displayed the greatest difference in prevalence between the genders, which was also the 4th largest gender disparity of all 35 countries (Table 2.3).

Table 2.5 Table showing adolescent smoking rates in Wales in comparison to the other 35 HBSC countries (where 1 is the country with the highest prevalence and 35 the country with the lowest), 2001/2

	11 year olds		13 year olds		15 year olds	
	Girls	Boys	Girls	Boys	Girls	Boys
Position relative to other HBSC countries where: 1 = *highest prevalence* 35 = *lowest prevalence*	**5**	**17**	**2**	**18**	**9**	**32**

While care is needed in the interpretation of longer-term trends, as when comparing any cross-sectional data over a period of a very few years, the data do suggest that Wales has both a relative and actual problem with adolescent smoking, ensuring that adolescent smoking still remains a public health

priority in the country. Despite apparent recent declines, adolescent smoking is still high, with girls smoking more than boys to a varying extent. In addition, the risk of adolescents being regular (at least weekly) smokers increases dramatically as they progress through secondary school. These suggest the need to address adolescent smoking in Wales and the potential for the secondary school context as a site of intervention to do so.

2.3 The importance of addressing adolescent smoking in Wales: adolescent smoking as a public health priority

Public health policy and attitudes occur at many levels. This section examines some of the changes in approaches to smoking and adolescent smoking that help characterise the contemporary approach in Wales.

Although evidence of the negative health impacts of tobacco use slowly grew from only about 100 years after its introduction to Europe in the middle to later part of the sixteenth century (ASH, 2004b; Doll, 1998; Gately, 2002; Mackay & Eriksen, 2002), it is in 1950 that Doll describes a "watershed" moment in the UK when, he argues, the place of smoking in medical culture shifts with the publication of several case-control studies demonstrating significant evidence for an association between smoking and lung cancer, and concluding a causal relationship between them (1998:96-97). This, he claims, is the point at which a shift in attitudes towards tobacco smoking begins within the scientific establishment. These epidemiological and medical conclusions soon filter through to both policy makers and the wider population, and policy makers begin to attempt to limit the harm that this habit may have upon the population and the economy. It seems likely that these moves were accelerated by an increasing fear of litigation.

In the light of this, adolescent smoking as a public health priority appears to have changed dramatically over the years. Indeed, as far back as the seventeenth century (male) pupils were sent to school with pipes, where they were taught how to smoke, as it was believed "necessary for a man's health"

(un-attributed 17th century quote cited by Gately, 2002:97)[2]. Understandings of childhood are, however, dynamic, shifting across both time and place (Prout, 2005). Combine this with the changing (and always contested) cultural notions of smoking, and the context is set for the emergence of policy that protects children from tobacco. Gately argues that in the Victorian era, smoking is reconstructed as a "man's sport – something a child might aspire to, but should not enjoy until of age." (2002:193). He proposes two cultural changes as being crucial in creating a more paternalistic approach towards children smoking. Firstly, a shift in thought around the turn of the twentieth century saw the Victorians believe that whereas smoking (which is predominantly a male habit) was not harmful to a man, it could cause stunted growth, infertility or smoker's heart in boys who smoked, effectively reducing their chances of a successful adult life. As Gately writes,

> *Curiously, the dangers posed to health by smoking were not presumed to carry beyond adolescence. It was believed that a grown man, like seasoned timber, could better withstand the shocks tobacco occasioned than a slender youth, a mere sapling, that might perish in its first drought or frost.*
>
> (2002:195)

Secondly, and perhaps more importantly, the belief that children should not smoke, he argues, is strengthened by changes in the legal status of children such as those encompassed by the 1870 Education Act which aimed to protect children, changing their status from "cheap labour" to state charges with the right to education and protection. It is from this apparent mix of changing child status, paternalism and pseudo-science that early legislation protecting children from the dangers of tobacco is seemingly born. Childhood smoking is widely seen as unhealthy much earlier than adult smoking: the 1908 Children's Act banning the sale of tobacco to children under 16 which continued until the Children's Act was replaced by the Children and Young

[2] It should be noted that Gately also highlights that the 17th century saw outbreaks of bubonic plague decimate the population of London and that at the time, tobacco was believed to have a preventative effect against it. What Gately fails to do, however, is explicitly draw the possibility that childhood smoking may have been encouraged at this time specifically in order to protect against the plague.

Persons Act in 1933, was some of the earliest smoking policy in the UK (ASH, 2004b).

Today, long-term population health improvement is a cornerstone of UK health policy (Wanless, 2002, 2003, 2004; Welsh Assembly Government, 2002a; Welsh Office, 1998a). Fundamental to this target, is improvement in the health of children and young people (Wanless, 2003; Welsh Assembly Government, 2002a; Welsh Office, 1998a). If patterns of health and well-being for life can be established among youth, then both their immediate health, and the whole population's long-term health, may be improved (Lynagh *et al*, 1997; Wanless, 2002, 2003, 2004; Welsh Assembly Government, 2002a; Welsh Office, 1998a). If successful, such interventions will lead to healthier lifestyles, thus reducing demand on health services in later life. This preventive model is especially crucial with our ageing population (Wanless, 2003). A focus on youth health is central to a preventive model in which interventions seek to encourage healthy lifestyles. As understandings of smoking and childhood have continued to change, tackling adolescent smoking has moved on from sheer paternalism to become a strategic public health priority within this preventative model, being a key element in reducing the long-term health costs of smoking among the whole population. Once adopted, a smoking habit is detrimental to health and consequently has been identified as an important public health problem in Britain (HMSO, 1998; Royal College of Physicians, 2000; WHO, 2004). Couple this with it being very well established that most adult smokers begin their habit in adolescence (Backinger *et al*, 2003; Brundtland, 2002; Clarke *et al*, 1994; European Commission, 2000; Mackay & Eriksen, 2002; Peck *et al*, 1993; Reid *et al*, 1995; Reitsma & Manske, 2004; Thun & da Costa e Silva, 2003; Tubman & Vento, 2001) and it becomes clear that if smoking can be reduced in adolescence, it will have positive benefits for the longer term health of the nation (Clarke *et al*, 1994). With the likelihood of a pupil becoming a smoker increasing as they progress through the school, tackling adolescent smoking is prioritised in order to have positive benefits for the longer term health of the nation (Reid *et al*, 1995). Trends in adolescent smoking outlined above, especially in the mid 1990s, and particularly amongst girls has further

encouraged public health policy to target adolescent smoking. Schools have increasingly been seen as a place where this should happen.

These attitudes towards adolescent smoking exist across all levels of public health policy. For example, internationally, the World Health Organization (WHO) arguably have the largest influence on such policy, being a specialised agency of the United Nations (UN) (UN, 2004). In identifying tobacco as a public health priority (WHO, 2004), they have maintained a particular focus on addressing adolescent tobacco use. This is illustrated, for example, in the highly publicised 2003 Framework Convention on Tobacco Control (FCTC), the first treaty to be negotiated by WHO and developed as a response to the global tobacco epidemic (WHO, 2003a:v) and which came into force in February 2005 (Framework Convention Alliance, 2004). This included an expression of concern "about the escalation in smoking and other forms of tobacco consumption by children and adolescents worldwide" (WHO, 2003a:1). In addition to other points, article 14.2(a) specifically highlights the importance of countries implementing smoking cessation programmes including in *educational institutions*. At the European level, citing tobacco as "the single largest cause of avoidable death in the European Union" (2004a), the European Commission (EC), which perceives itself to be a facilitator, using its regional networks of communication to allow region-wide exchange of information on effective and non-effective strategies (European Commission, 2004b), established the European Network for Young People and Tobacco (ENYPAT) (ENYPAT, 2006a) to aid European-wide collaboration in addressing adolescent smoking behaviour. While some schemes under the ENYPAT umbrella such as the Adolescent Smoking Cessation project address adolescent smoking behaviour in non-school settings as well as school settings (ENYPAT, 2006b; MacDonald *et al,* 2005), others such as the Smokefree class competition (ENYPAT, 2006c; Smokefree Class, 2006) are clearly solely focussed on schools as sites of behaviour change. Also at the European level, WHO's 1998, *Health21: the health for all policy framework for the WHO European Region* (an update of the Health for All Strategy which first appeared in 1980 (WHO, 2005)) set out a European response to the World Health Declaration's call for regional responses to

global health policy (WHO, 1998a) and included targets and strategies to reduce adolescent smoking. Despite the fact that the 21 targets of Health 21 were intended to be "realistic and achievable without being prescriptive" (1998a:177), the 2005 update of this policy stated that due to the social, health and economic diversity of the European area, regional targets were not useful but strongly emphasised "the usefulness of targets set at the national and subnational levels" (WHO, 2005:vii). This is illustrative of the way that policy often devolves responsibility for detail down to the next level and illustrates the importance of local policy context.

Tackling adolescent smoking is certainly a policy priority in Wales. While tobacco policy in Wales is now set by the Welsh Assembly Government in Cardiff, current approaches have their roots in pre-devolution policy and guidelines from Westminster. The publication of the report of the Scientific Committee on Tobacco and Health (SCOTH report) (DoH, 1998), alongside the UK government white paper *Smoking Kills* (HMSO, 1998) marked a renewed political commitment to addressing smoking. Published the year before devolution, Smoking Kills impacted on post-devolution Welsh policy. This includes the acknowledgment of smoking as "the single greatest cause of preventable illness and premature death in the UK" (DoH 1998:3); the reduction of smoking prevalence as a policy priority and the clear flagging up of tackling adolescent smoking as a crucial element to achieving this. While Smoking Kills aims to "protect young people both by making it less likely that they will begin to smoke and by helping them to stop" (HMSO, 1998:22), the strategies it suggests to achieve this appear restricted, focussing on advertising and point of sale strategies, with none focussing on the complex issues of uptake and cessation. The white paper also effectively devolved the implementation of strategy to regional government (HMSO, 1998:65).

The influence of Smoking Kills on Welsh policy is acknowledged by the Office of the Chief Medical Officer (OCMO) for Wales, which states that Smoking Kills forms the basis for national policy and strategy on tobacco, locally referred to as The Tobacco Programme (OCMO, 2004). The Welsh Assembly Government (WAG) felt that Smoking Kills provided a good

grounding for their programme due to "its comprehensive approach to smoking issues and the complementary measures covering prevention and smoking cessation, especially in disadvantaged communities." (OCMO, 2004). The Assembly also cite adolescent smoking as a priority, reiterating and adopting the objectives of Smoking Kills including the focus on the reduction of smoking among children and young people. In 1998, consultation health strategies were published for England, Scotland, Wales and Northern Ireland. In Wales, this took the form of *Better Health - Better Wales* (BHBW). The purpose of this document was to seek consultation on, and establish a new approach to "tackle the underlying causes of ill-health" (Welsh Office, 1998a:1) which could be taken forward by the Assembly for Wales, to which certain regulatory power was due to be devolved from central government the following year. The health of youth was fundamental from the outset of the Assembly, with BHBW acknowledging that "Children's health is an important indicator of health in later life." and pledging that "The Welsh Office [soon to become the Welsh Assembly] intends to focus on children's health and well-being as an investment in the future." (Welsh Office, 1998a:13). In addition, BHBW re-stated a set of Health Gain Targets intended to "measure progress towards improved health in Wales" (Welsh Office, 1998a:49) that had been announced the year before. One of these indicators, Indicator 12, related to smoking, and one target of this indicator specifically to youth smoking:

> **Indicator 12; Target (b):**
>
> *Reduce the proportion of 15 year old children who smoke (at least weekly) to no more than 16% for boys and 20% for girls (from 23% in boys and 29% in girls in 1996)* [to be achieved by 2002]
>
> *Welsh Office (1998a:50)*

An examination of the summary of responses to this consultation document reveals that no direct comment (that has been reported) was offered to the consultation regarding youth smoking (Welsh Office, 1998b). From this consultation then, and the consultation document, the Welsh policy and framework for tobacco was developed. Table 2.4 demonstrates that this target was achieved for boys but not for girls.

In September 2002, WAG produced a further consultation document on health called *Well Being In Wales* (WBIW). This document was not intended to be a new health strategy, rather it "builds on the foundations set by *Better Health Better Wales* but takes it further by expressing well-being as a core aim around which a concerted effort can be developed across policy areas." (WAG, 2002a:7). This is part of a broader approach by the Assembly to integrate traditionally separate policy areas in order to address national issues and problems (WAG, 2002a:4). This document maintains adolescent health as a policy priority, identifying *consultation on the development of policy for 14–19 year olds* as an action point[3] that WAG will follow up in order to "encourage lifelong learning and to improve health and reduce inequalities in health" (2002a:25). Alongside earlier policy, WBIW makes a further commitment to tackling youth smoking, stating the intention to "Extend smoking prevention and cessation initiatives for young people." (2002a:25).

In addition to making a commitment to smoking prevention and cessation in the young, WBIW also explicitly identifies:

> *Schools, as a key means of helping children to maintain or improve their health and well being*
>
> (WAG, 2002a:22)

A summary of the results of the WBIW consultation was presented to Assembly Members in order to inform the plenary debate on WBIW at the end of 2002. Policy-makers' attitudes towards schools as appropriate settings for tackling adolescent smoking may have been further influenced by the summary that said:

> *Young people felt it was important not to major on the use of scare and shock tactics but to try and influence behaviour through sound information and facts and by providing access to health and other services – including confidential services – in environments in which young people feel comfortable and confident.*
>
> WAG (2002c: item 51)

[3] Agreed by the Assembly, 17th December 2002 (WAG, 2002b)

Despite the national emphasis placed on the importance of schools, while most schools in Wales (and Scotland) have smoking restrictions, these are generally developed by Local Education Authorities (LEAs) or schools rather than by national legislation (Wold *et al*, 2004a; Wold & Currie, 2001). This is reinforced by examination of the WAG's approach to smoking prevention in schools which two years after Wold *et al*'s conclusions still does appear to make smoking policy as a priority. Citing Smoking Kills as the continued basis for its approach in schools it also acknowledges the need for multiple and co-ordinated strategies (see Section 2.4 of this chapter) to address smoking (WAG, 2006a). Despite this, in secondary schools WAG focuses mainly on the Smokefree class competition (2006b) and no responsibility for school smoking policy is apparently taken at this level.

One place that national input may be expected on smoking policy is in the Welsh Network of Healthy School Schemes or WNHSS (WAG, 2006c). This is related to the European Network of Health Promoting Schools which includes an emphasis on school policies and health (Health Promotion Wales, 1998). Such networks are strategies for creating Health Promoting Schools (discussed in more detail in Section 3.4) and effectively further devolving responsibility to the school level. At the national level it is suggested that addressing smoking and, increasingly since the study was conducted, nutrition are important (WAG, 2006d,e). However, smoking policy is not key to this (WAG, 2006f). One WNHSS document mentions the importance of developing effective health-related policies, including ones covering smoking (WAG, 2002d) but policies are only mentioned as *possible* ways forward. In order to help schools develop their own strategies, they are directed to a further document (Health Promotion Wales, 1998) which is merely a series of case studies in 6 Welsh schools with each school writing about their experiences of implementing strategies to become Health Promoting Schools. While one school looked at smoking policy in more detail, generally actions related to smoking targeted pupil education. This reinforces that, while

identifying schools as important places to address smoking, there is little guidance on this at the national level.

This is not intended to be an exhaustive review of policy, but is indicative of the fact that, as elsewhere, Welsh public health policy clearly identifies adolescent smoking as a public health priority for long-term population health gain, and identifies schools as appropriate places to try and achieve behaviour change. Although smoking policy is cited nationally as a potential tool for tackling smoking behaviour and while resources to help with policy creation may be provided, responsibility for this in Wales usually rests with LEAs or schools. It is this public health context that contextualises this study. To broaden understanding of this context, an interesting footnote may be added here regarding attitudes to school smoking policies. In June 2001 a small school in Cardiff for pupils with emotional and behavioural problems hit the headlines for allowing pupils to smoke during breaks (BBC News Website, 2001; Western Mail, 2001; South Wales Echo, 2001a). Allowing pupils to smoke, the school argued, helped keep them on the school premises. Generally, the reported reaction among those not connected to the school (including councillors, MPs, ASH and members of the public) appears to have been either one that found it indefensible (as demonstrated by a letter written to the South Wales Echo, 2001b) or one which struggled with balancing an understanding of the school's position with the desire not to condone such policy or children smoking. The fact that this made national headlines via the BBC and the (notably more right-wing) print media (The Daily Telegraph, 2001; The Mirror, 2001) demonstrated how emotive the issue of pupil smoking is. A similar story from a mainstream secondary school in Chester hit national headlines even more forcefully the following year (BBC News Website, 2002; Independent on Sunday, 2002; Sunday Mail, 2002; The Times, 2002) with an apparently larger backlash (Yorkshire Post, 2002) but with some still expressing understanding for the move (Daily Post, 2002). These suggest an overriding feeling that schools should not condone pupil smoking and that school smoking policies should reflect this.

2.4 Why investigate school smoking policy as a means for addressing adolescent smoking?

2.4.1 The complexity of adolescent smoking behaviour and the need for multiple interventions

It is commonly recognised that adolescent smoking is influenced by a complex range of factors (Mayhew *et al*, 2000; Nutbeam & Aaro, 1991; Reid *et al*, 1995). Arguing the need for continued research in the aetiology of adolescent smoking, Tyas and Pederson's systematic review of what is a vast literature is a useful starting point (1998). Their analysis adopts a four-fold categorisation of 26 factors influencing adolescent smoking which they believe is mutually exclusive and exhaustive, these being: *sociodemographic*; *environmental*; *behavioural*; and *personal.* Of these 26 factors, 20 demonstrate a statistical association with adolescent smoking; 5 are unclear with only 1 showing no association (Table 2.6). As with any review or meta-analysis, the potential importance of publishing bias must be remembered as must the fact that this is a very quantitative approach to analysis.

Table 2.6 Tyas & Perderson's summary of the findings of their systematic review of factors associated with adolescent smoking behaviour

Factors	Association	No association	Undecided
Sociodemographic			
Age	●		
Gender		●	
Ethnicity/race	●		
Acculturation			●
Family structure	●		
Parental socioeconomic status	●		
Personal Income	●		
Urban/rural residence			●
Environmental			
Parental smoking	●		
Parental attitudes	●		
Sibling smoking	●		
Peer smoking	●		
Peer attitudes and norms	●		
Family environment	●		
Attachment to family and friends	●		
Availability of tobacco			●
Behavioural			
School factors	●		
Risk behaviour	●		
Lifestyle	●		
Personal			
Stress	●		
Coping			●
Depression/distress	●		
Self-esteem	●		
Attitudes to smoking/smokers	●		
Knowledge of health effects of smoking			●
Personal health concerns	●		

Source: Tyas & Pederson (1998:411)

These associations exist to varying degrees and the number of them reflect why adolescent smoking uptake is viewed as complex. While this is not the place (nor is there the space) to explore all of these factors, it is worth mentioning a few of specific interest. Firstly, the trend data at the beginning of this chapter identified gender and age as potential risk factors in smoking uptake. This review further supports the well-documented importance of age as a risk factor. Demonstrating this is Reitsma & Manske's (2004) finding that as pupils in Ontario schools go up a grade, their odds of becoming a smoker increase 1.25 times. More interestingly, Tyas & Pederson's review finds no association between gender and adolescent smoking which appears to

contradict one of the dominant contemporary themes of adolescent smoking. What they did find was that adolescent gender differences are geographically/culturally patterned with higher female rates being more particular to adolescents with a "Western cultural orientation" (p.411). Even within this group, rates vary (as supported by HBSC data) with differences being either inverted or non-existent. Despite an overall lack of gender effect, they do highlight the importance of increases in female adolescent smoking in the "West" and the likelihood of different mechanisms of smoking uptake in boys and girls with targeted advertising and the desire for weight control being possible factors for increases in girls smoking – although the latter of these has been challenged (Lucas & Lloyd, 1999).

Also of interest is the category 'environmental factors" as these are the basis of much of the argument that will be developed in the remainder of this literature review. Tyas & Pederson argue that these have been a major focus of study since the 1970's when the importance of peer and parental smoking was first recognised. Bandura's social cognitive theory applied to smoking states that adolescent smoking behaviour is picked up through observation of smoking behaviour of role models (or referents) in an individual's social environment (Poulson *et al*, 2002; Wiium *et al*, 2006; Wold *et al*, 2004b). Bandura's theory states that during adolescence children are actively searching for information on which to base their behaviour (Wiium *et al,* 2006) and with schools a large feature in the social environment of most adolescents, teaching staff can be added to the list of role models or referents. Very often, the importance of role-modelling is framed within the conveyance of normative behaviour, an hypothesis which Tyas & Pederson's review appears to support. Personal norms (i.e. how an individual thinks they must behave) may broadly be seen as two types: descriptive and injunctive (subjective) norms (Rimal & Real, 2003; Wiium *et al*, 2006). Injunctive norms relate to what an individual perceives referents feel the behaviour of the adolescent ought to be (e.g parents may think their child should not smoke) and descriptive norms relate to the adolescent's perception of how widespread a practice is (i.e. what most people do) (Rimal & Real, 2003; Wiium *et al*, 2006). While this work focuses on school staff as role-models, referents are arguably not restricted to

immediate social actors in an adolescent's life, with the importance of images in films (Charlesworth & Glantz, 2005) and adverts (Wakefield *et al*, 2003), for example, also discussed. The importance of images in promoting smoking, not only as normal but exceptional behaviour is demonstrable by the tobacco companies' long-term interest in the use of such images be it via product placement or direct (and increasingly guerrilla) advertising (Cummings *et al*, 2002; Hammond & Rowell, 2001). It is the case that there is some evidence to suggest that smokers tend to over-estimate smoking among their peers and that the importance of peer influence may have been overestimated (Alesci *et al*, 2003; de Vries *et al*, 2006; Molyneux *et al*, 2002; Poulson *et al*, 2002) and the extent to which parents, peers and teachers are important in role-modelling and adolescent uptake is also contested. However, role-modelling and the conveyance of behavioural norms are still generally held to be key issues and are important to the later conceptual framework that is built to help understand the potential importance of the wider school environment and school smoking policy. Tyas & Pederson's category of *school factors* is concerned with the protective effect of academic success and aspiration and as such are not directly relevant to this study which is concerned with potential policy-effects in schools.

Tyas & Pederson argue that approaches to understanding adolescent smoking uptake are both theoretical and empirical, with theoretical approaches having 4 underlying bases: *rational approach*; *social learning theory*; *social norms and attitudes*; *affective approach (developmentally oriented)*. Many authors have proposed a staged-model to explain smoking uptake (Mayhew *et al*, 2000). While there are variations on the theme, Mayhew *et al* (p.S62-S63) identify a usual pattern to the models which is summarised in Table 2.7.

Table 2.7 General pattern of smoking uptake as identified in various models

Stage	Description
Stage 1: *Precontemplation Stage*	The adolescent has never smoked and has no desire to smoke in the near future. They are either unaware of positive reasons to start smoking or are ignoring/resisting pressure to smoke.
Stage 2: *Contemplation/Preparatory Stage*	The adolescent is beginning to think about smoking and is forming or modifying their beliefs and attitudes towards smoking. Negative pre-smoking beliefs are often modified by various influences.
Stage 3: *Initiation*	The adolescent tries cigarettes for the first time.
Stage 4: *Experimenting*	Increase in frequency of smoking and variety of situations where they are used. Emphasising the positive aspects of smoking, they may receive little pleasure from smoking and are not committed to smoking in the future. Cigarette handling and inhalation skills are developed. For some, "harsh" cues that accompany first experiences (e.g. burning, roughness) start fading in comparison to positive aspects. Self-image as a smoker may be developed.
Stage 5: *Regular Smoking*	Smoking moves from sporadic to a more regular, though still infrequent behaviour. Not everyone at this stage will move onto Stage 6.
Stage 6: *Established Smoking*	Daily or near-daily smoking behaviour. Adolescents may develop cravings, experience dependence and withdrawal making quitting difficult. Psychological and biological factors influence maintenance of smoking behaviour.

(Adapted from Mayhew *et al*, 2000)

While the model is predominantly psychological, and is contested (e.g. development may be continuous rather than stepped) (Mayhew *et al*), much research into adolescent smoking uptake can seemingly be fitted into stage two and three of the model: what is it that forms/modifies attitudes towards smoking that lead to smoking uptake? While this model could be criticised for apparently assuming some 'natural' state of a child as being one of negative attitudes towards smoking, the notion of the model is useful in understanding why investigation as to what inclines adolescents towards smoking are key in the literature. If adolescents can be prevented from an intellectual swaying towards smoking as a possible behaviour, then maybe adolescent smoking may be reduced.

Interventions to reduce adolescent smoking follow the literature on processes of uptake, with many different interventions targeting the different theorised influences in uptake outlined above. With much investigation surrounding why adolescents begin to modify their attitudes towards smoking, ultimately leading to experimentation and a possible future habit, many interventions also seek to tackle adolescent smoking at this point. However, adolescent smoking is a complex issue and consequently adolescent smoking prevention is a difficult task for which there is no one "magic" solution (Reid *et al*, 1995; Yach & Ferguson, 1999). Historically the tendency has appeared to be a quest for the holy grails of health promotion, but such solutions do not exist for particular issues. Instead, the use of a variety of approaches is increasingly seen as being the way forward. Even national level policies also need to be supported by a complex range of other initiatives to address the complex issue of adolescent smoking (Wold *et al*, 2004a). Adolescents also live within many social contexts, and responses to the problem of adolescent smoking need to acknowledge and address this (Cook, 2003). It may be desirable to focus on many social contexts (e.g. schools, youth clubs, the home) and the school is one context (Reid, 1985; Wakefield *et al*, 2000) where various interventions (Stead *et al*, 1996) may be located and as such is one context worth investigating as an element of more complex solutions.

We have already seen how the notion of schools as the key to adolescent and long-term public health is embedded within Welsh health policy. The assertion of schools as appropriate health promotion contexts is also common in the academic literature on youth health promotion (Darling & Reeder, 2003; Evans-Whipp *et al*, 2004; Lynagh *et al*, 1997; Nutbeam & Aaro, 1991; Peck *et al*, 1993; Reitsma & Manske, 2004; Stephens & English, 2002). This broad identification of schools as being important in establishing lifelong health behaviour patterns has been paralleled by the apparent devolution of responsibility for youth health to our schools. As a result, much research and intervention work is undertaken in schools. Smoking is no exception and it is the school that is most often used as the mode of delivering smoking education (Nutbeam & Aaro, 1991). Nutbeam & Aaro argue that this trend is "hardly surprising since the school represents a readily available mechanism for

reaching the vast majority of young people" (1991:416). This sentiment is echoed by Lynagh *et al* who add that schools have access to youth during "the developmental years in which health risk behaviours are often adopted as lifetime habits" (1997:43).

The traditional approach to the role of the school in promoting health, including addressing smoking, has been one of (often didactically taught) health education programmes (Lynagh *et al*, 1997; Samdal *et al*, 1998). However evidence on the effectiveness of these methods has been limited (Anderson & Hughes, 2000; Denman, 1999; Lynagh *et al*, 1997; Nutbeam & Aaro, 1991; St Leger, 2001). St Leger & Nutbeam (2000) suggest that this may be because they are to narrow, with too much pressure placed upon teachers. Just as approaches in general have recognised that there are no single magic solutions, so approaches in schools may be varied. Smoking, and the way it is addressed in schools (as well as beyond) is a complex issue requiring complex solutions with integrated, multi-faceted responses seeming more effective than single, stand-alone initiatives (Stead *et al*, 1996). While school smoking policies alone may not be a "magic bullet" (Yach & Ferguson, 1999:757) to fully address adolescent smoking, they may be a part of the solution. In investigating the potential role of secondary school smoking policy in influencing adolescent smoking behaviour, this study investigates one approach to addressing adolescent smoking, in one social context.

While school smoking policy is just one of the many approaches that may be useful in addressing pupil smoking both in schools and in general, Moore *et al* have suggested that it is an important area of investigation because if there proved to be a policy effect, it is "an important aspect of the school environment that can be readily modified" (2001:117). Similar reasoning has been proposed by Goldstein *et al* (2003); Wold & Currie (2001) and Wold *et al* (2004b). The former suggested that recommendations (reported from school experience) to improve the success of a (smoke-free) school policy initiative are inexpensive; reproducible and easy to implement. The two discussions co-authored by Wold argued that, despite the fact that evidence points to the greater importance of home life in determining smoking behaviour, in schools

it is easier to implement and maintain a smoke-free environment using legislation and academic evidence of an important role for school and staff in influencing smoking behaviours. Other reasons for studying secondary school policy may lie in the increasing policy and academic focuses on school-based health interventions, and the need for an evidence base to support this, combined with the fact that secondary school policy applies to young people over the years where they are at extremely high risk of adopting a smoking habit.

2.4.2 The development of the school smoking policy literature and the need for more work on the context of school smoking policies

It is a striking characteristic of the literature on school smoking policy that there has been relatively little published research specifically on this topic, although this has begun to change in the last few years. Fears that a large section of the literature has been overlooked by the search strategy are allayed by the fact that a number of papers on this subject begin with an identification of the lack of research precedent. Even the most recent systematic reviews support this assertion. For example, Reitsma & Manske (2004) conducted a systematic review of the literature on statistical associations between school tobacco control policies and smoking status. Despite searching between 1966 and 2002, the authors only identified 5 articles of interest, all published since 1989. Similarly, Aveyard *et al* (2004a) conducted a broader systematic review of observational studies into whether there was a school-effect on smoking. While they included studies which may be of interest to this work, the review's focus was broader than the one here, however the number of accepted publications their search strategy returned is indicative of increases in the amount of research into the broad area of school-effects on smoking (rather than those related specifically to policy) over the years. The search returned 22 studies, three of which were from before 1980. Calculating the average number of papers per year from the subsequent years we find the following: (1980s) 0.6; (1990s) 1.1 and (2000s) 1.3. This demonstrates both the small number of papers being published in real terms, and that the number of publications has doubled since the 1980s. This is especially pertinent as the

figure for the 2000s was calculated over just 18 months as the review was conducted midway through 2001. To demonstrate the apparent lack of speed with which research and school-level action based on research findings are progressing, despite being made nearly twenty years ago, some of Reid's (1985) policy recommendations are still pertinent as ways forward now. These include: the definition and measurement of goals to assess policy effectiveness; conducting regular prevalence studies; providing smoking-specific training support to staff and the importance of support from the LEA level.

Of course, the lack of literature may be a result of publication bias (i.e. that studies with positive findings are more likely to be submitted and/or accepted for publication) possibly hiding other studies finding no association between school smoking policy and adolescent smoking behaviour. This same argument has been made by Clarke *et al* (1994) after their study concluded that there was no relationship between policy and smoking status. They suggested that instead of the lack of literature reflecting a lack of research interest into school policy, perhaps it reflects a lack of research evidence supporting the hypothesis of the importance of school policy. As there is evidence that editorial preference leans away from publishing studies with non-significant findings, they argue, if there are many such studies with these findings then the lack of literature is more reflective of patterns of editorial control rather than the evidence base.

Turning to the literature that does exist, while some authors identify a few earlier studies (Aveyard *et al*, 2004a; Charlton & While, 1994; Reid, 1985) it is arguable that contemporary interest in robust and specific studies of school smoking policies as a method to reduce adolescent smoking was awakened by Pentz *et al* in their 1989 paper. This study marks the beginning of an approach to school policy that is interested in the characteristics of the policy (e.g. content, strength) rather than just its presence or absence. This assertion is reinforced by Reitsma & Manske (2004) whose systematic search of 1966-2002 literature on statistical associations between school tobacco control policies and pupil smoking status returned this as the earliest relevant hit.

More circumstantially, 4 years prior to Pentz *et al*'s paper, following his 1985 review of strategies to reduce smoking among British teenagers, Reid had stated that there was a clear need for more research into this topic.

Despite its significance however, for Pentz *et al* it appears to have been a logistical decision, rather than a conviction in the importance of school tobacco control policy specifically, that led their study. Concerned that no studies up until that point had "evaluated policy effectiveness in reducing adolescent smoking" (1989:857) they chose school policy rather than any other tobacco control policy context because they felt that it was relatively easy to control for other elements of the school environment (i.e. other elements of the policy context). Regardless of the incentive, the work produced some suggestive findings, broadly concluding that school smoking policy appeared to have a reductive effect on adolescent smoking. In this study policies were categorised according to how many of the following four components they comprised: a formal (i.e. written and posted) rule banning smoking; a formal rule regarding having a closed campus (i.e. pupils not allowed off-site); a formal rule banning smoking near the school grounds and a formal education plan for smoking prevention programming. Policies with more of these components appeared to be related to lower *amounts* of tobacco consumed by an adolescent smoker over the course of a day. To a lesser extent, the number of components was associated with lower levels of smoking *prevalence*. However, no direction of causality was established (i.e. does strong policy lead to lower levels of smoking or is it easier to implement strong policy where smoking is less common) and even if policy was mediating smoking, the findings suggest that stricter policy may serve only to push smoking off the school grounds rather than having a preventive effect on smoking uptake among pupils.

There is some critique of investigating smoking policies. For example, in finding no significant relationship between pupil smoking and either staff smoking policy; proportions of staff who smoke; visitor smoking policy or placement of no-smoking signs around the school, Clarke *et al* (1994) suggest that school smoking policy has little effect on students reported smoking

behaviour. Darling *et al* (2006), who based some of their analysis of the work of Pentz *et al* (1989) also found no association between school smoking policies and adolescent smoking prevalence. In Scotland, Griesbach & Currie (2001) found a similar pattern. This is echoed by Wakefield *et al* (2000) although they do acknowledge that their findings only assess smoking prevalence and the possibility that enforcement reduces the amount smoked (by individuals) cannot be discounted. Clarke *et al* also suggest that one factor which may be at play and could not be detected by their study was that it may be possible that policy effectiveness varies over time, becoming more effective the longer it has been in place. Although they support the need for smoking bans, Pickett *et al* (1999) also suggest that policies may become more accepted and easier to implement over time. Also, changes in the effectiveness of policies cannot be addressed by the cross-sectional studies that dominate school smoking policy research. Despite these criticisms, the debate is dominated by an interesting body of work which does suggest the usefulness of school smoking policies as one method of addressing adolescent smoking. This specific literature will be discussed further in Chapter 3.

In those studies that have been published, the classification and detailing of policy characteristics and contexts varies. For example, Myers (1989) lists teachers smoking habits; discipline in dealing with smoking pupils and health education as being possible effects on smoking behaviour, but separates them from policy. Since then, studies into school policy-effects have moved on by attempting to assess the existence of a policy effect and, if so, which policy characteristics and contexts may influence policy effectiveness. These studies have constructed different descriptions and indicators of policy which have focussed on characteristics and content to varying degrees. For example, Darling & Reeder (2003) focus on policy characteristics rather than context with their construction of a four-level classification of policy based upon 2 dichotomous variables: (1) whether it was compliant with current legislation (yes/no) and (2) demanded a smoke-free environment (yes/no). Others also bring in the policy context. For example, in Wakefield *et al*'s (2000) study, the classification of smoking policy consists of 2 descriptive elements (1) is there a smoking ban (yes or no) and (2) how strong is this ban (strong means that

most/all students comply and weak means that either a ban exists but few or no students comply, or there is no ban). While element 1 describes the characteristics of the policy, the second element concerns compliance which is a policy context arguably related to another topic discussed in the literature, namely enforcement. At the beginning of their study, Clarke *et al* (1994) state that school policies may be simple or complex. A simple policy states whether smoking is permitted on school grounds by students or teachers, including procedures to be taken if policy is transgressed while a complex policy addresses the type of smoking education in the curriculum. Procedures to deal with transgression and smoking education can both be considered elements of policy context. Stephens & English (2002) also bring context into their description, developing a classification to define whether a school policy was of high quality with scores being allocated for (1) policy development/oversight/communication; (2) purpose and goals [of policy]; (3) tobacco free environments; (4) tobacco use prevention education and (5) assistance to overcome tobacco addictions. Similarly, Griesbach *et al*'s (2002) study into Scottish school smoking brought context into the study, describing policy status (written/informal/uncertain); smoking restrictions (complete ban/permitted in restricted areas) and enforcement of smoking restrictions (always/not always enforced). In terms of policy context, using five items to describe students' perceptions of school policy, Reitsma & Manske (2004) looked at the association between these characteristics and smoking status. There are very few studies that have assessed pupil attitudes towards and perceptions of smoking policies (Unger *et al*, 1999) and Reitsma & Manske's is one of only a few studies that rely on the pupil voice to describe policy, rather than an adult one. They justified this method by demonstrating that students within schools rated school policy similarly, while between school variation was also clear. Wakefield *et al* (2000) similarly used pupil voice and observed similar consistency of reporting.

2.4.3 Building on the work of Moore at al (2001)

The above examples highlight the variation in approaches that have been taken when investigating policy. However, of all studies it is Moore *et al*'s (2001)

investigation of the relationship between school smoking policies and adolescent smoking prevalence in Wales, and their suggestions for future work that is the foundation for this thesis. The findings of Moore *el al* are also detailed throughout Chapter 3, alongside the results of other studies into school smoking policies. However, due to its relationship to the current study, it is useful to outline some of the main methods and findings here.

In each of the schools participating in the Welsh 1998 HBSC study, Moore *et al* left two questionnaires on the content and enforcement school smoking policies, to be completed by a member of senior management team and / or the staff member with responsibility for health education. Where two questionnaires were returned, they analysed the one provided by the most senior member of staff. The responses to these questionnaires were used to develop indicators describing school-level variation in smoking policies. Multi-level analysis of these indicators was then performed in association with the self-reported data on pupil smoking behaviour collected by HBSC in the same schools.

To summarise their general conclusions, Moore *et al* discovered that the strength and enforcement of pupil policy were significantly related to the prevalence of adolescent smoking, but that enforcement of teacher policy was not. As measures of pupil policy strength and enforcement (gauged from senior teacher interviews) increased, so both weekly and daily smoking (self-reported by pupils) came down. Initial modelling then suggested that pupil smoking policy strength may account for 40% of between-school variance in smoking. At this point, while pupils in schools where pupil policies were not always enforced were at a greater risk of being a daily smoker (OR=1.41) this was not significant. Adding and comparing further models, some which controlled for pupil-level factors shown to be significantly (and largely) associated with smoking behaviour, it emerged that both policy strength and enforcement had a significant association with smoking prevalence, with increases in both having a protective effect. However, when controlling for pupil-level factors, the influence of policy strength was reduced. Teacher policy enforcement remained insignificant across the models. While the

authors warn that this is a cross-sectional study that cannot address causality, and that reverse causality remains a possibility (i.e. that schools with less smoking prevalence find it easier to introduce stronger policies), they also assert that their findings do "demonstrate an association between policy strength, policy enforcement, and pupils' smoking behaviour" (2001:122). They recommend that further research into the relationship between school smoking policy and smoking prevalence should investigate *policy contexts* further, particularly referring to *policy content* and *enforcement*.

This call for further work is repeated by many researchers, highlighting an important issue: despite growing research into policy effects, there is little understanding as to why and how policies may have an effect on adolescent smoking behaviour (Alesci *et al*, 2003; Levy *et al*, 2004; Wakefield & Chaloupka, 2000). Aveyard *et al* (2004a) suggest that research into school contexts is too infrequently based in theoretical frameworks and generally assumes that relationships between school-level variables and smoking prevalence are straightforward, yet this is not necessarily true. Better use of theory would help to better elucidate the nature of these relationships, and their possible complexity. While some studies have attempted to describe the complexity of policy contexts, many remain only quantitative, using survey methods alone to collect data and reducing policy characteristics to, often dichotomous, variables and lack breadth in regards to the variety of elements they discuss. The one notable exception is Turner and Gordon's recent work (2003a – and as Gordon & Turner, 2004a,b) which applied qualitative research to pupil and staff perceptions of policy enforcement. The problem of restricting analysis to indicator variables is highlighted by Darling & Reeder's study (2003). Based on their survey data, their 2 dichotomous variables (whether policy complied with current legislation (yes/no) and demanded a smoke-free environment (yes/no)) they developed a 4-level policy classification which, while only used with descriptive statistics, are suggestive of being ordinal. A level 1 policy is described as where both variables are *yes*; a level 4 policy is where both are *no* with levels 2 and 3 being where one of the variables is *yes* and the other *no*. However, there appears to be no reason why level 2 is attributed to a policy where compliance with legislation is *no*

and requirement of a smoke-free school is *yes*, and level 3 being attributed to the reverse situation. Not only is data lost in this reductive approach, but variables necessarily draw boundaries where there is otherwise fuzziness. It is to the call for more in-depth work on policy contexts that this study aims to respond.

It will do this by building on the work of Moore *et al* (2001), identified above as the basis for this study. The present study undertakes an investigation of Welsh school smoking policies, also using HBSC schools in order that data on adolescent smoking is available for all schools. However, rather than relying solely on teacher questionnaires, this study adopts a mixed-method design in order to collect more rigorous and in-depth data on policy and its contexts (see Table 1.1 and Section 5.2). One stage of this study (Research Objectives 3 and 4, see Section 3.5.1) developed school-level indicators describing characteristics of policy that analysis of interview data (Research Objective 2) identified as potentially moderating the extent to which school smoking policies reduced adolescent smoking behaviour. Some of these indicators were similar to those developed by Moore *et al*, but described using more rigorous methods. All indictors were analysed using a similar strategy to the earlier Welsh study. Consequently, discussion of the results of Research Objective 4 (Section 9.4) focused on comparing them to Moore *et al's* findings. This is complemented by discussion of the interesting, complex data on policy and its enforcement produced by interviews with smoking policy experts in schools.

2.5 Schools as sites for tackling adolescent smoking behaviour: a caveat

Before proceeding any further, it is necessary to add a caveat. We have already seen how the notion of schools as the key to adolescent and long-term public health is embedded within Welsh health policy and the academic literature and has led to the apparent devolution of responsibility for youth health to our schools. As a result, much research and intervention work is undertaken in schools, including those designed to address adolescent smoking. However, in considering any school-based health promotion, it must be remembered that

the interest in the school as a producer of health knowledge and healthy citizens has resulted in schools that can often feel over-researched and over-burdened with responsibility. Schools are unique environments (Olds & Symons, 1990) whose priorities differ to those of health researchers, policy-makers and practitioners (Samdal *et al*, 1998; St Leger & Nutbeam, 2000). Realistically, there is a limit to what schools may be asked to do and to achieve (Samdal *et al*, 1998; St Leger & Nutbeam, 2000). As St Leger & Nutbeam assert, "Teachers are employed to teach students – not solve society's health problems" (2000:257). Anyone who has spent any time teaching will fully realise the nature of this sentiment: teachers in Wales are a professional group who tend to feel undervalued and hugely overworked. To paraphrase Samdal *et al*, curriculum time [to which we can add teacher time], and school resources are limited with competing priorities and all the while, the school's priority is academic success; social integration of students and discipline. Consequently, "finding ways of aligning the achievement of health goals with this core business of schools is critical to future success" (Samdal *et al*, 1998:384). St Leger (2001) also argues that the schools core business is education. However, he also outlines the traditionally asserted links between education and health that would make schools an obvious venue for health promotion. This traditional link indicates that an underlying logic to placing many interventions in schools is that: (1) better health education equals better health; and (2) schools are good at educating; therefore (3) schools are the good places to conduct health education. Care should be taken with such syllogisms, and research should investigate the actual potential for schools-based health promotion to work. In doing so, researchers must be careful not to over-burden schools with research. Nor should they appear to be relying on them to solve all our social problems. While it is essential to bear these arguments in mind, if various school-based health promotion interventions prove effective, then clearly they provide a practical environment for the promotion of the non smoking message. Clearly, while the school environment is worth investigating, a sensitive, understanding and realistic approach to both the attitudes of, and pressures on schools and those working in them is required in order that we can assess, rather than assume their potential as sites of health behaviour change.

-3-

Effective secondary school smoking policies: literature; research questions and moving forward

3.1 Effective school smoking policies

While Section 2.4.2 identified a lack of literature on school smoking policies, a small and interesting literature does exist. The search strategy for this literature is outlined in appendix 1. While some of this literature is mentioned in Section 2.4, a review of this literature identified six important dimensions, or characteristics, of school smoking policy that may be related to effective smoking policy. These are:

1. *The importance of policies that ban smoking (smoke-free schools)*
2. *Policy formality*
3. *Introducing more restrictive policies into a school – methods, rationales and attitudes.*
4. *Policy dissemination*
5. *Policy enforcement: identifying and addressing smoking misbehaviour*
6. *Type of sanctions employed when smoking policy is transgressed*

These are outlined below[1].

3.2 Important characteristics of school smoking policy that may be related to its effectiveness

3.2.1 The importance of policies that ban smoking

While some schools have total smoking bans, others allow various groups of people to smoke on site. Evans-Whipp *et al* (2004) argue that while school smoking policies are common, much between-school variation is in the degree of restrictions that they impose. While some have argued that there is too little

[1] It should be noted that these studies come from a variety of countries, however, it is felt that all findings and discussion reported here are useful to informing this work located in Wales.

research into smoke-free school programmes (Willemsen & de Zwart, 1999) many authors do recommend total smoking bans (i.e. for everyone on site) as an important policy characteristic that is an element of successful school smoking policies (e.g. Alecsi *et al*, 2003; Powell *et al*, 2005; Trinidad *et al*, 2004; Wold & Currie, 2001). Aside from issues such as employee's rights and health and safety at work, arguments in favour of smoke-free schools often draw on the importance of role-modelling and the establishment of behavioural norms. Tubman & Vento argue that:

> *Lack of a clearly articulated anti-tobacco policy is a barrier to prevention education due to increased conflict concerning its implementation, and decreased consistency of the messages transmitted to students. Therefore a formal anti-tobacco policy is a salient organizational feature that may powerfully reinforce and support the efforts of teachers to disseminate health promotion lessons*
>
> *Tubman & Vento (2001:229)*

It is only by marrying words and actions that the promotion of non-smoking is not undermined, and a non-smoking norm is most fully promoted. For example, Anderson & Hughes (2000) argue that a smoke-free environment appears to deter young people from smoking by conveying the idea that it is socially unacceptable, and also provides support to smokers who want to quit by not exposing them to temptation. This is echoed by Wakefield *et al* (2000). The idea that smokers perceive smoking as normal behaviour is supported by Alesci *et al* (2003) who found that non-smokers generally found smoking less socially acceptable than smokers did. Further, the more often youth witnessed smoking behaviour, the more they perceived it as socially acceptable and normal. While causality cannot be determined, application of the authors' conclusions suggests that there is significant evidence suggesting that a smoke-free school policy on and near the school site has the potential to reduce adolescent smoking by encouraging fewer role models of tobacco use; decreased opportunities to smoke; reduced opportunities for social exchange of tobacco and the change of community attitudes, public opinion and accepted norms. Finding that students in schools with strict tobacco policies are less likely to start using tobacco, and that substance abuse is a learned

behaviour, Peck *et al* (1993) go further, arguing that data suggest allowing pupils to smoke both encourages tobacco addiction and makes quitting harder.

Social cognitive theory applied to smoking states that adolescent smoking behaviour is picked up through observation of smoking behaviour of role models in an individual's social environment (Poulson *et al*, 2002; Wold *et al*, 2004b). While the smoking behaviour of friends is a key consideration, teachers are also important role models within this environment (Charlton & While, 1994; Goldstein *et al*, 2003; Poulson *et al*, 2002; Sinha *et al*, 2002; Wold & Currie, 2001; Wold *et al* 2004b). Consequently, total smoking bans become important for preventing pupils seeing staff smoking which may promote smoking behaviour. If local attitudes dictate that teachers may smoke on site then this may undermine any anti-smoking message promoted elsewhere (Smith *et al* 1992; Trinidad *et al*, 2004). Charlton & While (1994) suggest that, where they are allowed to smoke, both teachers and sixth formers may act as smoking role models, staff in particular act as authorisation figures, and their smoking behaviour may appear to legitimise smoking as a behaviour. For example, if a member of staff advising pupils not to smoke is then seen smoking by those pupils, it is likely to undermine the message. It is consistent messages that make tobacco education a more effective health message (Peck *et al,* 1993). The importance of producing no-smoking norms is reinforced by Wiium *et al* (2006), who found evidence for the association of both injunctive and descriptive smoking norms with smoking behaviour (i.e. perception of what normal behaviour is influences individual behaviour). In addition to these personal norms, they suggested that less frequently studied societal norms (i.e. how an individual believes others should behave) were also potentially important. Thus, an individual's expectations of referents' smoking behaviour may be related to their own smoking behaviour and an adolescent smoker may be more inclined to agree that people be allowed to smoke on the school site. They also concluded the possibility of a classroom effect where norms may to some extent be shared within classes, re-emphasising the importance of promoting no-smoking norms in schools.

Studying various locations, Alesci *et al* (2003) found a connection between adult and youth smoking where if one is high in a given location, so is the other arguing that this suggests the need to address staff and pupil smoking simultaneously. In schools, a total smoking ban would clearly help this. Similarly, in a cross-sectional study of Danish schools (where the high percentages of pupils that report seeing teachers and pupils smoking in and around their schools, suggests a high tolerance towards smoking), Poulson *et al* (2002) discovered that pupil exposure to teachers smoking outdoors was significantly associated with higher adolescent smoking behaviour. While these data may be skewed by the fact that smokers are more likely to be aware of others that smoke (projection), the study is fairly robust and the authors argue that their findings are suggestive of the importance of a smoke-free school environment.

Poulson *et al*'s study (2002), however, also found that pupil exposure to staff smoking indoors was not significantly associated with higher adolescent smoking behaviour. They argue that this suggests teachers smoking away from pupils, where pupils' exposure to the behaviour is likely to be shorter and less frequent, is less important than teachers smoking outside. This in turn suggests that smoking policies merely need to address the visibility of staff smoking, the same ends as a ban being potentially achieved if staff policy is used to hide staff smoking away rather than necessarily ban it outright. The potential of partial bans is enhanced by Griesbach *et al* (2002) whose study in Scotland found that while teacher smoking bans in the staff room were associated with lower numbers of pupils reporting seeing teachers smoking in staff rooms, complete teacher bans appeared to be associated to a higher perception of teacher smoking outside on the premises compared to school where staff can smoke in restricted areas. Another study suggested that smoking bans were not always effective when looking at school and college policies for 16-19 year olds, finding no clear pattern between whether staff and/or students were allowed to smoke (Charlton & While, 1994). Furthermore, in schools there was no significant relationship between the likelihood of a student being a current smoker and whether students were allowed to smoke or not (although there was a significant association in colleges). In addition, this study found

that not allowing staff to smoke also only had a significant association with likelihood of a student being a smoker within colleges and not schools. While these findings may be confounded by the differing demographics of pupils who stay on at school and pupils who continue to college, the authors conclude that policy appears to be more effective in the more workplace-like surroundings of college than in schools. The applicability of these findings to the current study may be limited, however as Charlton & While's work related to 16-19 year olds in school and college settings and this study considers 11-16 year olds in the school setting only. Despite this, while their evidence does suggest that school policy has no effect on smoking prevalence, they do argue that it may have an effect on the amount of tobacco consumed by smokers, although their evidence for this is not strong.

The effectiveness of school smoking policy is potentially weakened by an apparent contradiction inherent in the argument that it promotes smoke-free schools as a means of promoting a non-smoking norm. Alesci *et al* (2003) assert that tobacco use offers youth the opportunity to perform an adult behaviour and rebel against parents and suggest that reducing the identification of smoking as normative behaviour will solve this. Alesci *et al* found that adults (including parents) generally see teenage smoking as socially unacceptable, but adult smoking as less so. Therefore, by smoking, adolescents rebel against the perceived wishes of adults/parents. However, a potential tension is apparent here: if any element of smoking behaviour is about participation in a rebellious counter culture then it would seem that promoting smoking as non-normative behaviour may encourage smoking behaviour. Unger *et al* (1999) contextualise this argument within reactance theory, an idea to which Turner & Gordon (2004a) also refer.

Some studies (Gordon & Turner, 2003a; Northrup *et al,* 1998; Pentz *et al,* 1989; Turner & Gordon, 2004a) also highlight the issue that policy restrictions may serve merely to displace pupil smoking behaviour off the school site. Northrup *et al* found that, following the implementation of an enforced ban on smoking on school properties in Ontario, school administrators generally felt that the ban had made no real difference to smoking on site and it was

frequently reported that the ban had resulted in pupil smoking becoming more visible, moving from hidden on-site areas to visible off-site ones. This produced mixed feelings, with some respondents feeling that the ban was negative as the shift of smoking away from the school premises had led to complaints from the public; a deterioration in the public image of the school and an increase in both environmental tobacco smoke and litter when leaving and entering the school site.

However most evidence presented suggests the advantages of school smoking policies that ban all smoking on site by everyone, with many studies into school smoking policies suggesting the importance of total smoking bans. For example, regarding their data that demonstrate no significant relationship between pupil exposure to staff smoking indoors and higher adolescent smoking behaviour, Poulson *et al* (2002) suggest that this may be because pupil exposure to staff smoking inside tends to be in the staff room where contact is likely to be shorter and less frequent than with staff smoking outside (i.e. pupils frequent the playground rather than the staff room). While this doesn't wholly undermine the argument for hiding rather than banning staff smoking, it does suggest that the importance of staff smoking behaviour cannot be ignored. Similarly, following the mandatory Ontario school-smoking ban, despite feelings that the ban may merely displace pupil smoking from the school site, more schools did perceive a decrease in student smoking after the ban than noted an increase - although there is no indication as to whether schools had bans in place prior to the enforced one (Northrup *et al*, 1998).

With regards the claims that smoking bans only push smoking off site, some suggest that even if bans only reduce the *amount* pupils smoke on school site, this may be beneficial to long-term health and smoking behaviour. It can be argued that even if a policy only pushes smoking off of the school site, this may be beneficial in promoting a non-smoking norm and possibly reducing adolescent smoking. This argument is echoed by Unger *et al* (1999); Molyneux *et al* (2002); and Evans-Whipp *et al* (2004). Similarly, while some in Northrup *et al's* study had negative opinions of smoking bans others felt

that the ban was positive by making smoking inconvenient and increasing its social stigma. If peer influences are important in the uptake of smoking (Molyneux *et al,* 2002; Poulson *et al*, 2002; Reid *et al*, 1995) then removing pupil smoking from the school site may reduce the time that non-smokers spend in the company of friends who are smoking (assuming that contact with the behaviour is as important as contact with attitudes towards smoking) and this may reduce smoking prevalence (Molyneux *et al*, 2002). One study found that a smoke-free school environment actually reduced by 10% the likelihood of pupils encouraging each other to smoke (Darling *et al*, 2006). In order to maximise the success of school policies then, it would seem necessary to combine it with a gating policy which does not allow pupils off site during the school day, as when pupils are allowed off site, they are more likely to smoke off site than on campus (Turner & Gordon, 2004b). However, it should be noted that some recent evidence suggests that the importance of peers may have been overestimated (Molyneux *et al*, 2002; Poulson *et al*, 2002). This is supported by Alesci *et al* (2003) who found that smokers tend to notice smoking behaviour more than non-smokers, which could lead to skewed reporting of peer smoking patterns. In contrast however, when Reitsma & Manske (2004) found that pupils in larger schools had lower odds of being smokers it suggested that peer or staff influence may be important, as it could be that this effect is diluted in a larger school.

Even if a policy only postpones the age at which some pupils try smoking this may also have long-term health benefits with evidence suggesting that the younger an adolescent starts smoking, the more likely they are to become habitual smokers; the higher the mortality rate among their smoking cohort and the less likely they are to be able to quit (Alesci *et al*, 2003; Peck *et al*, 1993; Stead *et al*, 1996; Tyas & Pederson, 1998).

Agreeing that a smoke-free environment is necessary in order to establish non-smoking as the norm, Pickett *et al* (1999) add to this argument the suggestion that a partial smoking ban may even be detrimental. In Norway, for example, national legislation has banned staff smoking within school buildings, but allows them to smoke outside on the premises ironically making smoking

much more visible to pupils, demonstrable through between-country comparisons (Wold *et al*, 2004a,b). It is apparent that a consequence of a partial ban, or a staff ban that is only enforced in the buildings is that staff migrate outside to smoke, thus increasing the visibility of smoking and undermining the anti-smoking message. Therefore bans need to cover the *whole site* for *everyone* (Gordon & Turner, 2003a). Smoke-free schools are about a consistent and unified message and schools need to adopt and enforce smoke-free schools stringently, gaining whole school support to comply with the spirit of the law rather than just the letter.

A further argument in favour of smoke-free schools is that once schools become smoke-free, they then tend to evolve this into more complex policy adopting a multi-method and multi-agency approach to smoking as an issue (Heckert & Matthews, 2000). For example, ideas about consistent messages, school education and policy should complement each other to educate pupils about the importance of policy (Unger *et al*, 1999) with quality curriculum materials used to educate pupils as to the health (and social) issues surrounding smoking (Stead *et al*, 1996). While Maes & Lievens (2003) have questioned the importance of broader approaches, finding no significant association between health promotion policies and smoking (or indeed between health promotion policies and any health behaviours examined), the importance of whole school approaches is still seen by many as important. While some schools fail to integrate smoke-free policies into classroom curriculum, it is only by integrating health messages across the wider school environment, that schools can take more holistic approaches to health (Heckert & Matthews, 2000). Australian research (Clarke *et al*, 1994) suggests that this does not always happen, discovering that while 98% of schools have some form of health education, the content varies. This is important in light of authors such as Peck *et al* (1993) recommending that increasing tobacco education and refusal skills curriculum are crucial to successful tobacco-free schools. Interestingly, writing in 1985, when smoke-free schools were unusual, Reid was already arguing that perhaps combination with a good, age-specific, health education programme would make smoke-free schools seem

more acceptable to staff. Twenty years later, schools still vary in the consistency of the messages they are sending out.

Poulson *et al* (2002) argue that while there have been few studies into the relationship between staff smoking and adolescent smoking behaviour, the mixed evidence to date does generally suggest that there is a relationship. Similarly, despite their criticisms of school policies, and suggestions of the limitations of their effectiveness, Northrup *et al* (1998) conclude that smoke-free schools may be effective, but only as part of a broader programme encouraging social and political change in attitudes and policy towards smoking. Smoke-free schools are also especially important in the light of research suggesting that adolescent smokers tend to respect policies (in wider society) directed at all smokers, but not those solely targeting minors (Crawford *et al*, 2002) and suggesting that adolescent smokers may see such bans, especially where they apply to adults as well as students, as common courtesy to non-smokers and only a minor inconvenience to themselves. On the whole, therefore, the published evidence from the school smoking policy literature does largely suggest the importance of smoking bans. Accepting the importance of staff smoking behaviour in creating norms, the importance of smoking bans can further be seen when reflecting on some of the findings from CAS (Control of Adolescent Smoking), a transnational European study into adolescent smoking, which discovered that students in schools with a total smoking ban are less likely (by up to three times across all 9 participating countries) to report exposure to teacher smoking than pupils in schools without a ban (Griesbach & Currie, 2001; Wold & Currie, 2001). Despite the potential importance of smoking restrictions, as Peck *et al* (1993) point out, there is evidence to suggest that no-smoking policies may vary between schools in terms of their type and stringency.

3.2.2 Policy Formality

Policy formality concerns whether a policy is written (formal) or unwritten (informal) (Griesbach *et al*, 2002; Moore *et al*, 2001). While Moore *et al* included policy formality in their analysis, it was included in a policy strength

variable along with the smoking restrictions for staff and pupils, and although they conclude that stronger policy (written policies adding to policy strength) was associated with lower smoking prevalence, data on policy format itself are not retrievable from this study. Similarly, policy formality contributes to the work of Pentz *et al* (1989) with a formal policy being defined as one that was written and posted. However, this was contrasted to everything else including the absence of a policy and an unwritten or not posted policy. The presence of formal policies regarding smoking on school grounds; smoking near school grounds; having a closed campus and having a formal health education plan for smoking prevention were part of a combined variable and while higher numbers of these present appeared associated with lower smoking prevalence, again it is not possible to look at formality directly. Griesbach *et al* (2002) however, found that in schools with a written pupil policy banning smoking, significantly fewer pupils reported seeing pupils smoking outside 'about every day' compared to schools with an informal or uncertain policy. Similarly, in schools with a written staff policy, fewer pupils were aware of staff smoking in the staff rooms. If this is the case, there may be clear relationships between more formal policy and less people smoking on-site. However, some care is needed in interpreting these results as the same study found that there was no significant relationship between either pupil policy status and pupil reporting of smoking in the toilets, or between staff policy status and staff smoking outdoors. The authors argue that the difference in pupil policy may be because a written policy leads to greater awareness of smoking restrictions, making pupils less likely to smoke in high visibility areas. While this argument seems fair, it does not explain the difference in findings for staff. Perhaps another explanation could be that in general less staff smoke outside than in staff rooms, and less pupils smoke in the toilets than outside therefore any differences were too small to detect. Care is further needed in light of other findings from the same team in Scotland which found that students in schools with written policies were as likely to see other students smoking as those in schools with unwritten or uncertain policies (Griesbach & Currie, 2001).

Despite the potential importance of policy formality, studies have shown it to vary across Wales (Hartland *et al*, 1998). Providing 1995 data, they highlight

that at this time Welsh national targets had been set aiming for over 95% secondary schools to have written policies regarding pupils found smoking at school and which also have a no-smoking staff room. This desire is reflected in a guide to creating a smoke-free school which advises on the benefits of a written policy (Health Promotion Wales, 1993). By 1995 however, Hartland *et al* state that only 58% of Welsh schools had a written policy on pupil smoking and 38% of schools "had a written policy restricting teachers smoking in the staff room" (p.52) - although their wording is slightly ambiguous, the context heavily suggests that this means written staff smoking bans. At the same time, 39% had an informal pupil policy and 51% an informal staff policy. By 1998, 71% of Welsh schools had a written pupil smoking policy and 25% an informal one; with 38% having a written staff policy and 47% an informal one (Moore *et al*, 2001) – although the staff policy data are not directly comparable as the 1995 data appear to be for schools with staff smoking bans only and the 1998 data for all schools. This variability in approach demonstrates between-school variation in policy status and importance. More interestingly, these data show the within-school difference between staff and pupil policies, with formal approaches tending to be used more for pupils and informal approaches more for staff.

3.2.3 Introducing more restrictive policies into a school – methods, rationales and attitudes

Arguing that research into policy implementation (by which they mean the methods of introducing a more restrictive policy to a school) is limited, Goldstein *et al*'s (2003) work suggests that when implementing a smoke-free policy, a transition period for school members to adjust, including widespread publicising of the change, and the offer of cessation and support services for smokers may lead to more effective policy. The provision of cessation services for staff smokers during the implementation of a blanket smoking ban in Welsh schools has also been suggested by staff themselves (Hartland *et al*, 1998). Fear over losing teacher's support and not being able to enforce the policy are major barriers to smoke-free school policies, including those in

Wales with Senior Management Team (SMT)[2] keen not to alienate smokers by bringing in a smoking ban (Hartland *et al*, 1998). Often in these schools, the wishes of the LEA were used as an excuse to introduce a smoking ban without being held responsible. As a result, consultation with staff was reported as an important factor in introducing a smoking ban. The literature suggests then, that the processes and methods of introducing more restrictive policies to staff may influence attitudes towards the policy and consequently staff compliance with the restrictions. Less consultative approaches potentially lead to less compliance and less support of the no-smoking message. This is further supported by Myers (1989) who found that considerations over introducing policy are important as the impact of a policy may be dictated by the way that it was formed. A policy based on the perceptions of smoking, they suggested, is likely to be less coherent and effective than one based upon evidence of the effect that different actions may have on pupil smoking attitudes and habits. In addition, Pickett *et al*'s (1999) findings from a study investigating the implementation of the Ontario school smoking ban (where all Ontario schools had to implement a total smoking ban) found that the four risk factors making schools likely to recommend a return to a designated smoking area (less restrictive policy) included opposition from staff to the ban. The potential importance of policy introduction is reflected in a Welsh national guide to creating smoke-free schools, the majority of which focussed on the establishment of a successful policy with staff compliance through careful consultation, introduction and evaluation (Health Promotion Wales, 1993).

It is not only the methods used to introduce more restrictive staff policy that may have an impact on compliance but also the rationale behind it. The focus of nationally implemented restrictions on staff smoking across Europe tend to be on protecting staff and students from exposure to tobacco smoke (Wold *et al*, 2004a) rather than considering staff policy as integral to addressing adolescent smoking through promotion of a non-smoking norm through a

[2] Senior Management Team (SMT) refers to staff employed primarily in the overall running and management of a school. Most often these include head teachers and deputy or assistant head teachers. SMT's usually work in collaboration, to varying extents with the school's governing body which consists of parents, other staff and other members of the local community. Schools may use terms other than SMT (e.g. leadership team; management team) but SMT is fairly common.

smokeless environment and the cementing of consistent messages. However, these objectives can be unified as demonstrated by a New Zealand smoke-free school project the objectives of which were to increase youth quit rates by creating a supportive smoke-free environment and, by doing so, to reduce exposure to tobacco smoke (Heckert & Matthews, 2000). When creating a smoke-free school, for example, it is necessary to define that this applies to everyone across the whole site, and staff need to be encouraged to comply with the policy and staff policy developed and enforced alongside pupil policy in order to encourage and ensure compliance. Important to the success of a smoke-free school then, is that staff are educated regarding the importance of the wider school environment and the part that their attitudes and behaviour should play in health promotion (Trinidad *et al*, 2004). It is important to get staff behind the policy in order to encourage them not to disobey a smoke-free school policy themselves, as has been reported happening (e.g. Hartland *et al*, 1998). In this way a wider school environment may be produced which nurtures the production of a non-smoking culture, reinforced by education and reasoning.

Alongside staff opposition, Pickett *et al*'s (1999) other three risk factors for Ontario schools being likely to recommend a return to a designated smoking area after introduction of a total smoking ban were: (1) the school having a designated smoking area prior to the ban; (2) the identification of perceived safety risks for students who leave the school premises to smoke and (3) expression of the view that banning smoking on the school premises had no deterrent effect on smoking. These factors further point to the importance of prevailing staff attitudes in determining the success or failure of a smoke-free school policy, and emphasise the need for a whole school supported effort in order to introduce a successful policy that is complied with by staff as well as pupils in order to promote consistent no-smoking messages. The importance of staff attitudes is further supported by Hartland *et al,* who list other obstacles to more restrictive policy introduction as: a lack of information for schools on the law and rights of employees regarding smoking and protection from tobacco smoke; time issues and the relative unimportance of staff smoking as an issue alongside the feeling that the informal policy was working well – all of which

could all result in a reticence to formalise the policy into a written document. These local attitudes are crucial in establishing smoke-free schools and the ethos (used to mean the overall attitude) of a school towards smoking may effect policy (Clarke *et al*, 1994; Myers, 1989). Specifically, Myers suggests that school ethos may dictate the type of staff smoking policies taken up within a school. Goldstein *et al* (2003), for example, found that in many instances, adoption of smoke-free schools was driven by one or a few dedicated individuals. In Welsh schools, it has been reported that a member, or members of SMT can fulfil this role (Hartland *et al*, 1998). Heckert and Matthews' (2000) findings that several schools declined to participate in their follow up research on smoke-free schools program, citing it as low priority, demonstrate varying attitudes towards smoking. This is important in light of the suggestion that the creation of non-smoking messages through smoke-free schools through policy and compliance relies on attitudes and necessitates whole-school support for the ban, and wholehearted commitment to the policy.

Additionally, two of Peck *et al*'s (1993) 5 elements key to the successful introduction of a more restrictive policy are: involve the school and community in the development of policy and educate them as to its importance and express pride in being tobacco-free including announcing it at all school-sponsored events. This suggests the potential importance of the community in supporting more restrictive policies through compliance and is supported by Turner & Gordon's findings (2004a) that parental support, and consistent messages between home and school are also crucial to smoke-free schools as evidence suggests that parental support for pupil smoking can undermine staff authority and therefore, the messages they are conveying.

Stephens & English (2002) suggest that greater effort is needed in training and assisting schools in developing effective tobacco policies consistent with appropriate guidelines. Effectively, it was possible to have a policy that complied with the legal requirements yet which was still poorly written. Consequently, the authors argue, schools need to be educated in the importance of "good" policy. They also maintain that in demanding that

schools create and enforce better smoking polices, these expectations need to be reasonable, feasible and contextually appropriate.

While the literature deals mainly with the introduction of staff policies, elsewhere evidence suggests that in order for a policy to be successful, not only should pupils be made aware as to the health reasons and rationale for the policy, but they should also be involved in its development and implementation (Turner & Gordon (2004a)). This suggests that it may also be worth investigating the process of introducing pupil policies.

3.2.4 Policy Dissemination

In their study, Maes & Lievens (2003) demonstrated the existence of substantial between-school variance in pupil smoking with initial modelling suggesting that a large amount of this variance occurred at the pupil-level (i.e. was the result of varying pupil composition rather than a school-effect). However, after controlling for pupil characteristics, they found that there did indeed also seem to be a school-effect at work. Only two school characteristics significantly affected the odds of a pupil being a regular smoker, these being: teacher workload and *policy on rules for pupils*. While the former of these showed that a higher teacher workload was associated with higher odds of a pupil being a smoker, it is the latter that is more directly relevant to this work. Policy on rules for pupils assessed the clarity and communication of rules and showed that in "schools where rules were clearly formulated **and communicated** to the pupils there were far less regular smokers" (2003:525, highlighting not in original). While other characteristics of policy were not measured (e.g. perceived fairness or how they were established), this does suggest that dissemination of rules is crucial to successful policy. Goldstein *et al* (2003) also report that schools implementing smoke-free status have recommended visible and frequent dissemination as central to successful implementation of the policy. Turner & Gordon also claim that the rationale of policy needs to be communicated to pupils (2004a), reinforcing the idea that dissemination is clearly an important issue.

Unger *et al* (1999) found that pupil smokers displayed the most awareness of school policy and suggested that this is likely to be because they were affected by the policies - although they do point out that it cannot be discounted that awareness of policy leads to smoking as an assertion of perceived lost rights. In addition, it was susceptible students (i.e. students with a cognitive disposition towards smoking that has been demonstrated to be an important precursor to smoking uptake) that demonstrated the least awareness of policy. This implies that policy dissemination may be ineffective, as it is apparently only through its applicability that smokers become aware of the policy (most likely when they break it). Reitsma & Manske's findings (2004) reinforce the idea that policy applicability may affect pupil attitudes towards it, discovering that students who rated the strength and enforcement of policy higher had a slightly increased odds of being a smoker. They suggest that this might be because these pupils are more likely to feel the direct consequences of policy. Rather than undermining the role of dissemination, this evidence reinforces the need for effective communication of policy to the whole school. It would seem crucial that the school policy is known by pupils in order that it forms part of a coherent and consistent whole school message. Indeed, while Clarke *et al* (1994) found no association between the placement of no smoking signs around the school and student smoking, they still argue that dissemination is important as pupils often had a limited knowledge of what the school policies were. There is also evidence that pupils may underestimate the sanctions associated with breaking general tobacco control policy (Unger *et al*, 1999) which may have implications for school policy dissemination: both policy and consequences of breaking the policy need to be known. However, effective dissemination is not only about having quality procedures for communicating the policy, but also necessitates having a defined and concrete (i.e. written) policy to disseminate in the first place.

Despite the potential importance of dissemination, it can vary between schools. Darling & Reeder (2003) highlight that policy dissemination can be a weakness for schools with only 25.9% of schools with a written policy having it on display, and only 56.9% of schools including guidelines on non-smoking signage in their policy, despite this being a legal requirement in New Zealand.

Similarly, despite the posting of policies and signage prohibiting the consumption of tobacco products being a legal requirement in New York State schools, compliance with dissemination requirements is variable (Stephens & English, 2002).

As with enforcement, policy dissemination can also vary within schools. One study has shown that while dissemination of staff/student policy tends to be primarily through a handbook (with signage as well), for visitors it is signage that is the main method of disseminating this to visitors (plus it is occasionally announced at school events) (O'Hara Tompkins *et al*, 1999). Myers (1989) also suggests that dissemination to staff is also variable, finding that not only can school policies be vague, but they may also not be known to all teachers.

3.2.5 Policy Enforcement: identifying and addressing smoking misbehaviour

In their systematic review of the literature, Aveyard *et al* (2004a) assessed the evidence that there is between-school variability in smoking prevalence (i.e. that the school context influences pupil smoking. Their aim included the examination of studies for possible confounding by pupil characteristics (compositional characteristics) in order to assess the statistical evidence for school-level effects (contextual / collective characteristics, e.g. smoking policy). In order to compare different studies, they adopted the use of a school effect odds ratio (OR) to contrast the odds of smoking in a school one standard deviation above the average school with the odds of smoking in the average school in each study. The greater the school effect OR in each study, the greater the school effect of whatever contextual factor is being studied. In doing this, five studies showed that schools did vary (i.e. there was a school effect), but compositional confounding needed to be accounted for. Aveyard *et al* suggested that while statistical associations between individual school factors and smoking prevalence were generally weak, there was significant evidence for a school effect on smoking prevalence and that the "strongest and most consistent evidence relates reduced smoking by pupils to schools' policies banning smoking and enforcing this through punishment" (2004a:2262). Similarly, Pentz *et al* concluded that "simply having a formal

statement of policy is not likely to impact on adolescent smoking – the policy should emphasize smoking prevention and be *actively implemented*" (1989:860 – highlighting not in original). Applying generic theory by Bodansky regarding the effectiveness of legislation on human behaviour, to national tobacco control policy, Wold *et al* (2004a) argue that policy is likely to be most effective when accompanied by, among other things, adequate enforcement and threats of sanctions. If we apply these to schools, then it is the nature of enforcement that moderates another of Bodansky's factors for effective policy: compliance. If there is variation in enforcement, then this is likely to lead to variation in both compliance and policy effectiveness. Trinidad *et al* (2004) echo the importance of enforcement arguing that the weight of evidence suggests that if smoking bans are not consistently enforced then pupils will receive mixed messages and that consistent enforcement is associated with lower smoking rates. Griesbach & Currie (2001) also found an association between consistent enforcement of pupil smoking restrictions in given places and lower pupil reporting of seeing other pupils smoking in those areas. It has also been suggested that frequent and formal enforcement of staff bans may be necessary in order to ensure that smoke-free policies are not undermined (Peck *et al*, 1993). Gordon & Turner (2003a) and Darling & Reeder (2003) agree that it is not the policy, but the extent to which it is consistently enforced that is important: poorly enforced policy makes smoking easy and tempting for adolescents.

Some work brings the importance of policy enforcement into question. One study found that having a clear strategy for policy enforcement did not appear to be related to the policy's success (Pickett *et al*, 1999). Similarly, Moore *et al* (2001) found that, although in schools where pupil policy enforcement was low pupils were at greater risk of being smokers than where it was high (OR = 1.41), neither enforcement of staff or pupil smoking policies were significantly associated with reduced pupil smoking prevalence. Darling *et al* (2006) also discovered no association between adolescent smoking prevalence and school smoking policies which included sanctions for students caught breaking the policy. In addition, Reitsma & Manske (2004) discovered that secondary schools with weaker policy enforcement had fewer smokers. While this

contradicts the argument made for the importance of smoking policy enforcement, the cross-sectional study design (as in much of this literature) means that causality cannot be assessed and it may be that schools with less smoking have less need to strongly enforce policy. Interestingly, the authors compared secondary and elementary schools with the latter showing strong enforcement associated with lower smoking. However, they suggest that this could result from the fact that students were observed smoking on school grounds in only 1 elementary school out of 57 surveyed (2%), compared to in 90% of 29 secondary schools (around 26 schools).

Despite the potential importance of enforcement, while school smoking bans are common, they are generally poorly complied with and therefore enforcement is a key area of policy that needs investigation (Wakefield *et al*, 2000). Their findings suggest that a school ban alone does not have a significant effect on the stage of smoking uptake, but that an enforced ban is significantly associated with lower smoking prevalence. At the threshold between all five stages of their smoking transition model (each stage representing an increasingly developed smoking habit) enforced school bans were associated with an 11% reduction in the likelihood of a pupil crossing that threshold. Overall, school bans were only significantly associated with reduced prevalence when they were strongly enforced, providing clear evidence for the importance of policy enforcement. While Stephens & English (2002) found that reality often differs from the paper (or spoken) policy, in Wales too, it has been found that smoking policies are poorly enforced in many schools (Stead *et al*, 1996). More generally, Reistma & Manske (2004) also suggest that variation in strength of policy enforcement across their sample despite a consistency of policy restrictions due to a province-wide smoke-free school policy indicates that the effectiveness of local (i.e. school-level) enforcement of policy is a concern.

Crucially, policy enforcement does not only vary *between* schools, but also *within* schools. Perhaps this is connected to the fact that just as there is variability in policy formality between schools, Darling & Reeder (2003) also found that there was variability in the extent to which sanctions were

documented (formalised) or structured. Perhaps the most blatant example of between-teacher variation is when Reid (1985) states that teachers may turn a blind eye to smoking, describing it as a "relatively trivial offence". Turner & Gordon (2004b) also identify the fact that staff can undermine policy either by ignoring smoking behaviour, or even actively encouraging it in some cases. Although staff may refuse to intervene when they see pupil smoking for fear of being physically harmed (Gordon & Turner, 2003a), clearly such behaviour undermines the policy message. Turner & Gordon (2004b) also suggest that policy enforcement is context dependent within schools, with actions (or lack of them) varying depending on: who caught the pupil; that person's mood; whether the pupil had been caught before; the individual pupil concerned (i.e. nature of the relationship between pupil and staff member, largely dependent on the staff perception on pupil attitude) and where the pupil had been caught smoking. Stephens & English (2002) suggest that greater effort is needed in training and assisting schools in the importance of compliance and enforcing effective tobacco policies consistent with appropriate guidelines.

There is also evidence to suggest that policy enforcement is not ubiquitous *across* many individual school sites. For example, Griesbach *et al* (2002) reported that enforcement of both staff and pupil policy varied, with bans on pupil smoking being enforced more often in toilets (48.1% reported always enforced) than in the playground (28.6%) while for staff, bans where much more often enforced when they were in the staff room (75%) than in the playground (20%) - although these data are from a small subgroup of 20 schools that reported staff smoking bans. Finding that consistent enforcement in both the toilets and outside was clearly associated with a reduction in pupils reporting seeing pupils smoke in these places, confirms the importance of complete enforcement coverage. However, Evans-Whipp *et al* (2004) have similarly identified that smoking enforcement is difficult in toilets; at sporting events and where smokeless tobacco was being consumed.

Aside from across-site variation of enforcement, another issue touched upon by the literature relates to whether policies are enforced off-site or not. The weight of evidence clearly suggests that where pupils are allowed off-site

during the day, important challenges are raised regarding the enforcement of school smoking bans (Darling & Reeder, 2003; Gordon & Turner, 2003a; Northrup *et al*, 1998; Turner & Gordon, 2004a,b). As Darling & Reeder (2003) point out, some schools will limit their enforcement to the school campus, while others will enforce it whenever a pupil is in school uniform. As we shall see, this was an issue of major importance to the success of smoking policy in Welsh schools. Turner & Gordon (2004a,b) and Gordon & Turner (2003a) highlight the same variation between schools regarding off-school enforcement of policy and argue that neither pupils nor staff in their sample would support a policy that extends beyond the school site and the school hours (Turner & Gordon, 2004a). This confirms Northrup *et al*'s (1998) assertion that where pupils are allowed off-site during the day, school smoking bans can raise important challenges regarding their enforcement. It is fair to argue, then, that where schools are reluctant to enforce policy off-site, this further enhances the importance of gating policies in maximising the consistency and effect of school policy. If schools are reluctant to implement such restrictions for pupils during school hours, then consideration needs to be given to spatial and temporal extents of school authority over pupil smoking behaviour.

While SMT tend to be more active in picking up smoking than non-SMT teachers, the extent to which smoking varies also differs *between* teachers meaning that picking up smoking is not just dictated by staff authority, but may also be due, in addition to the reasons outlined above, to personal attitudes on smoking; support within the school for staff action on smoking and the staff member's perception of the role of the teacher in health promotion (Gordon & Turner, 2003a). An alternative way of looking at this is that staff members' authority over pupils is not created by their rank within the school, but by their relationship with the pupils (Turner & Gordon, 2004a). However, Gordon & Turner also argue that the potential of support staff (traditionally seen as low rank and authority) to address smoking could be improved by conferring upon them an authority that pupils will respect, by allowing them to invoke sanctions (2003a) thus suggesting that authority is determined by the ability to enforce sanctions when policy is transgressed.

Issues of enforcement are further problematised by Turner & Gordon (2004a) when they argue that schools are not conducive to staff enforcement of smoking policies with the large numbers of pupils dissuading staff from intervening and that pupils may have realised that staff could only influence pupils who were willing to accept staff authority (although interestingly some pupils felt that smoking staff had more right and authority to deal with smoking behaviour as they spoke from an informed perspective). In other words, the success of a sanction depends on the response of the pupil, and a pupil accepting a sanction implies some acceptance of authority. However, those who smoke, as seen elsewhere, tend to be disenfranchised from school therefore less likely to accept authority. Consequently, sanctions for smokers may be off to a losing start. Staff authority and enforcement is again raised when pupils reported that they were more concerned about their parents' reaction to them smoking. A higher value was placed on the parent-child relationship and therefore parental reaction was more likely to lead to behaviour change. This is echoed by the work of Wakefield *et al* (2000) who found smoking bans in the home more effective than school smoking bans at decreasing adolescent smoking. Staff reported the same feeling that parents were better than themselves at influencing pupil smoking behaviour (Gordon & Turner, 2003a). Therefore, for staff enforcement to work, it necessitates a school environment of respect for staff authority. Indeed, they report that pupils perceived a lack of teacher authority as impeding their impact on smoking, discovering that pupils felt that teachers enforcing policy, or discussing smoking would be unlikely to impact upon smoking habit, especially where staff are not respected (Turner & Gordon, 2004a). The fact that national Scottish law meant that adolescents were legally allowed to smoke, and that staff had no basis in law from which to act on stopping pupil smoking enhanced these issues. This demonstrates again the need for consistent and integrated policy across all levels of policy-making: policy that does not just devolve responsibility downwards but creates policy which works between and within the levels.

3.2.6 Type of sanctions employed when smoking policy is transgressed

Clarke *et al* (1994), found that in general, schools adopted a within school punishment (e.g. detention, warning), followed by parental contact and escalation up to suspension/ expulsion for third or fourth offences. However, Darling & Reeder (2003) discovered that the type of sanction adopted by schools varies. Variability of sanctions occurs not only between schools, but also within schools with sanctions having been shown to differ between staff and pupils. Charlton & While (1994) outline the types of sanction conducted by schools on staff and pupils. For staff, it was difficult to classify the variety of reported actions taken to enforce policy, but generally these consisted of a quiet discussion with the staff member breaking the policy. Two definite categories were identifiable from the responses, with 13% of schools reporting that a verbal or written warning from the Principal would be used and 15% of schools reporting that peer pressure and complaint would be seen as the main way of enforcing staff policy. The fact that this only equates to 28% of schools suggests that the presence of sanctions for staff breaking policy vary. While approaches to staff sanctions appear largely not stated and ad hoc, for pupils breaking policy there was a much greater emphasis on action and on punitive rather than supportive measures of enforcement. Only 20% of schools reported that they would use discussion or counselling with the pupil at any point while letters to parents (67%); expulsion or suspension (40%) and detention (33%) were employed much more frequently. O'Hara Tompkins *et al* (1999) also demonstrate this pattern, showing that in West Virginia schools, pupil policy enforcement tended to be generally punitive in nature and (mirroring county policy) weak on preventive education and cessation. For pupils the most commonly reported enforcement action was out-of-school suspension (81% of schools reported doing this) followed by notifying the parent/guardian (62%). In contrast, the first action that could be interpreted as supportive was meeting with parent/guardian (29%) followed by meeting with a counsellor (19%). Where smoking cessation was reported as part of sanctions procedures (9%), this was clearly reactive rather than proactive (i.e. implemented only in response to smoking behaviour rather than offered prior to it). Proactive support was relatively minimal, with only 15% of schools offering their own

programmes and slightly more providing information about (38%), or referring pupils to (33%), external cessation programmes. Conversely, in terms of West Virginian staff, they were generally given a verbal warning or written documentation (it is not clear whether this is a written warning or copy of the policy) and visitors were generally given a verbal warning only. Evans-Whipp *et al* (2004) also reported that drug policies in the US tended to be punitive not supportive. Tubman & Vento (2001) also found the provision of cessation programmes and tobacco education as a means of enforcement were again much less commonly reported than more punitive actions. Although largely based in the US, the literature suggests a trend towards (a) more punitive rather than supportive measures for pupils and (b) a lower emphasis on enforcing policy for staff and other adults on site, than there is for pupil policy. Where this does occur, it also tends to be behavioural rather than supportive.

Any trend towards punitive sanctions for pupils is important in light of Pentz *et al*'s (1989) conclusions that punishment and the severity of consequences for smoking against policy were not associated with lower levels of smoking prevalence. Instead, they found that pupils are more responsive to smoking policy that is supportive and positive in focus, with a policy emphasis on assisting pupils (i.e. focus on prevention and/or cessation) being significantly associated with lower adolescent smoking than those with a policy emphasis on punishing them. This is supported by Turner & Gordon who argue that "...attention needs to be given to how staff can enforce smoking restrictions in a way which indicates that they aim to protect pupil well-being rather than restrict pupil rights." (2004b:158). The importance of the approach taken by schools is reinforced by conclusions they made in an earlier paper which suggested that schools taking an holistic (including health) approach to pupils may alienate less pupils than those concentrating on academic achievement and that in their two case study schools while holistic approaches paralleled academic goals, where there was an academic focus, health became a subsidiary goal or target (Gordon & Turner, 2003b). Returning to sanctions procedures specifically, Reitsma & Manske (2004) also suggest that schools should carefully consider the sanctions that they use against smokers so that

they do not alienate them from the school. This is especially important as evidence indicates that if young people are alienated from school then they are far more likely to engage in health-damaging behaviours as a response (Nutbeam *et al*, 1993). Peck *et al* (1993) also suggested that implementation of an education programme for students breaking policies instead of more punitive measures was one of 5 elements they identified as key to the successful implementation of a tobacco-free school policy. Emphasising the need for support, they identified offering cessation classes/resources for staff, students and, if possible, the community too, as another important element, suggesting that there is a need for a supportive base to underlie a successful policy: the message of health rather than discipline being key. Tubman & Vento's (2001) analysis of school tobacco policy enforcement in Florida[3] echoes these points suggesting that policies tend to be punitive rather than educational and that alternative enforcement strategies may be equally appropriate. They later add the stronger claim that punitive strategies are possibly inadequate and developmentally inappropriate, however their evidence for this assertion appears somewhat circumstantial.

If there is an argument for schools also to move towards less punitive and more supportive measures, this raises the question of balance as clearly there do need to be punitive sanctions in order to act as a deterrent. This is demonstrated by Turner & Gordon (2004a) whose data suggest that if pupils perceive that staff will not act, then they will flaunt the policy. Clearly, there is a tension between behavioural control and addressing smoking as a habit, and schools will need to adopt an element of each. However, unless schools recognise that tobacco smoking is a habit, and that some pupils have a genuine addiction, the issue will not be dealt with well. As Turner & Gordon (2004a) note, the addictive nature of tobacco smoking limits staff effectiveness in addressing it. This suggests the need for supportive measures for pupils addicted to nicotine. Interestingly, Evans-Whipp *et al* (2004) found that drug

[3] For the sake of comparison it is useful to note that the middle (11-14 year olds) and high schools (14-18 year olds) researched in this study of Floridian schools reflect the age range of Welsh secondary schools, although the allocation of grades is offset by 1 year (i.e. grade 7 Florida is equivalent to year 8 here), (O'Donnell, 2004; Florida Department of Education, 2003; 2005)

policies in general in the US tended to be more severely enforced for younger students, while respondents felt that they would be better served by supportive action. This apparent trend towards punishment (deterrent) for younger pupils and cessation (quitting support) for older pupils appears to reflect the trend that older pupils are more likely to be smokers, and to have developed a smoking habit.

Conducting an exploratory analysis of the relationship between teacher enforcement of policy and certain contextual features of the school setting Tubman & Vento (2001) categorised different responses as formal (official enforcement response) and informal (teacher enforcement response). The most common informal action by a large margin was to report the pupil to the principal (55% of teachers reported doing this), suggesting that when they caught pupils smoking, teachers did tend to place the student into the (generally punitive) formal sanction procedures of the school. However, 34.4% of staff reported that they would talk to the student, although these action categories are not mutually exclusive. This highlights the possibility that staff may not always follow school enforcement procedures. Tubman & Vento conclude that as well as influencing attitudes and reactions to smoking education delivery, certain school contexts may also affect staff enforcement of school policy (although it is arguable that perhaps these are interrelated). Particularly interesting was that in the middle schools, an increase in perceived support from the school community was associated with more punitive informal responses including reporting them to the principle and calling their parents. This suggests that a supportive whole school community approach to smoking may encourage staff to engage with enforcement procedures as they feel supported. Combining this with the evidence that supportive, cessation and education-based policy enforcement is more effective, suggests that the best method of policy enforcement is an integrated whole–community approach that focuses on formalised support and cessation. An element of this is bringing pupils on-side too, because if pupils are made aware of the rationale behind the policy, and their support can be gained, then implementation is likely to be more successful (Unger *et al*, 1999). They enhance this with findings that support for a smoking policy appears to decline

as pupils progress to becoming a smoker - although this may have more to do with issues of perceived norms and social acceptability as outlined earlier. Findings by Crawford *et al* (2002) into the attitudes of smoking youth towards tobacco control policy in wider society support this idea. They found that, contrary to suggestions in some of the literature, the majority of smoking youth did not think that non-smoking policies made smoking attractive as a "forbidden" behaviour. In fact, generally, they agreed that non-smoking policies promoting non-smoking may benefit younger children and non-smokers, but not established smokers. This reinforces the notion that successful policy which reduces either smoking prevalence or smoking amount, most likely needs to incorporate cessation. It also suggests that adolescent smokers may have a more positive engagement with smoking policies than is generally suggested. If this is the case, then student-staff dialogue over policy and its rationale may lead to greater compliance and long-term effectiveness. In addition, Tubman & Vento's (2001) finding that undertaking formal training was significantly associated with sending pupils to formal treatment programs indicates that schools and staff need to be educated in the benefits of such ways forward. This relates back to suggestions of the importance of attitudes and the wider school environment in adopting whole-school approaches which reinforce non-smoking messages across policy and the curriculum.

Due to a lack of literature, smoking policy enforcement (i.e. sanctions and their implementation) is not fully described meaning that evidence on effective enforcement (including sanction types) is not readily available (Tubman & Vento, 2001). Perhaps this partly explains the general lack of school guidelines on policy enforcement identified by these authors. Although some studies have highlighted the difference between policy and action, these tend (a) to be based on discussions with a school leader and (b) not to examine how actual teacher responses to policy transgression may differ from the official response. In addition, the majority of this work appears to be located in the US. There are little or no data regarding sanctions used in Welsh schools.

3.3 Health Promoting Schools and the settings approach to tackling health through schools

The Health Promoting School[4] (HPS) movement spread across Europe and North America in the mid-1980s (Lynagh *et al*, 2002), although Denman (1999) argues that the same notions have existed in the UK for a lot longer. HPS were inspired by WHO's 1986 Ottawa Charter for Health Promotion (Lee 1999; Konu & Rimpela, 2002; St Leger, 2001). The charter recognises the complexity of providing health for all (WHO, 1986) and as such, recognised that education was not the only way in which health could be improved. By applying this general charter to children, some authors have argued that it (alongside other similar statements) recognised the importance of a holistic approach to youth health, which included a focus on the environment and community in which children lived (Lynagh *et al*, 1997). This echoed growing academic interest in health contexts in general. It was the application of such ideas to health promotion in schools that gave rise to the HPS (Lynagh *et al*, 1997). This new movement challenged schools to re-think the traditional top-down approaches to health education (St Leger, 2001). One of the important elements of this HPS approach is to identify and address the influence of the wider school environment on adolescent health behaviour (St Leger, 2001). And so, HPS can be identified as educational speak through which schools understand and discuss whole-school approaches to health education.

Denman provides a useful description of HPS:

> *It is rooted in a holistic concept of health and is concerned with improving the health of all in the community of the school. The health promoting school approach to practice requires the management and organizational structures in schools to be supportive and for policies to be in place which are coherent, comprehensive and reached by consensus.*
>
> *Denman (1999:216)*

[4] Known as co-ordinated school health in the USA (St Leger, 2001)

The HPS approach is concerned with focussing not only on coherent health related policies but on the achievement of a whole-school environment which supports these policies. The *settings approach* to health education in schools (Denman, 1999; St Leger, 20001) is based on the notion of the HPS movement (Denman, 1999). Rooted also in the general growth of health promotion interest in contexts and settings (Whitelaw *et al*, 2001), this is a more holistic approach to health education in schools which is concerned with the broader school environment and its role in influencing the health behaviours of pupils.

There is a (growing) body of literature suggesting evidence for the importance of studying the role of the school environment in influencing youth health behaviours. Aveyard *et al* (2004b) found data to suggest that schools achieving a balance between what pupils perceive as appropriate levels of support (practical assistance, advice and responsiveness) and appropriate levels of control (control of behaviour including disciplinary matters and the method by which this is accomplished) will have a greater relative reductive effect on pupil smoking given their social background. Especially as this effect potentially reduces smoking amongst both advantaged and disadvantaged pupils, they argue that "understanding and manipulating school cultures could potentially perhaps lead to substantial public health gains" and that "Changing school culture could become the new adolescent smoking prevention initiative of the 21st century" (p.1778). Early studies into relationships between the school environment and health suggest that during the 1970s and 1980s, school factors suggested as being important in influencing health behaviour included: staff as role models (e.g. headteacher smoking being linked to increased smoking among pupils); peer alcohol and drug use (linked to drug use as a norm) being linked to increased prevalence of these behaviours and good (social) support (from teachers and peers) being linked to lower levels of these behaviours (Roski *et al*, 1997). While some of these did discuss the preventive effect of health education on smoking, several of these early studies also discussed the fact that the school environment itself could provide both opportunities and barriers to promoting healthy behaviour. Roski *et al*'s own study into the influence of the school and community on adolescent alcohol and drug use concluded that there was evidence to suggest the importance of

the broader social environment in influencing these behaviours (1997). They found that perceptions of normal behaviour; role models and opportunities for alcohol and drug use were all associated with higher alcohol use. However, the level of social support available to alcohol and drug users had no real association with prevalence. With regard to the school environment, they proposed that successful intervention strategies may be those that complement successful classroom strategies by influencing the wider school environment to present more consistent messages about behaviour norms, and to produce better role models for pupils. Similarly, Gådin and Hammarström's (2000) Swedish study demonstrates the importance of the wider school environment on pupil's health; continued weaknesses of the school environment in encouraging pupil health, and the lack of much research into this area. They also indicate that gender may moderate the school effect on health. In their School Well-being model, Konu & Rimpela (2002) argue against the traditional separation of health from other aspects of school life, in favour of a well-being rather than health promotion approach to school health programmes. This model proposed a framework for understanding how certain interrelated home, school and community factors may be seen to influence the well-being of any given pupil. Tests of the model using linear regression (Konu *et al,* 2002) concluded that for both boys and girls the school context explained more of the variation in pupil general subjective well-being (17% for boys and 20.1% for girls) than their background context did (12.2% and 14.5%). This would appear to suggest that interest in school contexts is not misplaced. However, it should be noted that in this model, the school-effect on pupil health is mediated by its effect on pupil well-being: this differs both from other approaches taken above, and that taken in this project. In reference to their point that some of the most successful approaches to reducing smoking prevalence in adolescents were those targeting psycho-social influences, especially regarding the way in which adolescents related to those around them (relationships which in fact are very much a part of the wider school environment), Nutbeam & Aaro (1991) also pointed out that there was emerging work into producing supportive non-smoking environments which feeds in closely to settings-based work, and the creation of consistent messages across the educational curriculum and wider school environment.

Methods to achieve this include the presence and use of policies designed to influence youth health behaviours as demonstrated by the aims of an HPS as laid out by the European Network of Health Promoting Schools (ENHPS)[5], one of their specific aims for an HPS being:

> *To consider the complementary role of school policies to the health education curriculum, e.g. policies on smoking, bullying, healthy eating.*
>
> *Health Promotion Wales (1998:4)*

Critiques of these approaches do exist. For example, it has been suggested that, despite the fact that HPS policies imply some sense of agreed meaning (Whitelaw *et al*, 2001), HPS is itself a contested term with no agreed definition (Stewart *et al*, 2000; Whitelaw *et al*, 2001). However, St Leger (1998) argues that international difference in HPS is less to do with the components of the HPS which are often similar, and more to do with varying resources offered to teachers to help implement HPS guidelines and frameworks. Writing about the Australian experience of HPS, Lynagh *et al* (1997) expand on this, arguing that while clear philosophical shifts are identifiable at the international, national and state levels, what actually occurs at the school level is less clear. This is arguably the same in Europe and is partly practical: as the unit of study reduces in size (e.g. from the European to the Welsh to the Welsh School level) so the number of units, and therefore variation, increases, making data harder to collect. This is reinforced by the fact that, as with tobacco control policy (Section 2.3), HPS guidelines tend to devolve responsibility for detail of action down to the level below them (St Leger, 1998). Denman (1999) argues that, aside from the ENHPS, most HPS projects in England are localised, and even ENHPS identifies the importance of scale and local context (Turunen *et al*, 1999). Even where national networks of HPS exist, they devolve responsibility for health in schools downwards, ultimately to the level of the school, as seen with the description of the Welsh

[5] ENHPS is a practical expression of HPS philosophies and was launched in 1992 as a joint project of the WHO Regional Office for Europe (WHO); the Commission of the European Community (CEC) and the Council of Europe (CoE) (Denman, 1999; Health Promotion Wales, 1998; Konu *et al*, 2002)

Network of Healthy School Schemes in Section 2.3. In England, the National Healthy School Standard (NHSS) sees schools achieve Healthy School recognition by participating in nationally accredited local programs delivered by partnerships between Local Education Authorities and Primary Care Trusts (Department for Education and Employment, 1999; Teacher Support Network, 2006). The downside of the importance of local context for the HPS movement is that it does increase the likelihood of differing definitions and makes data harder to collect - although maybe successful HPS needs to be set within a local context and this downside is only problematic for researchers.

It has also been argued that research into the characteristics of the HPS movement and its effectiveness in creating healthy behaviour within the school environment is limited (Lister-Sharp *et al*, 1999; St Leger & Nutbeam, 2000; McLellan *et al*, 1999). In a rare investigation into the attitudes of (Australian primary school) teachers towards the HPS, St Leger (1998) argues that while staff largely believe in the importance of health education, they often see their role as tied to the formal curriculum (see Section 3.4.1) and may find it hard to conceive of more holistic (e.g. settings) approaches. This is important because he also argues that for HPS to work, they need support and commitment across the school, however, they must not be oversold as a solution to all the school's social problems. In addition staff need to be trained in the philosophical approaches underlying HPS, and presented HPS in a supported and pragmatic fashion.

Whitelaw *et al* (2001) have also provided a critical review of the broad settings movement, in part arguing that the perceived consensus implied by the literature around what is meant by a settings-based approach, is in fact an uneasy one. To some extent, the development of a consensus definition of settings approaches has been successful, they argue, in increasing the scope of theoretical discourses underlying health promotion, and drawing different disciplines into the field. However, they also argue that the breadth of activity included under the settings umbrella is also problematic. By bringing together everything under one umbrella, some of which may be very different from one another and some of which may not even be settings approaches at all, it can

appear to some practitioners as though this approach is widely identified as the only way forward in health promotion. Roski *et al* (1997) have also highlighted the suggestion that the influence of wider social environments, including schools, on adolescent health behaviours had largely been assumed rather than investigated.

However, while acknowledging that there are critiques of the HPS movement and the settings approach, there remains a strong argument suggesting the importance of school environments across which are consistent messages in order to moderate adolescent health behaviour. It is accepting such arguments for the importance of examining the wider school environment that this work proceeds.

3.4 The Wider School Environment

3.4.1 Defining the Wider School Environment

At the heart of the settings approach is what writers sometimes refer to as the *hidden curriculum* (Lister-Sharp *et al*, 1999; Lynagh *et al*, 1997; Nutbeam, 1992; Williams & Jones, 1993) or the *informal curriculum* (Lynagh *et al*, 1997) of a school. When using these terms, health researchers appear to use this to mean the influence of the school environment on health promotion messages. To illustrate this, the following definitions are useful:

> *The "hidden curriculum" influences students through a number of networks, both formal and informal. If health education in the classroom is not supported by what students see, experience, and feel in their school environment, it will be less effective.*
>
> *Williams & Jones (1993)*[6]

> *...it has been recognised that the informal or 'hidden' curriculum of a school can significantly influence students' attitudes and behaviours. The messages conveyed in the classroom can be*

[6] This document was sourced in html form from an on-line provider, consequently no page number is available

> *reinforced or completely undermined by what occurs outside the classroom...*
>
> *Lynagh* et al *(1997:43-4)*

In these definitions, the hidden curriculum (or informal curriculum) concerns elements of the wider school environment not traditionally considered when examining the school setting. It contrasts to the subject-specific formal curriculum delivered in classrooms (i.e. what is traditionally considered to be the pedagogical element of the school) as governed by both the national curriculum (prescriptive outline of subject content for specific age groups (key stages) as produced by government) and the local interpretation of this curriculum (e.g. the case studies to be used to cover prescribed subject content).

A summary of some elements of a school's hidden curriculum, as proposed by various authors is outlined below, and further illuminates the meaning of the term (many of these emerge from the HPS literature):

- Role modelling by teachers (Lister-Sharp *et al*, 1999; Nutbeam, 1992)
- Relationships between individuals and groups (within the school and in partnership with people outside of the school) social school environment (Lister-Sharp *et al*, 1999; McLellan *et al*, 1999; St Leger, 2001; Williams & Jones, 1993)
- Pupil-teacher interactions specifically (McLellan *et al*, 1999)
- Physical environment (e.g. space, lighting, health and safety) (Denman, *1999;* Lister-Sharp *et al*, *1999;* Nutbeam, 1992; Williams & Jones, 1993)
- Physical conditions (e.g. noise) (Lister-Sharp *et al*, 1999; St Leger, 2001)
- Learning environment (Denman, 1999; McLellan *et al*, 1999)
- Informal and formal networks (Williams & Jones, 1993)
- School policies (St Leger, 2001; Williams & Jones, 1993)
- Opportunities for students to succeed (Williams & Jones, 1993)
- Links with external health agencies (St Leger, 2001; Williams & Jones, 1993)

- Organisation and management of the school (Nutbeam, 1992)
- Atmosphere of the school (Piette & Rasmussen, 1995 cited in Lister-Sharp *et al*, 1999)
- Code of discipline (Piette & Rasmussen, 1995 cited in Lister-Sharp *et al*, 1999)
- Prevailing standards of behaviour (Piette & Rasmussen, 1995 cited in Lister-Sharp *et al*, 1999)
- Attitudes of staff towards pupils (Piette & Rasmussen, 1995 cited in Lister-Sharp *et al*, *1999*)

The fact that many of these elements can be identified in the studies into the school setting by Gådin & Hammarström (2000) and Konu & Rimpela (2002) cited in Section 3.1.2 reinforces the link between hidden curriculum and the settings approach.

However, there is a problem with using the term hidden curriculum. The emphasis of this term in the health literature is on the way in which the school environment supports the health messages present in the formal curriculum. This is related to an educational use of the term which, while acknowledging that the terms hidden and curriculum are contested, is concerned more generally with the socialising practices and messages conveyed in addition to those in the official curriculum (Meighan & Siraj-Blatchford, 2003). This may include, for example, the use of Euro-centric map projections in lesson; the use of language and the seating of pupils in a classroom. Therefore, in order to focus this work, on health promotion, rather than using the terms hidden or informal curriculum, another term used within discussions on the HPS and settings literature will instead be preferred: that of the **wider school environment (WSE)**. The WSE encompasses all those aspects of the school that are not the formal curriculum, but which shape the values and approaches of the school. The WSE is broad, consisting of numerous individual *elements* which may include, but are not restricted to, any of the elements listed above, including the policy itself. These individual elements of the non-formal

curriculum engage and interact to produce an overall set of attitudes, relationships, and interactions that define the values of each individual school. Effectively, it defines the value context in which education takes place. This context may either undermine or reinforce the messages forwarded in the formal curriculum (Lister-Sharp *et al*, 1999; Lynagh *et al*, 1997).

3.4.2 The Wider School Environment, discretion and school smoking policies

While the formal curriculum is prescribed by national and local guidelines, the WSE is subject to **discretion** at the local level. With regards discretion, Hawkins (1992) writes:

> *Discretion is the means by which law – the most consequential normative system in a society – is translated into action. One of the commonplaces of socio-legal studies is that the form such action takes may not necessarily be predictable from scrutiny of legal rules themselves. Discretion – which might be regarded as the space, as it were, between legal rules in which legal actors may exercise choice – may be formally granted, or it may be assumed. It is in the everyday discretionary behaviour of judges, public officials, lawyers, and others that the legal system distributes its burdens and benefits provides answers to questions and solutions to problems.*
>
> *Hawkins (1992:11)*

Historically, discretion has specific meaning in both legal and sociological discourses, which take two different conceptual approaches towards the term (Hawkins, 1992; Schneider, 1992). While one group, the *legal philosophers*, understand discretion as the way in which the laws (or rules) themselves create a space in which discretion can operate, the second group, taking a *socio-legal* approach examine the ways in which "the words of law may – or may not – be translated into legal action" (Hawkins, 1992:14). It is a socio-legal understanding of discretion to which the use of discretion here is closest. This sociological approach to discretion is, according to Hawkins, concerned with the actual decision making processes of humans, and how these affect policy enforcement. It is these decisions that influence the implementation of a

policy. And it is because of this discretionary decision making, that the expected outcome of a policy isn't always observed: "the 'arbitrariness' or 'capriciousness' of discretion (as lawyers and others might see it) resides in the disjunctions between expectations prompted by a reading of legal rules, on the one hand, and the patterned forms of behaviour engaged in by legal actors in their routine work, on the other." (Hawkins 1992:13). To put it more simply, "Discretion is an act of choice" (Feldman 1992:167). Hawkins (cited above) says that in socio-legal approaches, discretion may be formally granted or it may be assumed (1992:1). Goodin's (1986) well known classification of legal discretion makes a similar argument. This is to say that those involved in implementing policy may be given the space to exercise discretion (granted) or may exercise discretion of their own initiative (assumed).

While discretion is a term with contested academic meanings, here it is taken to mean decisions made within elements of the WSE which may influence smoking policy effectiveness. Gordon & Turner (2003a) have mentioned that SMT often exercise discretion in the enforcement of bans and that factors influencing the extent staff enforce policy have been unexplored. In schools, the major people making discretionary choices are staff, however, it is possible to argue that the discretionary choices made by staff enforcing bans is only one form of discretion and that discretionary choices can be made at two levels within the WSE related to smoking policy. Following from Moore *et al*'s (2001) suggestion that necessary future investigation into policy contexts should focus particularly on policy content and enforcement, these two levels are *policy-level characteristics* and *enforcement-level characteristics.* The six aspects of school smoking policy identified from the literature as being related to effective smoking policy (Section 3.1) can be categorised on this basis:

Policy-level characteristics

- *The importance of policies that ban smoking (smoke-free schools)*
- *Policy formality*
- *Introducing more restrictive policies into a school – methods, rationales and attitudes.*
- *Policy dissemination*
- *Type of sanctions employed when smoking policy is transgressed*

Enforcement-level characteristics

- *Policy enforcement: identifying and addressing smoking misbehaviour*

Policy has been identified above as one element of the WSE (St Leger, *2001;* Williams & Jones, 1993*).* **Policy level characteristics** relate directly to the smoking policy itself. These include the restrictions on smoking made by the policy; the rationale behind the policy; policy formality and policy dissemination. Discretionary choices regarding these characteristics are made by staff at the policy-level and result in between-school variation in the policy itself. It is such characteristics that dominate the analysis into effective school smoking policy.

The second group can be labelled **enforcement-level characteristics** and are very important. These concern the implementation of smoking policy and how implementation may contribute to policy effectiveness by either supporting or undermining the policy. These include the physical environment; staff implementation of policy and role-modelling. This is an important group of characteristics because they are often, but not exclusively, influenced by discretionary choice at the individual level and can therefore vary within schools. Tubman & Vento's informal (versus formal) enforcement response (2001) is an example of such individual discretionary choices in action. Due to time constraints, this work mainly focuses on the main group of people making discretionary choices regarding policy enforcement in schools and as such concentrates on the extent to which staff action either supports or undermines the policy. However, this could also include other members of the wider school community such as parents, the contribution of who will be mentioned. As Gordon & Turner (2003a) suggest, these are not a widely investigated area of school smoking policies.

3.5 Moving forward: research questions and a framework for analysis

3.5.1 Research objectives

This work set out to fulfil the following objectives:

1. To collect rigorous data on the development, content and enforcement of school smoking policy in Wales

    - *Undertake a **teacher survey** to identify patterns of smoking policy and its enforcement within Welsh HBSC 2001/2 schools.*
    - *Undertake **teacher interviews** with school experts within Welsh HBSC 2001/2 schools. These will use survey findings (including inconsistencies in reporting) as a basis to probe more deeply into smoking policies and their enforcement).*

2. To identify characteristics of school smoking policies and their enforcement that may potentially moderate the extent to which policies reduce adolescent smoking behaviour

    - *Transcribe teacher interviews and undertake a thematic analysis of these data in order to develop this conceptual framework*

3. To define new indicators to enhance analysis of the relationship between school smoking policies and adolescent smoking behaviour

    - *Create new **policy indicators** (quantitative variables) that describe variation in characteristics of school smoking policies and their enforcement identified through analysis of teacher interview data*
    - *Use teacher interview data to allocate schools into these variables*

4. To assess the extent to which characteristics of school smoking policies and their enforcement are associated with lower prevalence of adolescent smoking in Welsh schools

    - *Conduct multi-level analyses of the new policy indicators in association with self-reported data on pupil smoking prevalence from HBSC 2001/2 in order to:*
    - *Examine the extent to which various policy-level characteristics are associated with lower levels of adolescent smoking in Welsh schools*

- *Examine the extent to which smoking policies that produce more consistent no-smoking messages are associated with lower levels of adolescent smoking in Welsh schools*
- *Examine the extent to which Wider School Environments (as defined by enforcement-level characteristics) that are more supportive of school smoking policies are associated with lower levels of adolescent smoking in Welsh schools*
- *Examine the extent to which schools where the whole policy context (i.e. policy and its enforcement) is more supportive of producing consistent no-smoking messages are associated with lower levels of adolescent smoking in Welsh schools*

5. To draw conclusions about the potential relationship between characteristics of school smoking policies and their enforcement, and the potential success of those policies

    - *Use the results of the qualitative and quantitative analyses to draw conclusions about the potential relationship between the characteristics of school smoking policies and their enforcement, and the potential success of those policies*

During the study, the terms policy content and policy enforcement became replaced by the terms policy-level characteristics and enforcement-level characteristics. This was in order to reflect the fact that telephone interviews demonstrated policy-level characteristics to be about more than just policy content.

Please consult Sections 5.5 and 8.1 for explanations of the collaboration surrounding the statistical analysis presented in this thesis.

3.5.2 Consistency: a framework for analysis

This study aimed to contribute to knowledge on school smoking policies in several ways. Among Whitelaw *et al*'s (2001) criticisms of the settings approach is the fact that it can too often be used as a vehicle to continue traditional health education approaches, so that in fact Mittlemark's 1997 statement that "*the properties of settings themselves are too rarely objects of regard with reference to their health promoting and health damaging properties*" (cited in Whitelaw *et al*, 2001:342) still holds true. This project

answers such criticisms, by examining how school policy contexts, as well as school policies, may influence health behaviours.

As the study progressed, a reading of the literature alongside the emerging data suggested that there was a potentially interesting lens through which to look at the data which would further add to the originality of this work. The importance of consistent messages across the WSE is repeated throughout the HPS literature, and the importance of consistent no-smoking messages to promote normative no-smoking behaviour is present in the smoking policy literature (especially that related to the importance of smoking bans). These ideas are not themselves new. However, to the best of the author's knowledge, they do not appear to have been brought together and applied specifically to studies of smoking policy in Wales before. Typically, the WSE is used to understand the value context in which the formal curriculum is taught. Some smoking policy studies also discriminate between policy and its enforcement (e.g. Moore *et al, 2001*). This study brings these ideas together and applies them to Welsh school smoking policy, asking to what extent the WSE produces a value context in which smoking policy operates. Thus, smoking policy-level characteristics (themselves just one element of the WSE) may be approximated to the way that formal curriculum is understood in the HPS model, and elements of the WSE (including enforcement-level characteristics) can be examined as to the extent that they support or undermine the policy. These enforcement-level characteristics have been less often discussed in the smoking policy literature. Together, policy and its enforcement create the policy context and consequently, this study focuses on both these levels.

Further, if the importance of consistent no-smoking messages (from both the HPS and smoking prevention literatures) is particularised to smoking policy, it can be seen that in order to be effective and reduce adolescent smoking behaviour, it is important both for policy-level characteristics to produce consistent messages regarding the importance of no-smoking, and for the WSE (including enforcement-level characteristics) to support this. As far as the author is aware, published studies of Welsh school smoking policies have rarely, if ever, used such an approach, with such a data set in order to

investigate policy before. They also do not appear to have been commonly used in investigations focussed elsewhere.

Having established these points, the analysis aims to contribute to knowledge on school smoking policies in the following ways:

a) Adding to existing literature on policy- level characteristics

As has been asserted, most studies into school smoking policies focus on policy-level characteristics. However these often merely reduce data to policy indicators commonly using close-questioned surveys to do this. Having collected data from interviews with local experts on smoking policy (Research Objective 1), this study adopts a mixed-method approach in order to collect more rigorous data on school smoking policies than in many other studies to date. This mixed-methods approach is illustrated in Table 1.1. and discussed further in Section 5.2. This study included more rigorous analysis of characteristics commonly identified as important within the literature. These analyses include both qualitative and quantitative stages.

The work further contributes to the literature by using the often discussed but rarely analysed notion of consistency in order to create some of the indicators which describe schools on the extent to which their policy-level characteristics support or undermine consistent no-smoking messages. This indicator was added to other indicators describing policy-level characteristics for multi-level analysis of their association with prevalence of pupil smoking (Research Objectives 3 and 4).

b) Adding to existing knowledge by examining policy context through analysis of the supportiveness of the WSE towards school smoking policy

Having examined policy-level characteristics, the interview data are then used to investigate policy context (Research Objective 2). Through application of the above framework, data are analysed to investigate how discretionary choices at this level either undermine or support the school smoking policy in place. As less of the existing literature on smoking policy examines these issues, and because the qualitative analysis of data allows exploration of emerging themes, this raises some issues not, or seldom, encountered in the literature, such as the physical space of the school. An indicator variable is then developed for each school to describe the policy context by assessing the extent to which the WSE in each school appears to support or undermine the school smoking policy (Research Objective 3). This is added to the multi-level model (Research Objective 4). It is also used to create an indicator describing the extent to which the WSE supports or undermines consistent messages. This is combined with the policy-level scores, in order to produce a score for each school based on the extent to which their policy promotes consistent no-smoking messages and the extent to which the WSE supports this, to give an overall indicator for each school describing the consistency of the no-smoking message (Research Objective 3). This will also be analysed against pupil smoking prevalence (Research Objective 4) to add more data on policy context.

c) Undertaking this investigation using a large-scale Welsh data set

Not only has this approach rarely been undertaken using mixed-methods to produce a rigorous investigation into school smoking policy before, but such a large-scale empirical investigation into Welsh school smoking policies using mixed-methods have also, as far as the author is aware, rarely or never been undertaken.

3.6 Conclusion

The last two chapters have demonstrated that adolescent smoking continues to be an important and complex public health issue which requires complex solutions. As such, any potential approach that may help tackle adolescent smoking, and achieve long-term population health targets is welcome. One such useful approach, in one social context may be a focus on school smoking policies. If successful, such an approach could be important in influencing adolescent smoking behaviour, particularly at ages when young people are at a relatively high risk of developing a smoking habit. However, there have also been calls for further work in order to investigate further the importance of policy and policy contexts. This work seeks to answer this call by applying the need for consistent no-smoking messages within policy and the WSE specifically to Welsh school smoking policies. Consequently, this study investigates variation in both policy-level characteristics (Chapter 6) and the supportiveness of the WSE in implementing policy (Chapter 7). Particularising the importance of consistent no-smoking to smoking policy, the study also investigates between-school variation in the production of consistent no-smoking messages. All of this is achieved using a large-scale Welsh data set that is more in-depth and complex than those often found in smoking policy studies, allowing qualitative exploration of critical themes.

-4-

Associations with the Health Behaviour in School-aged Children (HBSC) Study

4.1 Associations with the Health Behaviour in School-aged Children (HBSC) study

It is necessary to explain the close association of this study with the 2001/2 Health Behaviour in School-Aged Children (HBSC) survey in Wales. These separate projects were connected both by research design and by working relationships between the people working on them. This collaboration and data sharing were fundamental to this work which collected policy data from HBSC schools in order that they could be cross-analysed against pupil data on smoking behaviour collected by HBSC (see Section 4.4.1). This somewhat opportunistic research design allowed this doctoral work to gain a larger and more representative sample of pupil data to compare with policy data than would otherwise have been possible with the time and resources available to a doctoral student.

This chapter outlines the HBSC study in order to contextualise the pupil-level data used within this research. It also discusses HBSC sampling procedures which, as this policy study approached all schools participating in HBSC 2001/2 in Wales, influenced the sample for this work. It is important, however, to remember that the school policy (doctoral work) and HBSC (Welsh Assembly Government / World Health Organisation study) projects are still separate studies conducted in different institutions.

Before proceeding, it is also useful to outline the background to the association with HBSC in order to conduct this doctoral study. This policy study aimed to build on the work of Moore *et al*'s (2001) study of school policy, which made similar use of the 1998 HBSC data set. The aim of this smoking policy project was to take forward their suggestions for further research, replicating the use

of HBSC data to do this. The ongoing collaboration between two authors of this paper, Professor Laurence Moore (doctoral supervisor and director of Cardiff Institute of Society, Health and Ethics (CISHE), Cardiff University) and Chris Roberts (principal investigator for HBSC as part of his role in the Health Promotion Division (HPD) of the Welsh Assembly Government (WAG)) was the working context for my access to the HBSC infrastructure and data. In addition, I worked at HPD before beginning this project. During this time I also developed a working relationship with staff involved in implementing HBSC in Wales. Part of my job was to conduct the sampling of HBSC schools (including developing a strategy for replacement school selection), in consultation with Chris Roberts and Laurence Moore. Even after leaving HPD, my input continued by leading the field piloting of the pupil questionnaires and helping to conduct fieldworker briefings and observation of fieldworkers for HBSC. In return, I was allowed access to the HBSC pupil data, and was allowed to adapt the teacher questionnaire distributed with HBSC to suit the purposes of this research (although, as discussed in Chapter 5, due to problems over implementation, use of data from the teacher survey was restricted).

4.2 What is HBSC?

HBSC is a trans-national study collecting self-reported data on "adolescent health behaviours, health and lifestyles in their social context" (Currie & Smith, 2002:3). Through the use of self-complete, standardised international questionnaires, data are collected from young people of comparable ages in each country. These data then allow "cross-national comparisons to be made and, with successive surveys, trend data is gathered and may be examined at both the national and cross-national level." (Currie & Smith, 2002:2). HBSC began in 1982 when researchers from Finland, Norway and England established an informal collaboration between themselves, which was soon adopted by the European Region of the World Health Organisation (WHO) as a collaborative study. Through this relationship with WHO, HBSC has continued to grow since the first survey in 1983/4 (Currie & Smith, 2002:2).

Starting with five European countries in 1983/4, in 2001/2 36 countries or regions across Europe and North America participated in the study (Currie & Smith, 2002:9). Wales joined in 1985/6.

Currie & Smith argue that it is the relationship with WHO that has allowed the HBSC study to continue developing. An example of this development has been the establishment of four WHO Collaborating Centres charged with providing certain expertise or resources in order to help develop HBSC. Collaborating Centres are organisations or institutions recognised by WHO as centres of excellence within a specific field and which have an agreed work-plan of involvement with certain WHO projects. HPD is one of the four HBSC Collaborating Centres (Currie & Smith, 2002:4). As each centre specialises in adding to different areas of the study, it is apparent how this WHO initiative may allow HBSC to develop across a range of procedural and theoretical areas. It is arguable that this relationship with WHO must also be beneficial in aiding HBSC to achieve one of its main objectives, which states that the study should "disseminate findings to the relevant audiences including researchers, health and education policy makers, health promotion practitioners, teachers, parents and young people.".

The WHO constitution was signed at the International Health Conference at New York in 1946 (Sze, 1988). In it, health is defined as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." (WHO, 2000). This definition is still used by WHO (WHO, 2003b). Szeming Sze was one of the driving forces behind the formation of WHO, and sat on a subcommittee of the Technical Preparatory Committee[1] that wrote this definition. Sze (1998:33) recalls how members of the sub-committee had wanted to include an emphasis on the preventative side of health. This is similar to part of the rationale behind HBSC as outlined by Currie & Smith (2002). They state that HBSC is underlain by a holistic approach to the health of young people, asserting that "health is acknowledged

[1] The Technical Preparatory Committee were responsible for laying much of the groundwork for the International Health Conference, including drafting the Constitution. While some

as a resource for everyday living, and not just the absence of disease." (2002:2). Within this approach, HBSC sets out to collect data on a variety of socio-economic and lifestyle indicators which are effectors of health in the individual. An onus is placed on the fact that these are as important to the study of health as health damaging, or risk behaviour. It can be seen that there is apparently a clear convergence between the philosophies of HBSC and WHO, which would allow HBSC to easily integrate into a collaboration with WHO. It should be noted, however, that it is equally possible, that the HBSC rationale has developed in association with, or parallel to WHO collaboration.

Due to the rapid increase in membership of HBSC, the study has seen recent organisational changes (Currie & Smith, 2002:6-7). This has included the establishing of focus groups to investigate key areas of research identified within HBSC, and to improve the collection of data and measurement of factors within each of these areas. Currently HBSC is conducted every four years, and has been adopted by more countries than ever before. In each country, mandatory core questions are complemented by optional topics, or modules, which may be selected for appropriateness to local priorities. Due to the study's aim of drawing international comparisons, a strict translation procedure is operated to ensure that each HBSC question is accorded the same meaning in each language it is conducted in.

While it employs a cross sectional approach, HBSC essentially aims to simulate a longitudinal study (Roberts *et al*, 2002b:28). It does this by surveying pupils aged 11, 13 and 15 in each country. As national educational systems vary, each country is left to decide for themselves, within certain parameters, how best to achieve this.

4.3 HBSC in Wales

In Wales, HPD have been implementing HBSC since the 1985/6 survey. Prior to amalgamation into the Welsh Assembly Government in 1999, HPD was

---

amendments were made to this during the conference, this Constitution was accepted and

known as Health Promotion Wales (HPW) and conducted HBSC under this name. 2001/2 was the first HBSC survey to be conducted by HPD.

HBSC targets those pupils of age 11, 13 and 15. Under the Welsh educational system this equates to Year groups 7, 9 and 11 respectively (Table 4.1). In addition, HPD also survey the two intervening year groups, years 8 and 10. This is in order to produce a complete national data set, which is updated biennially with the same questions being asked on the Welsh Youth Health Survey, which is implemented in between HBSC cycles (in 2000 this was conducted by HPD, prior to which it had been HPW). In effect, every two years, the Welsh adolescent population is surveyed using the HBSC question protocol.

Table 4.1 Age ranges of Welsh educational year groups for pupils aged 11 and over

	Year Group	Age (years)
Compulsory education	Year 7	11-12
	Year 8	12-13
	Year 9	13-14
	Year 10	14-15
	Year 11	15-16
Further education	Year 12	16-17
	Year 13	17-18

In every school selected for participation in HBSC 2001/2 in Wales, one mixed ability class was selected from each year group and these pupils were asked to complete the questionnaire. Due to the large size of the study, while HPD undertake the questionnaire design and piloting, and have primary investigators working within the international HBSC network, they tender the actual data collection out to a market research company. HPD themselves do

---

signed at the end of the conference on 22nd July 1946. (Sze, 1988:31-3)

not have enough staff to do the data collection. In the 2001/2 survey, this relationship was co-ordinated through a series of meetings between HPD and project managers allocated by the market research company to HBSC, and also via HPD led training sessions for fieldworkers collecting the data. Fieldwork was conducted between February and April 2002.

4.4 Selection and recruitment of HBSC schools

4.4.1 Why is the selection of HBSC schools important to the school policy study?

In Section 4.1 the link between HBSC and data collection on school policy was mentioned. It was schools that completed the HBSC survey that were approached to participate in the school policy research. This was in order that data on school policy may be compared with the data on self-reported smoking behaviour among adolescents in that school, as collected by HBSC. As already stated, this allowed the policy research to gain a larger and more representative pupil-level data set to compare with policy data than would otherwise been possible under the time and resource constraints of a doctoral project. Clearly, the HBSC sampling strategy also pertains to the selection of schools for the policy project. Consequently, when undertaking the HBSC sampling, I knew that those schools that completed HBSC (after refusal and drop-out), would be those that I would approach for my research. Consequently, the following description of HBSC school sampling (including the selection of replacement schools in case of refusal) is also the description of how I arrived at a list of schools to approach for telephone interviews on smoking policy. Staff in all HBSC schools were asked to take part in a teacher survey on school smoking policy and the original strategy was to highlight to HBSC schools from the outset that I would be contacting them to take part in a telephone survey in order to follow up on the teacher survey. However, this plan was dropped by HPD for fear that it may seem like too much commitment to schools, especially as it was tangential to HBSC. The alternative strategy to make connections between my work and HBSC was that I would mention the link to

HBSC when approaching schools. Table 1.1 shows how the implementation of the teacher survey paralleled the implementation of HBSC.

4.4.2 Drawing the HBSC Sample

4.4.2.1 Sample size

The school sample for HBSC was drawn under the requirements of the 2002 HBSC Study protocol. In HBSC, samples are drawn from within schools, often using whole classes as the sampling unit. In such circumstances, pupils have a shared experience of the school environment; often come from a range of very similar socio-economic backgrounds and social groups/circles and are exposed to similar educational strategies and local teaching. For these reasons, the behaviour of respondents (and consequently their responses) cannot be assumed to be independent, and so we have a clustered sample. In other words, these commonalities mean that the responses of pupils in each class and/or school are more likely to be similar to one another, than to the general population (Roberts *et al,* 2002b:29). In these circumstances, the sample size must be increased in order to achieve the same precision as a random sample. In order to achieve this, the HBSC protocol recommends a minimum of 1536 pupils in each target age group (Roberts *et al*, 2002b:30).

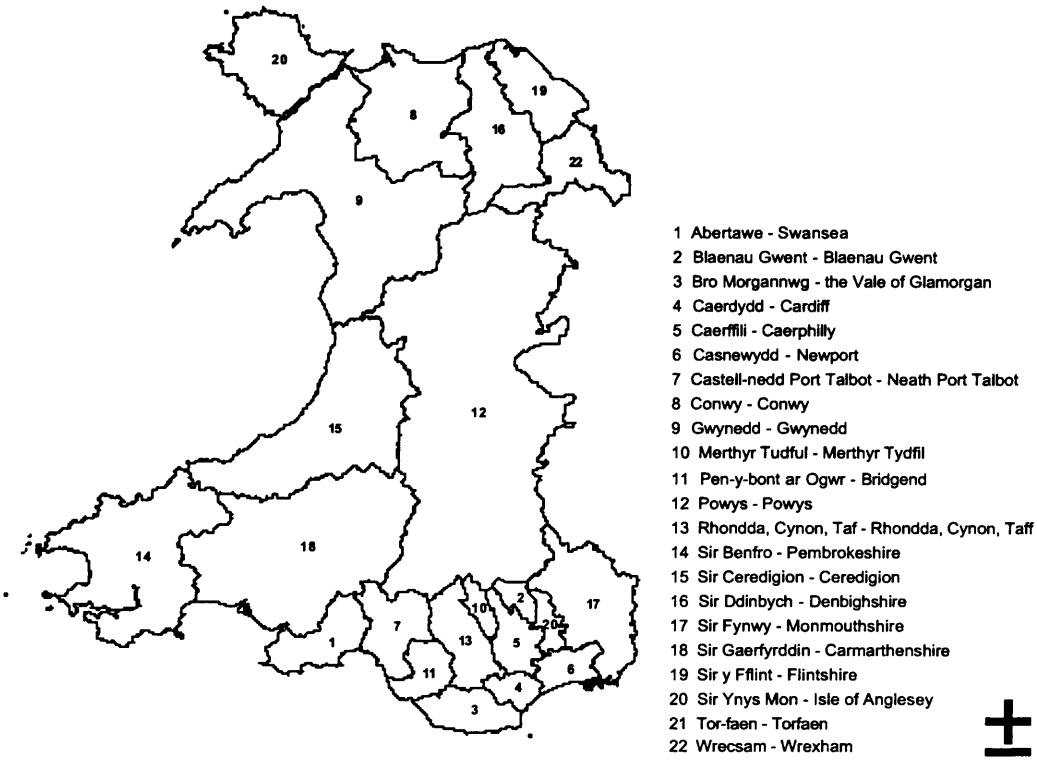
4.4.2.2 Sample stratification

The Welsh schools selected for HBSC formed a stratified sample, with schools being sampled from within 23 strata[2]. This stratification of the sample ensured a geographically representative sample of schools from across Wales, and was allowed within the guidelines of the HBSC 2001/2 international research

[2] Data on Welsh schools were provided for HPD by the Statistical Directorate (SD) of the Welsh Assembly Government. This internal database was provided on a Microsoft® Excel spreadsheet, with the data split into two sheets labelled "[State] Secondary Schools" and "Independent Schools". In order to achieve the school socio-economic stratification of the sample within each UA, the most recent data on the total number of pupils entitled to free school meals in each school was also obtained from SD and added to the database (discussed later in this section).

protocol (Roberts *et al,* 2002b:29). In order to achieve this representative geographical dispersal, the first 22 strata consisted of the 22 Unitary Authorities (UA's) of Wales (Figure 4.1) with all state secondary schools in Wales being allocated to the strata representing the UA to which they belonged.

Figure 4.1 Map of the 22 Unitary Authorities of Wales



(Wales and Unitary Authority maps supplied as Boundary data provided by Ordnance Survey via Digimap. Boundary data merged and legend added by author using ArcGIS software.

It was then necessary to add a 23rd strata consisting of all the independent schools in Wales. The reason for treating these as a separate stratum was in order to maintain the national ratio of state (n=227) to independent (n=38) schools within the HBSC sample. Due to the relatively few number of independent schools which are spread across Wales, maintaining this ratio necessitated the sampling of independent schools separately. This was

complicated however, by the fact that some independent schools were removed from this stratum before sampling occurred. This was necessary because some of the independent schools in Wales have only a very small number of 11-16 year old pupils on their rolls (in some cases as few as 5), which would be far too few pupils to create a valid sample. Anecdotal evidence from browsing these schools' websites, suggests that most commonly schools with very few pupils in the 11-16 age range tended to be schools with registration based on a highly defined core educational objective or ethos, and which selected pupils based on these principles. Mainly these were denominational religious schools, where specific theologies underpinned the curriculum, and which only accepted pupils from families who shared these beliefs, and wanted to opt into a curriculum promoting these central tenets. However, such high selectivity was also seen in schools providing for specific special educational needs. In all cases, the small number of pupils on the roll appeared to be partly due to the specific curricula of these schools which fewer parents may be choosing to opt in to, and which restrict the number of pupils qualifying for enrolment. In addition, the small numbers of pupils aged 11+ in these schools was compounded by the fact that not only do these schools have small numbers of pupils in total (in some cases less than 30), but they are also often spread over a large age range (e.g. 3-18 years old).

Due to the problematic nature of these small numbers of pupils in producing a valid sample size, any school from the independent strata with less than 50 pupils aged 11-16 on the roll was removed before selection. This resulted in the removal of 17 schools from this stratum. There were no state secondary schools that had less than 50 pupils registered.

Another problem to consider when examining roll size in independent schools is the fact that some employ a different age structure within their organisation than that found in most state secondary schools. For example, one of the independent schools in the sample took pupils from ages 3 to 18 years old, split into three schools, a lower school (3-7 year olds); a middle school (7-13 years old) and an upper school (13-18 years old). The middle and upper school are located on the same site, treating pupils aged 6-13 years old as one cohort.

This contrasts with state secondary schools which tend to take pupils aged from 11 to either 16 or 18 years old as one cohort. If not recognised, such disparities could lead to a selected independent school appearing to have enough pupils to sample, but actually falling short of a number of 11-16 year olds which would be practically useful to sample. However, for sampling, data for all independent schools, like for state schools was presented as the number of 11-16 year olds on the role.

As mentioned above, the national ratio of state to independent schools in Wales is 227:38, or 0.167. The original sample drawn for recruitment to HBSC was 62:6 (0.097). After the initial recruitment of schools to HBSC (including replacement schools for refusals), this ratio was 55:6 (0.109). However, after two schools dropped out during the survey, the final HBSC sample had a ratio of 54:5 (0.093) state to independent schools. While this is lower than the national ratio, it can be explained by the removal of the 17 schools from the independent school strata prior to sampling as discussed. Allowing for this, the population of Welsh schools actually sampled (with 17 removed) had a ratio of 227:21 state to independent schools, or 0.093. This is just slightly lower than the ratio of state to independent schools as originally selected for recruitment to HBSC, and exactly the same as the final sample of schools participating in HBSC. Hence, by sampling independent schools from within a separate stratum, the HBSC sample, even after non-participation and drop-out, maintained a ratio of state to independent schools representative of the population of Welsh schools actually sampled from.

Once schools were placed within these geographical strata, they were then subjected to a secondary, socio-economic stratification, in order to achieve a cross section of the different socio-economic catchments of schools within each authority. Free School Meal (FSM) entitlement is widely used as an indicator of the socio-economic status of school catchments. Although problematic as an indicator, the precedent for this is evident in the widespread use of FSM entitlement in this way across many studies and policy documents (e.g. Sharp & Croxford, 2003; Gorard *et al*, 2001; National Audit Office, 2003) Consequently, calculating the proportion of pupils entitled to FSMs in

each school, is a practical way of comparing estimates of the socio-economic status of the catchment of each school. In order to achieve a comparison of school socio-economic status within each UA, the most recent data available on the total number of pupils entitled to FSMs in each school was used to calculate the percentage of pupils in each school entitled to FSMs. Within each strata, schools were then listed in ascending order of the proportion of pupils with FSM entitlement in each school. As FSM entitlement is a good indicator of socio-economic status, by listing the schools this way, and selecting schools down through this list using the cumulative roll for each UA (see below), the selection of schools should achieve a sample across the socio-economic spectrum within each UA. Entitlement to FSMs has been used rather than actual take up of this entitlement among pupils, as it provides a more accurate picture of the socio-economic character of the school. This is because not every pupil who is entitled to FSMs may take them up.

It should be noted that the independent schools are not listed on the basis of FSM, as they do not have this provision. Instead, independent schools are listed in order of size. There is an assumption made that the independent schools are of more similar socio-economic status than the state schools. This is due to the fact that, as fee-paying schools, they tend to attract pupils from families who are both affluent enough to afford these fees, and who share similar preferences, values and beliefs on education choices.

4.4.2.3 School selection

Once each stratum had been organised in this way, it was necessary to select the schools from each stratum to form the HBSC sample. It was decided, on the basis of previous HBSC studies in Wales, that a sample of 70 schools would be both manageable, and provide a sample well above the HBSC recommended minimum of 1536 pupils at each age group (Roberts *et al*, 2002b:30). This would allow for the possibility of school drop out during HBSC, while still producing a final sample size above 1536 pupils. This sampling of 70 schools from the population of 248 Welsh schools (excluding

the 17 independent schools removed due to small roll size) equates to a sample of 28.2% of schools.

Schools were then selected using Probability Proportional to Size (PPS) sampling. This method produces randomness within the sampling of the 11-16 year old population of Wales, giving each pupil in each UA the same probability of being selected as any other pupil. This is in contrast to sampling by school, in which case pupils from smaller schools are over-represented, with individual pupils standing a greater chance of selection than those in larger schools. By allowing all pupils within a strata an equal chance of selection, and selecting every n^{th} pupil rather than every n^{th} school, all members of the pupil population stand an equal chance of selection, which they would not do if the sample was selected by school.

In order to make this selection, having listed the schools in each UA in ascending order of FSM entitlement, the number of pupils on the register was used to construct a cumulative roll next to the list of schools. This effectively allocated a number to each pupil within the strata. Using these numbers, pupils were then selected at random dependent on the size of the UA.

To make this selection, it was necessary to calculate a sampling interval for each strata which would achieve a sample of 28.2% of schools. To calculate this, the following equation was used:

Sampling Interval = Total roll in strata / (Number of schools in strata/3.543)

Where 3.543 is the sampling fraction needed to obtain the sample of 28.2%, i.e. the reciprocal of 0.282.

Using this formula, the necessary interval between selected pupils which should achieve the desired sample size was calculated.

To ensure randomness, the number of the first pupil to be selected was decided using the random number generator in Microsoft® Excel, programmed to generate an integer between 1 and the value of the sampling interval (SI).

Using the cumulative roll, the number pupil to which this corresponded was then selected, and their school was selected for the sample. The SI was then used to select every n^{th} pupil whose school would be selected for the study. This was repeated until the SI took the pupil number above the number of pupils on the cumulative roll. This was repeated for each of the 23 strata. The schools selected in this way constituted the initial HBSC sample.

4.4.2.4 Selecting replacement schools

Before schools were approached for participation, a replacement strategy was designed for those schools that declined to participate. For each school, a replacement school was designated. This school, as far as possible, was selected to be of similar size and socio-economic status to the original. In order to achieve this, the following rules for the selection of replacement schools were designed:

1. As far as possible, the replacement school size should be within ±33% of the size of the original school .

2. In order to select a school as near as possible in socio-economic status of catchment area, as well as size, to the original school, the following process will be adopted. Starting with the first school on the list in each UA, the next unselected school down the list whose roll falls within ±33% of the size of the first school will be selected as the replacement. If the bottom of the list is reached and no appropriate school found, then the replacement school is selected upwards from the original school in the same manner.

3. If no school in the UA lies within ±33% of the size of the original school, then the next unselected school down the list will be selected as the replacement. As before, if the

bottom of the list is reached and no unselected school is found, the next school upwards will be selected.

4. Independent schools are not listed by FSM, but by size. Selecting the next school on the list would give you the school of most similar size to the original anyway. As discussed earlier, there is an assumption made that the independent schools in the sample are all of similar socio-economic status. Consequently, in the independent school stratum, replacement schools will be selected just by choosing the next unselected school down the list. As with the state schools, should the bottom of the list be reached, and no unselected school is available, the next school upwards of the original will be selected as the replacement instead. This should produce a replacement school of similar socio-economic status and size.

Each time one of the initial school selections declined the offer to participate in the research, this procedure was implemented. If the replacement school also declined to take part, then no further replacement school was sought, the number of participating schools being reduced by one. Replacement schools were only selected prior to commencement of data collection. If schools dropped out during data collection, no replacement school was selected.

4.4.2.5 School recruitment and retention

Once the sample had been drawn, members of HPD staff recruited schools within the protocols for HBSC. Schools were provided with a booklet detailing the work of HBSC and invited to participate. The booklet gave information on the history of HBSC, it's current size, it's importance as a research tool, and what participation involved. A financial incentive was also offered by HPD to encourage a higher response rate.

Once a response had been obtained from all schools and any replacement schools, those agreeing to take part consisted the final list of HBSC schools for the 2001/2 cycle. Teacher survey questionnaires were also distributed to all of these schools at the same time. Once HBSC data collection was completed, apart from two schools that dropped out during data collection (see below), this was also the list of schools that I approached to ask if they would take part in the smoking policy research. Due to drop out 61 schools began taking part in HBSC Wales, with a further 2 dropping out during data collection giving a total set of complete data from 59 schools. Although this was well below the target sample size, it still provided enough respondents for HBSC. Data collected on smoking behaviour as part of this study would be matched to policy data from the teacher survey and interviews with staff in these schools. It is this that is the fundamental association of this study with the 2000/2001 HBSC survey in Wales.

-5-

Discussion of methods

5.1 Achieving the objectives of the research

Section 3.5 set out the Research Objectives. Table 1.1 outlines the research process implemented in order to achieve the research objectives. While Section 3.5.1 explained how the use of terminology changed from this original plan, the five stages of research and the methods of data collection and analysis within them remained the same. Each of the five stages achieves one of the Research Objectives. It should be noted that Stage 1 of this process included HBSC collection of pupil data. As discussed in Chapter 4, although this project conducted its research in HBSC schools in order that data on the WSE could be compared with pupil smoking prevalence data, this project had no control over the HBSC survey protocol (including design and sampling) which was outlined in Chapter 4, and does not set out to defend HBSC methods. This chapter discusses only those stages of data collection and analysis which were specifically under the author's control. The chapter first reflects upon the use of mixed-methods and the relationship between the 5 stages of the research. It then discusses the implementation of the individual elements of the research separately.

5.2 Adopting a mixed-method approach: some reflections

This project combined the use of qualitative and quantitative techniques to answer the literature's call for better quality, more in-depth data to inform the debate on school smoking policies. This call arguably parallels a broader move in tobacco control (and arguably in public policy more generally) towards the increased use of qualitative methodologies to inform the evidence base. This is to redress the traditional skew towards quantitative methods in these disciplines emphasised by Mehl (2003) in the abstract to his paper at the *12th*

World Conference on Tobacco or Health in a session revealingly titled "Adding tools to the methods toolbox: using qualitative research methods to improve programme and policy responses":

> *The use of qualitative research methods have been dwarfed by the wide use of survey methods in the public health community, meanwhile the tobacco industry has been perfecting and making extensive use of qualitative methods.*
>
> *Mehl (2003:413)*

The approach of this work was both multi-method (using more than one technique) and multi-methodological (combining the use of qualitative and quantitative approaches) and the adoption of such an approach cannot be left without some brief comment or reflection. Contrary to Mehl, others would argue that contemporary health research is full of multi-method approaches (Sale *et al,* 2002:43), and the adoption of such strategies often means addressing the issues of marrying together quantitative and qualitative techniques of research (Bryman, 2001; Gray & Densten, 1998; Sale *et al*, 2002). Having said this, as already highlighted, aside from this thesis very little investigation into the role of school smoking policies had used qualitative research, and even less had used this in association with more traditionally employed quantitative methods. Despite the increasing use of multiple techniques, the qualitative-quantitative debate is ongoing, and arguably will continue to be so, pervading the foundations upon which our methodological frameworks are built. Despite this, Sale *et al* (2002:44-5) argue that while such approaches are commonly practiced and accepted, this is often done uncritically, and without regard to the differences between the fundamental ontological and epistemological assumptions which underlie each method. This is not a methodological piece and there is not the space here to exhaustively detail the debate surrounding these issues. I have long seen value in a "right-tools-for-the-job" approach to method(ology) and this section is intended only as an acknowledgement of the issues surrounding mixing methods and methodologies, while providing a justification for this approach.

In my early consideration of mixing methods, I found that it was useful to summarise approaches to mixed-method research as a dichotomy which I labelled *philosophical* and *mechanical* approaches to the issue. It was after this that I discovered both Bryman's categorisation, in which he attempts a similar reduction of the literature, using the terms *epistemological* and *technical* versions of the quantitative-qualitative division (2001:446) and Gray & Densten's discussion of differences in approach which made reference to Bryman's earlier writing (1998). I make explicit reference to these later discoveries for the sake of transparency. However, while acknowledging these writings, I will continue by using my own terms that I have found useful. That said, Gray & Densten's description of divergent methods (1998:419) is useful (especially if contrasted with the term convergent which is used by Bryman but only in discussing *validity* through comparative methods (2001:73-4)). The adoption of these descriptors as suffixes to my own terms, is useful and hence I would argue that there are two broad approaches to the use of multi-methodologies (1) *Philosophical Approaches: Divergent Paradigms and Separate Spheres* and (2) *Mechanical Approaches: Convergent Paradigms and Right Tools for the Job.*

In the first approach ***Philosophical Approaches: Divergent Paradigms and Separate Spheres*** there is a clear methodological divide (Table 1.1). It is reasoned that qualitative and quantitative techniques are immersed in, emerge from and are underpinned by fundamentally separate paradigms (Bryman, 2001; Gray & Densten, 1998; Sale *et al*, 2002). These paradigms are defined by different ontologies, epistemologies and methodologies (Sale *et al*, 2002:44). So fundamentally different are these beliefs about the world being studied, that, even if looking at the same topic, a quantitative or qualitative approach could not be said to be studying the same phenomena.

Table 5.1 Fundamental differences between Quantitative and Qualitative paradigms as outlined by Sale et al (2002:44-6)

	Quantitative	Qualitative
Epistemology	*Positivism* • All phenomena reducible to empirical indicators representing the truth • Investigator and investigated are independent (i.e. one does not influence the other) • Objectivity	*Interpretivism and Constructionivism* • There is no access to reality independent of our minds / no external referent by which to compare claims of truth • Investigator and investigated interactively linked • Findings are mutually created within the context of the situation which shapes the inquiry • Suggests that reality has no existence outside of the boundaries of the inquiry • Subjectivity
Ontology	• There is an absolute truth (objective reality) which exists independent of human perception	• There are multiple truths / realities based on one's construction of reality • Reality is socially constructed and therefore constantly changing
Aims	• Measure and analyse causal relationships between variables within a value-free framework	• Illumination of process and meaning
Techniques	Randomisation; blinding; highly structured protocol; questionnaires with limited range or responses	In-depth / focus group interviews; participant observation
Samples	• Larger than qualitative research • Allows use of statistical techniques which mean that sample data can be seen as representative and therefore generalisable to the population	• Samples are not meant to represent populations • Small, purposive samples of articulate respondents to provide important but not representative data

Adapted from Sale et al *(2002:44-46)*

This school of thought traditionally says that because the world views of these two approaches are so different, they can never be said to study the same phenomena (Bryman, 2001:446; Sale *et al*, 2002:44). Even if a qualitative and quantitative study were both investigating, for example, chronic back pain, their separate epistemologies are so different that they cannot be said to be studying the same phenomenon. This clearly has consequences for cross-validation or triangulation between different methods within the same study.

It is useful to consider the second approach, *Mechanical Approaches: Convergent Paradigms and Right Tools for the Job*, as residing around a spectrum. At one end are the qualitative methods, and at the other the quantitative methods. This spectrum tends from (broadly) interpretive and constructionist methods at one end towards (broadly) positivistic methods at the other. This understanding is common today (Mendlinger & Cwikel, 2008). In this approach epistemological differences are celebrated and seen as compatible. Methods are regarded as tools for a job, and may be selected for use from any point along this spectrum. The limitations of each method are key, the strengths of one method being used to enhance the other. Contrary to the first school of thought, researchers who favour multi-method approaches argue that quantitative and qualitative methods may be seen as different ways of examining the same research question, and that the use of multiple methods "strengthens the researcher's claims for the validity of the conclusions drawn where mutual confirmation of results can be demonstrated." (Bryman cited in Gray & Densten, 1998:420). It is argued that this is a more useful approach as techniques can be selected on the basis of their suitability to the topic, standing in direct contrast to alternative claims that this cannot be the case. As Bryman (2001:446) observes, because research methods are viewed as autonomous of their underlying paradigms, it is possible to combine these strategies. Summarising the writings of several writers, Sale *et al* (2002:46-47) argue that quantitative and qualitative methods are compatible because: they share a unified logic and therefore the same rules of inference apply to both; both qualitative and quantitative approaches share a goal of understanding and improving the world and the human condition; they both have goals of

disseminating knowledge for practical use; they both have a commitment to rigour and they both involve conscientiousness and critique in the research progress. They also argue that the complexity of phenomena (including most public health problems / social interventions) require the use of a broad spectrum of qualitative and quantitative methods. Another way to address these differences may be to acknowledge that more philosophical debates around the epistemological and ontological differences between approaches are important. However, instead of letting them prevent multi-methodological research getting done, these may be taken into consideration when designing research and returned to when interpreting findings.

This dichotomisation of approaches may be a simplification of a much more complex debate. However, it is a useful model for justifying the adoption of a multi-methodological approach to this work. While I have some reservations regarding the extent to which the paradigms are in fact convergent, the argument for a mechanical, convergent paradigms approach which allows the use of mixed methods is a strong one. Mendlinger & Cwikel (2008) suggest that events such as international conferences and the founding a mixed-methods journal all evidence the increasing acceptability of such approaches across the fields of social sciences and health care.

While pragmatic approaches overcome issues regarding whether we should mix methods, doing so demands consideration of how differing approaches may be best combined. Despite increasing acceptance and use of mixed-methods research, the field is still very much a developing one (Tashakkori & Creswell, 2007) and there is a lack of consensus as to nomenclature and no standard protocols on how best to successfully combine qualitative and quantitative methods (Mendlinger & Cwikel, 2008). In light of this, the work of Teddlie & Tashakkori (1998, 2006) is useful. They argue that since the emergence of mixed-method research, those working in the field have developed typologies of mixed designs (2006). Although they can never be exhaustive, one of the reasons such typologies are useful, they argue, is because they help researchers to design their mixed-method studies (2006).

Tashakkori & Teddlie's own typology has developed over time (e.g. 1998, 2006) and provides a useful classification of mixed methods research based upon the combination of methods. They argue that mixed methods approaches traditionally enable comparison of quantitative and qualitative data either simultaneously or sequentially in order to improve analysis (1998). The sequential combination of methods consists of either converting qualitative data into numerical codes for statistical analysis (quantitizing techniques producing quantitized data) or converting quantitative data into narratives for qualitative analysis (qualitizing techniques producing qualitized data). In 2006, they outlined a 2x2 matrix detailing a typology of mixed-method research designs. Along one side of the matrix, research design could be either *monomethod* (study uses either a qualitative *or* a quantitative approach only) or *mixed method* (qualitative and quantitative methods are mixed across the study). Along the other side of the matrix, research design could be either *monostrand* (there is only one strand to the research) or *multistrand research* (there are more than one strand to the research). A strand is a phase of study which includes (1) a *conceptualization* stage (abstract operations including formulation of research purposes; questions etc); (2) a *experiential* stage (concrete observations and operations such as data generation and analysis and (3) an *inferential* stage (abstract explanations and understandings including emerging theories and explanations).

Under Teddlie & Tashakkori's typology, the current study may be described as a mixed-methods multistrand design as it contains more than one method and more than one stage of the research. Table 1.1 outlined the stages of this study as related to the Research Objectives. It should be noted here that the stages in this table relate method to the Research Objectives, and do not equate to Teddlie & Taskakkori's definition of a strand. However, such strands are visible within the method, making their typology still useful to understanding the mixed-method approach adopted in the current study. Within Teddlie & Tashakkori's typology, there are various types of multistrand design for mixed-methods of which the current study can be said to follow a *sequential mixed design*. A sequential approach is one in which:

> *there are at least two strands that occur chronologically (QUAN? QUAL or QUAL? QUAN. The conclusions that are made on the basis of the first strand lead to formulation of questions, data collection, and data analysis for the next strand. The final inferences are based on the results of both strands of the study"* [while the authors use the simplest, two stranded example for conciseness, they highlight that a sequential approach may include more than two strands]
>
> Tedlie & Taskakkori *(2006:21-22)*

Tedlie & Tashakkori argue that, although difficult, such a design is easier to undertake by a solo researcher than other mixed-method approaches as it is easier to keep strands separate and studies tend to unfold both more slowly and predictably than in more complex approaches. Consequently, a sequential, multistrand mixed-method design is a good approach to adopt by a doctoral student seeking to undertake mixed-methods research. Table 1.1 clearly demonstrates how the current study follows this design, with a quantitative phase leading to a qualitative phase leasing to a quantitative phase. Ultimately, the final inferences are based on data generated from all of these phases. In the remainder of this chapter, the technicalities surrounding the conduction of the various approaches (i.e. teacher survey; teacher interviews; development and analysis of school-level indicators) are discussed individually. Before this, it is useful to briefly reflect on the relationship between the phases of the study. This will deal with the phases as set out in Table 1.1.

The first stage, relating to Research Objective 1, combines quantitative and qualitative methods sequentially in order to collect rigorous data on the development, content and enforcement of school policies. Although not conducted by the author as part of the current study, the HBSC study is included in this table to show its use within the study. Using Teddlie & Tashakkori's definition, the first strand is the design, implementation and analysis of the teacher survey in order to collect quantitative data on school smoking policies from several sources in each school. The second strand of the research consists of interviews with smoking policy experts in each school. Although a generic interview schedule was created for these interviews,

analysis of the results of the teacher survey in each school are used to inform the interview schedule in each school so that interviews can be used to probe and follow up these data. In this way, the first quantitative strand is used sequentially to inform the second qualitative strand in order that rigorous data may be collected on school smoking policies.

To fulfil Research Objective 2 the interviews were first analysed in order to identify characteristics of policy and its enforcement that may moderate the extent to which school smoking policies moderate adolescent smoking behaviour. While this analysis stands alone, it was also used in order to develop indicators which described school-level variation in these characteristics (Research Objective 3). This is an accepted practice that Teddlie & Tashakkori refer to as the quantitizing the data. Providing several examples of previous studies which quantitized data, they highlight the different ways in which this may be undertaken (1998; 2006). This includes a school-based study conducted which converted narrative data into likert-type scales. This is very similar to, and, along with the other examples they cite, sets a precedent for the quantititzation of qualitative data in the current study. At this point, the second qualitative strand fed into a third and final, quantitative strand (Research Objective 4) in which the indicators were analysed in order to assess their association with adolescent smoking behaviour. The final analysis then drew directly on the second and third strands (Research Objective 5). Due to problems with the teacher interview (see Section 5.3) the first strand did not contribute as much to the study as intended. However, under Teddlie & Tashakkori's definitions, it is still arguable that the current study is an example of a sequential mixed-methods, multistrand design as the analysis draws its conclusions from sequentially linked qualitative and quantitative strands

Having justified the adoption of a multi-method and multi-methodological approach, in order to conduct a rigorous investigation of school smoking policies, the rest of this chapter will provide a description of the various elements of research conducted by the author. It should be reiterated here that

while these are portrayed as distinct stages, this is for ease of both project management and discussion only. All phases are interrelated, and the boundaries between them blurred with the movement of data occurring between each stage.

5.3 Stage 1: teacher survey

5.3.1 The objectives and process of implementing the teacher survey

Undertaking the teacher survey was part of the strategy to help achieve Objective 1 (the collection of in-depth, complex policy data). Following precedent set by Moore *et al*'s study (2001), HPD allowed another teacher questionnaire to be circulated alongside the 2001/2 HBSC survey. A weakness of Moore *et al*'s work was that questionnaires were only collected from one respondent per school. This study aimed to improve on this by collecting 5 responses per school. The reasons for targeting five respondents were twofold. HBSC was conducted in five classes in each school, and questionnaires could be handed out to the five teachers of these classes in order to minimise disruption to HBSC. With the intention of the survey being to gain a cross-section of staff perspectives on school smoking policy, it was also felt that five respondents would provide a reasonable cross-section in order to allow the consistency of reporting and variation in policy perception to be assessed both between survey respondents and, eventually, with policy data provided by a local 'expert' in the interview stage. As with the earlier study, the survey captured data on policies for (a) staff; (b) pupils and (c) policies for other adults and visitors on site; and also on the dissemination and enforcement of student and staff policies. The success of this was assessed by questions asking about smoking misbehaviour on site. The survey also included some questions on health education in the school and the place of smoking in this. Finally, some general questions collected data on the respondent's positioning the school; their own smoking behaviour and their attitudes towards smoking in schools and the school's role in addressing this. It was also hoped that the link

with HBSC meant that when I came to recruit for interviews, I would already have a contact within the school, and could mention that I was following up data associated with HBSC, which may make recruitment easier than if I had cold-called schools.

In Wales, while design of the HBSC questionnaire is undertaken by HPD in line with the international study protocol, implementation of the survey is contracted to an independent market research company and their fieldworkers. This is because HPD do not have the staffing resources to undertake the survey themselves. Fieldworkers had two main roles in implementing the teacher survey. Firstly, all letters and questionnaires were produced bilingually however, due to the fact that they were already large documents when printed in one language, like HBSC, questionnaires were supplied in either English or Welsh. The fieldworkers established which language each school required prior to their visit, and were provided with the appropriate copies by the project manager from the market research company. During data collection, fieldworkers were requested to hand the teacher questionnaire to the staff member in charge of the HBSC class at the beginning of the session, ask them to complete it while pupils completed HBSC, and collect it again at the end. A freepost envelope was provided in case the respondent had not completed the questionnaire by the end of the session. It was anticipated that this process should return a response rate of around 100%. Another advantage of collecting teacher data in this way was to keep the teacher of each class occupied during the HBSC data collection procedure. During HBSC teachers are meant to remain in the classroom for insurance purposes, and to act as an authority figure, but are meant to refrain from interacting with pupils. Many of the questions on HBSC are of a personal nature, and greater anonymity is achieved by pupils being able to raise any issues that may arise with unknown fieldworkers than with their teachers, leading to more accurate reporting by pupils. However, even when staff are asked not to interact with pupils during the session, the conditioned pupil-teacher role means that teachers find it hard not to interact with the pupils (and often pupils with teachers). The

questionnaire, by means of giving the staff something to do, was intended to help restrict their interaction with pupils.

Regular meetings with market research company project managers were held in order to ensure that fieldwork was conducted to the standards that were expected. In addition, two briefing sessions were held for fieldworkers by the market research company and HPD. In these sessions I outlined the teacher survey, its purpose and how it related to HBSC, and the HBSC dataset. Respondent selection and distribution procedures were discussed, as was the importance of a high response rate. Fieldworkers had all been requested to prevent teachers from interacting with their pupils by HPD and the use of these questionnaires in facilitating this by occupying teacher time was highlighted. Each fieldworker was also provided with a comprehensive set of notes regarding the procedures that they should adhere to. The market research company required all of their fieldworkers to attend one of these two sessions. In addition the market research company made assurances that all fieldworkers were used regularly and trusted to do a good job. To maximise attendance of all fieldworkers at the briefings, one was held in South Wales (Cardiff), and the other in North Wales (Wrexham). Members of HPD and the author also attended and observed a fieldwork session each in South Wales, comparing notes on how well it was being implemented afterwards. Despite these precautions, working with two other groups raised certain problems and these are discussed further in Section 5.3.5.

5.3.2 Designing the questionnaire for the teacher survey

Design of the teacher survey was undertaken with the collaboration of Chris Roberts and Laurence Moore. Several types of sources were used to aid in designing both the questionnaire (including individual questions) and the strategy for its implementation (Table 5.2).

Table 5.2 Sources used to design HBSC teacher questionnaire and the strategy for its implementation

Source of information	Description
1998 teacher questionnaire	When Moore *et al* (2001) undertook their study of school smoking policy they distributed a questionnaire alongside the 1998 Welsh Youth Health Survey. As this study builds on the findings and recommendations of Moore *et al*, it was decided that this original questionnaire would form the basis of this second version.
Other studies into school smoking policy	Key literature on school smoking policy was used to identify any further areas of interest or specific questions that may be useful to consider. The use of questions from other similar surveys is one recommended by Bryman (2001), partly because this provides questions that have already been piloted and applied in the field.
Literature on questionnaire methodology	This was consulted regarding questionnaire design and strategies for implementation.
HBSC protocol	To a large extent, HBSC protocol dictated the survey implementation strategy as the schools it was sent to were decided by HBSC sampling protocol for Wales.

Using the original questionnaire from 1998 as the basis for my teacher survey instrument, there was no reason to alter much of the original due to its suitability in addressing the research question. In designing the questionnaire, length remained a critical issue that influenced its content, especially where additions were concerned. De Vaus (2002:112-3) argues that the conventions generally accepted by social researchers on the acceptable length of questionnaires are unsupported by conclusive research. Instead, drawing on the work of Dillman (1978) he insists that good survey design which makes the experience enjoyable for the respondent is more important than survey length. The only guideline de Vaus offers is "...too short may make the survey seem too insignificant to bother about while a questionnaire or interview that took several hours to complete would probably be too demanding." (2002:112). However, researching schools raises very particular logistical concerns and the survey must be of a length that will fit in to the daily routine

of a member of teaching staff. In this case members of staff were to be asked to complete the questionnaire at the same time their students were completing HBSC and as such it was known that staff would have about 45-50 minutes to complete it, and the questionnaire was designed accordingly. The pilot questionnaire was much longer (51 questions) than the original 1998 version (26 questions). The timing of the questionnaire was consequently an element of the study design that was focussed on during the piloting.

5.3.3 Piloting the teacher survey

The piloting of questions as an integral stage in survey design is well documented (Bryman, 2001; May, 2001; Lavrakas, 1993; de Vaus, 1986, 2002). These well rehearsed arguments will not be iterated at length here, suffice it to say that piloting is crucial in order to assess the usefulness, clarity and lack of ambiguity of the survey instrument. Feedback from the pilot allows the survey instrument (e.g. questionnaire; interview schedule) to be re-worked if necessary, and finalised into a design that will minimise problems in data collection and analysis, maximising data quality. Ideally, the pilot group should consist of a similar cross section of respondents to that expected in the sample population (de Vaus, 2002:117), none of whom will participate in the final survey (Bryman, 2001:155). My pilot school was again dictated by HBSC research design as it was decided from the outset to pilot the teacher survey in the same school and at the same time as piloting HBSC. As I had already committed to undertaking the piloting of HBSC with HPD, it made further sense to conduct the piloting of the teacher survey at the same time. While de Vaus (2002:116) recommends the advantages of an undeclared pilot (i.e. the respondents do not know that it is a pilot) in order to replicate the final survey conditions, as I was interested in feedback on comprehensiveness and clarity from a small group of teachers, a group used to giving such feedback, I felt that a declared pilot was preferable.

Three short visits were made to the school to pilot HBSC, with a different year group (Year 7, 9 and 11) being targeted on each occasion. Given that I was

working with HPD, and their priority was the pupil survey, not much time was available for piloting the teacher survey. One hour over a lunchtime before conducting an HBSC pilot was allocated to pilot the teacher survey. Piloting was conducted by myself with the help of the member of HPD staff who had been scheduled for involvement with the HBSC piloting on that day. As there was only an hour for piloting, five teachers were invited to the hour-long session and asked to complete the pilot questionnaire simultaneously, writing any comments they had on clarity and comprehensiveness in the margins. Afterwards, participants also discussed the questionnaire with us. The choice of lunchtime was partly logistical with this being the best time to get a group of teachers together in one room. Lunch was provided. Participants consisted of five teachers from different subject areas and with varying levels of teaching experience (both in general and within the school). Of these, four were current non-smokers and one was a smoker. All participants were recruited by the school contact in advance of our visit.

During discussions around the questionnaire, the HPD staff member and I made notes which we compared afterwards for accuracy. I wrote these up afterwards adding comments made on questionnaires by individual teachers (Appendix 2). During piloting the time taken for respondents to complete the questionnaire was also assessed The amalgamated notes made from piloting were then fed back into several meetings in which this feedback was discussed and the questionnaire finalised. As always, this was done in parallel to revision of the HBSC survey. In addition to these meetings, other HPD staff were consulted on their opinion of the wording of some questions, including a lot of time spent on making the wording of the first nine questions unambiguous. Through this process, question design and order was finalised.

5.3.4 Final design and layout of the questionnaire for the teacher survey

Once the questions and their order had been finalised, it was necessary to create a well laid out and presented final questionnaire, with associated documentation, ready for implementation (de Vaus, 2002; Dillman, 1978). The

intention was that the questionnaire was self contained so that HBSC fieldworkers could distribute them to staff at the beginning of the session, and collect them at the end with minimal distraction from their focus of implementing the pupil survey. As a result, the approach adopted in design was akin to that of a postal survey with the researcher being absent from the distribution and collection of the questionnaire. While there are many good texts on survey design that can be drawn on (e.g. Bryman, 2001; de Vaus, 2002; May, 2001; Oppenheim, 1992) still the most cited and drawn on work regarding such surveys is that of Dillman's Total/Tailored Design Method (1978, 2000).

Several methods to self-contain the questionnaire, drawn from Dillman's work in particular, but regularly cited by the authors noted above, are worth mentioning in particular. Instructions on completing the questionnaire, including information on following routing instructions (i.e. directing respondents to different parts of the questionnaire depending on their response to a given question) were put on to the front of the questionnaire. A covering letter was also provided which introduced the smoking policy study, explained the purpose of the questionnaire, who was conducting the study, how it related to HBSC and my contact details. The letter also emphasised the importance of obtaining five completed questionnaires from each school and asked respondents to pass on the questionnaire to a colleague if they had already completed it. Good covering letters are standard practice in obtaining a good response rate from a survey (Bryman, 2001; de Vaus, 2002; Dillman, 1978) and as suggested, these were produced on formal, headed paper. However, while during Stage 1, cover letters were sent on Welsh Assembly headed paper in order to make them consistent with the HBSC documentation, in Stage 2, I was required to produce all communications on Cardiff University headed paper. This change of identity was further complicated by the fact that the corporate identity of the Welsh Assembly changed during project hence some communications were on Welsh Assembly Government paper with earlier ones bearing the National Assembly for Wales motif. Although personal signatures, reinforced as personal through the use of blue ink are preferable

(Dillman, 1978), given the fact that these were printed by the market research company, an electronic signature was used. While respondents were asked to hand the completed questionnaire back to the HBSC fieldworker, if this was not possible they were asked to return it in the enclosed pre-paid (i.e. freepost) envelope. To add to the self contained nature of this, all of these items were placed in one envelope which the fieldworker was asked to hand to the respondent. If the member of staff had already answered the questionnaire[1], the letter asked them to hand it to a colleague for completion. If a respondent had not completed the questionnaire by the end of the session, they were asked to return it in a freepost envelope. This was also the case where a questionnaire was passed on to a colleague.

Once the questionnaire and covering documentation were finalised, they were translated into Welsh by WAG and typeset by staff at HPD. This included the addition of codes for data entry. Electronic copies of all documentation were then sent to the market research company contracted to implement the 2001/2 HBSC survey in Wales. The company was then responsible for the distribution of this to their fieldworkers involved in implementing HBSC. This was done in parallel with the preparation of the HBSC questionnaires. A copy of the final questionnaire can be found in Appendix 3 with the covering letter in Appendix 4.

5.3.5 Problems with survey implementation and the need for follow up

Despite all the precautions taken, several issues arose that highlighted to me potential problems that may occur when conducting research in association with another study, where other people have control over your methods, or when you contract this out to someone else. A few issues arose in working with the HBSC team. For example, I was originally told that schools would be alerted to my follow-up telephone interview which would be sold as part of

HBSC, but this was changed and I had to make the link back to HBSC when I telephoned the school, rather than the link being already established. Also, the team vetoed my preference to put a time limit on when posted teacher questionnaires had to be returned by. They also vetoed my desire to add a unique identifier number to each questionnaire and to record the name of the teacher to whom it was distributed against that identifier. It would have been explained to respondents that this was just to help follow up and that their anonymity was assured with the list of names being destroyed after the project and responses not being linked to individuals. Part way into the study, I raised my concern over not being able to identify survey respondents again, only to find out that my being told that I could not was the result of miscommunication within HPD rather than a methodological decision. Consequently, I phoned the market research company to discuss the possibility of implementing this from that point onwards. They agreed, however only partly as due to a combination of Data Protection and logistical issues (with the former possibly seeming an excuse for the latter), they were only prepared to provide a list of names of staff who had received the questionnaire. Although an improvement, questionnaires could still not be matched to individual teachers, only to schools. This was only one issue of working with the market research company, a relationship that was far more problematic than collaborating with HPD. At the outset, I thought it a fair expectation that asking the teacher to complete the questionnaire during HBSC and collecting at the end would achieve a response rate of nearly 100%. However, Table 5.3 reveals that this was not the case:

---

[1] This may have occurred if HBSC data collection was conducted over two or more visits to a school, or with one year group after another, when the same teacher may have been in charge of more than one class undertaking the survey.

Table 5.3 Initial teacher survey response rate by number of returns per school and number of questionnaires returned

Number of responses	Number of schools	Percent of all schools with this number of responses	Cumulative %
5	6	10.2	10.2
4	12	20.3	30.5
3	13	22.0	52.6
2	4	6.8	59.4
1	11	18.6	78.0
0	13	22.0	100.0
Total	**59**	**100**	**100.0**
Overall response rate as a percentage of all questionnaires returned (n=136) from all questionnaires distributed (n=295)			**46 %**

Note: 61 schools initially took part in HBS but 2 dropped out during data collection, leaving 59. These figures do not include these two schools.

The overall response rate of 46% was much lower than expected, with only 53% of schools returning 3 or more questionnaires and 22% of schools returning no questionnaires. While the exclusion of a time limit for postal returns may have lowered the response rate to some extent, most questionnaires should have been collected by fieldworkers. However, there are concerns about the effectiveness of the market research company in implementing this. I had to consistently chase up questionnaires to be returned to me, and on one occasion went to the office to pick up two boxes of outstanding questionnaires. Any contact with the company was hampered by the fact that our contact was acting as an intermediary between myself and those managing data collection. Concerns were also raised over the quality of the fieldwork with regards the teacher survey and there appeared to be no internal quality control over this aspect of the work. Despite fieldworker briefings and the provision of written guidelines, the fieldworker appeared to follow their own procedures. The covering letter was not handed out to teachers with the fieldworker claiming that they never did this unless leaving the questionnaire with the teacher to complete later. Consequently, the potential respondent was not introduced to my project and received no information about why they were being asked to complete the questionnaire,

or instructions on what to do. Also, the fieldworker appeared to make very little effort to collect it back in saying words to the effect that she just leaves it with them and does not know what happens to them after that. Overall, to this fieldworker, and sometimes to the market research company, the teacher survey seemed to be treated poorly, and this appears to have affected the response rate.

Follow up is important to maximise survey response rate (Dillman, 1978) however, due to the low response rate the need for this became even more acute. A weakness of Moore *et al's* (2001) study was that with only one questionnaire per school, this raised concerns over the validity and reliability of the data. As such, we felt that it was important to achieve 3 or more responses from each school in order to assess internal inconsistencies in reporting. Consequently, I implemented a thorough follow-up procedure, that was not dissimilar to starting the survey again, in those schools with less than 4 responses. This was hampered however by the fact that, due to the problems described above, in some schools I had a list of staff who had received the questionnaire and in others I did not. Consequently, follow up took two forms. In schools where the names of all teachers to who the questionnaire had been distributed was provided I sent them a new copy of the questionnaire in the language in which they had received the original, and a covering letter explaining that I was following up non-responses to this questionnaire and asking them to complete the questionnaire and return it if they had not already done so. If they had they were asked to return it uncompleted so that I knew they had completed it previously. These questionnaires all had identifiers, to allow monitoring of returned questionnaires. The purpose of these identifiers was explained in the covering letter (Appendix 5). In schools with no record of who received the questionnaire, a letter was sent to the HBSC contact, enclosing as many spare copies of the questionnaire as were outstanding from the school (Appendix 6). The covering letter sent alongside this, explained the situation and asked the contact if they could help increase our response rate by distributing the replacement questionnaires to those staff who had not completed their first copy. If the contact did not remember who had originally

received the questionnaire, they were asked to distribute the spare copies to any staff members who reported that they had not received, or completed it, before. An attached information sheet in the form of a flowchart was used to explain this procedure to the contact (Appendix 7).

In this postal follow up, letters were personalised where possible and were all on Cardiff University headed paper and included a real rather than electronic signature in blue ink so that it stood out as handwritten (Dillman, 1978). Freepost envelopes were again used and this time, respondents were also asked to return questionnaires within a set time. These letters were followed up by phone calls. In some cases I managed to speak to the teacher or contact in question. In other cases, messages were taken by administrative staff and distributed to appropriate teachers internally. After many weeks of follow up, the response rate was eventually pushed up to the levels shown in Table 5.4.

Table 5.4 Final teacher survey response rate by number of returns per school and number of questionnaires returned

Number of responses	Number of schools	Percent of all schools with this number of responses	Cumulative %
5	10	16.9	16.9
4	21	35.6	52.5
3	9	15.3	67.8
2	9	15.3	83.1
1	7	11.9	94.9
0	3	5.1	100.0
Total	**59**	**100**	**100.0**
Overall response rate as a percentage of all questionnaires returned (n=186) from all questionnaires distributed (n=295)			**63 %**

Note: 61 schools initially took part in HBS but 2 dropped out during data collection, leaving 59. These figures do not include these two schools.

After follow up, only 5% of schools had returned no questionnaires, while 68% had returned 3 or more with an overall response rate of 63%. This exceeds the average 61% response rate for postal surveys (Hox & de Leeuw,

1994 cited in de Vaus, 2002; de Leeuw & Collins, 1997 cited in de Vaus, 2002) although it has been suggested that in surveys of specific homogenous groups such as teachers postal survey response rates may be expected to be much higher than this at above 90% (Dillman, 1978) especially where the topic is relevant to them (Dillman cited in de Vaus, 2002). As well as being hampered by the initial low response which restricted the response rate follow up could achieve, the long length of the questionnaire (Dillman, 1978) as well as the fact that schools are increasingly researched environments may have impacted on this response rate.

5.3.6 Data entry and analysis

Data from all completed questionnaires were entered into SPSS v.11 using a coding booklet. Open-ended questions were coded after all responses had been returned. School identifiers were the same as those used in HBSC data entry, to allow the easy comparison of the two data sets. Due to school drop-out and the recruitment of replacement schools, these numerical identifiers were not consecutive. These data were then used to inform the telephone interviews (see below). During data entry, any problems or decisions made regarding coding individual data were recorded in a log.

Despite the success of follow up in raising the response rate, the failings of the market research company in implementing the questionnaire meant that the use of the survey data in the project necessarily altered in order that it was not totally discarded. Initially, an analysis of survey data from all schools participating in interviews was to be undertaken in order to strengthen the comparison of qualitative and quantitative data within these schools. However, 28% of the schools that agreed to participate in interviews had either none, one or two questionnaires received from them. As having less than three questionnaires for a school raised issues over validity and reliability and would undermine the ability to assess inconsistencies in reporting, it was decided not to incorporate any statistical analysis of survey data into school-level analysis. However, as Table 1.1 illustrates, these were still used to inform the

interviews, allowing the generic interview schedule to be particularised for each school. In those schools where there was any survey data, before each interview, SPSS was used to produce a Frequency report on the survey data received from each school. This report was then visually checked for inconsistent reporting in each of the survey variables or for any other interesting points. Anything worth following up was noted on the interview schedule. The open-ended questions were then analysed and any interesting points raised by the data, or conflicts within the data, also noted on the interview schedule to follow up in the interview. By doing this, the survey data was still allowed to inform the interviews. This process is exemplified for Schools 40, 18 and 04 below.

In School 40, this analysis revealed that staff smoking on the premises was a key area to follow up in the interview. The visual check of the Frequency of responses given for each variable in the two teacher surveys received for the school, found that while both respondents stated that staff were not allowed to smoke outside on the school premises, one reported this happened at least once a week and the other reported that it happened about every day. A check of the questionnaires revealed that the latter respondent had added a note to their response saying that this was in a car. In addition, analysis of the open-ended questions revealed that both teachers reported that there was some smoking behaviour by staff in their cars. This was noted on the schedule and followed up in the interview which confirmed this behaviour and linked it to a fire in the school (caused by staff smoking on site) which meant that staff did not smoke on site, as this was no longer allowed, but some did smoke in their cars.

In School 18, the Frequency report revealed some confusion about staff policy, with two respondents reporting that they did not know whether was a staff smoking policy, one reporting that there was no policy and one reporting that there was an informal policy. This apparent lack of policy dissemination to the whole school was reinforced by one respondent who wrote of policies in general that "I have ticked a no. of 'don't know' boxes simply because I am unclear whether the school does have written policies on a number of issues

raised here", going on to imply that senior staff may be the people who know. A note was made to explore this in the interview which conformed that while staff were not allowed to smoke on the school site, policy dissemination was clearly very weak.

In School 04, several issues were identified from survey data to follow up in interviews. Two of the main issues concerned staff smoking. One of the four survey respondents stated that staff had been known to smoke on school trips while one stated that this never happened and the other two said that they did not know whether this had ever happened. This was added as a note to follow up. Also, one respondent said that staff were allowed to smoke outside on the school promises, and three reported that staff were allowed to smoke within sight of the school, as long as it was outside the school boundary. In each of these places, one respondent reported that staff smoked in them about every day. These were also followed up in the interview.

5.4 Stage 2: teacher telephone interviews

5.4.1 Why use telephone interviews?

For this phase of the research, interviews with key members of staff aimed to collect good quality data on school policies in order to help achieve objective 1. Good quality data refers to complex, in-depth data collected by interviews with staff, rather than relying solely on the limited data that can be captured by a survey instrument and on which the majority of past investigations into the effectiveness of smoking policy have relied. The lack of qualitative data on school smoking policies has been outlined in Chapters 2 and 3, with Moore *et al* (2001) recommending that their findings be followed up by using in-depth data. By conducting interviews with local 'experts' on policy (see Section 5.4.3), this stage of research sought to collect data that would give a more detailed insight into school smoking polices and their operationalisation in schools where probing could help clarify the respondent's perspective of

policy. As such, while the interview schedule covered similar areas to the teacher survey, the method potentially provided a different perspective on these, allowing the interviewer to investigate more sensitive issues such as smoking misbehaviour, and people being allowed to get away with breaking policy, in order to try and get beneath any difference there may have been between policy practice and policy rhetoric, which could not be assessed from survey responses.

Initially, school respondents were to be interviewed face to face. However, it quickly became clear that, given the size of the sample area (i.e. Wales), and that only one person was conducting interviews, this would be impractical in terms of time. This was compounded by the busy timetables of secondary school teachers, which means that interviews must be fitted in where possible, usually during breaks; the very few non-contact (i.e. non-teaching) lessons that secondary school teaching staff have or in between the other commitments of members of SMT. Having arranged an interview, staff may be required at short notice to attend to urgent issues, or cover the lessons of sick colleagues at the last minute. Unforeseen incidents may require interviews, particularly with members of SMT, to be postponed or paused such as the example of a member of SMT in this research who was called away because of an accident occurring to a pupil. As telephone interviews afford greater flexibility in rescheduling or following up interviews (de Vaus, 2002), they give a greater chance of getting an interview. With such logistics, even the standard technique of route-planning to maximise the efficiency of in-person interviewing by conducting them in one geographic locality at a time, around a route that minimises travel and time costs (de Vaus, 2002) would have been insufficient to overcome the potential difficulties of in-person interviewing which would have resulted in a much lower response rate over a much longer period of data collection. The benefits of telephone interviews are highlighted by several interviews where on phoning to conduct the interview at the pre-arranged time, the respondent had been called away and the interview had to be rearranged, sometimes multiple times, before the interview was conducted. While it may be argued that a personal visit may be harder for a respondent to

postpone, the flexibility of telephone interviewing certainly appeared to achieve a greater response rate through the ability to reschedule until the interview was convenient. A good example of this is school 16 where, due to a school event, the interview was conducted over two separate phone calls on two separate days.

The use of telephone interviews in the social sciences has been, and sometimes still is, met with scepticism. Partly this has revolved around the ubiquity of telephone coverage amongst populations of interest (Trewin & Lee, 1988). During the late 1970s and 1980s, this was similar to recent debates surrounding the use of electronic technologies, reflected in Dillman's work on social research methods with his landmark, and still commonly used text *Mail and Telephone Surveys: The Total Design Method* (1978) being republished as *Mail and Internet Surveys: The Tailored Design Method* (2000). Telephone surveys of any given population only became practical once enough members of that population have telephones (Lavrakas, 1993): if telephones are unevenly distributed among this population, or many phone numbers are unlisted, then sampling error is immediately a concern. However, none of these issues are of a concern for this study, applying mainly to general household surveys and opinion polling of national or regional populations (even then, while telephone proliferation varies between countries Trewin & Lee (1988), telephones have become ubiquitous to the point that they are suitable for surveys of many national populations (Frey, 1989; Lavrakas, 1993; Massey, 1988)). Although more modern developments such a mobile phone use have raised new problems regarding sampling and cost (de Vaus, 2002), this research focuses on a specific population of Welsh Secondary Schools, all of which have access to land-line telephones. Therefore, all schools selected have the means to participate in the survey and there will be no sampling error as a result.

Another traditional concern with telephone interviews has been that of response rate with tradition stating that face-to-face interviewing has the highest response rate followed by telephone and then postal interviews

(Burton, 2000; de Vaus, 1986; Dillman, 1978). However, technique development made these justifiable alternatives to in-person interviewing (de Vaus, 1986; 2002) with Dillman's Total Design Method (TDM) achieving him telephone response rates of between 73% and 100% across a variety of population types and sizes (Dillman, 1978). In addition to the above, between-method variation in response rates tend to be for general populations rather than specific ones such as teachers (de Vaus, 2002) which added to confidence in the appropriateness of the decision to adopt telephone interviews. There is some dispute over the effectiveness of engaging in a telephone survey with de Vaus (2002) arguing that having started a telephone interview, people almost always complete it and May (2001) suggesting that people may 'break-off' telephone interviews more often than in-person interviews. Of all respondents agreeing to participate in an interview for this study, only one broke-off the interview.

5.4.2 Design and piloting

Having decided upon telephone interviews, it was necessary to design and pilot the telephone survey. It was decided that semi-structured interviews would be the best way forward. Kvale (1996:124) summarises a semi-structured interview as:

> *[having] a sequence of themes to be covered, as well as suggested questions. Yet at the same time there is an openness to changes of sequence and forms of questions in order to follow up the answers given and the stories told by the subjects.*
>
> *Kvale (1996:124)*

As such the interview schedule was designed as a series of questions which prompted coverage of a series of themes. It has been argued that the completion of telephone interviews may be relatively unaffected by their length (de Vaus, 1986; Frey & Oishi, 1995) and although more recent evidence on this is mixed, it is still asserted that there is no link between questionnaire length and response rate (de Vaus, 2002). Despite this, the research context demanded that interviews could be completed in an average

of 20-25 minutes. Piloting work suggested that this appeared to be the threshold after which teachers would refuse the interview on grounds of length - a time of around twenty minutes is relatively easy to fit into the school day. Questions were devised in consultation with Laurence Moore and Chris Roberts in order to follow up on issues that seemed important from a preliminary and largely descriptive analysis of teacher survey data, and on themes identified as potentially important by earlier studies, particularly that of Moore *et al* (2001) as the work builds on their findings. In ordering the questions, one possibility was to place questions deemed more important at the beginning of the interview so this data will have been collected even if time ran out. This was done to an extent, with some less directly relevant questions being placed at the end. However, it may be unethical to ask questions for which there is no purpose and as such all questions on the schedule were important and the emphasis was to be on completing the interview. Instead, questions discussing policy were placed before those discussing its implementation in order to identify the official position on smoking before discussing how this is supported by practice. This said, in order to achieve a more fluid dialogue, if respondents chose to address themes in a different order, they were allowed to do this, with the interviewer ticking off themes as they were covered and ensuring that the respondent did not wander off the subject and that all topics were covered. To facilitate this, although the schedule was written and implemented by the same person it was still necessary that the schedule was clearly laid out for easy navigation (de Vaus, 2002; Frey & Oishi, 1995). Retrospectively, my ability to do this increased with time, creating focussed dialogues that I felt gave respondents more ownership of the interview and created better data making more effective use of the short time available. It is this flexibility of the semi-structured interview that allows a naturalness to develop while resting in a clear structure that can be seen as an advantage of this type of interview (Gillham, 2000). As the interview was semi-structured, questions tended to be short negating the need for consideration of presenting complex response categories over the phone (de Vaus, 2002).

Once the preliminary schedule had been designed, it was piloted in four schools. These schools were selected from the same database of schools used for HBSC sampling on the basis that they hadn't been in the initial or final HBSC samples, and that they were from different areas of Wales. These schools were approached initially by a telephone call, and a follow up letter where requested. During the pilots, a run through of the interview was followed by questions on comprehensibility, clarity, length, and content (including irrelevant or missing topics). These data were then used to finalise the interview schedule. The opportunity was also taken to experiment with methods of recording interviews over the phone. As a result it was decided to record all telephone interviews simultaneously to an audio tape recorder and a mini-disc (MD) player direct from the telephone. This live creation of a master and a back-up was beneficial on a few occasions where one recording either failed or was too quiet to hear and this system ensured that no transcripts were lost due to equipment failure. Where only one device recorded a backup was made immediately.

After refinement of the piloting and schedule refining, an introductory script was written that prompted the interviewer to discuss consent forms (sent prior to interview as outlined below) and negotiate the recording of the interview. The script then summarised details that had previously been sent to the respondent in an information booklet – different versions of this were provided for English and Welsh language schools, the latter reiterating thanks for allowing the interview to be conducted in English. From my perspective, this scripting sometimes felt artificial, and I was anxious that this may have been the same for respondents. However, it is recommended as a way of ensuring complete and standard dissemination of research information in interviews where respondents have not had prior contact with the researcher (Dillman, 1978; Frey & Oishi, 1995) and seemed a useful way of ensuring that all respondents received the same information. Finally, while selection of an appropriate respondent had occurred prior to interview the script prompted a check on whether they matched the selection criteria (see below). This final interview schedule used for each interview can be seen in Appendix 8.

5.4.3 Conducting the telephone interviews

Due to the need for extensive follow up outlined above, design, piloting and implementation of telephone interviews were pushed beyond the summer of 2001 and into the next academic year. Eventually, interviews began in December 2002. However, while many interviews were conducted over the next few months, a few interviews required extensive arranging and rearranging and did not happen until the end of the summer term 2003. Eventually it was unlikely that interviews would happen in those schools still saying that they would arrange or rearrange an interview at some point, or that I was still waiting to call me back where it had been necessary to leave a message. So on the 18th June 2003, a cut off was made and interviews were ended. Consequently, as discussed in Chapter 6, there is a lag between the HBSC data and the interview data. While HBSC data were collected mainly in February and March 2001, teacher interview data were collected between December 2002 and June 2003. The implications of this are discussed later.

Before recruiting respondents for telephone interviews, a database was created in Microsoft® Excel to record the interview status of all schools (i.e. interview arranged; declined or negotiations ongoing); contact names and details and also to log all attempted telephone calls and the outcome of all telephone contacts made with each school. A cover sheet for each interview was also produced on paper which replicated this information and was kept in the respective file of each school. Once the administrative system was in place, the arrangement of interviews followed a strategy which had been designed and summarised in a flowchart (Appendix 9).

Rather than cold-calling schools, for which pre-emptive letters are recommended to improve response rates of telephone interviews (Dillman, 1978; Frey & Oishi, 1995), having been provided with the name of the HBSC contact for each school, I contacted this person directly to discuss the research, its association with HBSC and to negotiate access. This was not the same as the pre-emptive cold *pre-call* discussed by Frey & Oishi (1995) as the

foundations for the contact had been laid during HBSC, albeit not as firmly as originally planned. Initially at this point, there were two selection criteria for recruitment of an appropriate respondent:

1. *They have not answered the teacher survey*
2. *They have a knowledge of the school's smoking policy and its enforcement which they are confident will allow them to discuss this policy accurately and in detail.*

The first criterion was included in order that a different voice may be heard to those already expressed in the teacher survey responses. However, it quickly became apparent that this criterion was problematic. In many cases, potential respondents could not remember whether or not they had participated in the survey. In other instances, potential respondents who had already answered the questionnaire were either the only person a school was happy for me to interview, or were the only person with enough knowledge of policy prepared to do the interview. As it was more beneficial to get qualitative data from each school than to miss out on gathering data in some schools due to the enforcement of this condition, and as the role of teacher survey findings had changed since the start of the study (see Section 5.3.6), this condition was consequently removed.

The HBSC contact was usually a member of SMT, someone involved with PSE or both and often they were suitable and prepared to do the interview in which case I arranged a time to call them to conduct the interview. Alternatively, another respondent was suggested or I was directed to a member of SMT to negotiate an interview. The potential respondent was told that they would receive more information in the post and once a provisional interview had been arranged, the respondent was sent a covering letter confirming the time and date of the interview (Appendix 10); an information booklet further detailing the project (Appendix 11) as recommended by Dillman (1978) and a consent form (Appendix 12). Letters were sent on official headed paper (now Cardiff University) and fitted onto a single page as recommended by Dillman (1978). Within this information, the research was outlined, the anonymity of

the respondent assured, the respondent invited to raise any questions or concerns that they had either by telephone, email, post or at the beginning of the interview and it was highlighted that they could opt-out at any point between then and the end of the interview. Although they were asked to sign and return the consent form before the interview, not all respondents did do, some not even sending it after the interview took place. However, the fact that the respondent agreed to the interview, and that the information was read to them at the beginning of the interview, ensures that everyone had a minimum of informed consent.

Before each interview, the survey data from the school were entered into an SPSS database, and reported as case summaries. These were then analysed for inconsistencies in reporting, or notable responses to follow up. Open ended responses were analysed separately for follow up in the teacher interview. Any points that emerged from this analysis as needing to be followed up were noted on the schedule before the interview. As mentioned above, reflecting the suggestion of Dillman (1978), a cover sheet to the interview schedule recorded the interview arrangements (Appendix 13). However, to this was added space to record details of the interview itself (i.e. duration; context and comments on the interview and respondent) which where noted by the interviewer directly after the interview. Notes were also made on the interview schedule in case the recording equipment failed. In the one interview were the respondent did not want to be recorded, the interviewer made notes on the interview which were typed up immediately afterwards and added to the interview transcripts.

At the end of the interview, respondents were asked if they would like to receive copies of the findings at the end of the study. They were also asked if it would be possible to approach them for case studies if this became appropriate the following year.

Interviews were conducted in 46 of the 59 HBSC school approached giving a response rate of 78% (Table 5.5) which compares favourably with the average

response rate for telephone interviews of 67% (Hox & de Leeuw, 1994 cited in de Vaus, 2002; de Leeuw & Collins, 1997 cited in de Vaus, 2002).

Table 5.5 Breakdown of telephone interview response rate

Outcome of contact	Number of all HBSC schools	Percentage of all HBSC schools
Interview conducted	46	78
Interview refused	8	14
Contact never made with appropriate respondent	2	3
Needed to rearrange interview but couldn't before cut-off date	3	5
Total	**59**	**100**

5.4.4 Analysis of telephone interviews: from qualitative analysis to indicator development

All interviews were transcribed by the interviewer from the audio cassette recordings. Transcripts are not representations of a reality, rather transcription decontextualises the interview, interprets it and (re)presents it in an alternative (i.e. written rather than spoken) form (Kvale, 1996). As Kvale asserts, there is no such thing as a correct transcription, only the transcription useful for a given research purpose. With only one person transcribing, achieving a consistent transcription style was fairly straightforward and sought to transcribe interviews verbatim, including pauses, interruptions, *ums* and *ers* and also noted other detail such as where respondents laughed or were interrupted (although retrospectively the decisions on the detail to include appear somewhat arbitrary). As the aim was a verbatim transcription, every transcribed line was checked at least twice. I was also conscious of the danger of imposing onto the transcript my assumptions about the words the respondent used. This was particularly true where a mumbled word or phrase was replayed several times to try and distinguish it and where the dialogue was unclear, care was taken to note indistinguishable speech on the transcript. The

context notes from interviews were also added to each transcript which were then imported into NUDIST[2] for analysis.

Themes of interest were identified both during the interview period and also from the literature. These were converted into a coding tree. A random selection of 5 (11%) interviews were then coded by hand to test the suitability of these codes, and identify any further themes worth coding. Once the codes had been finalised, all interviews were coded using NUDIST. Where the written document led to some uncertainty in the apparent meaning of the respondent, the interview recording was revisited to aid interpretation. Once this was done, between- and within-school differences in policy and enforcement level characteristics of school smoking policies were investigated and this qualitative analysis was written up (Objective 2). This analysis was then used to create indicator variables that discriminated between schools on the basis of variation in characteristics of school-smoking policies and their implementation (Objective 3) and attribute these indicators to schools. The analysis of these indicators is discussed in Section 5.5 and achieved Objective 4.

It should be highlighted that as only one person was involved in identifying these themes, developing indicators and attributing schools into these, the classification of schools has not undergone comparison with an alternative interpretation. However, it is also important to emphasise that all analysis of policy-level data and the development of indicator variables occurred with the researcher blinded to the pupil data.

5.4.5 A brief note regarding interview citation

Where transcript excerpts are included, they are appended with six pieces of information as follows and which are explained in Table 5.6:

---

[2] NUDIST is a software package that facilitates the management and analysis of qualitative data

School 26 (State, Eng), Assistant Head, Male (Lines 646-667)

Table 5.6 Key to information added to interview citations

	School Identifier	School type	Language	Respondent position	Gender	Lines
Example	*School 26*	*State*	*Eng*	*Assistant Head*	*Male*	*646-667*
Explanation	A unique identifying code to distinguish between schools	Describes whether the school is an independent or state school: **Ind** = *Independent School* **State** = *State School*	Indicates the language medium of school, as defined by which language pupil questionnaires where requested in **Eng** = English **Cym** = Cymraeg (Welsh)	*The capacity /capacities through which the respondent is involved with policy in the school. Where possible this is described* ***as defined by respondents themselves***	*Gender of Respondent* **Male** **Female**	*Line numbers of text relating to document as it is stored within NUDIST*

As a condition of participation, respondents were guaranteed anonymity during the presentation of research findings. As Grinyer (2002:1) states, convention has it that most codes of ethical conduct produced by professional institutions or organisations incorporate the need to maintain the anonymity of research participants. For example:

> *The anonymity and privacy of those who participate in the research process should be respected.*
>
> *Section of Item 34, British Sociological Association (BSA) Statement of Ethical Practice (2002)*

> *Where possible, threats to the confidentiality and anonymity of research data should be anticipated by researchers. The identities*

> *and research records of those participating in research should be kept confidential whether or not an explicit pledge of confidentiality has been given.*
>
> *Item 35, British Sociological Association (BSA) Statement of Ethical Practice (2002)*

Similarly, guidelines of the MREC for Wales, who provided ethical comment on this research project, include the need to assure the respondent that they will not be identifiable from their data (MREC internal guideline sheet, (undated):2).

The question of confidentiality has taken on a legal dimension for academic researchers since March 2000 when the Data Protection Act (1988) came into effect (BSA, 2002; Cardiff University, 2003a,b; Grinyer, 2002). Where academic research involves data about identifiable living individuals, this constitutes the use of personal data (Cardiff University, 2003a:1, 2003b:1-2) and is subject to the terms of the Data Protection Act. As such, the British Sociological Association (BSA) advises its members that as researchers they "should have regard to their obligations under the Data Protection Acts. Where appropriate and practicable, methods for preserving anonymity should be used including the removal of identifiers, the use of pseudonyms and other technical means for breaking the link between data and identifiable individuals," (2002:5).

It is clear, that respondent anonymity is a prime concern for the researcher, both ethically and legally and pseudonyms are a traditional way around this. However, Grinyer problematises the traditional use of pseudonyms in writing up research, claiming that it is a method "embedded in various codes of ethical conduct." (2002:1). Grinyer challenges the orthodoxy of adopting pseudonyms as a technique for achieving anonymity, by discussing its difficulties including the fact that some research participants sometimes do not want anonymity and those that do are not always comfortable with someone else choosing a pseudonym for them. However allocating pseudonyms to schools presented a dilemma. Should random, generic names be applied, or should the allocated

pseudonym reflect the characteristic of the school (e.g. Welsh names to replace Welsh names; schools named after saints replaced by a pseudonym with the prefix St.): while the latter may undermine anonymity (particularly with the names of religious schools), allocating random names may be insensitive to the culture of the schools. Adding this to issues regarding allocation of pseudonyms to respondents, it was decided not to adopt any pseudonyms for use within this work. Instead, each school will be referred to by an identifying number (e.g. School 10). In addition, the other relevant descriptors of both school and respondent set out in Table 5.6 are added to the interview.

5.4.6 Suggestions for conducting telephone interviews in schools

While the uniqueness of the school environment has been highlighted in Chapter 2, much of the literature on telephone interviewing considers random sampling of general populations such as in general household surveys or opinion polling. However, conducting telephone interviews in schools raised several issues particular to this environment which may be useful for others adopting this method to consider. These are outlined below.

1. When negotiating access it is important to consider how you 'sell' the research

When outlining the research to schools while negotiating access, I became aware that respondents often focussed on either the fact that I was undertaking doctoral research or the fact that the project was related to HBSC and also that they reacted to these in different ways, having a greater interest in one of these elements. The temptation then is to allow the discussion to focus on the element in which they are most interested. This made me realise that when negotiating access to school environments, which do have different priorities and procedures to researchers, it is possible to represent your work in differing ways (i.e. you effectively 'sell' your research to potential participants) and that this raises many practical and ethical issues. This was compounded by concerns regarding the openness and honesty of respondents if the survey was seen as related to WAG compared to if it was seen as Cardiff University

research. Conversations with colleagues provide anecdotal evidence that I am not alone in this and this is something that I have been following up in since undertaking this research. For the moment it is worth mentioning that those undertaking any research in schools should reflect on how they are selling it to the school and what implications this has for the research relationship with the school.

2. Do not leave messages for potential respondents with colleagues

Frey (1989) identified that leaving messages on answerphones was a bad strategy as it gave the potential respondent the option as to whether or not to call back. While answerphones may be present, in schools it is also often necessary for another person (e.g. colleague; administrative staff) to pass on a message asking the potential respondent to call you back. If possible this should be avoided as it not only removes control of initiating telephone contact from the interviewer but also relies on the message being accurately passed on. Instead, it is best to ask for a time that the respondent is likely to be around (e.g. when they have a non-contact lesson) and telephone again at this point. Messages should only be left as a last resort.

3. Be aware of administrative staff as gatekeepers to SMT

Administrative staff often filter phone calls, particularly to SMT and especially to the head teacher. It seemed to me that this may be official (i.e. they are told not to put certain telephone calls through) or unofficial (i.e. they decide themselves not to put certain telephone calls through). This was exemplified where on asking to speak to the deputy head, a member of administrative staff said that they would put me through, asking who I was and then suddenly remembering that the deputy was not in that day when I told them. In one instance, the head of a school answered the telephone because his secretary had gone home. After agreeing to do the interview, he proceeded to give me his direct line to telephone if I needed to speak to him because his secretary was likely to filter out my call. This can be problematic, especially given the preference for not leaving a message. As this cannot be avoided, the best strategy is to recognise when this may be happening and adapt your

approach accordingly. While point 1 highlights that care must be taken regarding the 'selling' of research, it is arguable that an ethical strategy (particularly where unofficial gatekeeping is apparent) may include giving minimal detail about the research to the administrative staff member so that the head may be allowed to make up their own mind. This would appear to be reinforced by the head who agreed to take part in the project although his secretary would probably have filtered my call out. Another justifiable strategy if gatekeeping of this kind is suspected is to ask when best to phone back, and to keep phoning back at these times, or at regular intervals until you either speak to the potential contact or are told that they are not interested. It is often worth trying to contact SMT 15-30 minutes after school finishes because they are often around and answer the phone once the administrative staff have gone home. As well as identifying the best time to phone (Dillman, 1978), keeping a log of calls (including a note of the conversation that happened) also helps identify potential gatekeeping issues.

4. Be prepared that it may take a while to get in touch with a potential respondent

Allowing for points 2 and 3, it may take a while to get in touch with a potential respondent. Be prepared to keep trying until you succeed in speaking to the contact. Keep a call log to identify times not to phone (Dillman, 1978).

5. Be prepared to arrange and rearrange interviews as necessary

The work context of a teacher means that it can be very difficult for them to make time for an interview during the day. Clearly, interviews are arranged at the convenience of the respondent, however this raised a couple of other issues in schools. Firstly, many teachers across Wales have breaks at around the same time of day and this may restrict the number of interviews that can be done in a day. Secondly, as mentioned above, staff can often be called away at the last minute so be prepared to re-schedule the interview as many times as necessary – this is not usually an avoidance tactic and the interview will usually be completed eventually. While teaching staff are best caught during breaks and non-contact lessons, as mentioned in point 3 it is often worth trying to contact

head teachers and SMT either before or after school hours – they tend to be on site longer than teaching staff and have more time at these times (particularly after school). In one instance, for example, a head teacher suggested that I phone him during half term, either at home or, on certain days, at school during half term to conduct the interview.

6. Keep the length of the interview suitable to the school context

As discussed above, from the outset I recognised the need for having an interview that lasted 20-25 minutes in order that it was easier to fit into the school day. This certainly helped the response rate and should be borne in mind by those intending to conduct interviews in schools.

7. Keeping the respondent informed of how far through the interview they are

Doing any telephone interview, it is hard for the respondent to know how near the end they are. This is particularly important for school staff who have to be elsewhere (e.g. in class; meeting parents) imminently and often I could sense respondents getting anxious towards what we both knew was the limit of their time, but that only I knew was near the end of the questions. In addition, by knowing how near the end they are, respondents can adapt the length of their answers as appropriate unlike one early interview in particular which lasted 51 minutes because the respondent was very expansive in all his responses – it was after this interview that I decided to address this problem of letting respondents know how far through the interview they were. To address this I took to regularly telling respondents how far through the schedule, and telling them at the outset that I would do this. However, this could be rendered inaccurate by the fact that I could not anticipate how much each respondent would say. Other solutions may be, instead of sending just an advance letter (Dillman, 1978) to send a copy of the interview schedule to the respondent in advance. However, this may undermine the dynamism of the interview, with the respondent preparing rigid answers and resulting in a lack of dialogue (it was in the flowing dynamic interviews that some of the best data emerged). It also undermines the purpose of leaving certain questions until the end (see

above). A further alternative may be to send the respondent copies of the themes to be covered. However it is addressed, it is important to let the respondent know how near the end of the interview they are in.

5.5 Analysis of indicator variables

5.5.1 Collaboration on the statistical analysis

It is the intention of the author that the existence of collaboration around the statistical analysis element of this thesis is transparent throughout this thesis. The recommendation of Moore *et al* (2001) was that better, more in-depth data on policy contexts be collected to develop future analyses. The author independently collected interview data on policy contexts, and analysed these in order to develop an understanding of policy- and enforcement-level characteristics. As such, the intellectual property of the qualitative data remain solely with the author of this thesis and will be written up as a separate, solely authored publication.

In order to bring the qualitative analysis recommended by Moore *et al*, back full circle to their study, it was desirable that summary indicator variables needed to be developed in order to describe between-school variation in the policy- and enforcement-level characteristics developed in the thematic qualitative analysis (objective 3). These indicators could then be analysed in association with the self-reported pupil prevalence data for HBSC. Again, development of the indicators was done solely by the author of this work, based on his qualitative analysis and he retains the sole intellectual property over these.

However, while the author is a fairly competent consumer of statistics, he is not a statistician and therefore collaboration on this stage of research was desirable in order to maximise the findings of this funded piece of research. This was done in conjunction with Dr Nora Wiium and Professor Laurence

Moore, who are experienced statisticians and users of multi-level modelling techniques. With Professor Moore's technical input, the author worked with Dr Wiium, using his qualitative findings to interpret the results of the analyses as she ran them, which also allowed the group to make decisions about the resulting direction the analysis should take. The results of this analysis, are currently being written up as a co-authored paper. Some of the interpretation of, and discussion around these findings are also presented in this paper (Chapter 9).

5.5.2 Indicator development

Analysis of interviews and the development of indicators were completed blind to the pupil data. Enforcement-level characteristics were each summarised into 2 and 3 level variables describing between-school variation in these characteristics. These are described in Sections 6.3-6.8. Once this was done, a 2-level indicator was created to describe whether policy-level characteristics tended to support or undermine consistent no-smoking messages in each school. Construction of this variable is described in Section 6.9 and involved the re-classification of each policy-level indicator on the grounds of which levels tended to support and which tended to undermine the production of consistent no-smoking messages. These were then amalgamated into the final supportiveness of policy-level characteristics variable.

An indicator was then devised to describe the extent to which the WSE supported the smoking policy. Variation in enforcement-level characteristics could be related to variation in the extent to which each characteristic supported or undermined the policy. Ideally, these would have been combined in order to give an indication as to the extent that the WSE supported or undermined the policy. However, as many of these enforcement-level characteristics emerged from the analysis, data on them were limited across the whole sample. Instead, the two enforcement-level characteristics that there were data on across most schools were used to create a 3-level variable describing the extent to which the WSE in each school supported or

undermined the policy (Section 7.5). As before, this was then re-classified into a 2-level indicator describing the extent to which each WSE could be said to support or undermine the production of consistent no-smoking messages (Section 7.5).

Finally, the indicators describing the extent to which policy-level and the WSE/enforcement-level supported or undermined the production of consistent no-smoking messages were amalgamated to create a policy context indicator describing the extent to which the school tended to support or undermine no-smoking messages (Section 7.6).

5.5.3 Analysis

Once the indicators had been created, analysis of them in association with HBSC data achieved Objective 4.

It is not the intention or place of this thesis to defend the mathematics behind the statistical techniques undertaken for the collaborative analysis of indicator variables. It should also be noted that, as described above, during this stage of analysis the author worked closely with Dr Wiium as she ran the analyses, interpreting the findings in light of his qualitative data. The author is making no claim to having devised this analysis. Instead, it should be noted that the contents of this section are based largely upon discussions with Dr Wiium and the draft paper on which they have been collaborating as well as the author's own understanding of and reading around the subject.

HBSC pupil data were provided as an SPSS file by WAG. These data had already been cleaned at a national level, however for this analysis, all schools that participated in HBSC but did not take part in interviews were removed from the data set. One HBSC question asked whether pupils smoked every day (daily smokers); at least once a week but not every day (weekly smokers); less than once a week or never. As daily and weekly smoking prevalence was very low in younger pupils (Table 5.7), only year groups 10 and 11 were used in the

final analysis. Having made this decision, School 08 had to be removed from the sample as there were no data for these year groups in this school[3]. This gave a final sample for analysis of 1941 pupils across 45 schools.

Table 5.7 Frequency of smoking pupils by year group

Year Group	% weekly smoking[1]	% smoking daily
Year 7	1.9	0.9
Year 8	6.1	4.0
Year 9	11.7	9.0
Year 10	20	14.8
Year 11	21	16.7

[1] *Weekly smoking is created by collapsing daily and weekly smoking in order to capture all those respondents smoking at least weekly*

Social research commonly involves people in social contexts and groups which they both influence and are influenced by (Hox, 2002). These are often seen as hierarchies, with people 'nested' in their social contexts and as such, observations within social contexts cannot be assumed to be independent and such data, due to the presence of these hierarchical levels, is termed multilevel (Hox, 2002; Rasbash *et al*, 2000). Pupils nested in schools is a classic example of this and the employment of cluster sampling to account for this has already been discussed (Section 4.4.2.1). As traditional statistical techniques assume that observations are independent (Hox, 2002), multilevel techniques have more recently been developed to account for hierarchical data structures (Rasbash *et al*, 2000). Not to account for this can lead to false positive findings. As this study used a hierarchical data set, it employed multilevel techniques.

[3] WAG had no record of why there was no data for these year groups in this school, but it was most likely because these year groups were involved in examinations at the time of HBSC data collection.

In the first instance, a simple cross-tabulation of each indicator against weekly, daily and daily smoking on the school premises was conducted. The latter of these was included to test the hypothesis that smoking bans may merely displace smoking behaviour from the school site (Gordon & Turner, 2003a; Northrup *et al's*, 1998; Pentz *et al*, 1998; Turner & Gordon, 2004a). This descriptive analysis allowed investigation into the proportion of pupils in each level and the assessment of any patterns in the data.

Any indicators that demonstrated a pattern in the expected direction, were subjected to a multilevel logistic regression analysis against weekly smoking, daily smoking and daily smoking on the school site. Logistical regression was used since smoking is a binary variable (i.e. yes or no). For each policy indicator variable, the reference category was taken as the level of the variable assumed to be the strongest policy characteristics with odds ratios showing the comparative likelihood of being a weekly, daily or daily on the school site smoker across the other levels of the indicator.

A third analysis was then conducted on findings that were significant at the second stage. This multilevel logistic regression again tested these indicators against weekly smoking, daily smoking and daily smoking on the school site, this time controlling for pupil-level variables theoretically linked to smoking behaviour (e.g. parental smoking). In this way, the association of these factors with smoking can be assessed. If any given factor is strongly linked to adolescent smoking (e.g. parents smoke) and many of the pupils in the school exhibit this characteristic (i.e. the parents of many pupils smoke) then any apparent relationship between the school-level variable (i.e. policy) and smoking prevalence may be due to this compositional characteristic rather than the contextual characteristic of the school (policy). These confounding relationships may lead to false results. By including these pupil-level variables in the model, the amount of variation in smoking prevalence that they explain may be controlled for and the effect of any confounding relationships accounted for. At this stage, five models were tested:

Model A:

a random intercept model adjusting for no covariate (i.e. the null model)

Model B:

a random intercept model including all significant pupil-level variables in the present study

Model C:

a random intercept model including significant school policy indicators and controlling for all pupil-level predictors

Model D:

a random intercept model including significant school policy indicators and controlling for all pupil-level predictors as well as best friend smoking

Model E:

a random intercept model including significant school policy indicators and pupil-level predictors and possible interaction between school and pupil variables

The random intercept model refers to the multilevel model which allows for between school variation in smoking prevalence. The extent to which this between-school variation is the result of policy characteristics is the subject of this analysis. These are discussed further in Chapter 8.

Finally, due to the findings of the analysis, a descriptive cross-tabulation of pupil perceptions of policy compared to staff reporting of policy was also conducted.

The remainder of this thesis presents the results of this analysis and discussion of the findings.

5.6 A note on ethical approval

This research was begun before the existence of school-specific Research Ethics Committees in Cardiff University. Therefore, in order to receive ethical scrutiny on this research, the proposed protocol for the study was submitted to the Multi-Centre Research Committee for Wales (MREC). This was submitted as *Research Protocol MREC 02/9/05*. As the study fell outside of their NHS remit, they could not offer ethical approval under their guidelines, however, they did offer their ethical opinion on the study saying: "Members agreed that the study is interesting and worthwhile. They had no ethical objections to the approach or method being used."

-6-

Using telephone interview data to investigate policy-level characteristics

6.1 Policy-level characteristics

Section 3.5.2 set out a framework for analysis of data from telephone interviews with selected respondents in schools. In accordance with section (a) of that framework, this chapter presents a qualitative analysis of the Welsh data and identifies variation in policy-level characteristics highlighted in Sections 3.1 and 3.4.2 as being related to effective smoking policy. These are:

- *The importance of policies that ban smoking (smoke-free schools)*
- *Policy formality*
- *Introducing more restrictive policies into a school – methods, rationales and attitudes.*
- *Policy dissemination*
- *Type of sanctions employed when smoking policy is transgressed*

As stated in Section 3.4.2, policy level characteristics relate directly to the smoking policy itself with discretionary choices regarding these characteristics being made by staff at the policy-level and resulting in between-school variation in the policy. This analysis is then used to developed indicators to discriminate between policy-level characteristics and classify individual school policies within these indicators. Having done this, again as set out in section (a) of the framework, an indicator is developed which describes and discriminates between schools on the extent to which their policy-level characteristics support or undermine consistent no-smoking messages. Before doing so, Section 6.2 presents a brief description of the interview respondents.

6.2 Description of telephone interview respondents and their schools

In total, interviews were conducted with staff in 46 of the 59 Welsh HBSC schools, giving a response rate of 78%. (Table 6.1). As mentioned in Section 5.3.6, numerical school identifiers were the same as those used in HBSC data entry in order to allow easy comparison of the two data sets. School numbers were not consecutive due to school drop-out and the recruitment of replacement schools during HBSC. The contextual details of respondents and their schools are summarised in Table 6.2. From this it can be seen that the sample consisted of 42 (91%) state schools and 4 (9%)[1] independent schools. Of these, 5 (11%) schools reported their primary language as being Welsh and 41 (89%) English.

Table 6.1 Categorisation of responses from HBSC schools asked to participate in teacher interviews on smoking policy

Outcome of contact	Number of all HBSC schools	Percentage of all HBSC schools
Interview conducted	46	78
Interview refused	8	14
Contact not made with appropriate respondent	2	3
Needed to rearrange interview but could not before cut-off date	3	5
Total	59	100

[1] Percentages do not add up to 100% due to rounding error

Table 6.2 Contextual details of telephone interview respondents and their schools

School	School Type (Independent or State)	School Language	Respondent gender	Respondent Position
School 01	State	Eng	Female	Assistant Head (Pastoral)
School 03	State	Eng	Female	Health and Drugs co-ordinator
School 04	State	Eng	Female	Head of PSE
School 06	State	Eng	Male	Assistant Head Teacher
School 07	State	Eng	Female	Head
School 08	State	Eng	Male	Headmaster
School 09	State	Eng	Female	Deputy Head
School 10	State	Eng	Male	Assistant Head
School 13	State	Eng	Male	PSE line manager / Key Stage 4 manager
School 14	State	Eng	Female	PSE co-ordinator
School 15	State	Eng	Female	Head of PSE / Head of Year
School 16	State	Eng	Male	Deputy Head / Head of PSE
School 18	State	Eng	Female	Teacher in charge of Health Education
School 19	Ind	Eng	Male	Senior Teacher, SMT (Pastoral)
School 23	State	Eng	Male	Deputy Head (Pastoral - with responsibility for policy development)
School 24	State	Eng	Male	Deputy Head (with responsibility for policy development)
School 25	State	Eng	Female	Teacher in charge of PHSE
School 26	State	Eng	Male	Assistant Head
School 27	Ind	Eng	Male	Pastoral responsibility for 6th form
School 29	State	Eng	Female	Assistant Head Teacher
School 31	State	Eng	Female	PSE co-ordinator
School 32	State	Eng	Male	Head (with responsibility for smoking policy introduction)
School 33	State	Eng	Female	Head of PSHE (with responsibility for development of smoking policy)
School 34	Ind	Eng	Male	Assistant Head (Pastoral)
School 35	State	Eng	Male	Assistant Head
School 36	Ind	Eng	Female	Teacher in charge of PSE
School 37	State	Eng	Female	PSE Co-ordinator
School 38	State	Eng	Male	Head Teacher (with responsibility for policy)
School 39	State	Eng	Female	Deputy Head (Pastoral Curriculum)
School 40	State	Eng	Female	PSE Co-ordinator
School 44	State	Eng	Male	Deputy Head / Leadership Team
School 47	State	Eng	Female	Head of Upper School
School 48	State	Eng	Male	Assistant Head (with responsibility for policy development and for Key Stages 4&5)
School 49	State	Cym	Female	Deputy Head / PSE Co -ordinator
School 50	State	Eng	Male	Assistant Head / Head of Guidance
School 52	State	Eng	Male	Deputy Head (Pastoral / PSE)
School 54	State	Eng	Female	Health Education Co-ordinator
School 55	State	Eng	Female	Assistant Head / PSE Co -ordinator
School 56	State	Cym	Male	PSE Co-ordinator
School 57	State	Cym	Female	Deputy Head
School 58	State	Eng	Female	Deputy Head / PSE Co -ordinator
School 61	State	Cym	Female	PSE Co-ordinator / Head of Year
School 62	State	Eng	Male	Deputy Head (including PSE Co - ordinator until current academic year)
School 63	State	Eng	Male	Assistant Head (Pastoral)
School 64	State	Cym	Female	Deputy Head (Pastoral/PSE/Health)
School 66	State	Eng	Male	Head (including leader of Healthy Schools Initiative)

Table 6.3 shows the capacities in which respondents were involved with smoking policy. While 86% of male respondents were classified as members of senior management team (head teacher or assistant head), only 42% of women were in this position. Conversely, while 54% of women were PSE / Health co-ordinators, only 9% of men were in this role. It is apparent that within this sample, male respondents were more likely to be in senior management team positions than women, who in turn, were more likely to be in PSE/health co-ordinator roles than men.

Table 6.3 Capacities in which telephone interview respondents identified themselves as being involved with smoking policy in their school by gender

Respondent position	Female		Male		Total	
	No.	*%*	No.	*%*	No.	*%*
Head Teacher	1	*4*	4	*18*	5	*11*
Assistant / Deputy Head Teacher	9	*38*	15	*68*	24	*52*
PSE / Health Co-ordinator	13	*54*	2	*9*	15	*33*
Head of section (e.g. Year group/ key stage)	1	*4*	1	*5*	2	*4*
Total	*24*	*100*	22	*100*	46	*100*

6.3 School smoking policy restrictions

6.3.1 School smoking policy restrictions

All schools had a policy[2] which stated whether staff and students were allowed to smoke on-site or not. In some cases these were seen as separate policies and other times staff and students were identified as being covered by the same policy. This section discusses the extent of the restrictions placed on staff and students. Policies for others on site will also briefly be mentioned.

6.3.2 School policy restrictions on pupil smoking

In all schools the gist of the policy was the same: pupils must not smoke on site. In many cases, it was also reported that they never had been allowed to.

[2] See section 6.10 for a note on the use of the term policy

Only Schools 27 and 40 had made any concession towards this policy, with both having allowed sixth formers to smoke on school trips at some point (school trips are discussed further in Chapter 7). Only one respondent (School 18, Eng, Female, Teacher in charge of health education) said that their school had ever allowed pupils to smoke on site, when sixth formers had been allowed to smoke in a common room in 1975 or 1976. However, this had been banned after fuss in the local press. The dominance of the notion that pupils should not be allowed to smoke in school was clear from very early on in the research. Indeed, it was often suggested that this was "obvious". The extent to which this is accepted as fundamental is illustrated by the following extract. Talking about the difficulties of addiction and counselling pupils, the Assistant Head said:

TR: *- you probably saw in the, er, in the press, perhaps, or on, on the news that the headmaster from* [name of school] *just down the road who, who, who opened up a smoking area in school for children, did you see that on the news?*

SB: *Um, was that recently?*

TR: *Yes.*

SB: *No, I didn't see that one, I saw, I knew there was one in Cardiff a couple of years ago.*

TR: *Yeah, and, and this headmaster said that anyone who smoked could go behind the sports hall and, and the area would be supervised at certain times of the day by, by, er, by teachers-*

SB: *Yeah.*

TR: *- well you can imagine what that, happened in the press, you can imagine what happened in the newspapers, that headmaster now is no longer a headmaster [laughs].*

SB: *Right, yeah, yeah.*

TR: *I don't think he was sacked but maybe the pressure sort of saw him off [but?] because, um, you know, er, society [doesn't?], they want schools to be, seen to be the bastions of all sort of law and order don't they [indistinguishable speech] you know, and, and, and, I, I,*

I'm not, I'm not advocating that, I mean I wouldn't advocate that, but, er, someone tried it and it didn't work, you know.

School 26 (State, Eng), Assistant Head, Male (Lines 646-667)

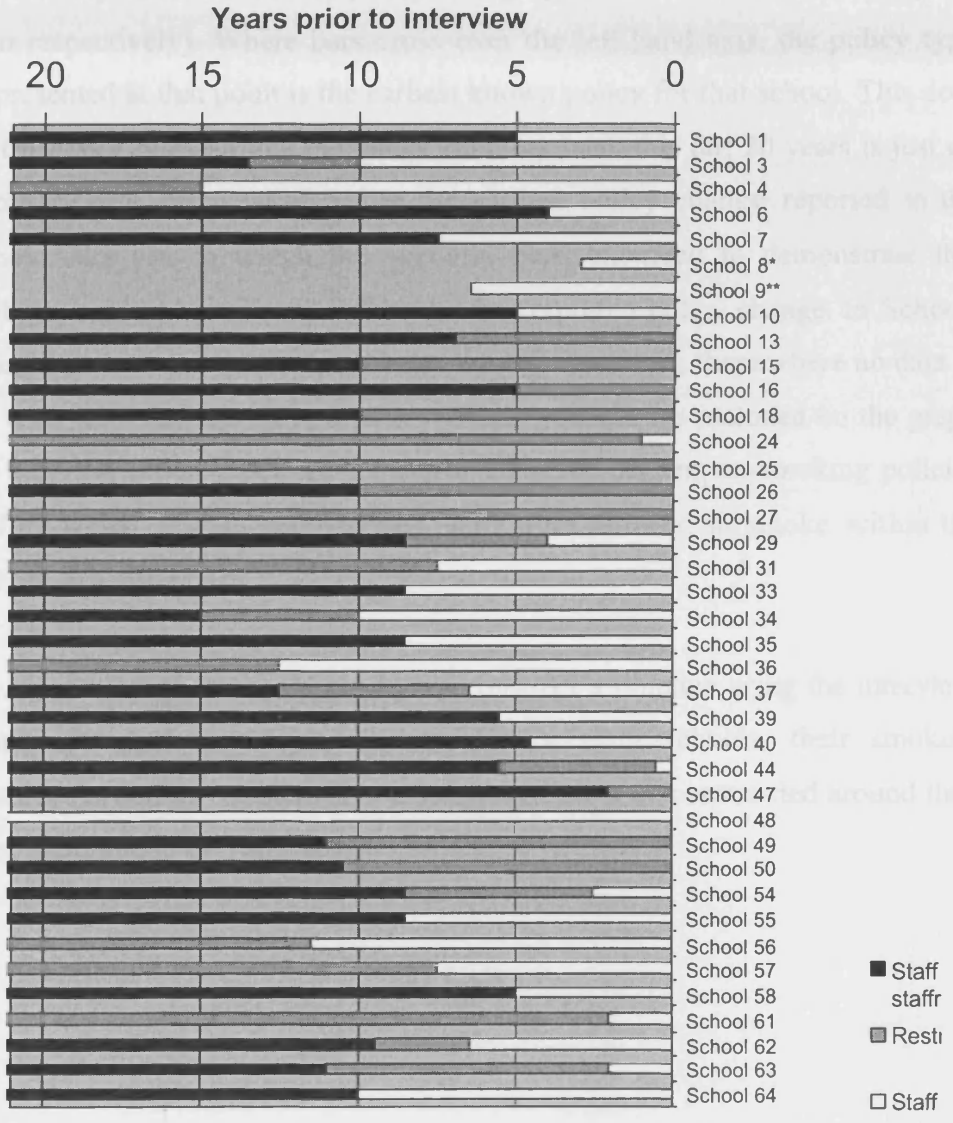
A clear message, often repeated explicitly or implicitly was that society expects certain standards and rules within its schools regarding pupil smoking. Through the above example, and examples from outside the study presented in Section 2.3, it was apparent that where these have been threatened, pressure placed upon the school (via parents, governors, the community and the media) had ensured that schools once again conformed to these standards. In those few experiments where pupils have been allowed to smoke the public reaction has been strong and often fierce, sometimes overshadowing the question as to why the experiment was attempted. These attitudes are highlighted by the above respondent's clear attempt to distance himself from advocating such experiments despite his apparent sympathies for the reasoning behind such initiatives. A recurring notion throughout the research was that by the most commonly held standards across society and schools, it was axiomatic, sometimes to the point of "obviousness", that pupils should not be allowed to smoke in schools.

6.3.3 School policy restrictions on staff smoking

While all schools placed some restriction on staff smoking, the extent of these restrictions varied. In some schools staff were allowed to smoke in designated areas, while in others staff were not allowed to smoke anywhere on site. It was also evident that the pattern of staff policy restrictions had changed over the last twenty years, with a shift away from staff being predominantly allowed to smoke on school sites, to school sites mostly banning staff smoking. Over this time, three possible approaches to staff smoking were reported: (1) the school allowed smoking in all staffrooms or common areas; (2) staff smoking was allowed in restricted areas only or (3) there was a total staff smoking ban on

the site. Figure 6.1 shows a timeline demonstrating the presence of these different approaches in participating schools.

Figure 6.1 Timeline constructed from interview data to illustrate chronology of policy restriction uptake across schools



This timeline was constructed from interview data and consequently serves only as an approximation of policy uptake in order to illustrate policy trends over time. Where respondents gave approximations of policy date changes within varying ranges (e.g. 10-15 years ago; 5-6 years ago) the mid point was used to represent the date of policy change (in these cases 12.5 and 5.5 years ago respectively). Where bars cross over the left hand axis, the policy type represented at that point is the earliest known policy for that school. This does not necessarily mean that the policy stretches back this far; 20 years is just an arbitrary date set 5 years before the earliest policy change reported in the whole data set, to which the axis has been extended to demonstrate that policies existed historically before the first reported policy change. In Schools 8 and 9, where the bar does not cross the left hand axis, there where no data as to what preceded the current policy. These schools are included on the graph as they did report dates for the introduction of current no-smoking policies before which it was assumed that staff were allowed to smoke within the school to some extent.

In seven schools it was impossible to construct a timeline using the interview transcripts due to a lack of data. The missing schools, their smoking restrictions and the reason why timelines could not be constructed around their data are outlined in Table 6.4.

Table 6.4 Summary of characteristics of missing data from Figure 6.1

School	Policy-Type Detail	Reasons Why a Timeline Cannot Be Constructed for the School
School 14	No-smoking for staff. About 6 years ago a separate room was set aside and this evolved into a no-smoking policy as the number of smokers has dwindled.	There was some ambiguity over the reported data largely due to the fact that the current no-smoking policy had evolved rather than been introduced. Consequently dates were hard to fix in the timeline format.
School 19	No-smoking for staff for at least 10 years. Before this a separate smoking room was provided.	Respondent was not certain about the exact dates and policy changes. Therefore it could not be summarised in the format above. However, interview data revealed that the respondent had been at the school for 4 years and the policy was in place when he arrived so it was fair to assume that it had been in place for longer than 4 years.
School 23	No-smoking policy. Five years ago a separate smoking room was established in the school. This had dwindled out of use and the school now no smoking.	As the policy has evolved, it was impossible to attribute dates to policy changes and represent it in the timeline format.
School 32	Separate smoking area provided. Before this staff could smoke in any of the staff rooms.	The respondent did not put a date onto when the policy came into effect. However, he was responsible for introducing it and he had been at the school for 10½ years. Therefore the policy had been in place for at least that long. The respondent said it had been in place for "some years" (line 294).
School 38	School had been no-smoking for at least 11 years.	Respondent was unsure of exactly how long ago this was introduced (he had been in the school for 9 years and it was no-smoking when he arrived) and there were no data as to what the policy was before this.
School 52	School had a separate smoking area which they brought in as they felt it was difficult to enforce the county council policy banning smoking in their buildings.	Respondent knew that the council no smoking policy has been in place for 14-15 years but did not know how long the school had acknowledged a smoking area for staff in their policy. While it appeared as though this had been in place for a while, and it would have probably been fair to assume that this had been the case about as long as the county policy had been in existence, there were not enough data to confirm this or construct a timeline for this school.
School 66	No-smoking.	The respondent did not know the history or the timing of the policy and said that it would be unfair to guess. It was only his second year in the school and the policy clearly predated his appointment.

All schools exercised some level of restriction over where their staff were allowed to smoke. In the majority of schools (34, 74%), this restriction was absolute with staff not allowed to smoke on site. In the remainder (12, 26%), smoking areas had been set aside. However, there was a lag between the collection of pupil-level data during HBSC and teacher interviews (see Section 5.4.3) although interview data allowed evaluation of what school policy was at the time of pupil data collection. These data showed that Schools 24 and 44 had changed their policy during this time, meaning that at the time of pupil data collection:

- School 24 did not have a staff smoking ban but *restricted staff smoking*
- School 44 did not have a staff smoking ban but *restricted staff smoking*

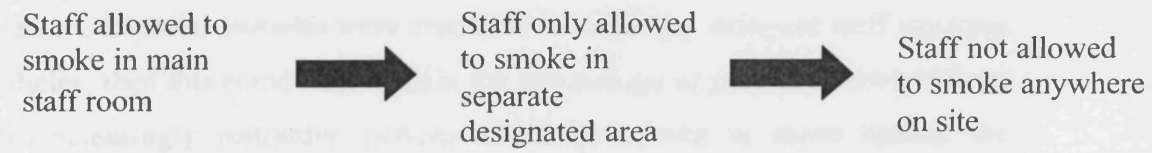
All other policies had been in place for at least about a year prior to HBSC data collection (allowing for the use of approximate dates by respondents), and so policy data could be considered contemporary to the pupil data. Of those seven schools where a timeline could not be fixed, in only two schools (Schools 14 and 23) was it impossible to put an exact date on the change – in all the others the current policy had been in place for at least a year. In Schools 14 and 23 there appeared to have been no recent change in policy and therefore policies were assumed not to have changed since HBSC. Given this, Table 6.5 shows the classification of school policy restrictions at the time of HBSC. While examples from Schools 24 and 44 were incorporated into the qualitative analysis as examples of how school smoking policies were operated, they were removed from all indicators (except policy restrictions) and classifications as their data on school policy and its implementation could not be related to the prevalence data which these were tested against. As such, the maximum number of schools described by any indicator was 44, apart from the indicator for policy restrictions which described all 46 schools. All other data related to the policies that were in place at the time of data collection and as such were treated as contemporary to pupil data.

Table 6.5 Staff smoking policy restrictions at time of pupil data collection

	Restricted staff smoking	Staff smoking ban
Schools	13; 15; 16; 18; 24; 25; 26; 27; 32; 44; 47; 49; 50; 52	01; 03; 04; 06; 07; 08; 09; 10; 14; 19; 23; 29; 31; 33; 34; 35; 36; 37; 38; 39; 40; 48; 54; 55; 56; 57; 58; 61; 62; 63; 64; 66
Number of schools	***14***	***32***
Percentage of all schools	**30**	**70**

It was apparent that the preceding twenty years had seen a period of great change in staff smoking policies with almost all schools having implemented at least one policy change during this time. This began around the mid to late 1980s when schools began, at first, to introduce separate smoking areas, with smoking bans becoming increasingly common throughout the 1990s. The interview data revealed a definite chronology of staff smoking policy. In all cases the sequence shown in Figure 6.2 underlay school policy change and no school deviated from it:

Figure 6.2 Sequence of Staff Smoking Policy Change in Welsh Schools



While not every school adopted every stage of this sequence, no school adopted an approach outside of this: no school reported going from a smoking ban to a designated smoking area, for example.

Some respondents suggested that this trend reflected the changing awareness of the dangers of passive smoking and the social pressures that come with this. Tobacco smoke had become increasingly recognised as anti-health and constructed as anti-social, and policy trends reflected this broader social change. For example, while the respondent from School 19 was not around at the time of the policy change in his current school, his discussion of the reasons for such policy change clearly drew on these discourses and were indicative of this trend:

> *...I imagine that it was part of the general social and cultural trend away from smoking in public, er, in the sense that, you know, I think there's pressure generally, via restaurants and cinemas and public places, now, um, and I think that we were very much coming into line with that, um, er, so I think it was part of that general trend, I imagine so anyway.*
>
> *School 19 (Ind, Eng), Senior Teacher, SMT (Pastoral) (Lines 287-293)*

Other respondents, however, suggested that it might be falling numbers of staff smokers (due to increasing awareness of the health risks of smoking) that had resulted in more restrictive policies. They implied that as the number of smokers had fallen, so there had been less pressure from smokers to allow smoking on site, and more pressure fom non-smokers to restrict or ban it, leading to a greater number of more restrictive smoking policies in Welsh Schools. If social attitudes were crucial to increasingly stringent staff smoking policies, then this could help explain the chronology of policy: to deviate from the increasingly restrictive pattern would have been to move against the highest social pressure.

Where schools did allow staff to smoke, it was also notable that some schools appeared to have given greater consideration to separate smoking areas than

others. In one school this room followed county guidelines which advised that such rooms must be "appropriately equipped with effective extraction, ventilation and fire safety equipments" (School 26 (State, Eng), Assistant Head, Male (lines 126-127)). In other schools, any space that happened to be available appeared to have been designated as the smoking room. More interestingly, not only were these restricted areas mostly reported to be separate and designated staffrooms or rooms, but over half of respondents from schools that allowed staff smoking emphasised that these were small areas including cupboards; a boiler house and a mobile classroom[3]. In all cases, smoking areas were separate from pupils and other staff. Generally, respondents apparently took care to demonstrate that where staff were allowed to smoke on site, it was in designated places which were peripheral areas, accommodating a marginal habit with the behaviour annexed off both socially and geographically. While some schools expressed concern over the welfare of staff smokers, smoking rooms mostly appeared to be merely smoking ghettoes where smokers could be hidden away. This, arguably, echoed a broader social marginalisation of smoking and was further suggestive of the importance of social pressure in creating more restrictive staff smoking policies. Across the interviews, the discourse of smoking as anti-social and unhealthy (both actively and passively) was certainly a very prominent framework for the discussion of policy and its restrictions.

6.3.4 Indicator variable describing variation in smoking restrictions

Overall, schools varied in the extent of their restrictions on staff smoking and they were classified on this basis. As all schools had bans for pupils, policy restrictions were represented by a binary indicator (Table 6.6)

[3] Mobile classroom usually refers to a mobile unit, much like a large static caravan (Portakabin), which increases usable space on the school site. While also often referred to as temporary classrooms, experience suggests that once in place, these often become near permanent fixtures on the site.

Table 6.6 Indicator variable describing variation in smoking restrictions

Level	Description	Schools	Number of schools	%[1]
2	School has both pupil smoking ban and staff smoking ban	01; 03; 04; 06; 07; 08; 09; 10; 14; 19; 23; 29; 31; 33; 34; 35; 36; 37; 38; 39; 40; 48; 54; 55; 56; 57; 58; 61; 62; 63; 64; 66	32	70
1	School has pupil smoking ban but staff are allowed to smoke in restricted areas	13; 15; 16; 18; 24; 25; 26; 27; 32; 44; 47; 49; 50; 52	14	30

[1]Percentage of 46 schools as 24 and 44 are included in this indicator only due to availability of data

6.3.5 A note on the characteristics of school smoking policies for others on site

Before proceeding, it is necessary to mention smoking policies and restrictions for others on site. Part of objective 3 was to investigate the creation of indicators regarding policies for others on the school site as well as for staff and pupils. However, the analysis did not consider this group in detail as during the study, the focus was narrowed to examine policy for staff and pupils only. This was a pragmatic decision based partly on the amount of data and respondent knowledge on staff and pupil policies compared to those for others and reinforced by issues over definition. A general, often tacit, understanding emerged among respondents that teaching staff; Senior Management Team (SMT) and pupils were often seen as the core participants

of the school environment with anyone on site during the school day who was not a member of this core, tending to form a third, othered, group. The main constituents of this group of "others" were caretakers; cleaners; contractors; visitors; supply teachers and parents. No data were collected on why these people were seen as other, but perhaps it was because they are on site either less often or less frequently than pupils and staff; have minimal contact with pupils or maybe because they did not participate directly in the delivery of curriculum. However, it also emerged that there was some fuzziness at the boundaries between core participants and other participants. Depending on the school, the status of cleaners; caretakers; administrative staff and supply staff on site during the school day apparently varied between being core participants or being peripheral (other) members of the school. Particularly, contrary to preconceptions at the outset of the project (reflected in questions which implicitly categorised administrative staff as others), administrative staff were included under most staff smoking policies. The term "others" was further confused where buildings and facilities of schools were used by people outside of school hours. It became clear that people using these could also be classified as other to the core members of the school. The fact that core staff and pupils may use the school site after hours for non-school activities, further blurred the distinction between core and other.

The result of these issues was that, while they may be touched on (particularly in Section 7.2.4.2) there was insufficient data to explore policies for others in any great detail, and certainly not enough to create indicators. However, some general comments could be made. Despite the fact that these others had a presence within the school environment and, as such, smoking policy should have extended to them, what was apparent from the interview data was that the extent to which this happened in practice was highly variable across schools. Policies for cleaners, caretakers; supply staff and visitors (e.g. parents) were less often considered than those for core members of the school and the presence of smoking policies for others on site fell into four main categories:

1. Smoking policies for others on site were an extension of that in place for core staff and pupils

2. A different or separate smoking policy existed for others on site
3. A different smoking policy applied to some groups of others on site, but not to all of them
4. There was no policy for others on site (i.e. they had not been considered)

The most consistent policy message was achieved in the first approach, where policy for core members of the school was extended to all others on site. The other approaches led, in varying ways, to inconsistent policy messages across the school. For example, in School 09 (State, Eng) the smoking ban applied to everyone except cleaners who were managed by a separate company contracted to the school. By not extending the smoking policy to cleaners this school undermined its own policy of being a no-smoking site. Some respondents suggested that it did not matter if cleaners smoked on site as they were on site after school and consequently did not come into touch with pupils. However, as has been already stated, this was not necessarily the case: pupils could be on site after school, particularly if the school was used for non-school related or community activities such as sports, youth clubs or evening classes. Even if this was not the case, it did not change the fact that the no-smoking policy was undermined by turning a blind eye to one group smoking on site. An alternative example of inconsistency in approach occurred in School 32 (Sate, Eng) where there was a more restrictive smoking policy for visitors to the school site than for staff: while staff were allowed to smoke in restricted areas, visitors were not allowed to smoke anywhere on the site (apparently it was easier to tell visitors that they could not smoke anywhere, than detail the areas where they could). These are, however, only general observations, underpinned by the broader realisation that policies for others were a more complex area of investigation than anticipated.

6.4 Policy formality

6.4.1 Smoking policy formality

Policy formality referred to whether the policy was **written** or **unwritten** (sometimes referred to in the literature as **formal** or **informal** respectively). In schools, individual policies could take different formats for different groups. For example, in School x, the pupil smoking policy might have been written for staff but unwritten for pupils. Data focussed on the format of the policy for the group it applied to, therefore in School x, the pupil policy would have been classified as informal as it was unwritten for pupils themselves. In another school, where the restrictions on pupil smoking may have been displayed on the classroom walls this would have been classified as a written policy for pupils as the policy was written in a place where pupils could access it. It was notable that there was an imbalance where staff could usually access policies where they were written for pupils (e.g. pupil handbooks; posters) but pupils were less often able to access policies where they were written for staff (e.g. staff handbooks; signs in the staffroom).

In some schools the data on policy format were unclear. Sometimes this resulted from a lack of clarity as to who a particular policy format was intended for, while in other schools it resulted from a respondent being unsure about the policy but not wishing to acknowledge this uncertainty. For example, in School 13 (State, Eng) when asked if the policy was written, the respondent was apparently unsure saying:

> *Er, well no it's, it's a, it's, well yes it is, it, and, and it came from the County Borough of Blaenau Gwent, um, all educational establishments within Blaenau Gwent are non-smoking buildings.*
>
> *School 13 (State, Eng)*
> *PSE Co-ordinator, Female*
> *(Lines 110-112)*

Then when asked about where a copy of this could be found she said:

> *TR: I don't know really, I'd have to have a look if I'd got a copy, other than that, you could possibly write to, um, County Borough of Blaenau Gwent, which is Victoria House, um, Ebbw Vale.*

SB: *Okay, I mean that might be the easy way anyway. Where would that be written down in the school, if that is written in the school?*

TR: *Um, I don't know, I haven't got a copy, I don't think I've got a copy, the head may have a copy*

(Lines 115-121)

Later in the interview the respondent was again asked about where the policy was written, and answered:

Um, I think the true answer to that is yes and no [laughs] um, it has been written down but as I said it's being re-done, er, so the new one is coming out but, um, it had, that, that policy is clear, um, the policy of a caught smoker being reported back to parents is clear.

(Lines 149-152)

This is an example of where the respondent's lack of certainty regarding the policy format led to it not being possible to confidently interpret what the format was for pupils or staff.

6.4.2 Variation in smoking policy formality

Table 6.7 illustrates the classification of school smoking policy format by staff smoking restrictions present in schools at the time of pupil data collection (i.e. excluding Schools 24 and 44). As all schools banned pupil smoking, pupil policy could not be split into levels of policy restriction.

Table 6.7 Classification of schools policy format by staff smoking restrictions

	Restricted staff smoking				**Staff smoking ban**			
	Written staff policy	Unwritten staff policy	Respondent doesn't know staff policy format	Unclear staff policy data	Written staff policy	Unwritten staff policy	Respondent doesn't know staff policy format	Unclear staff policy data
Written pupil policy	27	26; 47; 50			01; 04; 29; 33; 38; 39; 55; 58; 64; 66	03; 07; 08; 23; 48; 56; 57	37	
Unwritten pupil policy	15; 16; 25; 49				06; 09; 19; 34; 62;	31; 35; 36;	14; 63	
Respondent doesn't know pupil policy format for pupils			18		10		40; 54	
Unclear pupil policy data	52	32		13				61

Table 6.8 Distribution of school policy format by percentage of all schools

	Written staff policy	Unwritten staff policy	Respondent doesn't know staff policy format	Unclear staff policy data	Total
Written pupil policy	25	23	2	-	**50**
Unwritten pupil policy	20	7	5	-	**32**
Respondent doesn't know pupil policy format	2	-	7	-	**9**
Unclear pupil policy data	2	2	-	5	**9**
Total	**50**	**32**	**14**	**5**	**100**

* All figures displayed are rounded percentages. Where column and row totals do not add up, this is due to rounding error.

Table 6.8 shows the distribution of school policy format by percentages across all schools. It was fairly common (although by no means ubiquitous) for schools to have written staff and/or pupil smoking policies with 75% (33 schools) of schools presenting their policy in a written format for at least one of these groups - indeed, only 7% (3) schools had neither a written policy for staff or students. However, it was much less common for schools to write their policies for *both* staff *and* students, with only 25% (11) of schools doing so. In 43% (19) of schools, one of the policies was formal and one informal, with a similar numbers of schools providing a written policy only for staff (20%, 9) or only for pupils (23%, 10).

Overall, the total number of written staff policies in the sample (50%, 22) was the same as the total number of written pupil policies (50%, 22). It was possible to add another dimension to these data by combining them with the

data on policy restrictions (remembering that all schools had a pupil smoking ban). Tables 6.9 and 6.10 show the prevalence of school smoking policy formats within schools that restricted staff smoking and schools that banned staff smoking respectively.

Table 6.9 Prevalence of policy formats in schools with restricted staff smoking

	Restricted staff smoking				
	Written staff policy	Unwritten staff policy	Respondent doesn't know staff policy format	Unclear staff policy data	**Total**
Written pupil policy	8	25	-	-	**33**
Unwritten pupil policy	33	-	-	-	**33**
Respondent doesn't know pupil policy format	-	-	8	-	**8**
Unclear pupil policy data	8	8	-	8	**25**
Total	**50**	**33**	**8**	**8**	**100**

* All figures displayed are rounded percentages. Where column and row totals do not add up, this is due to rounding error.

Table 6.10 Prevalence of policy formats in schools banning staff smoking

	Staff smoking ban				
	Written staff policy	Unwritten staff policy	Respondent doesn't know staff policy format	Unclear staff policy data	**Total**
Written pupil policy	31	22	3	-	**56**
Unwritten pupil policy	16	9	6	-	**31**
Respondent doesn't know pupil policy format	3	-	6	-	**9**
Unclear pupil policy data	-	-	-	3	**3**
Total	**50**	**31**	**16**	**3**	**100**

* All figures displayed are rounded percentages. Where column and row totals do not add up, this is due to rounding error.

Reiterating that all schools had a pupil smoking ban, it could be seen that schools with *more restrictive smoking policies* (i.e. teacher and pupil smoking ban, Table 6.10) tended to be more likely to have a written pupil policy than those schools with *less restrictive policies* (i.e. restricted teacher smoking and pupil smoking ban, Table 6.9): while 56% of schools with more restrictive policies had a written pupil policy, only 33% of schools with less restrictive policies had a written pupil policy. Written policies for staff however were equally as common in schools with more and less restrictive policies (50% in each). Another way to look at this is that overall, written policies for staff and pupils were more similarly common in schools with more restrictive policies than in schools with less restrictive policies (50% and 56% respectively in schools with more restrictive policies compared to 57% and 36% in schools with less restrictive policies.)

While Table 6.8 shows that 68% of all schools provided at least one policy in written form, the above data emphasise that co-existing written policies for staff and pupils were far more common in schools with more restrictive smoking policies (i.e. staff and pupil ban) than in schools with less restrictive policies (i.e. pupil ban, restricted staff smoking). However, this was still very uncommon in both types of school.

6.4.3 Indicator variable describing policy formality

All schools had staff and pupil smoking policies which were either formal or informal. To differentiate between schools based on whether staff and pupil policies were each written or unwritten would have resulted in many categories each with few observations. Consequently, Table 6.11 shows an indicator that classified schools based upon the number of written policies in place.

Table 6.11 Indicator variable describing policy formality

Level	Description	Schools	Number of Schools	%[1]
3	Both staff and pupil smoking policies are written	01; 04; 27; 29; 33; 38; 39; 55; 58; 64; 66	11	33
2	One of the staff or pupil policies is written, and one is unwritten	03; 06; 07; 08; 09; 15; 16; 19; 23; 25; 26; 34; 47; 48; 49; 50; 56; 57; 62	19	58
1	Neither staff or pupil smoking policies are written	31; 35; 36;	3	9
-	The respondent did not know or the data are unclear on the format of all policies	10; 13; 14; 18; 32; 37; 40; 52; 54; 61; 63	11	-

[1]Percentage of 33 schools data are available for

6.5 Rationales behind school smoking policies

6.5.1 Rationales behind pupil smoking policies

While the literature identifies the importance of rationales behind staff policies, the role of rationale behind pupil policies does not appear to have been analysed to the same extent. Variation between schools regarding rationales behind pupil smoking policies occurred in the extent to which they adopted a **disciplinary** or a **health** approach to the policy. In a **disciplinary** approach, a school treated pupil smoking as merely an act undermining the school's authority. Adoption of a **health** approach, however, saw schools take a more complex approach to pupil smoking which focused more on smoking as a health issue, acknowledged both the health issues of smoking, and, in the most complex cases, recognised and treated it as an addictive behaviour. These were not mutually exclusive categories, rather extremes with schools usually leaning more towards one approach but incorporating elements of the other. Particularly, a health approach also usually incorporated disciplinary actions. However, across the interviews, the most consistent data on the extent to which schools took either of these approaches occurred in discussion of the types of sanction schools used. For this reason, in each school the approach to sanctions procedures was seen as an indicator of the rationale behind pupil policy and as a result, the difference between disciplinary and health approaches is developed in Section 6.8.

6.5.2 Rationale behind staff policies

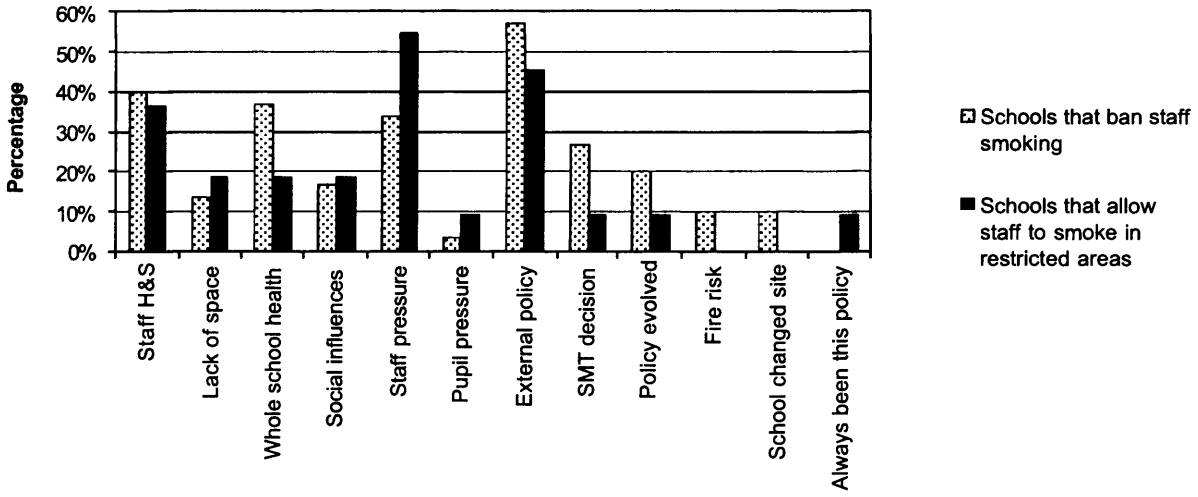
Table 6.12 outlines rationales behind staff smoking policies. The table differentiates between rationales that were reported both by schools with total staff smoking bans and those with restricted smoking and rationales that were reported by only one of these types of school. It can be seen that very similar rationales were reported in schools with both total and partial staff smoking bans. This is reinforced by Figure 6.3 which shows the proportion of times these categories were reported in schools with complete and partial smoking

bans. It is important to remember that schools often reported more than one influence on their policy and as such, these categories were not mutually exclusive.

Table 6.12 Rationales given for the current staff smoking policy in (a) schools that ban staff smoking and (b) schools that allow staff to smoke in restricted areas

Rationales given for why schools had adopted particular staff smoking policies	
(a) Schools that banned staff smoking	**(b) Schools that allowed staff to smoke in restricted areas**
Rationales shared by schools with bans and restricted staff smoking • health and safety issues for staff • whole school health issues • wider social influences • pressure from staff • pressure from pupils • external policy requirements • decision made by one or more members of the SMT • policy has evolved that way	**Rationales shared by schools with bans and restricted staff smoking** • health and safety issues for staff • whole school health issues • wider social influences • pressure from staff • pressure from pupils • external policy requirements • decision made by one or more members of the SMT • policy has evolved that way
Rationales not shared by schools with bans and restricted staff smoking • lack of space • fire risk • school moved site	**Rationales not shared by schools with bans and restricted staff smoking** • the policy has always been that way

Figure 6.3 Percentage of schools reporting factors influencing their staff smoking policy (percentages calculated by smoking policy type)



Schools with staff smoking ban: n=30 (missing Schools 36,48)
Schools with restricted staff smoking: n=11 (missing School 15)

Despite differences in the level of restrictions they may have placed on smoking, Welsh schools were apparently all moving in the same policy direction, towards more restrictive staff smoking policies (Figure 6.2). It was perhaps not surprising then, that across both sets of schools, similar motivations behind smoking policies were reported. More interesting was the difference which existed between the motivations themselves. Staff policy rationales could be classified into four broad groups:

1. Health rationales
2. Logistical rationales
3. Policy development as a result of pressure to change policy
4. Unplanned policy evolution.

These were important because they provided a context for staff smoking policy with regard to attitudes towards the policy within the school and the messages that underlay smoking policy, which in turn may help to understand the extent of staff compliance with the policy. Staff were the local actors who implemented the policy, and if rationales behind the policies did not encourage

staff support, then policy implementation potentially suffered. These approaches are outlined below.

6.5.2.1 Health rationales

These approaches were led by a concern for the health of staff in the light of the dangers of tobacco. Schools which reported **health and safety issues for staff** as being a factor in their staff smoking policy generally felt that staff had the right to work in a healthy environment, which included a smoke-free workplace. Many of these involved general concerns relating to passive smoking, although some respondents cited direct concern among the staff regarding passive smoking and pregnant employees.

In some schools staff policy was seen as a crucial part of a **whole school approach** to tackling tobacco. These schools had decided that it was not possible to preach a no-smoking message to their pupils without addressing staff smoking too. Instead, a whole school approach was necessary, with the pupil message being reinforced by banning or reducing the visibility of staff smoking. In some cases, whole school approaches included other initiatives such as maximising the opportunities that arose in the national curriculum to reinforce the smoking message, and implementing events and activities particular to the school. Such whole school approaches were concerned with smoking as a health issue and were about employing a deliberate strategy of reinforcement, integration and consistency of message. For example, the headmaster of School 08 was asked about the reasons behind the introduction of the staff smoking policy :

> *TR: It was introduced, well I came in, in September, um, er, September 1998, and the new policy came into force in, er, September 1999, um, because I was concerned at the large, sort of, the massive amounts of, of smokers here, this was why I became involved in the ASSIST project in the first instance, you know, cos I consider it to be a major problem, er, here, and, um, er, what I thought was, um, we couldn't have, going round saying you know, pupils can't smoke et cetera, et cetera when staff*

smoke, so, you know, we, we, effectively banned staff, er, from smoking.

School 08 (State, Eng), Headmaster, Male (Lines 156-167)

This was one example of a whole school approach to smoking as a health issue which saw staff banned from smoking as it promoted a mixed message for pupils. This staff ban as part of a whole school approach was demonstrated by the fact that smoking among pupils was also reported to be addressed as a health issue. For example, in this extract the respondent reported that the school had agreed to take part in ASSIST, a local (South Wales and Bristol) peer-led smoking cessation intervention run among Year 8. In addition, later in the interview (lines 220-223) the respondent said that the school smoking policy also stated that smoking education for pupils should be covered in both PSE and the science curriculum as a part of the school's health education policy.

Interestingly, several schools reported what they felt were unexpected health benefits to some staff from introducing a smoking ban, where a ban provided an incentive for some smokers to successfully quit. This was sometimes put down to the inconvenience of having to go off site during already short break times, if staff wanted to smoke during school hours.

6.5.2.2 Logistical rationales

Logistical rationales included policies being made more restrictive as the result of either a practical issue or a specific incident within the school.

A common logistical rationale occurred where a ban resulted from the combination of a desire to place some restriction on staff smoking but where a **lack of space** to be able to provide a separate staff smoking area determined that a total ban was introduced rather than a dedicated smoking room. Sometimes however, a lack of space was used as an excuse for bringing in a more restrictive policy, while seeking not to alienate smokers from those

making the policy decisions. This possibility was supported by those schools that reported the fact that their **school had moved sites,** and this had been used as an opportunity to change the policy and ban staff smoking. This was often linked to a lack of space in the new site, but seemed to coincide with growing pressure from staff for more restrictive smoking policies (see 6.5.2.3), suggesting that the move and resulting lack of space produced a good excuse for this change.

The final logistical rationale related to **fire risk,** which was generally about health and safety as well as insurance. The clearest example was School 40 where a fire as a result of smoking had acted as a catalyst toward the policy being introduced. The respondent had mentioned the fire during the preliminary phone call to arrange the interview, and clearly it was big issue in relation to school smoking policy. When the respondent mentioned the fire again in the interview, the opportunity was taken to follow up on its importance in tightening up school restrictions on staff smoking by banning it:

SB: *Yeah, and coming to that issue of the fire, I know you said that when we talked last time...*

TR: *Mmm.*

SB: *...that was why the policy was introduced?*

TR: *Um, at, that instigated it, I'm, I'm sure, er, but I think we were probably heading towards it anyway, um, you know, as, as just, just because of health.*

SB: *Sure, and how long ago was the fire?*

TR: *Um, [pause] five, five years ago, four, four or five years ago.*

SB: *Right, and was that actually related to a smoking incident?*

TR: *Er, it was put down to a smoking incident, yes, but no-one was actually blamed.*

SB: *Right, was that a pupil or staff, or was it a...?*

TR: *Staff.*

SB: *Right, where did it start, was it in a...?*

TR: *On the roof.*

SB: *Really?*

TR: *Well, we've got a, we've got a, a room on the roof, er, which is, um, um, a room in fact where they do photocopying and storage of paper.*

SB: *Oh right, so, right, sure. So before that fire, what was the policy in the school?*

TR: *Um, there, there wasn't really one.*

SB: *Right, and that went for staff and pupils?*

TR: *Yeah, yeah.*

SB: *Right. So before the policy was set down as it was, would staff smoke on site...*

TR: *Yeah.*

SB: *...quite, but within the rules?*

TR: *In the, in the staff rooms.*

School 40 (State, Eng),
PSE Co-ordinator, Female
(Lines 130-160)

In another school, assessment of fire risk appeared to be inconsistent: the SMT of School 16 wanted to introduce a total smoking ban but had been advised against it at the time (possibly by staff in the local authority although this was not clear) apparently to keep staff onside. However, they were about to open their buildings for use after school and at these times the buildings would be no-smoking partly because of the fire risk. The difference between the during-school and after-school policies seemed strange - given fire risk as a primary motivator for the after school policy, this risk seemed to be overlooked for the during school hours policy. Related to fire risk, School 24 had introduced a staff smoking ban partly because they had had a **new fire alarm system**

installed and the network of smoke detectors had made smoking in most places on the premises impossible without setting them off.

6.5.2.3 Response to pressure to change policy

Some rationales behind staff policy could be classified as those where pressure to change exerted by a particular group or entity had led to a more restrictive policy. While some respondents talked directly of **wider social influences** (i.e. changing attitudes towards smoking) being a factor in this pressure to change, it seemed likely that any pressure to change was framed within these changing social attitudes.

These pressures could be further categorised into **external pressures** (from outside of the school) and **internal pressures** (from within the school). Broadly, external pressure to change could be thought of as top down and internal pressure as bottom up, with the latter representing a strategy with more ownership at the staff level. However, where internal change was driven by **decisions made by one or more members of the SMT** this became top down within the school

Most schools reporting *internal* pressures to change reported that **pressure from staff** had resulted in more restrictive smoking policy implementation. Always implicit, and often explicit in this was an understanding of the dangers of passive smoking, and a desire for non-smokers not to be subjected to this. The one exception to this was School 25, where staff pressure had actually prevented a smoking room being lost to a total ban. In two schools, a no-smoking approach for staff was reported as emerging from **pressure from pupils**, in both cases, this coming from the school council[4]. While pupil attitudes may have been considered by schools, there were questions however, over the extent to which pupils could actually influence policy: pupils arguing

[4] Respondents talked of school councils as still relatively new within Welsh schools, being introduced over the course of the previous ten years. They usually consisted of pupil representatives from each year group who met with at least one member of staff to discuss school issues. One school in the sample also seemed to use this structure as a means to disseminate information back to the pupils as well as to get input from pupils on school issues (School 26, lines 215-235).

that they should be allowed to smoke in school were unlikely to be accommodated, for example.

With regard *external* pressures, some schools reported that staff smoking restrictions or bans had been introduced due to the demands of **external policy requirements**, for example where a ban on staff smoking arose from a requirement of the local authority that smoking be banned in all of their buildings, including schools. However, schools engaged with external policy requirements in varying ways, providing a further insight into how the rationale behind staff policy reflected school attitudes towards smoking.

In some schools, the presence of an external, or top-down smoking policy that needed to be conformed to was accepted as a part of school life. Sometimes this was wholeheartedly accepted as necessary and related to health. The policy was integrated deliberately into school life, and had become an important part of the school environment. For example, in School 44, when the LEA brought in their no-smoking policy (since HBSC), under their guidance the school's governors and SMT had introduced the no smoking policy in a very ordered, firm and well documented manner. In other schools, however, the policy was apparently not questioned, but accepted and introduced, often being regarded as inevitable in that they reflected changing social attitudes or national smoking policy patterns across workplaces in general. Additionally, with schools being used to receiving external policy guidelines, instructions on smoking may have been seen as no different with schools merely implementing them as required.

Sometimes, however, external policies seemed to have become tick box exercises rather than a policy designed to tackle tobacco use in schools. It seemed that where schools were not fully engaged with a policy, or not genuinely subscribed to a policy, it may not have been enforced wholeheartedly, may consequently not have had the desired impact, and its effectiveness may have been reduced. For example, School 52 allowed restricted staff smoking and had a smoking room that stood in direct contravention of the external policy. In this school, the respondent began by

reporting that the school's smoking policy was that of the local county council policy which banned smoking in any of its buildings. However, he then continued to explain that there was a "closet" where the few smokers on staff were allowed to smoke. When discussing how this may or may not be reconciled to county policy, the respondent said:

SB: *So in terms of the way that cupboard works as it were, is that kind of, just, sort of, ignored in terms of county policy, or is that just kind of, look the other way?*

TR: *I'm afraid, it's, [if I?], it's, you, you've got to be, um, [sighs] not lax to the rules but, you know, you've got, you've got to, you've got to run the place in terms of what it is, er, you know and, er, um, you know, we've gotta.*

School 52 (State, Eng),
Deputy Head (Pastoral / PSE), Male
(Lines 159-165)

The respondent had already said that he wanted to get rid of this smoking area, and acknowledged its contravention of the county policy which had been in place for at least 14 years (nine years with the current local authority who had continued an existing policy that had been in place for at least 5 years before local government reorganisation). However, there had clearly been pressure from staff smokers, and wanting to keep their staff onside, the SMT had reluctantly allowed staff to smoke in a cupboard which was accessed only via the main staff room - hence School 52 was classified as allowing restricted staff smoking. While he started to justify this decision, he seemed to feel that it was not possible, and his argument tailed off. This was a good example of how schools could be caught between the competing pressures of external policy; the employer's duty to health and safety; non-smokers' wishes for a smoke-free workplace; smokers' wishes to be able to satisfy their addiction during work hours and the desire to keep all staff on side.

Other interesting problems with implementing external smoking restrictions were also reported. In School 44 this was because the LEA policy

(implemented since HBSC) had to be adapted to suit the secondary education context. Local authority policy recommended that workers wishing to smoke, do so outside of their buildings. This was a problem, the respondent noted, within a school. The SMT and governors identified the fact that to allow staff to do this would make staff smoking more visible to pupils. Implying that for pupils to see staff smoking would undermine the non-smoking and unhealthy tobacco messages that the school was trying to convey to its students, the school opted instead for a total ban. Alternatively, Schools 39 and 23 reported that, while bans may be generally welcomed, staff had found it very difficult to implement the county policy because they found it difficult to tell their smoking friends that they could no longer do this on site.

As the introduction of more restrictive staff smoking policies could be contentious and emotive, some schools actually used external policy requirements to further an internal agenda that sought to further restrict smoking, but without alienating staff from the school's own leadership team and policy-makers. In effect, this buck-passing allowed some schools to introduce more restrictive policies while not taking any of the blame from those who were against it. At other times the emphasis was more towards using an external decision to support a smoking ban that was already desired by sectors of the school staff. In School 54, for example, the headmaster and a group of other staff had wanted to introduce a smoking ban for a while. However, the headmaster had been worried about the legal position that this might put him in. One day, however, he is reported to have suddenly announced that the school was now a non-smoking site. It was only through the support and reassurance of local county council policies that he had felt it was legally acceptable for him to do this. In this way, external policy was used as an excuse to make smoking a health issue, and adopt a strong approach to smoking issues. Similarly illustrative was School 10, where it was apparent that the SMT, and in particular the respondent, had been under some pressure to make the site non-smoking. At the same time, the assistant head didn't want to upset the smokers on the staff. However, not having the space to offer a second staff room, he had compromised and added an extractor fan into a corner of the existing staff room. With an apparent groundswell of opinion

demanding a smoking ban, the assistant head seemed pleased when the county introduced a smoking ban into all of its schools at a very fortuitous moment as far as the school was concerned. He reflected that

> *there was beginning to be pressure, um, from, er, a section of the staff, but then the county, I think, er, um, introduced it as a county-wide policy which eliminated the, the danger of a rift between the two sections of staff..."*
>
> *(lines 214-217)*

It was evident that the Assistant Head was relieved that the decision had been removed from his hands, and a rift between himself and either of the two pressure groups was avoided, as was a schism between staff factions.

6.5.2.4 Unplanned policy evolution

Finally, some school representatives reported that a policy decision had never been taken to ban smoking in the school, but that there had been an **unplanned policy evolution**. It was not necessarily that a rationale did not exist behind the policy, but that an active decision on policy change had apparently never been made with several schools reporting that the policy had evolved but also reporting other rationales too. This seemed to occur where the number of smokers had dwindled so low, coinciding with increasing awareness of the dangers of passive smoking and the resultant changing social attitudes towards smoking, that the school had "just become" no smoking. To return to School 23 (State, Eng) it appeared as though the dwindling number of smokers had been used to make a policy decision that the school otherwise felt it could not make, by portraying it as a natural evolution of policy. As outlined above, when the LEA started moving towards a no-smoking policy, staff had felt that that they couldn't suddenly tell their smoking colleagues not to smoke and so the school had compromised by providing a small smoking room for them. However, most of the smokers (who had previously been allowed to smoke in the staff room and in science "prep" rooms) found it too much hassle to go to the new set aside room and the numbers of staff smoking in school had dwindled. Eventually, the last smoker on the staff retired. At this

teacher's leaving event, the headmaster, who had long been keen that the school become no smoking, stood up and gave a speech detailing the teacher's time with the school. During this speech, he announced that he could now officially declare the school to be no smoking. And from that point, it became "just, er, understood by staff" (line 257) that the school was no smoking (Deputy Head Pastoral - with responsibility for policy development, Male).

However, where unplanned policy evolution was reported, it sometimes led to some confusion as to what the policy actually was. School 14 was a good example of this. As highlighted in Table 6.1, the respondent was almost sure that the school was non-smoking, but there was an element of uncertainty to this. When asked about the history of the policy, the respondent (a PSE co-ordinator) said that there used to be a smoking room, but due to falling numbers this was no longer in use. There was no mention of a deliberate decision to end the use of this room, but the sense was that it had fallen out of use as the numbers of smokers had fallen. However, later she said that it was possible that the smoking room may still be in use, but that she was not aware of it or where it was. This illustrated how when policy was allowed to evolve, rather than being deliberately created, it sometimes led to confusion and ambiguity about what the status of that policy was.

The respondent from School 25 reported that policy restricting smoking had **always been that way** in the school, also outlining how previous moves to introduce a smoking ban had been blocked by staff pressure.

6.5.3 A note on the fear of litigation

School 44 provided an interesting footnote to the above categories. As mentioned above, since the time of HBSC data collection, this school had implemented a total smoking ban. While (as outlined above) School 44, like School 24, cannot be used in classifications and indicators, it still provides interesting data on contemporary Welsh school smoking policies. Connected with the introduction of their ban was the fear of litigation. Embedded within changing understandings of health, safety and tobacco, such approaches were

fundamentally concerned with financial repercussions and the image of schools. In School 44, this fear was expressed by the local authority rather than the school with the deputy head reporting that the smoking ban was introduced by the local authority in response to fears that former or current employees may sue them on the grounds that exposure to passive smoking contravenes the school's responsibility to provide a safe work environment under the Health and Safety at Work Act of 1974. Such issues are increasingly dominating current debates surrounding smoking and public places and it was not surprising to see them expressed in schools.

6.5.4 Indicator variable describing variation in policy rationale

Pupil sanctions were seen as the best indicator of the rationales behind pupil policy and are discussed further in Section 6.8.1.3.

Again, due to the small number of schools it was important that indicators did not have too many levels, otherwise it was less likely to be able to achieve statistically significant findings. While a simple 3-level indicator could distinguish between schools that had 1, 2 or 3 types of rationales in place, as discussed above, the types of rationales in place gave more information about the policy approach (Table 6.13). Using these data, two indicators were created (Tables 6.14 and 6.15). These were based around the presence of health and logistical rationales. Pressure to change could not be used as all except 4 schools had this as part of their rationale. It should be noted that where a school reported unplanned policy and also mentioned other rationales, these were taken into consideration. Only schools reporting unplanned policy and no other rationales were categorised as having unplanned policies.

Table 6.13 Rationales behind school staff policies as reported by school

Rationale	Health		Logistical			Pressure to change				Unplanned	
Type / **School**	H&S for staff	Whole school health issues	Lack of space	Fire risk	School moved site	Wider social influences	Pressure from staff	External policy requirements	Decision made by SMT	Policy evolved this way	Policy has always been this way
School 01	✓						✓				
School 03			✓			✓			✓		
School 04										✓	
School 06			✓				✓				
School 07	✓	✓						✓			
School 08		✓							✓		
School 09	✓					✓	✓	✓			
School 10	✓	✓	✓	✓			✓	✓			
School 13	✓							✓			
School 14		✓						✓		✓	
School 16	✓	✓				✓					
School 18	✓						✓	✓			
School 19				✓		✓		✓			
School 23	✓							✓	✓	✓	
School 25							✓				✓
School 26	✓						✓	✓			
School 27										✓	
School 29	✓						✓	✓			
School 31								✓		✓	
School 32							✓				
School 33	✓							✓			
School 34					✓		✓	✓			
School 35	✓	✓					✓		✓		
School 37						✓	✓	✓		✓	
School 38		✓						✓			
School 39		✓						✓			
School 40	✓			✓							
School 47			✓				✓				
School 49		✓				✓		✓			
School 50									✓		
School 52			✓				✓	✓			
School 54	✓				✓			✓	✓		
School 55	✓	✓									
School 56							✓				
School 57								✓		✓	
School 58		✓							✓		
School 61		✓							✓		

continued...

...Table 6.13 continued

Rationale	Health		Logistical			Pressure to change				Unplanned	
Type / School	H&S for staff	Whole school health issues	Lack of space	Fire risk	School moved site	Wider social influences	Pressure from staff	External policy requirements	Decision made by SMT	Policy evolved this way	Policy has always been this way
School 62							✓	✓			
School 63	✓		✓		✓	✓					
School 64									✓		
School 66		✓						✓			
Total	**16**	**13**	**6**	**3**	**3**	**7**	**16**	**22**	**9**	**7**	**1**
Group total	**29**		**12**			**54**				**8**	

No data Schools 15; 36; 48

Table 6.14 Indicator variable classifying variation in policy rationale by the presence or absence of health rationales

Level	Description	Schools	Number of schools	%[1]
2	Health **is** a factor in the rationale behind school staff smoking policy	01; 07; 08; 09; 10; 13; 14; 16; 18; 23; 26; 29; 33; 35; 38; 39; 40; 49; 54; 55; 58; 61; 63; 66	24	59
1	Health **is not** a factor in the rationale behind school staff smoking policy	03; 04; 06; 19; 25; 27; 31; 32; 34; 37; 47; 50; 52; 56; 57; 62; 64	17	41

[1]Percentage of 41 schools data are available for

Table 6.15 Indicator variable classifying variation in policy rationale by the presence or absence of logistical rationales

Level	Description	Schools	Number of schools	%[1]
2	Logistical rationales **are not** a factor in the rationale behind school staff smoking policy	01; 04; 07; 08; 09; 13; 14; 16; 18; 23; 25; 26; 27; 29; 31; 32; 33; 35; 37; 38; 39; 49; 50; 55; 56; 57; 58; 61; 62; 64; 66	31	76
1	Logistical rationales **are** a factor in the rationale behind school staff smoking policy	03; 06; 10; 19; 34; 40; 47; 52; 54; 63	10	24

[1]Percentage of 41 schools data are available for

6.6 Introduction of more restrictive smoking policies

6.6.1 Introduction of more restrictive pupil smoking policies

When respondents were asked about the introduction of pupil smoking policies, very often they could not answer this question. This related very much to the fact that, as outlined in Section 6.3.2, most respondents felt that not only was it obvious that pupils could not smoke in school, but that this had always been the way. Smoking restrictions for pupils had been the same for longer than respondents had been in their current schools, or even for as long as they had been teaching, and so they were not able to answer this question. Consequently, aside from some respondents mentioning that school councils were involved in the introduction of school smoking policies (although these tended to be related to the introduction of more restrictive staff smoking policies as mentioned above), there were no data on how pupil policies were introduced and therefore it was not possible to describe this in depth.

6.6.2 Introduction of more restrictive staff smoking policies

The process of introducing more restrictive staff smoking policies varied between schools. Where respondents discussed policy introduction, the following approaches were mentioned:

- Policy change introduced with consultation with staff
- Policy change decision made via a staff ballot
- Policy change announced by Head / SMT
- Policy change introduced in special consultation with smokers and/or with offers of helping them quit smoking
- Policy change just happened with no announcement or consultation

Some schools adopted more than one of these approaches, so more usefully, they can broadly be divided into two groups, **consultative** and **prescriptive** approaches to policy introduction. In some schools the introduction of a new policy occurred in consultation with the staff, sometimes even with a ballot to support this process (consultative approach), while in other schools the new policy was announced rather than discussed (prescriptive approach).

As an example of a prescriptive approach, the announcement by the Head of School 23 on the retirement of the last smoker on the staff that the school is now no-smoking (above) left little room for debate. Sometimes the reason for just announcing a policy rather than discussing it with the staff was because the policy originated externally and there was no difference that staff discussion could make to the policy. In other schools the policy appeared to be developed internally and imposed on staff by a member or members of SMT as part of an individual or managerial preference. However, in some of those schools, while the policy may have appeared to some as having been imposed upon a staff, in actual fact the smokers were approached separately and the policy change discussed with them, sometimes with the promise of cessation support. In some schools this dialogue with smokers occurred before the announcement, and in others it occurred after.

Conversely, there were some schools where the introduction of a new policy was surrounded by discussion. In some schools, especially where the policy was generated internally, this appeared to have been genuine discussion in order to move forward smoking policy in the school. However, there were also schools were these discussions were something of a *fait accompli.* The decision appeared to have already been made before the meeting, and the discussion was more an illusion of democracy than a genuine act of discussion and compromise. For example, the respondent from School 50 recalled how the decision to restrict smoking on site to a smoking room came from the head who first surveyed the staff for their opinion and then opened the policy change to staff discussion:

SB: *Right. And when that process, was there a process of consultation as well then, 'cos you mentioned that staff had that say in smoking policy, was there a process of discussion after the questionnaire?*

TR: *Um, well yes there was because, er, we addressed it then following the questionnaire, um, it was addressed in a staff meeting and, er, during the staff meeting the head said that, you know, this is, this is the issue, we've had returns from a questionnaire which suggests that people are not happy with other colleagues smoking in the general staff room, so can you show now, and he, he put, put a few of us on the spot and said, you know, if you've said that you don't want this to happen, and if you have objections can you raise them now. And a number of us did.*

SB: *Right. Were there different alternatives discussed at that point as to ways to go forward?*

TR: *Er, no [Laughs].*

SB: *Right. okay. I was just wondering if no smoking totally was considered or if there was always going to be a no smoking separate room?*

TR: *I think, I think, [they sort?] the, the idea [er/it?] to my mind, as an, as, as I remember things was always that there would be a smoke room not that we could actually stop people smoking [on the site?]*

School 50 (State, Eng), Assistant

Head / Head of Guidance, Male
(Lines 215-233)

While objections were invited from the staff and given, it was apparent that there was never intended to be any room for compromise on the planned policy changes. The way forward was to be a separate smoking room and neither maintaining the status quo or a total ban were options. It also implied that the idea was only brought to the staff for discussion when SMT were confident that a general consensus for the change would emerge, reinforcing the idea that perhaps tighter smoking restrictions followed changes in attitudes rather than vice versa. Sometimes it was less clear whether the discussion was genuinely democratic or not. For example, in School 35 ((State, Eng) Assistant Head, Male (lines 178-187; 193-198)) due to increasing awareness of passive smoking, the staff were invited to vote on whether the school should become no smoking. There was no option for a separate staff room, however some respondents wrote that they would prefer this on their voting slips. The school did not go down this route, although it was unclear as to whether this was because of space issues, SMT preference or any other reason. While it appeared as though this may have been a genuine attempt at including staff in the decision-making process, this could have easily backfired if it appeared as though alternative opinions were being ignored. Whether intentional or unintentional and while the SMT may have valid reasons for wanting a no-smoking school, going about it in this pseudo-democratic way may irritate staff, who may see opening these issues to staff discussion as disingenuous. This may reduce compliance.

6.6.3 Indicator variable describing the introduction of more restrictive staff smoking policies

While there were not enough data on pupil policies, schools could be classified as to whether the introduction of staff policies followed prescriptive or consultative processes (Table 6.16). The division between these approaches was not always clear. For example, in School 58 (State, Eng) the policy was reported to have been initiated by SMT and agreed by the staff association which consists of the whole staff. Interview questions did not directly ask

whether approaches were consultative or prescriptive, these themes emerged during analysis. As such, data on this were not consistent across schools and this classification should be treated with caution and seen as only as suggestive of the extent to which the introduction of policies varied.

Table 6.16 Indicator variable describing the introduction of more restrictive staff smoking policies

Level	Description	Schools	Number of schools	%[1]
2	School tended to use **consultative** approaches when introducing more restrictive staff smoking policies	01; 08; 09; 13; 14; 18; 19; 32; 35; 39; 47; 50; 52; 58; 61	15	60
1	School tended to use **prescriptive** approaches when introducing more restrictive staff smoking policies	03; 10; 23; 33; 36; 40; 49; 54; 57; 63	10	40
-	No data / unclear data	04; 06; 07; 15; 16; 25; 26; 27; 29; 31; 34; 37; 38; 48; 55; 56; 62; 64; 66	19	-

[1] Percentage of 25 schools (no data on 19 schools listed)

6.7 Policy Dissemination

6.7.1 Introduction

Respondents were asked how staff and pupils were made aware of the policy governing their own smoking behaviour, with most discussion revolving primarily around the dissemination of pupil policy to pupils and staff policy to staff. Of these, it was the pupil policy dissemination that respondents generally seemed most comfortable discussing. When discussion turned to how staff got to know what the policy relating to them was, although all respondents reported at least one method (although some of these are problematic), this

issue did not appear to be either as important to respondents, or as well considered either by the respondent or the school as a whole.

The dissemination of pupil smoking policy to staff was not often mentioned by respondents. While this may have been influenced by the question wording, a factor in this appeared to be that when discussing the fact that pupils are not allowed to smoke on school site, over and again the sense was conveyed that it was obvious that pupils do not smoke on site and that staff did not need to be told this. So ingrained was this attitude that it often felt as though respondents did not see the point of discussing it: it was just the way it was and all staff knew this. Finally, the dissemination of staff policy to pupils was also not often discussed. This section discusses the variety of reported dissemination methods, and the combinations of methods that respondents reported schools in the sample as employing.

6.7.2 Dissemination of pupil smoking policy to pupils

Table 6.17 provides a three-level classification of the various reported methods of disseminating pupil smoking policy to pupils. These categories were not mutually exclusive, with it being possible to describe any particular method by all three categories. The levels of this classification were:

1. Policy communication involved **pupil-targeted dissemination** and **parent-targeted dissemination**. As the terms suggest, pupil-targeted dissemination communicated policy direct to pupils and parent-targeted methods used pupils' parents/guardians as an intermediary to convey the no-smoking policy to pupils.

2. Methods of dissemination were also either **written** or **unwritten**.

3. Methods of dissemination were further categorised according to whether they were **proactive**, **reactive** or **passive**.

Table 6.17 Methods of disseminating pupil smoking policy to pupils

Pupil-targeted dissemination	*Written*	*Proactive*	Pupil planner/homework diary *(daily use)*	07; 08; 23; 27; 29; 33; 37; 38; 48; 55; 64; 66
			Pupil-targeted prospectus/ booklet *(non daily use)*	47; 48; 58
			Pupil-parent targeted prospectus/booklet *(non daily use)*	07; 26; 38; 56; 57
			Home-school contract	01; 04; 39; 64
			School code of conduct/rules	39; 50
			Signs/posters	01; 09; 18; 37; 52; 62; 64
			Other non-specified written	48
	Unwritten	*Proactive*	Told rules when enter the school	08; 23; 25; 35; 48; 50; 62
			Special events	39; 52; 55; 62; 64
			Part of unwritten school code of conduct	52
		Reactive	Told rules when caught smoking	10; 14; 35
			Because they are punished when they try it	48; 63
		Passive	Word of mouth	14; 15; 26; 63
		Reactive or Proactive	Ongoing verbal communication	16; 25; 36; 48; 55; 64
			Assemblies	01; 10; 13; 15; 16; 36; 52; 62; 66
	Other	*Unfocussed on policy dissemination*	PSE	03; 14; 15; 16; 19; 29; 33; 35; 36; 37; 38; 39; 40; 48; 49; 52; 54; 55; 56; 62; 66
			Curriculum	03; 16; 19; 39; 48; 64
		Not dissemination methods	Because is the way it was in their old [primary] school	63
			Via staff handbook which pupils could see if they asked	04
Parent-targeted dissemination	*Written*	*Proactive*	Parent-targeted prospectus / handbook	06; 19; 25; 26; 39; 49
			Pupil-parent targeted prospectus/ booklet	07; 26; 38; 56; 57
			New parents' pack[1]	19
			Home-school contract	01; 04; 39; 64
	Unwritten	*Proactive*	Parents evening for new pupils	06
Nothing Used				31; 34
No data				32; 61

[1] School 19 mentions both a new parents' pack and a parental handbook. It is possible that the handbook forms part of the new parents' pack but this is ambiguous

> *Proactive dissemination* was pre-emptive, occurring as a matter of process rather than in response to a specific event. *Reactive dissemination* was prompted by either transgression of the policy or by an individual enquiring about the policy[5]. *Passive dissemination* was used to describe situations where dissemination did not involve action by the school, but where the dissemination was allowed to evolve and take its own course.

Most dissemination of pupil policy to pupils in the 44 schools where data were available was pupil-targeted (100 reports of pupil-targeted dissemination methods compared to 17 reports of parent-targeted dissemination). Two schools reported that no methods were used. In two other schools (Schools 32 and 61) there were no data on pupil policy dissemination in the interview transcripts. Of all pupil-targeted methods, unwritten (37 reported), written (34) and other (29) methods were similarly reported. Parent-targeted dissemination, however, was dominated by reporting of written (16) methods rather than unwritten (1) ones.

While all written methods could be classified as proactive, the use of these varied (as demonstrated by the separation of pupil and pupil-parent targeted booklets). Unwritten methods could be proactive, reactive or passive. Proactive unwritten methods all involved the verbal communication of policy to pupils as a matter of course such as pupils being told the rules when they entered the school or the use of special events such as a no-smoking day extravaganza (School 39; State, Eng); healthy living day (School 52; State, Eng); health day (School 55; State, Eng); no-smoking day activities (School 62; State, Eng) and the smoke-free class competition (School 64; Sate, Cym). All of these were primarily concerned with communicating and reinforcing health messages around smoking but appeared to also be used to reinforce policy. Reactive unwritten methods communicated policy to pupils after they

[5] While it was arguable that on one level all smoking policy dissemination was reactive to both the policy and the issue of smoking, these terms were used to differentiate between daily dissemination methods

had broken it. Word of mouth was classified as passive because it did not involve action by the school. Four reported methods were classified *other*. PSE and curriculum were elements of the formal curriculum which were not, in their own right, focussed on policy dissemination (although they may be used to support this - see below). Having the policy in the staff handbook which pupils could look at if they asked raised several problems: even if they knew they could do this, it was very unlikely that pupils would feel empowered to ask, or indeed would choose to do so. Thus this method almost rendered the policy obscure to pupils, rather than disseminating it. Finally, while it raised an interesting point, the argument by the respondent in School 63 (State, Eng) that "...it's accepted that smoking is not allowed in schools, it hasn't been allowed in their previous school, there's, and there's no reason why it should be allowed here..." (Assistant Head (Pastoral), Male, lines 314-317) was not a method of dissemination.

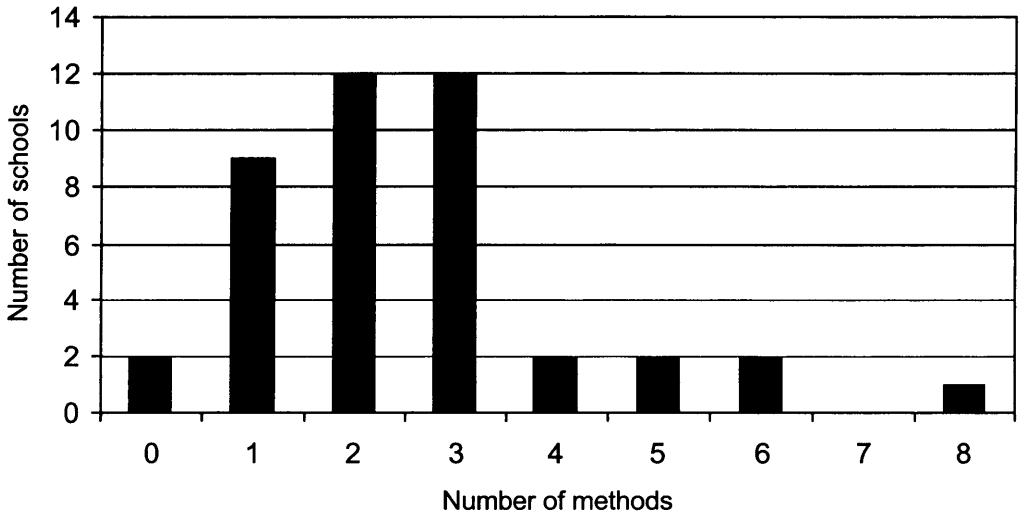
Considerable variation existed between individual methods reported as being used. However, it is important to consider that schools may report the use of more than one method. For example, on their own unwritten reactive pupil-targeted methods would seem fairly unsatisfactory. This was demonstrated by School 10 (State, Eng) where the only dissemination was the use of assemblies alongside telling pupils the policy when they were caught smoking. Conversely, while School 48 (State, Eng) reported that smoking policy was communicated to pupils when they were punished for breaking it, they also disseminated the policy to pupils through the use of pupil planners; a pupil booklet; other written methods; telling them the rules when they entered the school; ongoing verbal communication, PSE and the curriculum. This last point also demonstrated how, despite not being classifiable as policy dissemination methods in themselves, some schools seemed to use PSE and curriculum as part of a whole school approach to smoking policy, employing a deliberate cross-school strategy to disseminate and reinforce pupil smoking policy and the rationale behind it. Examination of the combination of methods used by any one school gave a better idea of the effectiveness of individual school approaches to pupil policy dissemination (Table 6.18, Figure 6.4).

Table 6.18 Pupil policy dissemination methods employed by schools

	Planner/ diary	Pupil booklet	Pupil-parent booklet	H-S contract	Code of conduct	Signs/posters	Other written	Told rules on entry	Special events	Unwritten code	Told when caught	Because punished	Word of mouth	Verbal comm'cation	Assemblies	PSE	Curriculum	As was in old school	Staff handbook	Parent booklet	New parent's pack	Parent's evening	**Number**
School 01				✓		✓									✓								3
School 03																✓	✓						2
School 04				✓															✓				2
School 06																				✓		✓	2
School 07	✓		✓																				2
School 08	✓							✓															2
School 09						✓																	1
School 10											✓				✓								2
School 13															✓								1
School 14											✓		✓			✓							3
School 15													✓		✓	✓							3
School 16														✓	✓	✓	✓						4
School 18						✓																	1
School 19																✓	✓			✓	✓		4
School 23	✓							✓															2
School 25								✓						✓						✓			3
School 26			✓										✓							✓			3
School 27	✓																						1
School 29	✓															✓							2
School 31																							0
School 33	✓															✓							2
School 34																							0
School 35								✓			✓					✓							3
School 36														✓	✓	✓							3
School 37	✓					✓										✓							3
School 38	✓		✓													✓							3
School 39				✓	✓				✓							✓	✓			✓			6
School 40																✓							1
School 47		✓																					1
School 48	✓	✓					✓	✓				✓		✓		✓	✓						8
School 49																✓				✓			2
School 50					✓			✓															2
School 52						✓			✓	✓					✓	✓							5
School 54																✓							1
School 55	✓								✓					✓		✓							4
School 56			✓													✓							2
School 57			✓																				1
School 58		✓																					1
School 62						✓		✓	✓						✓	✓							5
School 63												✓	✓					✓					3
School 64	✓			✓		✓			✓					✓			✓						6
School 66	✓														✓	✓							3
Number	**12**	**3**	**5**	**4**	**2**	**7**	**1**	**7**	**5**	**1**	**3**	**2**	**4**	**6**	**8**	**21**	**7**	**1**	**1**	**6**	**1**	**1**	
Percentage	*27*	*7*	*11*	*9*	*5*	*16*	*2*	*16*	*11*	*2*	*7*	*5*	*9*	*14*	*18*	*48*	*16*	*2*	*2*	*14*	*2*	*2*	

No data: Schools 32; 61

Figure 6.4 Variation in number of methods employed by schools



While two schools reported no methods, others reported using up to eight. However, as implied above, it is not just the number of methods that schools employed that was important but also the types of method as it was the whole range of methods that a school reported using which gave a better understanding of their approach towards policy dissemination. For example, when asked about policy dissemination, the respondent in School 13 suggested that assemblies were the only way that this happened. As assemblies could be either proactive or reactive, this school seemed to have a weak approach to dissemination (using only unwritten methods that may be reactive). In contrast, other schools reporting the use of only one method relied on more formal approaches such as the pupil planner/diary of School 27. School 48 however employed 8 different methods of varying types and also appeared to take a whole school approach to policy dissemination, where various methods were used to reinforce one another. These examples highlight the variation in approaches towards dissemination of pupil smoking policies to pupils.

It is also worth noting at this point that Schools 09 (State, Eng) and 62 (State, Eng)) were both reported as using posters / signs here yet were recorded in Section 6.4 as having unwritten pupil policies. This is because analysis of the whole interview showed that in both cases respondents reported an unwritten

policy and the only mention of anything written was through the use of signs. In both these cases the signs were, respectively, generic signs around the school and posters designed by pupils around the health impacts of smoking as part of the PSE[6] curriculum, neither of which constituted a written pupil policy. Similarly, when the respondent from School 18 (State, Eng) reported that they did not know the format of the pupil policy, but later discussed no smoking signs and posters it was apparent that these were generic signs and health-information posters rather than the pupil policy written for pupils and so policy format was recorded as the respondent did not know. Similar is true of School 52 (State, Eng) where the respondent was recorded as being unclear as to the pupil policy format. To highlight differences in the usage of signs to disseminate pupil policy within schools, the usage of signs in the above schools can be contrasted with School 37 (State, Eng) where this involved copies of the school rules (including pupils not being allowed to smoke) posted in every classroom. Not only did this reinforce written rules in a pupil handbook, but was also a much more focussed use of signage to disseminate the pupil policy. These examples demonstrate both variation is the use of specific methods and the usefulness of interviews both in providing a better and more robust understanding of local practice.

6.7.3 Dissemination of staff smoking policy to staff

While pupil policy dissemination sometimes used parents as intermediaries in the process of communicating policy, staff policy dissemination was always targeted at staff themselves. However, like pupil policy, it could again be divided into written and unwritten methods (Table 6.19). Again these could be further split into proactive, reactive and passive forms of policy dissemination.

Written methods of disseminating staff policy (32 reports) were more commonly reported than unwritten methods (22 reports). As before all written methods could be classified as proactive. Within unwritten methods, proactive

[6] Personal and Social Education (also referred to as PSHE or PHSE with the additional H representing health) is a non-examinable curriculum used in Welsh Secondary schools to cover various aspects of health and social development. Timetabling, content and organisation of PSE varies considerably between schools.

methods were the most common (9) with passive (3) and reactive methods (3) also reported. Two respondents reported being unsure of what the specific dissemination methods were, while 6 interviews produced no data regarding staff policy dissemination. By far the dominant method of dissemination for staff was the use of a staff handbook with 21 schools (48% of all schools) reporting their use. However, use of these varied. While policies were often included in handbooks given to all staff, in School 66 (State, Eng) although they reviewed and updated staff policy handbooks annually, it appeared as though only smoking staff were handed a copy of the staff smoking policy as it only applied to them. This highlighted an interesting difference from pupil policy: while specific data on this did not exist for each school, it appeared that while in all schools smoking policies were seen to apply to all pupils, in some schools they were seen to apply only to smoking staff. This was exemplified by the respondent from School 14:

SB: *Okay. In terms of the staff then, is that policy of a no-smoking building written anywhere in a handbook for them or...?*

TR: *It maybe but I'm not aware.*

SB: *Not too sure.*

TR: *We have a staff handbook which is something like fifty odd pages, er, thick, so, [laughs] since, since I don't smoke I'm not going to go back and check that one.*

School 14 (State, Eng) PSE Co-ordinator, Female (Lines 235-241)

Two reported methods of disseminating staff policy were arguably not methods of dissemination. With word of mouth, the school did not play an actual role in this dissemination method, but just acknowledged that it happened. In School 40, a fire that led to the school becoming no-smoking was reported to have raised the profile of the policy. While this was interesting

Table 6.19 Methods of disseminating staff smoking policy to staff

Written	*Proactive*	Staff handbook	01; 04; 06; 09; 10; 15; 16; 19; 25; 27; 29; 34; 38; 39; 49; 52; 55; 58; 62; 64; 66
		Policy document file	33; 34;
		Included in job information when applying	04; 08; 09; 38; 55
		Signs	29; 31; 38; 39
Unwritten	*Proactive*	Ongoing verbal communication (meetings/briefings)	13
		Went through it with staff verbally when new policy introduced	08
		Smokers only consulted prior to change	47
		Verbal induction process with new staff	08; 27; 55
		Told during job interviews	01; 08
		Through the vote on what the policy should be	35
	Reactive	Individual smokers told if smoked where/when they shouldn't (i.e. if they break policy)	18; 31
		Told if ask	03
	Passive Not dissemination methods	Word of mouth	03; 31; 32
		Just assumed / understood / taken for granted	03; 23; 26; 36; 56; 57
		Fire in school led to change and people know that it is no smoking	40
Reported being unsure of specific dissemination methods			14; 63
No data			07; 37; 48; 50; 54; 61

information about the local policy context, it was not a method of dissemination. More interestingly, 6 (14%) schools reported that the staff policy was just assumed/understood and that it was taken for granted that this was the case. Five (11%) of these schools did not report using any actual methods to disseminate staff policy. One school (School 03) reported the use of 2 other methods, but these were word of mouth and staff were told if they asked: neither of these were proactive methods of dissemination covering all staff. Regardless of what the policy was, these schools all appeared to feel as though no dissemination of staff policy was necessary. For example:

SB: *Right, Okay. And in terms of the staff is there written rules on tobacco in staff handbook or anything?*

TR: *Um –*

SB: *Or is it more of an informal...?*

TR: *- no, no, no, I mean staff are fully aware, and, and, and staff don't smoke anywhere else other, other than the, the, the smoking room.*

School 26 (State, Eng) Assistant Head, Male
(Lines 152-157)

A similar sentiment was expressed by the respondent in School 36:

SB: *Okay, okay. And is that the same for staff, or is that no smoking written down for staff anywhere, or is that...?*

TR: *No, they are they, they very much know it, we're only twenty-six staff in the school, so, yeah.*

School 36 (Ind, Eng) Teacher in charge of PSE, Female
(Lines 245-248)

These extracts are demonstrative of an attitude that staff did not need to be told what the policy is, they just knew it.

Again it is useful to look at all methods various schools employed to disseminate staff policy (Table 6.20, Figure 6.5). The most apparent difference between staff and pupil policy dissemination was the fact that many schools (24, 55% of all schools) reported using only one method of staff policy dissemination. The number of schools consequently decreased as the number of methods used increased with 7 (16%); 4 (9%) and 1 (2%) schools reporting the use of 2, 3 and 4 methods respectively. Again, the type of methods used were important. For example, while School 03 reported using 3 methods, all of these were unwritten (one reactive method; one passive method and a third reported method that it was generally just assumed that staff knew the policy). Similarly, in School 31, three methods were also used: signs in staff toilets where there has been a problem with staff smoking against policy; staff being told the policy if they broke it and word of mouth. In contrast, School 38 appeared to disseminate smoking policy to the whole staff using three methods which included a staff handbook, information handed out to applicants for jobs so that new staff were aware of the policy at the outset and the use of signs in the entrance of the school. As well as demonstrating variation in the methods used, this also supported the idea that some schools appeared to focus on disseminating policy to smoking staff while others disseminated it to the staff as a whole.

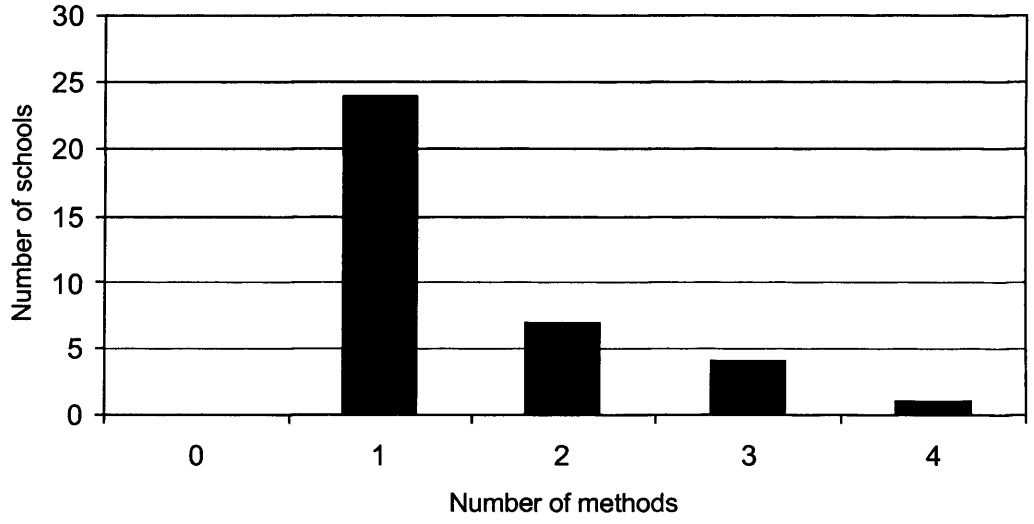
All schools reported at least one method of staff policy dissemination although some of these were not actually dissemination methods. However, 3 respondents were unsure of the specific methods of dissemination (the respondent not being aware of the methods itself suggesting that policy was not actively disseminated in these schools) and several of the reported methods were arguably not methods at all. The dissemination of staff policy to staff seems generally less comprehensive and considered than the dissemination of pupil policy to pupils. There were also occasions when it appeared as though while schools tended to treat pupils as a homogenous group for policy dissemination, smoking and non-smoking staff were sometimes treated differently in that staff smoking policy was sometimes only disseminated to smokers.

Table 6.20 Staff policy dissemination methods employed by schools

	Staff handbook	Policy document file	Job information	Signs	Verbal comm'cation	Staff told	Smokers consulted	Verbal inductions	Told in interviews	As there was a vote	Told if break policy	Told if ask	Word of mouth	Just assumed	Due to fire in school	**Number**
School 01	✓								✓							**2**
School 03												✓	✓	✓		**3**
School 04	✓		✓													**2**
School 06	✓															**1**
School 08			✓			✓		✓	✓							**4**
School 09	✓		✓													**2**
School 10	✓															**1**
School 13					✓											**1**
School 15	✓															**1**
School 16	✓															**1**
School 18											✓					**1**
School 19	✓															**1**
School 23														✓		**1**
School 25	✓															**1**
School 26														✓		**1**
School 27	✓							✓								**2**
School 29	✓			✓												**2**
School 31				✓							✓		✓			**3**
School 32													✓			**1**
School 33		✓														**1**
School 34	✓	✓														**2**
School 35										✓						**1**
School 36														✓		**1**
School 38	✓		✓	✓												**3**
School 39	✓			✓												**2**
School 40															✓	**1**
School 47							✓									**1**
School 49	✓															**1**
School 52	✓															**1**
School 55	✓		✓					✓								**3**
School 56														✓		**1**
School 57														✓		**1**
School 58	✓															**1**
School 62	✓															**1**
School 64	✓															**1**
School 66	✓															**1**
Number	**21**	**2**	**5**	**4**	**1**	**1**	**1**	**3**	**2**	**1**	**2**	**1**	**3**	**6**	**1**	
Percentage	*48*	*5*	*11*	*9*	*2*	*2*	*2*	*7*	*5*	*2*	*5*	*2*	*7*	*14*	*2*	

No data: 07; 37; 48; 50; 54; 61
Unsure of specific methods: 14;63

Figure 6.5 Variation in number of methods employed by schools



6.7.4 Dissemination of pupil smoking policy to staff

As it is staff that implement pupil policy, dissemination of pupil policy to them would seem to be a key issue. As stated at the beginning of this section, the dissemination of pupil smoking policy to staff was not discussed in detail. Partly this was because of the focus of the questions. However, more interestingly, when discussing the fact that pupils were not allowed to smoke on school site, over and again the sense was conveyed that it was obvious that pupils should not smoke on site and that staff did not need to be told this. So ingrained was this attitude that it often felt as though respondents did not see the point of discussing it: it was just the way it was. In these schools, stating and defining smoking policy appeared to be of little concern. Instead, it was apparently seen as obvious that pupils should not smoke on site. In other words, it was 'common sense' that pupils should not smoke in school, therefore it did not need to be said:

Um, staff were allowed to smoke, ***obviously pupils weren't allowed to smoke,*** *but, er, staff were allowed to smoke.*

School 33 (State, Eng), Head of PSHE (with responsibility for development of smoking policy), Female (Lines 196-197 – author's emphasis)

Alongside this idea was the sense that it was because pupils had not been allowed to smoke in schools for so many years that it was seen as obvious and not needing stating. This theme, either explicitly or implicitly, dominated any discussion on communicating pupil policy to staff.

6.7.5 Dissemination of staff smoking policy to pupils

This form of dissemination was not widely discussed within the interviews. In some schools a total ban for both staff and pupils was widely publicised to all people on site. There were some examples of dissemination of staff policy to pupils, but these tended to arise in other elements of the interview and were not coded for as it was not a focus of the interview.

6.7.6 Indicator variables describing variation in policy dissemination

Indicator variables were developed for the dissemination of policy to those it applied to (Sections 6.7.2 and 6.7.3). However, while the qualitative analysis demonstrated that there was much variation in the types of method implemented, to reduce the number of levels in the indicator, it was necessary to simplify these data. Therefore, indicators for both staff and pupil policy focussed on whether dissemination methods were written or unwritten. Although it was an important distinction, there were too few schools to include information on whether written methods were proactive or reactive. The pupil indicator was also only concerned with dissemination that targeted pupils directly. As such, methods that jointly targeted pupils and parents were classified as pupil-targeted with schools with just parent-targeted methods being classified as having no methods within this indicator. Consequently, the

one school (School 06) that reported only using parent-targeted methods was classified as using no methods. In addition, the use of PSE / curriculum was also not included in this indicator as the extent to which this is a method of dissemination was unclear. Schools using only PSE/Curriculum were also classified as using no methods. Table 6.21 shows the classification of pupil policy dissemination.

Table 6.21 Indicator variable describing dissemination of pupil smoking policy to pupils

Level	Description	Schools	Number	(%)[1]
4	School uses **written** and **unwritten** methods of disseminating pupil smoking policy to pupils	01; 08; 23; 26; 39; 48; 50; 52; 55; 62; 64; 66	**12**	**29**
3	School just uses **written** methods of disseminating pupil smoking policy to pupils	04; 07; 09; 18; 27; 29; 33; 37; 38; 47; 56; 57; 58	**13**	**31**
2	School just uses **unwritten** methods of disseminating pupil smoking policy to pupils	10; 13; 14; 15; 16; 25; 35; 36; 63	**9**	**21**
1	School uses **no methods** of disseminating pupil smoking policy directly to pupils	03; 06; 19; 31; 34; 40; 49; 54	**8**	**19**

[1] *Percent of* 42 schools (no data for Schools 32 & 61)

Table 6.22 shows the classification of dissemination of staff smoking policy to staff. In creating this indicator variable those reporting they were unsure of the methods being used were classified as having no data. The two categories which were labelled as not dissemination methods were not included in the indicator. As these were not dissemination methods, any schools reporting one of these as the only method of disseminating staff smoking policy to staff was reclassified as having no methods of dissemination.

Table 6.22 Indicator variable describing dissemination of staff smoking policy to staff

Level	Description	Schools	Number	(%)[1]
4	School uses **written** and **unwritten** methods of disseminating staff smoking policy to staff	01; 08; 27; 31; 55;	5	14
3	School just uses **written** methods of disseminating staff smoking policy to staff	04; 06; 09; 10; 15; 16; 19; 25; 29; 33; 34; 38; 39; 49; 52; 58; 62; 64; 66	19	53
2	School just uses **unwritten** methods of disseminating staff smoking policy to staff	03; 13; 18; 32; 35; 47	6	17
1	School uses **no methods** of disseminating staff smoking policy to staff	23; 26; 36; 40; 56; 57	6	17

[1] *Percent of* 36 schools (no data for Schools 07; 14; 37; 48; 50; 54; 61; 63)

6.8 Sanctions employed when pupils and staff caught breaking policy

6.8.1 Type of sanctions employed for pupils

6.8.1.1 Individual sanctions

Once pupils had been identified smoking, schools reported using many different methods to address this. These are summarised in Table 6.23 (sanctions specific to school buses have been excluded as such buses were not common to all schools).

Table 6.23 Sanctions applied to pupils breaking smoking policy

	Detention	Parents Informed	Internal Exclusion	External Exclusion (Temporary)	External Exclusion (Permanent)	Verbal Warnings	Individual monitoring	Cigarettes Confiscated	Health Information Given	Cessation Support Given	Other	Number
School 01		✓							✓			2
School 03		✓				✓	✓					3
School 04		✓										1
School 06	✓	✓		✓								3
School 07	✓	✓		✓								3
School 08		✓									✓	2
School 09	✓	✓										2
School 10		✓		✓				✓	✓		✓	5
School 13		✓										1
School 14	✓	✓									✓	3
School 15	✓	✓	✓									3
School 16									✓			1
School 18	✓	✓							✓			3
School 19	✓	✓				✓			✓			4
School 23	✓	✓										2
School 25		✓		✓								2
School 26	✓	✓										2
School 27	✓	✓		✓								3
School 29	✓	✓										2
School 31		✓							✓	✓		3
School 32		✓	✓	✓	✓		✓			✓	✓	7
School 33		✓					✓		✓	✓		4
School 34		✓		✓		✓					✓	4
School 35	✓	✓							✓			3
School 36		✓		✓								2
School 37	✓								✓	✓	✓	4
School 38	✓	✓	✓						✓			4
School 39		✓				✓		✓	✓	✓		5
School 40	✓	✓								✓	✓	4
School 47	✓	✓	✓	✓								4
School 48	✓	✓										2
School 49	✓	✓										2
School 50	✓		✓	✓								3
School 52	✓	✓					✓		✓	✓		5
School 54										✓		1
School 55	✓	✓		✓					✓			4
School 56	✓	✓		✓								3
School 57	✓	✓		✓								3
School 58	✓	✓		✓								3
School 61		✓		✓		✓	✓					4
School 62	✓							✓	✓			3
School 63	✓	✓										2
School 64				✓						✓		2
School 66	✓	✓					✓					3
Number	**27**	**38**	**5**	**17**	**1**	**5**	**6**	**3**	**14**	**9**	**7**	
Percentage	*61*	*86*	*11*	*39*	*2*	*11*	*14*	*7*	*32*	*20*	*16*	

All schools reported at least one sanction being used when policy was transgressed. The most commonly reported sanction was parents being informed with 86% of schools reporting using this, with detentions the next most commonly reported (61%). It is worth briefly explaining some of these sanctions.

Detentions ranged in both length and when they occurred. For example, in School 57 (State, Cym) pupils caught smoking had to stay in every lunchtime for two weeks, whereas in School 47 (State, Eng) pupils were given a detention on a Friday evening. When a child was kept after school, there was a legal requirement to give the parents prior warning of this.

While the vast majority of schools *informed parents* when their child had been caught smoking, this was done in different ways (e.g. phone, letter) resulting in different levels of parental involvement, with some schools inviting parents into the school. Parental contact could happen on the first occasion a pupil was caught smoking, or after later offences. The importance of getting the cooperation of parents was raised by several respondents, and very clearly by the following deputy head:

> *...my philosophy is to tell all the parents exactly what's going on, er, because, er, the more you can keep them informed the more you can get them on your side and they are our, our greatest ally, once you alienate the parents you've got no chance.*
>
> *School 23(State, Eng) Deputy Head (Pastoral – with responsibility for policy development), Male (Lines 603-606)*

Three different types of *exclusion* were reported by schools as sanctions for smoking. The first of these, internal exclusion involved pupils being removed from mainstream teaching to work on their own (although this may be in a room with a few other pupils). The tasks they were set while in internal exclusion appeared to vary. The other two types of exclusion were external,

and involved the pupil being removed from school either for a set period of time, or permanently. Only School 32 (State, Eng) applied a permanent exclusion, and this was after a 10 day temporary one. Temporary exclusions varied in length between schools, ranging from the pupil being sent home for the remainder of the day on which they were caught smoking, to 10 days. They also varied in when they were applied with some schools excluding pupils on the first attempt, and others using alternative sanctions first. External exclusion as a sanction was clearly problematic because it removed pupils from education, as the following respondent reflected:

> *...you can't, um, exclude kids for smoking on the premises although they're breaking school rules, or, or could you, I don't know, er, er, and, and, you know, we've got enough trouble getting kids to come here anyway, er, like most schools, attendance rates are hovering around the ninety per cent, just below the ninety per cent which is the, um, er, recommended, er, average, and, you know, a little excuse and, er, and they're away.*
>
> *School 23 (State, Eng) Deputy Head (Pastoral – with responsibility for policy development), Male (Lines 723-729)*

The respondent added that this was particularly pertinent when struggling to prepare pupils for examinations where removing pupils from school was counterproductive to these attempts.

Two types of sanction reported by schools could be classified as *individual monitoring of pupils breaking the policy*. In some schools a pupil was put on report, which involved an individual's behaviour being monitored and documented. In other schools the names of pupils caught smoking were recorded on a central file in order that the number of occasions an individual was caught could be recorded. In School 66 (State, Eng) for example, all staff members had an input device into which they recorded many aspects of all pupil's school lives, including behaviour, which was transferred to a central database. Where the weekly or monthly printout from this database recorded a pupil regularly caught smoking (regularly was undefined), sanctions were

applied. Both of these sanctions were about recording individual behaviour across time and some schools used both methods. For example, School 61 (State, Cym) kept a central record of all smokers and lookouts, with one of the sanctions applied to pupils on this database being a report-type scenario where the pupil's name was recorded on a card in the secretary's office, where they had to go every 10 minutes during break times to have this signed by a member of SMT.

The 'other' category of methods included all those sanctions reported by only one school. These included the use of a disciplinary lecture (School 10; State, Eng); being told to put it out and move on (both School 14; State, Eng; the use of an agreement made between school, pupil and parents (School 32; State, Eng); being made to write out lines by prefects (School 34; Ind, Eng) and a special sanction for pupils caught buying tobacco for, or selling it to younger pupils (School 40; State, Eng). In School 08 (State, Eng) pupils caught smoking for a first time were given a choice between doing lunchtime duties in the canteen or having an after school detention. Pupils often chose the former of these as, by law, parents had to be informed in advance of an after-school detention at which point the school also gave parents the reason for the detention, while the school would not inform parents of a lunchtime duty. Finally, while in School 37 (State, Eng) an immediate detention was given for smoking misbehaviour, the school also had a consequences system in which pupils accumulated consequences until they were given a detention. These consequences are handed-out for actions like being late to class, which can be because the pupil was smoking (especially if the pupils smells of smoke). In this way, the consequence system led to sanctions being indirectly applied for pupil smoking misbehaviour.

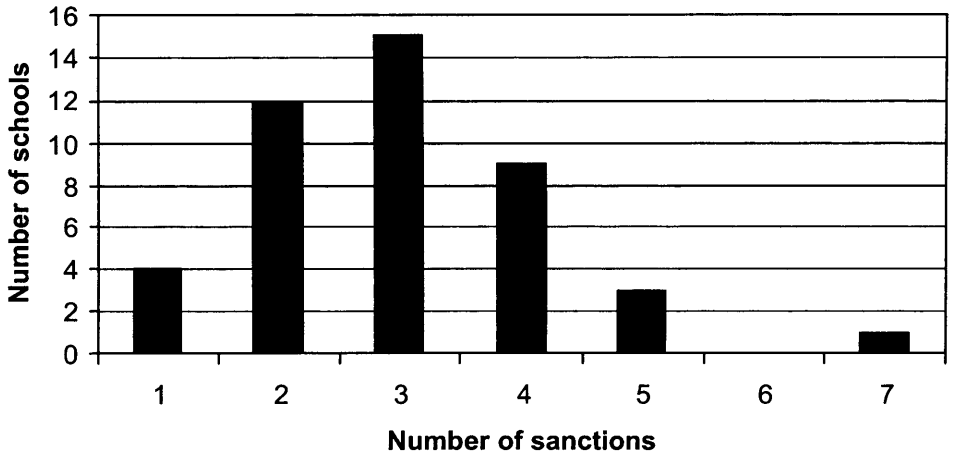
The final two reported approaches (health information given and cessation support given) were different to the others, as they explicitly incorporated health into them. Some schools incorporated the provision of information on the health risks of smoking into the sanctions for pupils caught smoking. Again, this took many forms. For example, School 37 (State, Eng) used worksheets to educate pupils into the health and social issues surrounding

smoking, while School 39 (State, Eng) used educational videos. School 33 (Sate, Eng) reported that part of their information giving involved pupils caught smoking having to attend an after school session where they had to work through a computer programme on the risks of smoking. This had recently replaced a paper exercise which also encouraged pupils to reflect on these risks. Other schools also incorporated cessation support for smoking pupils as part of their sanctions procedures. While some schools provided cessation support outside of the sanctions procedure, nine schools reported incorporating this into their sanctions procedures.

6.8.1.2 Combinations and escalation

As can be seen from Table 6.23, most schools used more than one type of sanction (Figure 6.6).

Figure 6.6 Variation in number of methods used



There were several reasons why more than one sanction may be used. Sometimes sanctions were used in combination within a school, such as health information being given as part of a detention or internal exclusion procedure. For example, School 37 (State, Eng) provided worksheets covering the health, social and financial impacts of smoking for pupils to complete. Similarly, in School 44 (State, Eng), internal exclusion as a sanction was targeted at

younger smokers and aimed to change their behaviour through education. Health approaches tied to sanctions were sometimes deliberately described by schools as something other than a sanction. For example, when smokers in School 33 (State, Eng) were given the computer package to work through, while this was done after school, this was deliberately not referred to as detention but as an after-school session. Similarly, cessation sessions run at lunchtimes as part of a sanctions procedure were not always labelled as detentions.

Methods also sometimes varied because they were employed in a progressive series of sanctions with increasing severity (they were **escalated**). The strictness of this escalation procedure varied between schools. Sometimes it was tightly defined, in other schools some choice about which sanction to implement could be exercised at the individual level (e.g. School 15, State, Eng). The highest end of an escalation procedure tended to be temporary external exclusion. Only School 32 (State, Eng) reported going further than this and applying permanent external exclusion (i.e. expulsion) as a sanction for smoking. Other schools discussed the fact that such a severe sanction would never be implemented, with some stating that, even if they did try and permanently exclude a pupil for smoking, this would be thrown out. For example, having explained that the first two times any pupil was caught smoking they would be given a Friday night school detention with a letter sent home explaining the reason for this, and the third time they would have a day's internal exclusion, the respondent in School 47 was asked about the next stages in the escalation procedure:

> *...inclusion would go to exclusion, um, again that would just be a one day exclusion then if it escalated again it would be two days and so on, um, and then it would come to permanent exclusion, um, if it went to permanent exclusion, um, really we wouldn't go that far for smoking because we wouldn't, you know we wouldn't get that through, I mean county wouldn't go along with that just for smoking.*
>
> *School 47 (State, Eng) Head of Upper School, Female*
> *(Lines 349-354)*

6.8.1.3 Sanctions approaches and policy rationale

As stated in 6.5.1, sanctions procedures varied in the extent to which they took **health** or **disciplinary** approaches. This was reflected in the types of sanctions a school employed. In a **disciplinary** approach, pupil smoking was seen merely as an act undermining the school's authority. Adoption of a **health** approach, however, saw schools take a more complex approach to pupil smoking which focused more on smoking as a health issue, in the most complex cases, recognising and treating it as an addictive behaviour. However, these were not mutually excusive categories, rather extremes with schools usually leaning more towards one approach but incorporating elements of the other. Particularly, a health approach would also usually incorporate disciplinary actions. As also stated in Section 6.5.1, the sanctions employed by schools were an indicator of the rationale behind their pupil policy. While other factors may have been important in pupil policy rationale, the best data on this available in most schools was that found in the types of sanctions employed by schools. For this reason, the indicator developed around sanctions procedures may also be taken as an indicator for the rationale behind pupil policy. In doing this, it should be acknowledged that some data was omitted. For example, schools that provide health information and cessation support outside of sanctions procedures may be classified as tending towards a disciplinary approach to sanctions which may not be reflected in their overall rationale (hence some schools may be reported as discussing cessation but classified differently for sanctions procedures). Thus care needs to be taken when interpreting this as a proxy for rationale as well as the approach of sanctions. These approaches will now be discussed in more detail.

A **disciplinary approach** to pupil smoking saw it as merely as an act of policy-transgression, a deliberate act of defiance against the authority of the school. While further probing revealed that School 10 did include some health approaches, some of the respondent's comments highlight well disciplinary attitudes towards smoking:

um, [pause], I mean, I think the key thing now, to be honest with you, would, wouldn't be so much the fact that they were persistently smoking on the campus, but that they were persistently disobeying, er, the members of staff who were telling them to stop, er, I would me, that would be more of an issue than the fact that they were actually smoking.

School 10 (State, Eng), Assistant Head, Male
(Lines 311-315)

This was reinforced a little later in the transcript, when discussing the escalation of sanctions for pupil smoking:

SB: *If you had a pupil who repeatedly smoked, are there any other...?*

TR: *Yeah, I think they would reach a point where,* ***I mean again, frankly, it wouldn't be because they were smoking, er, it would be because they were constantly disobeying our instructions****, and we would move to a point of, you know, unless they're prepared to cooperate with us, and, and tow the line, um, then we would be prepared to exclude them.*

School 10 (State, Eng), Assistant Head, Male
(Lines 520-525) –author's emphasis

While School 10 did incorporate health into their approach, School 56 tended more towards the disciplinary. Making no mention of health in regard to their sanctions procedures, the respondent said:

SB: *Okay. And would there be any escalation of sanction, for example, up to an exclusion, even internal or external exclusion?*

TR: *Well, if, if a pupil, we find is deliberately defying authority then perhaps, wouldn't be exclusion, would be suspension, most probably.*

SB: *Right, sure, yeah, okay.*

TR: But that suspension would be for defying authority rather than for the actual smoking.

School 56 (State, Cym), PSE Co-ordinator, Male
(Lines 270-276)

As with these examples, schools focussing on smoking behaviour as a disciplinary issue sometimes disregarded the complex issue of why pupils smoked and continued to smoke. This approach was sometimes linked to a notion that schools were being overburdened with responsibility for larger social issues when they had far more pressing concerns:

...we're an educational establishment and, and educating them about the ills of smoking is, is, er, something worthwhile to do, er, it is not, er, high on our list, as you can imagine.

School 23 (State, Eng) Deputy Head (Pastoral – with responsibility for policy development)
(Lines 346-349)

With the literature suggesting that smoking is a complex issue requiring complex solutions (Chapter 2), it is arguable that if school approaches to smoking are to be successful, they need to be broader than merely seeing smoking as a deliberate undermining of the school's authority.

Conversely, schools taking a **health approach** to smoking realised that there was more to pupils smoking than merely a policy transgression. While they had been taking a disciplinary approach, School 36 provided an insight into a school that was beginning to make the transition between treating smoking as a simple issue, to seeing it as a complex one. The school was a small Catholic girls' school who reported that they had never had a problem with smoking until a few weeks prior to the interview. Over those few weeks however, they had become aware that some Year 10 and sixth form pupils were beginning to smoke in the home economics area, a toilet block and in a lane behind the school. As well as locking the toilet block, and increasing patrolling of the lane in the mornings, they had also turned their attention to the school policy saying:

TR: *Well, I would just like to tell you that, you know, this has made us think about, when you've actually had to say things like not having a written no-smoking policy, um, we are actually looking into getting signs throughout the school and we are sort of thinking about how we're going to cope with this little problem that has sort of emerged over the last few weeks, you know, so we are sort of very aware and we are on to this now, so we're looking, probably be looking from, for some advice from somewhere, or to see what other schools do, you know? Cos we've not had this problem before, and it's a particular group of girls, you know that are causing, they cause problems with other things as well but, um, you know, and, and I'm, I'm sure a lot of them smoke outside the school, you know, but, er, yeah, so I've nothing really else to say about that.*

School 36 (Ind, Eng) Teacher in charge of PSE, Female
(Lines 604-615)

Having not perceived themselves to have a problem before, the school had always seen smoking as a simple issue and dealt with smoking through the use of an unwritten policy. However, recent pupil smoking had raised the profile of the issue in the school and they had begun to re-conceptualise smoking as an important issue, apparently moving towards much more of a health approach as a consequence. Not only were they considering the importance of a written rather than verbal policy, particularly for pupils, they were also reconsidering how smoking was addressed across the school. While discussing potential and actual school initiatives, the respondent said "You know, we're looking at all these different things now, since all this has come about." (lines 583-4) and suggested that they were beginning to take a more complex approach to smoking.

A common feature of schools taking a health approach was that they recognised the addictive nature of smoking, and the fact that some pupils had a nicotine habit, and in doing so, also recognised that for these pupils it was not as easy as saying "don't smoke", because like adults with a smoking habit,

adolescents needed to fulfil their craving. And like adults with a smoking habit, this addiction could affect their performance:

> *You know, one example for you, um, key stage four, we had a year eleven group of girls and we kept them in for, certainly [since?] for, at break time detention and they were absolutely climbing the walls by the end of the break because they were desperate for a cigarette and they actually told us that, you know, they were, so, er, that was my concern then, that sort of brought, er, that alarmed me with regards to the addiction, you know, so.*
>
> *School 31 (State, Eng), PSE co-ordinator, Female*
> *(Lines 236-242)*

> *...there are, er, some of them have got such a heavy dependence on nicotine that you find that, um, they actually need a shot at specific times, while you don't condone it, sometimes, um, you see why, you know, cos they smoke so, they smoke heavily at home and, er, they're really, [you, you/ you know?], they do become agitated, they do become, sort of in need and their behaviour can be a problem when that happens.*
>
> *School 52 (State, Eng), Deputy Head*
> *(Pastoral / PSE), Male*
> *(Lines 458-464)*

If a pupil with a nicotine addiction could not satisfy their craving, they sometimes became agitated, their concentration could be reduced and their behaviour and work suffered. This could lead to a pupil being labelled as having a 'bad attitude' rather than that they suffered from an addiction. This problem was made especially acute by reporting that addictive behaviour was most prominent among Year groups ten and eleven (following established patterns outlined in Chapter 2). It is by this age that pupils are sitting GCSE examinations and preparing for the step beyond compulsory education and any disruption to this was most definitely not welcomed by schools.

For schools taking a health approach to pupil smoking, *adolescent smoking cessation* often appeared to be an issue of crucial importance, but an issue which was also highly problematic. The following discussion of issues surrounding cessation support draws both from schools that included cessation into their sanctions procedures and those who provided it separately from sanctions. While some schools provided smoking cessation information leaflets, others wanted to provide access to interactive cessation support. While this was a high priority for many schools taking a health approach, as they wished to incorporate it into their pupil smoking policy, interviews also suggested that support for the provision of such services in schools across Wales was inconsistent at best. Frustration over this lack of cessation support was evident during the research. Nowhere was this more so than in School 31 (State, Eng) where the PSE co-ordinator was struggling to find resources to help her provide support for a group of Year 11 girls (see transcript above) who had been identified as having a serious smoking habit. The openness with which this group admitted that this was the problem had alarmed the respondent, alerting her to how serious the problem was for some pupils. Ever since the incident, she had been trying to find support and resources to help her support these pupils in giving up smoking. Having failed to find anything, when she received a telephone call to ask if she would help with some research into school smoking policies, she not only leapt at the chance but also took the opportunity to ask for help and information regarding resources and ways forward in obtaining help with cessation support. This was agreed, and once the main themes of the interview had been covered the conversation turned to adolescent smoking cessation. During this time, the respondent's sense of frustration and helplessness that had been apparent while arranging the interview, became increasingly evident. Her sense of isolation in dealing with this issue was striking enough in itself, but when this became increasingly reiterated by other respondents a picture was clearly beginning to emerge of schools across Wales, all struggling to provide smoking cessation for their pupils, and all feeling alone in this quest. Adolescent smoking cessation was not a topic on the original interview schedule, but emerged very strongly as a theme throughout this phase of data collection and while the theme had certainly been emerging, it was the interview in School 31 (the 26th interview

to be completed) that brought it to prominence as an issue of importance to rationales behind pupil policies. Re-visiting earlier transcripts, and an awareness of it in later interviews, revealed the need to code for this during analysis. Cessation support appeared to be generally done within individual schools, and the time and the resources were not often available to maintain this regularly or long-term. Often, support was reliant on one or two enthusiastic and committed members of staff to run something which either they or the school had identified as important. Where the resources were not available, well-meant and important initiatives sometimes succumbed to the pressures of modern school life. It was apparent that while they may have had the desire, schools rarely had the local capacity to maintain adolescent smoking cessation support, leading to within-school variability in this provision, even in schools that had adopted a health approach to pupil smoking policy.

While cessation support was sometimes incorporated into sanctions procedures, most often the provision of smoking cessation existed independent of policy enforcement. Often this was provided in groups run at lunchtime or after school, which pupils were free to attend if they wished to. In these cases, the pupils did not have to request help as they did in School 33, but provision was readily available, and they could opt in to it. Another key issue surrounded who ran these groups. Most often they were run by members of staff, with the use of school nurses also common. While it was arguable that, for issues of confidentiality, the use of neutral facilitators such as school nurses was preferable, it was also evident that the presence of school nurses within Welsh schools was so variable (schools reported their presence on site as anything from daily to whenever they had the time to turn up or that they only ever came to school to do vaccinations) that a nurse was not a viable smoking cessation resource for many schools. Even where schools managed to maintain these groups, due to a lack of resources there could still be within school variability in cessation provision. For example, in School 52 ((State, Eng), Deputy Head (Pastoral / PSE), Male) the school nurse ran a weekly smoking clinic at lunchtimes, but only for girls, with male smokers getting no access to such a service.

It was also interesting to note that some schools reported dwindling pupil interest as a reason why a quit group has closed down, and it seemed that retention of participants should be a consideration in designing a cessation support programme. Despite all of these difficulties, some schools seemed to manage to run successful quit groups either via members of their staff or the school nurse:

TR: *Now we have what we do have is a, a group run by the school nurse where, um, it's, it's an informal group where persistent offenders are directed to this group, um, now, um, it's not something that they are forced to do but they are directed to this group which, um, meets every Thursday lunchtime.*

SB: *Oh right, okay. And that's a sort of support group is it?*

TR: *Yes.*

SB: *And how many of those do you find take that up?*

TR: *Um, it varies sometimes there's eight there sometimes there's only two there.*

SB: *Right. Is that successful?*

TR: *Um...*

SB: *In terms of pupil...*

TR: *Er, I, I, [pause] I think it, it has limited success, yeah, some, some kids have, um, cut down and maybe one or two have.*

School 61 (State, Cym), PSE Co-ordinator /Head of Year, Female (Lines 229-243)

With limited resources being an issue, in some instances schools relied on specialised external agencies for this provision. These minimised costs in terms of staff time, and were usually funded externally. While external agencies were sometimes invited into the school (e.g. School 37, State, Eng)

most often this seemed to involve education and cessation information rather than support. Where cessation support by external agencies was mentioned as being available to pupils, most often this appeared to be off-site (e.g. School 18, State, Eng).

The commitment needed to provide cessation was also highlighted, and problematised by School 33 (State, Eng). While the respondent used to organise cessation sessions for pupils who wanted to give up, she had to stop these due to the time pressures of her position. However, she appeared to have adapted the cessation approach and still provided some help with the input of the school nurse, and the use of relaxation tapes, information leaflets and bringing parents into the dialogue where necessary. School 64 had also developed their own approach to helping cessation:

> *...a PSP, a personal support plan is put in place to help the individual to manage his or her smoking or to reduce it or, well in essence to, um, stop smoking and then, um, we, er, we cut it down by saying well try, don't smoke during, during school hours then, and then try to reduce it that way and then put something in, else in instead like a, a table tennis, um, workshop during the, we have a table tennis workshop, we have all sorts of workshops really during the lunch hour, er, textiles and, try to bridge that gap so that they don't feel the need to go and [laughs] and squander their time round corners smoking, and, er, house, er, activities, you know, sort of the, er, hockey and netball and, um, er, maths activities, numeracy and literacy, try to push some other, um, activity in there instead of the negativity of [a?] don't smoke, you know.*
>
> *School 64 (State, Cym) Deputy Head (Pastoral/PSE/Health), Female (Lines 353-365)*

Some schools reported attempts to provide cessation that seemed weaker than others. For example, while a nurse ran a drop-in clinic in School 54, the health education co-ordinator appeared to insist on providing smoking cessation herself, by giving them a leaflet with "lots of little handy hints" (line 424) to go away and read. This respondent did make an observation, however, that suggested that where schools did provide cessation support, regardless of what

this may be, for this to be successful, the relationship between school and pupils might need to become less didactic than other elements of school life:

> *...the first question I ask them is do you want to stop smoking cos there's certainly, absolutely no point in trying to counsel somebody who says to you no I don't want to stop smoking.*
>
> *School 54 (State, Eng) Health Education Co-ordinator, Female (Lines 417-419)*

Some respondents also reiterated the fact that issues of law and appropriateness also hindered smoking cessation for adolescents. Much of the smoking cessation material or support that was available, some felt to be targeted at a much older audience than their pupils. However, this may have been more reflective of where these teachers were looking for their information, rather than it not being available. This, however, may indicate a lack of publicity about where to find materials to support adolescents trying to give up smoking. Certainly, the respondent from School 31 felt this. A more tangible problem was that, at the time of interviews, and despite apparent moves to address this, Nicotine Replacement Therapy (NRT) was still not commonly available for under sixteen year olds[7]. As one respondent said, "They're too young for Nicorette patches and they're too young for the doctors to do much about them, but, um, cos you're not, you can't be addicted till you're over sixteen [laughs], yeah." School 13 (State, Eng), PSE line manager / Key Stage 4 manager, Male (lines 294-296)).

In School 32 (State, Eng) pupils caught smoking had to sign an agreement, which their parents also signed, saying that the pupil would not smoke on site again. For their part, the school then offered cessation support for the pupil, which could also be accessed by smokers who had not been caught. However,

[7] Since undertaking this research there has been a movement towards the wider use of NRT in a broader range of people (DOH, 2005; Royal Pharmaceutical Society, 2006) following advice from the Medicines and Healthcare Products Regulatory agency (MRHA, 2005a). It may now be given to 12-18 year olds for up to 12 weeks, or for longer under the advice of a healthcare professional (MHRA, 2005b)

if pupils undertaking this cessation continued to be caught smoking, the sanctions become firmer which the school justified as they were offering this support. This illustrated how schools sometimes struggled to balance health and disciplinary approaches to sanctions: the desire to promote cessation had to be balanced with the need to maintain the school policy and discipline. Disregarding smoking would legitimise it, yet increasing the sanctions seemed to ignore the difficulties of quitting. In this case, the balance seemed not to favour the pupil smoker as the six-week cessation course has been inconsistent with the external cessation support worker missing several sessions and the school nurse having to step in to complete the course, leading the school nurse to decide that she would now run it herself.

While the actions of some schools clearly demonstrated a commitment to health approaches, in others, discussion of these appeared more rhetorical. For example, while the respondent in School 07 (State, Eng) claimed that "...the truth is it's not really just about catching them, it's about changing their behaviour isn't it?" (Head, Female; lines 270-271) they implemented only disciplinary sanctions. School 47 exemplified the more explicit detachment of some schools from responsibility for providing support to smoking pupils:

> *Yeah, so I mean what we basically do is try and encourage the child if, if, if that person is really addicted to either get some help for it or if they can't do it to make sure that they are, you know, they, they don't put [themselves / myself?] in the position where they're gonna be found next time.*
>
> *School 47 (State, Eng) Head of Upper School, Female*
> *(Lines 356-360)*

As has already been stated health and disciplinary approaches are extremes and most schools adopted elements of both. Particularly, schools taking a health approach incorporated some sense of the disciplinary into their

procedures. The deputy head (and Head of PSE) of School 16 particularly pointed this out[8]:

> *What sanctions are normally used to deal with pupils who are smoking?*
>
> *If pupils are caught, as discussed earlier, there will be no suspension. It is "not a kneecapping" offence. They prefer to deal with it by discussion and providing counselling, and involving the pupil's parents etc. They like to talk to them, and show them the health and the health and safety aspect of smoking (personal health, fire prevention etc). They accept that it is a behavioural problem [in the sense that smoking is an addiction and being a smoker is a complex issue], and there are other issues as to why people smoke, and they like to allow for this. However, smoking in school it is also a challenge to authority. "No smoking" for pupils is a rule, and therefore, if it is contravened, it must be tackled.*
>
> *School 16 (State, Eng), Deputy Head/ Head of PSE, Male (Lines 143-154 of author's interview notes)*

Generally, policy rationales recognised that the health aspects of smoking were balanced with the need for a school to maintain discipline and authority over pupils. For example, at the beginning of the interview with the deputy head of School 24, the respondent outlined his main concerns about smoking, discussing problems of smoking in toilets and on school buses. When asked further about these, he highlighted smoking as undermining school discipline saying:

> *Er, they're, they're something which I think, er, actually undermines the general discipline of the school, any rule which has been, um, broken concerns me obviously.*
>
> *School 24 (State, Eng,) Deputy Head (with responsibility for policy development), Male (Lines 128-130)*

[8] This respondent agreed to do the interview only on the condition that it was not recorded, consequently this extract was taken from notes taken during the interview and written up immediately afterwards

However, later in the interview, when asked if there is anything else he would like to add that he felt was important, he highlighted the need for balancing smoking as a disciplinary issue (referred to by the respondent as sanctions that simply identified smoking as anti-social behaviour) with the health aspects:

> *I think the thing you need to, I mean, I mean I'm very aware of the fact that when you, er, when, when you answer questions like this, um, it sounds as if we got sanctions which are just purely and simply to, um, identify smoking as anti-social behaviour. We also go to great lengths to try and convince pupils of the fact that, um, why we, we have this rule, it's not the fact that it's anti-social behaviour, it's the fact that it, um, is basically very unhealthy, um, and we, we do go to great lengths, not only with this particular, um, rule or sanction or whatever you want to call it, er, to explain to pupils why we actually employ these sanctions, um, yeah.*
>
> *(Lines 620-629)*

The respondent discussed how he and his colleagues did this on a one-to-one level with pupils caught smoking. This seemed a fairly casual arrangement and the school did not go as far as others by examining issues of cessation, for example. These examples, then, demonstrate the variation between schools in rationales behind pupil smoking policy. At one end of a scale, schools addressed pupil smoking as a disciplinary issue, at the other end it was seen as a health issue. For most schools, their approach lay somewhere between these two, with some schools taking more complex (health) approaches to pupil smoking than others.

6.8.2 Type of sanctions employed for staff

Where staff smoking misbehaviour was identified some, sanctions generally appeared more *ad hoc* than those for pupils. Table 6.24 summarises all responses to the question on sanctions for staff caught breaking the policy. Unlike monitoring pupil smoking policy, aside from 3 schools that reported an escalated sanctions procedure, schools reported a maximum of one sanction method for staff.

Table 6.24 Sanctions applied to staff breaking smoking policy

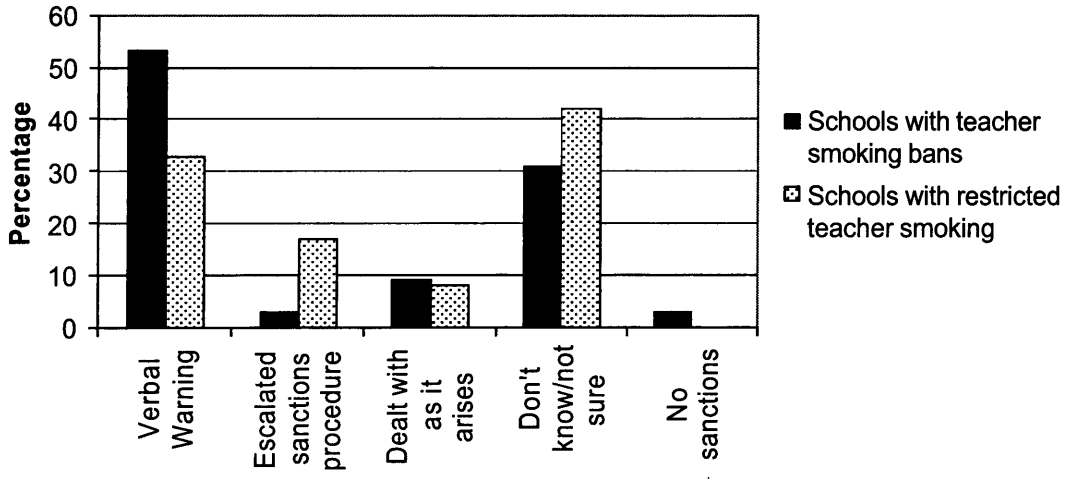
Method	Schools	Number
Verbal warning	03; 04; 08; 09; 10; 13; 14; 16; 23; 27; 29; 35; 38; 47; 48; 54; 58; 62; 63; 64; 66	**21**
Escalated sanctions procedure	32; 52; 55	**3**
Dealt with it as it arises	01; 26; 39; 40	**4**
Do not know/not sure	06; 07; 15; 18; 19; 25; 31; 33; 34; 37; 49; 50; 56; 57; 61	**15**
No sanctions	36	**1**

Sanctions for staff most commonly took the form of a verbal warning. This varied in formality from a friendly word, to a formal verbal warning and was usually given by a member of SMT. The two exceptions to this were School 13 (State, Eng) where a line manager could do this as well as SMT and School 35 (State, Eng) where it was unclear who would do this. When asked if there was a sanctions procedure for staff caught smoking, the respondent from School 36 (Ind, Eng) merely repeated that she could not envisage teachers ever smoking in the school, apparently negating the need to have a sanctions procedure.

The number of respondents who did not know what the staff sanctions were stands in contrast to the fact all staff knew what the sanctions were for pupils, suggesting that staff sanctions were taken less seriously in schools. This was enhanced by the four respondents who reported that their schools dealt with staff smoking as and when it arose, clearly indicating that there was no defined procedure. However, many respondents reported that the reason they did not know what the sanctions were was because it never happened that staff smoked against policy. If this would appear to suggest that perhaps schools did not need staff sanctions procedures because, on the whole, staff kept to the policy, the interview data on staff smoking misbehaviour indicated that this was not always the case.

Figure 6.7 shows school reporting of the type of sanction used as a percentage of all schools with either smoking restrictions or a total smoking ban. This indicates that verbal warnings were proportionally more common in schools with total bans than in those with staff smoking restrictions. In schools with restricted smoking, more staff reported not knowing what the sanctions were.

Figure 6.7 Sanctions applied to staff breaking smoking policy by staff policy type



There were not many data on staff sanctions procedures and it appeared as though the application of sanctions to staff was not as often or fully thought through as those for pupils.

6.8.3 Indicator variables describing sanctions procedures

6.8.3.1 Indicator variables describing pupil sanction procedures

Depending on the types of sanctions they employ, schools lay somewhere between taking a health or a disciplinary approach towards pupil smoking in their sanctions. Some schools explicitly mentioned the incorporation of health issues in connection to sanctions procedures, whether this was the provision of

health information or cessation support. In this indicator, those schools that reported such incorporation of health were classified as tending towards the inclusion of health in their sanctions. Those that did not were classified as tending toward disciplinary sanctions. No schools reported the use of just health sanctions. As discussed in Sections 6.5.1 and 6.8.1.3, with some care and acknowledgment of its limitations, this could also be treated as an indicator of the rationale behind pupil smoking policy. An example of the care needed in making this assumption was that some schools who provide cessation support outside of sanctions procedures (Section 6.8.1.3) could be classified as tending towards the disciplinary in terms of sanctions, while the rationale behind the policy appeared actually to make more consideration of health issues. Table 6.25 outlines the indicator variable.

Table 6.25 *Indicator variable describing approaches to pupil sanctions*

Level	Description	Schools	Number	%[1]
2	Schools tends towards the inclusion of health in their sanctions	01; 10; 16; 18; 19; 31; 32; 33; 35; 37; 38; 39; 40; 52; 54; 55; 62; 64;	18	41
1	School tends towards disciplinary sanctions	03; 04; 06; 07; 08; 09; 13; 14; 15; 23; 25; 26; 27; 29; 34; 36; 47; 48; 49; 50; 56; 57; 58; 61; 63; 66	26	59

[1] Percentage of all 44 schools included in classifications

6.8.3.2 Indicator variables describing staff sanction procedures

As all schools reported just one method of sanctions for staff caught breaking smoking policy, variation in method types was not used as an indicator for this policy-level variable (Table 6.26). Instead, schools were classified into those

that had a sanctions procedure in place for staff caught breaking policy (i.e. school uses verbal warnings or an escalated sanctions procedure) and those that did not have a sanctions procedure in place.

Table 6.26 Indicator variable describing approaches to staff sanctions

Level	Description	Schools	Number	%[1]
2	School has a sanctions procedure in place when staff break smoking policy	03; 04; 08; 09; 10; 13; 14; 16; 23; 27; 29; 32; 35; 38; 47; 48; 52; 54; 55; 58; 62; 63; 64; 66	24	83
1	School does not have a sanctions procedure in place when staff break smoking policy	01; 26; 36; 39; 40	5	17

[1]Percentage of 29 schools (no data on 15 schools as given in Table 6.24)

6.9 Extent to which policy-level characteristics support or undermine consistent messages

6.9.1 Reclassifying policy-level characteristics

As stated in Section 3.5.2 (a), this work further contributes to the literature by using the often discussed but rarely analysed notion of consistency in order to create an indicator which describes Welsh schools in the extent to which their policy-level characteristics support or undermine consistent no-smoking messages. In order to do this, each policy-level variable was re-classified into the categories shown in Table 6.27:

Table 6.27 Categories for the reclassification of policy-level characteristics

Level	Description
2	Tends to support the production of consistent no-smoking messages
1	Tends to undermine the production of consistent no-smoking messages

Policy level characteristics were reclassified as follows:

6.9.2 Reclassification of policy restrictions

This reclassification was made with the assumption that a total smoking ban was clearly more supportive of consistent no-smoking messages than staff being allowed to smoke (Table 6.28):

Table 6.28 Reclassification of policy restrictions

Level	Consistent messages level	Policy restrictions level
2	Tends to support the production of consistent no-smoking messages	School has both pupil smoking ban and staff smoking ban
1	Tends to undermine the production of consistent no-smoking messages	School has pupil smoking ban but staff are allowed to smoke in restricted areas

6.9.3 Reclassification of policy formality

In reclassifying policy formality, it was assumed that written policies were better at communicating policy than unwritten ones, and therefore were more supportive of making the policy, and any no-smoking messages within it (e.g. pupils or staff not allowed to smoke; staff allowed to smoke in peripheral areas and out of site from pupils) consistently known across the school. Consequently, any school where at least one of the policies was not written was seen as tending towards undermining consistent messages (Table 6.29).

Table 6.29 Reclassification of policy formality

Level	Consistent messages level	Formality level
2	Tends to support the production of consistent no-smoking messages	Both staff and pupil smoking policies are written
1	Tends to undermine the production of consistent no-smoking messages	One of the staff or pupil policies is written, and one is unwritten **And** Neither staff or pupil smoking policies are written

6.9.4 Reclassification of rationales behind staff policy

In this reclassification (Table 6.30), it was assumed that policies with health rationales as opposed to those with only logistical and/or pressure rationales would receive greater acceptance among staff, which might lead to greater staff compliance with any policy designed to promote non-smoking, and therefore more consistent messages.

The health indicator was used rather than the one based upon the presence or absence of logistical rationales as there was a stronger argument that the presence or absence of health rationales may lead to more consistent policy messages through its effect on compliance. The use of both original indicators would also have involved schools being classified twice for staff rationales.

Table 6.30 Reclassification of rationales behind staff policy

Level	Consistent messages level	Rationale level
2	Tends to support the production of consistent no-smoking messages	Health **is** a factor in the rationale behind school staff smoking policy
1	Tends to undermine the production of consistent no-smoking messages	Health **is not** a factor in the rationale behind school staff smoking policy

6.9.5 Reclassification of the introduction of staff policies

This reclassification assumed that consultative approaches to introducing more restrictive policies were more likely to lead to staff compliance with any policy designed to promote no-smoking messages and therefore the production of more consistent no-smoking messages (Table 6.31).

Table 6.31 Reclassification of the introduction of staff policies

Level	Consistent messages level	Introducing staff policy level
2	Tends to support the production of consistent no-smoking messages	School tended to use **consultative** approaches when introducing more restrictive staff smoking policies
1	Tends to undermine the production of consistent no-smoking messages	School tended to use **prescriptive** approaches when introducing more restrictive staff smoking policies

6.9.6 Reclassification of the dissemination of staff and pupil policies

The assumption made in this reclassification was that stronger dissemination was likely to lead to people being more knowledgeable of the policy as it applied to them. Consequently, both through better awareness of the policy, and any no-smoking messages contained therein, and through the fact that stronger dissemination may lead to greater compliance, it was also assumed that stronger dissemination may lead to more consistent no-smoking messages. As explained regarding policy formality, written methods of dissemination were seen as stronger methods of dissemination than unwritten ones and Tables 6.32 and 6.33 show the resulting reclassification of pupil and staff dissemination methods.

Table 6.32 Reclassification of the dissemination of pupil policies

Level	Consistent messages level	Pupil Dissemination Level
2	Tends to support the production of consistent no-smoking messages	School uses **written** and **unwritten** methods of disseminating pupil smoking policy to pupils **And** School just uses **written** methods of disseminating pupil smoking policy to pupils
1	Tends to undermine the production of consistent no-smoking messages	School just uses **unwritten** methods of disseminating pupil smoking policy to pupils **And** School uses **no methods** of disseminating pupil smoking policy directly to pupils

Table 6.33 Reclassification of the dissemination of staff policies

Level	Consistent messages level	Staff Dissemination Level
2	Tends to support the production of consistent no-smoking messages	School uses **written** and **unwritten** methods of disseminating staff smoking policy to staff **And** School just uses **written** methods of disseminating staff smoking policy to staff
1	Tends to undermine the production of consistent no-smoking messages	School just uses **unwritten** methods of disseminating staff smoking policy to staff **And** School uses **no methods** of disseminating staff smoking policy directly to staff

6.9.7 Reclassification of pupil and staff sanction types

With regards to pupil sanctions types, it was assumed that the inclusion of health within sanctions procedures was more likely to lead to consistent no-smoking messages as it supported the sanctions by explaining the health reasons behind their implementation, and reinforced the no-smoking messages. Schools taking disciplinary approaches were less likely to do this. This resulting policy-level characteristic can be seen in Table 6.34.

Table 6.34 Reclassification of pupil sanction types

Level	Consistent messages level	Pupil sanctions level
2	Tends to support the production of consistent no-smoking messages	Schools tends towards the inclusion of health in their sanctions
1	Tends to undermine the production of consistent no-smoking messages	School tends towards disciplinary sanctions

With regards to staff sanctions procedures, it was assumed that schools with a sanctions procedure for staff breaking policy were more likely to ensure greater compliance than those that did not, as before leading to greater consistency in any no-smoking messages contained within the policy (Table 6.35).

Table 6.35 Reclassification of staff sanction types

Level	Consistent messages level	Staff sanctions level
2	Tends to support the production of consistent no-smoking messages	School has a sanctions procedure in place when staff break smoking policy
1	Tends to undermine the production of consistent no-smoking messages	School does not have a sanctions procedure in place when staff break smoking policy

6.9.8 The combined indicator variable

After the reclassification of policy-level characteristics, each school in turn was allocated a score of 1 or 2 for each policy-level variable there were data for (Table 6.36) with level 2 tending to support the production of consistent no-smoking messages and level 1 tending to undermine them. The average score was then used to classify each school policy into a classification describing whether or not policy-level elements tend to support consistent no-smoking messages. As this score was calculated arithmetically, numbers were rounded up or down. Consequently, if a school had the same number of 1 and 2 scores, the average was 1.5 and the school was categorised as level 2, tending to support the production of consistent no-smoking messages. Schools 24 and 44 were not included as there were only data for them in the first indicator. However, the key to this indicator was consistency of no-smoking message, and the policy-level characteristic that most clearly influences this was the level of restrictions placed on staff smoking policy. Therefore, any school where policy stated that staff were allowed to smoke somewhere was very clearly undermining a no-smoking message. As a result, any school allowing staff smoking was automatically placed into level 1. This meant that Schools 16; 18; 27; 32 and 52 which had an average score of 2, were reclassified into level 1. The final indicator describing the extent to which school policies supported consistent messages is shown in Table 6.37.

Table 6.36 School scores for each policy-level characteristic

	Policy restrictions	Policy formality	Staff rationales	Introducing staff policies	Dissemination of pupil policy	Dissemination of staff policy	Pupil sanction types	Staff sanction types	*Number of scores present*	Average score (rounded)
School 01	2	2	2	2	2	2	2	1	*8*	**2**
School 03	2	1	1	1	1	1	1	2	*8*	**1**
School 04	2	2	1	-	2	2	1	2	*7*	**2**
School 06	2	1	1	-	1	2	1	-	*6*	**1**
School 07	2	1	2	-	2	-	1	-	*5*	**2**
School 08	2	1	2	2	2	2	1	2	*8*	**2**
School 09	2	1	2	2	2	2	1	2	*8*	**2**
School 10	2	-	2	1	1	2	2	2	*7*	**2**
School 13	1	-	2	2	1	1	1	2	*7*	**1**
School 14	2	-	2	2	1	-	1	2	*6*	**2**
School 15	1	1	-	-	1	2	1	-	*5*	**1**
School 16	1	1	2	-	1	2	2	2	*7*	**2**
School 18	1	-	2	2	2	1	2	-	*6*	**2**
School 19	2	1	1	2	1	2	2	-	*7*	**2**
School 23	2	1	2	1	2	1	1	2	*8*	**2**
School 25	1	1	1	-	1	2	1	-	*6*	**1**
School 26	1	1	2	-	2	1	1	1	*7*	**1**
School 27	1	2	1	-	2	2	1	2	*7*	**2**
School 29	2	2	2	-	2	2	1	2	*7*	**2**
School 31	2	1	1	-	1	2	2	-	*6*	**2**
School 32	1	-	1	2	-	1	2	2	*6*	**2**
School 33	2	2	2	1	2	2	2	-	*7*	**2**
School 34	2	1	1	-	1	2	1	-	*6*	**1**
School 35	2	1	2	2	1	1	2	2	*8*	**2**
School 36	2	1	-	1	1	1	1	1	*7*	**1**
School 37	2	-	1	-	2	-	2	-	*4*	**2**
School 38	2	2	2	-	2	2	2	2	*7*	**2**
School 39	2	2	2	2	2	2	2	1	*8*	**2**
School 40	2	-	2	1	1	1	2	1	*7*	**1**
School 47	1	1	1	2	2	1	1	2	*8*	**1**
School 48	2	1	-	-	2	-	1	2	*5*	**2**
School 49	1	1	2	1	1	2	1	-	*7*	**1**
School 50	1	1	1	2	2	-	1	-	*6*	**1**
School 52	1	-	1	2	2	2	2	2	*7*	**2**
School 54	2	-	2	1	1	-	2	2	*6*	**2**
School 55	2	2	2	-	2	2	2	2	*7*	**2**
School 56	2	1	1	-	2	1	1	-	*6*	**1**
School 57	2	1	1	1	2	1	1	-	*7*	**1**
School 58	2	2	2	2	2	2	1	2	*8*	**2**
School 61	2	-	2	2	-	-	1	-	*4*	**2**
School 62	2	1	1	-	2	2	2	2	*7*	**2**
School 63	2	-	2	1	1	-	1	2	*6*	**2**
School 64	2	2	1	-	2	2	2	2	*7*	**2**
School 66	2	2	2	-	2	2	1	2	*7*	**2**

Table 6.37 Indicator describing extent to which policy-level characteristics support or undermine the production of consistent no-smoking messages

Level	Description	Schools	Number	%[1]
2	Policy-level characteristics tend to support the production of consistent no-smoking messages	01; 04; 07; 08; 09; 10; 14; 19; 23; 29; 31; 33; 35; 37; 38; 39; 48; 54; 55; 58; 61; 62; 63; 64; 66	25	57
1	Policy-level characteristics tend to undermine the production of consistent no-smoking messages	03; 06; 13; 15; 16; 18; 25; 26; 27; 32; 34; 36; 40; 47; 49; 50; 52; 56; 57	19	43

[1]Percentage of all 44 schools (i.e. all schools excluding Schools 24 and 44)

6.10 A note on school terminology and policy

A terminological issue presented itself during the research that highlighted the importance for researchers to use labels carefully. As Myers (1989) also found, sometimes a respondent would say that there was no policy, only to proceed to discuss issues of smoking and the school's attitude towards it in detail. It was notable that while many respondents used only the term smoking *policy*, some used the terms policy and *rule* interchangeably, while others made a distinction between a rule and a policy. Differentiation between the two terms was not consistent and a number of distinctions were evident, for example policies were seen as written, and rules as unwritten entities; that rules were simpler statements than policies which were more complex in some way or that policies were intended for a staff audience and rules for a pupil audience. In addition, a rule was also sometimes used as an interface between staff and pupils, with a more complex pupil smoking policy being presented to pupils as a simple "do not smoke" rule.

As an example, in the simple rule / complex policy dichotomy apparently made by some, a more simplistic rule could be equated to a disciplinary

approach that simply said do not smoke, while the complexity of policies could be associated with health approaches to smoking. For example, the following respondents constructed policies as complex in comparison to simpler rules:

> *... you wouldn't have a so-called policy, on that [smoking], I've got a policy on virtually everything else, but, forgive me for this, but there's no need to write a policy which says you don't smoke on the premises, that's a statement rather than a policy.*
>
> *School 24 (State, Eng) Deputy Head (with responsibility for policy development), Male (Lines 180-185)*

SB: *Sure, okay. Is the policy written down at all?*

TR: *Yes, it will be.*

SB: *Okay...*

TR: *But, er, actually, now that you mention it, I'm not altogether sure, er, because it is so simplistic, it'll be embraced in the school rules, sort of thing, I'm not sure whether we've got a specific no-smoking policy, um, but we, we could well have actually, but, er, it is, it is, really is that simple, that it is no smoking and that's it sort of thing.*

School 10 (State, Eng) Assistant Head, Male (Lines 162-169)

This section is added as a caveat that sometimes the researcher's usage of words was not the same as that of the respondent or the school. While the use of policy to mean a school approach to smoking may often used generically by academics, respondents sometimes deliberately or accidentally interchanged with the term rule and attribute different meanings to these terms.

-7-

Using telephone interview data to investigate enforcement-level characteristics and the WSE

7.1 Introduction

This chapter addresses section (b) of the framework set out in Section 3.5.2 and investigates policy context by examining the supportiveness of the WSE towards smoking policy. As stated in Section 3.4.2, enforcement-level characteristics concern the implementation of smoking policy and how this may contribute to policy effectiveness by either supporting or undermining the policy. These include the physical environment; staff implementation of policy and role-modelling and are often, but not exclusively, influenced by discretionary choice at the individual level and can therefore vary within schools. Applying an HPS model to smoking policy (Chapter 3), enforcement-level characteristics can be seen as indicating the extent to which the WSE supports or undermines smoking policy. This chapter outlines enforcement-level characteristics, and the ways in which they may either undermine or support the school smoking policy in place. Although the data cannot possibly capture, nor is there space here to discuss all the enforcement-level characteristics of a school, those set out here will be assumed to suggest the extent to which the WSE of each school supports or undermines the smoking policy in place. Therefore, at the end of the chapter, an overall indicator variable for each school is created, based on enforcement-level characteristics, to describe the policy context by describing the extent to which the WSE in each school appears to support or undermine the school smoking policy. This is then used to devise an indicator suggesting the extent to which the WSE either supports or undermines consistent no-smoking messages. Finally, this is combined with the equivalent policy-level score and an indicator is produced which discriminates between schools based on the extent to which their policy promotes consistent no-smoking messages and the extent to which the WSE supports this, to give an overall school value of consistency of no-smoking

message. The chapter concludes with a discussion of the varying status of smoking policies within Welsh schools.

7.2 The extent to which school smoking policy is supported by the identification of pupil smoking misbehaviour

7.2.1 Geographies of pupil smoking misbehaviour

School smoking policies that ban pupils from smoking are undermined if pupils are able to get away with smoking on site. This section is concerned with the extent to which WSE supported policy by identifying smoking misbehaviour. A clear theme that emerged from the first interviews onwards was that individual schools had very particular geographies of smoking misbehaviour. In all schools there were places, sometimes referred to as the "smokers' corner", where pupils tended to congregate in order to smoke. While individual schools identified their own particular problem areas, several types of general place were commonly reported by schools as attracting pupil smoking misbehaviour (Table 7.1). All schools indicated that some pupils get away with smoking at some time and place during the school day.

Table 7.1 Typology of areas commonly reported as attracting pupil smoking misbehaviour

Type of place	Description
Distant places (on-site)	Parts of the school site far away from the school building (e.g. perimeters). These tended to attract pupil smoking misbehaviour due to staff inertia in patrolling them.
Hidden places (on-site)	Places that were out of sight and provided cover from staff patrols.
Open spaces	Large open spaces with good lines of sight. These allowed early observation of approaching staff, and provided anonymity for smoking pupils in large groups where it was difficult for staff at a distance to identify who was smoking.
School buses	Contracted school buses running pupils between home and school offered an environment with a lack of authority figures.
Toilets	Provided cover from staff particularly as they presented issues over monitoring and privacy.
Off-site	Smoking off the school site meant that there were fewer people (staff and other pupils) around to observe smoking. Also raised issues of school jurisdiction.
In places not covered by CCTV cameras	Schools increasingly had Closed Circuit Television (CCTV) cameras for security reasons, and some reported that pupils actively sought out places not covered by these cameras to smoke in.

These categories were not mutually exclusive and some clearly overlapped with one another. For example, distant places tended also, by definition to be hidden, as did toilets. While some of these types of place were specific areas (toilets and buses) the others were more descriptive types of areas. Consequently, it was possible for one place to have elements of several of these; for example pupils smoking somewhere that was both open and distant from the school. Table 7.2 shows schools reporting smoking in each of these areas.

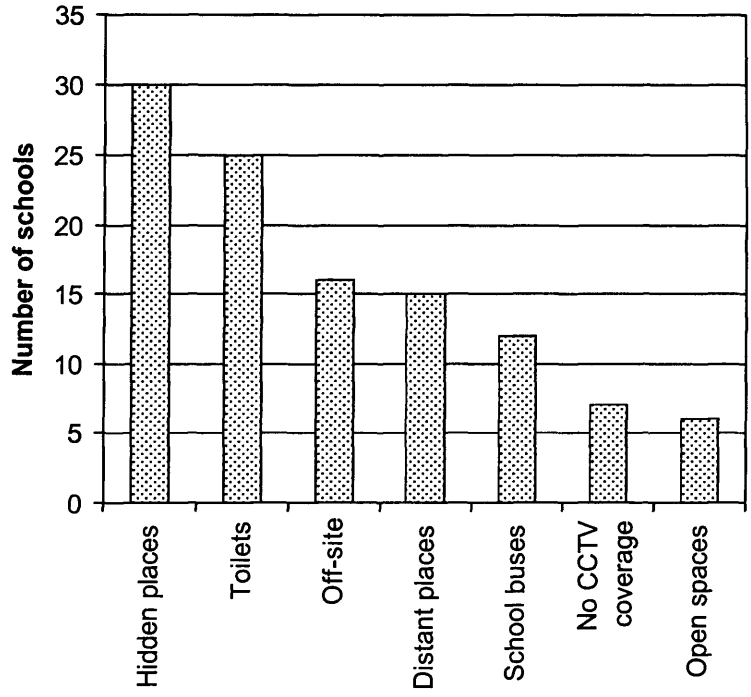
Table 7.2 Schools reporting pupil smoking misbehaviour in each type of area

Type of place	Schools reporting smoking behaviour in this place		Number of schools reporting smoking behaviour in this place
Distant Places (on-site)	03; 04; 08; 09; 10; 15; 29; 33; 38; 39; 49; 55; 57; 58; 62		**15**
Hidden Places (on-site)	04; 06; 09; 10; 13; 14; 15; 18; 23; 26; 29; 31; 32; 34; 35; 37; 38; 39; 40; 47; 48; 49; 50; 52; 55; 56; 57; 61; 63; 64		**30**
Open spaces	06; 08; 09; 13; 39; 40		**6**
	Unprompted	07	
School Buses	*Prompted*	01; 10; 15; 18; 23; 25; 49; 55; 56; 61; 62	**12**
Toilets	*Unprompted*	03; 08; 14; 23; 26; 31; 32; 33; 47; 48; 50; 52; 58	**25**
	Prompted	01; 06; 09; 10; 15; 18; 29; 35; 37; 39; 62; 63	
Off-site	01; 09; 14; 16; 18; 19; 25; 27; 31; 32; 37; 49; 50; 54; 58; 63		**16**
In places not covered by CCTV cameras	01; 03; 09; 23; 26; 35; 62		**7**
Unspecified areas	07 (outside areas but did not specify where); 25 (as well as buses and off site unspecified areas on-site especially between lessons); 66 (unspecified outside areas – at first respondent said there was no smokers' corner as such but proceeded to say that he knew the places pupils tended to smoke)		**3**

It should be noted that both toilets and buses were used as prompts in the interview, often being asked about specifically and for clarity, a distinction is made in this table between unprompted and prompted discussion of these areas

as problematic by respondents. Also, not all schools had dedicated school buses. Figure 7.1 demonstrates the most common areas that pupils smoked, as measured by the number of schools to report these as a problem area. In this diagram, prompted and unprompted responses have been merged.

Figure 7.1 Most reported places for the occurrence of pupil smoking misbehaviour as reported by staff



All of these places provided cover for smoking misbehaviour to be undertaken with hidden places and toilets[1] being the most common places for pupils to smoke. Each school has its own particular geography of smoking misbehaviour which was dependent upon the layout of the school, and the places where pupils perceived they were less likely to be caught. The potential importance of the physical space of the school in defining these areas was reinforced by two respondents in particular. The first of these was School 63 (State, Eng) which had just finished moving all of their buildings to one site

[1] Some schools also reported that smoking in toilets was worse in particular toilets: sometimes this was a specific toilet block and sometimes girls or boys toilets in general were reported to be worse than the other.

the year before the interview. The respondent noted that as a result of this change, the pupils had changed where they smoked. If this demonstrated how the physical space of the whole school site could influence the geography of smoking misbehaviour, then School 54 (State, Eng) illustrated how changes to the physical space within a school campus could alter smoking behaviour. The school had a problem with smoking in an old toilet block that was reported as being in quite a poor condition. These had been rebuilt and consequently smoking had ceased to be a problem in them. The respondent put this down to a combination of the new block being more visible and easier to patrol by staff, and of pupil pride in a toilet block that was much better than the old one. It was apparent then, that the physical space of the school building could impact on the geographies of smoking behaviour, whether as the result of the topographical layout of the space or the physical condition of the buildings. Most of these categories were self-explanatory. However, it was useful to look at hidden places; distant places and open spaces in a little more detail.

Hidden places were fairly self-explanatory, being places where surveillance was difficult because they were hidden from view. Most often, these areas were behind buildings or under the cover of foliage. Related to these were **distant places** which rather than being hidden from staff by a physical object, were hidden from view by the barrier of space. In these places, consistent surveillance was disrupted by staff inertia. As one respondent said:

> *Yeah, I mean the further away from the school campus they, they go, I mean, er, and we've got this lovely grassed area, as I say, so if they went to the wrong side of the rugby pitch, there's a public toilet down there, and I can't see any of our staff trudging all the way down there on a break time to see whether, whether there's, so if they wanted to try hard enough, and go far enough from the school, then they probably would get away with it, yes.*
>
> *School 10 (State, Eng) Assistant Head, Male*
> *(Lines 618-624)*

This sentiment was echoed almost exactly in the words of the deputy head of School 49:

SB: *No, okay. And are there any places in the school where you feel, I mean you've mentioned the flats, are there any other places that you feel are harder to monitor?*

TR: *Well as I say, really these trees at the bottom of the school field, you know, not many people want to go trudging [down?] there* [laughs], *that's, that's the most awkward.*

SB: *Okay. Have you got quite a big campus?*

TR: *Um, fairly big, I mean it's not unreasonable walk, it, it, it's just, you that it's that extra mile sometimes that you don't to walk in the rain* [laughs].

School 49 (State, Cym) Deputy Head/PSE Co-ordinator, Female
(Lines 473-482)

This respondent also implied that the weather might influence the geography of smoking behaviour. This idea was also repeated by the respondent in School 32 (State, Eng) who explicitly said that the places were pupils smoked were dependent on the weather. Apparently, this could be due to the effect of the weather on the pupils themselves, or the fact that it influenced staff surveillance of the problem.

Similar to hidden and distant places was the category of **open spaces**. Apparently contrary to the closeted nature of hidden and distant spaces, it was the openness of these places that provided cover for pupils. Good lines of site allowed smokers to see staff coming from a long distance. If groups of smokers congregated together, then by the time a staff member had arrived, they could have extinguished the cigarette and, even if the smoking misbehaviour had been identified, the exact culprits might not have been:

All of these places tend to be natural windbreaks, difficult to observe, and, um, difficult to supervise in a way were you catch people, cos as soon, they're only, they're approachable, they're not approachable in a secret manner, if you like so as soon as you're there whatever's being smoked is stubbed out quickly and

you tend to get the remnants and that does lead to problems because, [there's a lot of staff, or committed staff, and proper staff?] staff with better eyesight than me, will actually know who's done it and then it's no I didn't, yes you did and, um, we're, we're left to pick the bones out of it...

School 13 (State, Eng) PSE Line Manager / Key Stage 4 Manager, Male (Lines 256-265)

SB: *Are there any places where you think that pupils would know where monitoring is less effective in terms of...?*

TR: *Oh yeah, absolutely, I mean we're a huge site, you know, [they go up the back?], you know, the top of the field, you know, and by the, the time they see you coming, then the fags will have gone, you know...*

School 09 (State, Eng) Deputy Head, Female (Lines 329-333)

These two examples also highlighted why hidden places; distant places and open spaces could not be grouped together under one category, and this was because places could be described by more than one of these categories. For example, the fact that the respondent in the first extract described smoking misbehaviour as occurring in places that were "natural windbreaks" and which were "not approachable in a secret manner" indicated that they may be hidden places with open spaces between them and the school. Similarly, the respondent in the second extract implied that the places pupils smoke were both distant and open. In these cases, problems of surveillance were compounded arguably making smoking misbehaviour easier to get away with.

Also interesting to mention is the fact that **toilets** provided cover for pupils (so much so that it is almost a cliché to discuss smoking in school toilets). This was interesting as apart from toilets, schools rarely reported smoking misbehaviour inside the school buildings. It was apparent that this was because there were always staff around in the school, making the surveillance

of pupils fairly easy. There was something about toilets, then, that made it more difficult for staff to monitor. The essence of this problem seemed to be captured by the following respondent:

> *SB:* *Right, okay. And do you use closed circuit television to monitor smoking behaviour?*
>
> *TR:* *No, we've got closed circuit television cameras throughout the school in the œrridors, er, and, so I, well as I say, I've been here twenty-four years and the only place that there would have been any smoking, on the, in the school, would be in the toilets and obviously you can't use CCTV in the toilets, and they certainly would never, ever have smoked in a classroom or in a corridor.*
>
> *School 10 (State, Eng)*
> *Assistant Head, Male*
> *(Lines 625-632)*

Similarly, the Assistant Head/Head of Guidance in School 50 (State, Eng) said that "we don't have CCTV in the, in the toilets for obvious reasons" (lines 484-485). While this was not an issue that emerged explicitly in many interviews, it seemed that an underlying reason why pupils got away with smoking in toilets related to issues over privacy and the difficulties in staff monitoring toilets. It seemed that this was surely compounded by the power relationships between staff and pupils, and the complexity of the school's role *in loco parentis*. In School 13 (State, Eng), the difficulties of addressing smoking misbehaviour in toilets was reinforced when the male respondent emphasised that if there was a problem in the girls' toilet, they would ensure that female members of staff were sent to investigate. (School 48 line 174 says similar). If surveillance was difficult in pupil toilets, then they became hidden places within the school building being one of the only areas inside where pupils felt hidden from staff view.

However, this issue did not appear to be of concern in all schools with School 15 (State, Eng), for example, reporting that "there is always a member of staff, er, on duty outside and inside the toilets every break-time and lunchtime."

(Head of PSE / Head of Year, Female: lines 352-254). Similarly, School 23 reported that:

> *...of course they smoke in the toilets in the break times, um, which is very, very difficult to police other than have, we, we, on occasions we have a member of staff actually, er, standing in the toilets which is, you know, embarrassing for the kids, it's embarrassing for the member of staff, er, yes it stops the smoking at that particular point in time, but it, you, you just can't maintain it.*
>
> *School 23 (State, Eng) Deputy Head (Pastoral – with responsibility for policy development), Male (Lines 149-154)*

However, while School 23 did use staff placed in the toilets, they also acknowledged that the privacy issue dominated this surveillance making both staff and pupils uncomfortable, and meaning that this could not be an ongoing situation. This reinforced the idea that, due to issues of privacy, pupil toilets were less accessible to staff for monitoring behaviour than other parts of the school. Perhaps for this reason, any monitoring of toilets tended towards following up reported problems, and the occasional blitzing of the area rather than regular patrols (although as we shall see blitzing was also common in other problem smoking areas). Indeed, sometimes it seemed that identification of problems in pupil toilets was only through pupils reporting this to staff. For example, the Deputy Head of School 58, said:

> *Um, we have had younger members of, of, er, the school community come in to report people that have, that they've seen smoking in the toilets, you know they've come and reported it straight away, they love getting each other into trouble and, um, that, that has happened on a few occasions.*
>
> *School 58 (State, Eng) Deputy Head/PSE Co-ordinator, Female (Lines 335-339)*

This bypassed the need for staff to regularly patrol toilets and allowed them only to blitz them when required. In addition to staff investigating if they

smelt smoke, School 55 reported an interesting way in which pupil toilets were monitored:

> *...our toilets are cleaned twice a day during the day, so, any smell of smoke would be reported or cigarette butts or anything like that...*
>
> *School 55 (State, Eng) Assistant Head/ PSE Co-ordinator, Female (Lines 259-261)*

While monitoring pupil smoking misbehaviour was probably not the purpose of cleaning the toilets twice a day it did suggest the possible use of less invasive techniques of monitoring pupil toilets that could also involve staff checking toilets for signs of a problem during lessons, for example. However, if a problem was recognised, it would probably still have required staff to enter the toilets to try and catch pupils smoking, raising the same issues regarding privacy and staff-pupil relations. It was apparent that there will always be issues regarding the surveillance of toilets for this reason.

In addition to using hidden places advantageous to getting away with smoking, pupils were often reported to make staff surveillance more difficult through the use of lookouts. This strategy, especially when used in harder to monitor places, made getting caught smoking even less likely. While staff were fully aware of this strategy, it was apparently difficult to undermine it. It seemed that this hindered staff surveillance of pupil smoking misbehaviour. School 07 (State, Eng) reported a counter-strategy in which when a problem was identified, two staff went out and moved in either side of the smokers, catching them between them in a pincer movement.

7.2.2 Moving the problem around

Several respondents reported the feeling that tackling smoking in problem areas did nothing but move it from one place to another. As the respondent from School 15 (State, Eng) said "it's the age old thing though you, you move them from one place and they'll find somewhere else" (Head of PSE / Head of

Year, female; lines 309-311). The notion of fighting a loosing battle that often seemed to accompany this was encapsulated by the head of School 32 (State, Eng) who described the problem as "like squeezing the toothpaste, it goes somewhere else" (Head (with responsibility for smoking policy introduction, male; line 387-388). While almost all schools discussing this problem reported it as frustrating, in School 50 keeping pupils moving appeared to be part of their attempts to combat smoking:

> *Um, well I think they're, it's a question of moving the problem I think, if, as soon as you find an area where you know pupils are smoking and you make a specific effort to stop that then they tend to move and, er, our policy really is to, to keep on your toes and move them around [and?] so that they never actually feel comfortable anywhere so it's more trouble for them to smoke that it is, than [it?] actually, er, not to.*
>
> *School 50 (State, Eng)*
> *Assistant Head/ Head of Guidance, Male*
> *(Lines 473-478)*

Schools 13 and 37 also reported that moving smoking around makes it more difficult for pupils to undertake smoking misbehaviour. However, this was unusual though and more often the continual onward movement of pupils was a frustration in schools who saw this as failing to genuinely address the issue. Indeed, in School 52 they had realised this and instead of moving pupils on they sometimes tried to keep it in one place:

> *...you police the place as far as, er, where kids go to smoke, and, um, you move them on, then they find somewhere else, they move them on, they find somewhere else, so sometimes it's easier to keep them in one place, so you know, at least knowing where they are and what they're doing, so then you can keep an eye on them as well.*
>
> *School 52 (State, Eng) Deputy Head (Pastoral/PSE), Male*
> *(Lines 109-114)*

This approach was uniquely reported by School 52 and appeared to contradict the majority of reporting which stated that tackling smoking misbehaviour

moved it around the school. The sense of most schools was captured by the following:

> *...if we go to a certain area and we can see there's loads of children there then we'll go there and we'll have a good blitz, um, but otherwise we just generally walk around and the children tend, they just automatically go from one, from one place to another place, you know, so [and?] we just end up following them around.*
>
> *School 31 (State, Eng)*
> *PSE co-ordinator, Female*
> *(Lines 307-312)*

It was apparent then that the geography of smoking misbehaviour not only varied between schools, but also within schools as smoking pupils sought to outmanoeuvre staff efforts to identify and address their transgressions of the school policy.

The physical space of schools is not usually considered in studies of the effectiveness of school smoking policies. However, it was clear that this had an influence on the extent to which school smoking policy for pupils was enforced and could therefore affect the extent to which pupils got away with smoking and to which the policy was supported. Physical space was also related to jurisdiction (Section 7.2.4). Before examining this, methods used to monitor pupil smoking misbehaviour in those places where it does occur will be discussed.

7.2.3 Methods to identify pupil smoking misbehaviour

Schools varied in the methods they used to address pupil smoking misbehaviour. Table 7.3 shows a classification of methods reported by schools.

Table 7.3 Methods used to identify pupil smoking misbehaviour

Method		Schools reporting using this method
Staff on duty	*Planned patrols*	01; 03; 04; 06; 08; 09; 13; 15; 18; 19; 23; 25; 26; 29; 31; 32; 33; 34; 35; 36; 37; 38; 39; 47; 48; 49; 50; 55; 56; 57; 58; 61; 62; 63; 64; 66
	Blitzing	01; 06; 13; 19; 29; 31; 32; 39; 48; 49; 50; 52; 54; 55; 58; 61; 62; 64
	Duty staff monitor smoking	01; 03; 04; 06; 07; 08; 10; 14; 15; 16; 19; 23; 25; 26; 29; 31; 32; 36; 38; 40; 47; 48; 49; 52; 55; 56; 57; 62; 63; 64
Other methods of staff monitoring	*Remote sensing*	08; 55
	Unplanned monitoring	07; 10; 18; 55
	During movement of pupils between sites	64
	Cleaning staff monitor	55
Pupil self monitoring		16; 23; 38; 52; 55; 57; 58; 61; 63
Automatic methods	*CCTV*	01; 03; 07; 08; 13; 15; 16; 23; 25; 26; 33; 35; 38; 40; 47; 50; 62; 63
	Smoke detectors	03; 04; 08; 09; 13; 15; 16; 26; 33; 38; 39; 54; 66
Other methods	*Problem toilets locked*	18; 36; 39
	Not allowing pupils out of lessons unmonitored	19
None on the school site		27

While decisions about this were made at the school-level, they were included under enforcement-level characteristics as they explicitly concerned the supporting of policy through the identification of pupil smoking misbehaviour. The majority of monitoring of pupil smoking was done by duty staff either on planned, routine **patrols**, or carrying out **blitzing** on problem areas. Generally this was done by duty staff with duties allocated by rota. Thirty-six schools (82%) reported using planned, routine patrols to monitor smoking misbehaviour. Sixteen of these (36% of all schools) reported using the blitzing of problem areas in addition to patrols, while 2 schools (5%) only reported using blitzing to identify pupils smoking. The third duty staff category was more general and after reporting the use of duty staff most respondents then proceeded to specifically discuss patrols or blitzing. However, 5 (11%) respondents just mentioned duty staff without expanding on this. Consequently, 43 (98%) schools reported the use of duty staff, patrols or blitzing to identify pupils smoking. The only school that did not report using this was School 27 (Ind, Eng) which reported that no-one patrolled the school site for smokers, but that staff and prefects would go into town with the identification of smoking pupils being one of their aims.

While the dominance of staff patrols in identifying pupil smoking was clear, there was some variation in the way that these operated. For example, Schools 03 (State, Eng) and 04 (State, Eng) reported trying to keep these unpredictable. Some schools, such as School 62, provided lists of known smokers to aid surveillance. Also, several schools reported that staff patrols would sometimes pay special attention to areas known to attract smokers. There was some blurring of the boundary here between a routinely focussed patrol and a long-term blitz. However, this did not detract from the fact that staff monitoring was almost universally used to identify pupil smoking behaviour.

In addition to this, 8 (17%) schools reported that smoking behaviour was detected through **unplanned monitoring by staff**. None of these reported this as the only method of identifying pupils smoking and it seemed reasonable to assume that in most schools, staff identifying smoking in an unplanned fashion would partly address smoking. In two schools that had split sites, staff

monitored smoking during movement between sites. In School 44 (State, Eng) this appeared very casual, being dependent on which staff were also moving between sites, while School 64 (State, Cym) was a very small school with sites on opposite sides of a road which was overlooked by an office of administration staff who monitored the situation in a description invoking images of a panopticon. The use of cleaners in School 55 is discussed in Section 7.2.1.

The **remote sensing** category referred to incidents in two schools where pupil smoking in open and distant areas, with good lines of site allowing staff patrols to be spotted approaching, was identified using unconventional methods that allowed identification of this behaviour from a distance. In School 08 (State, Eng) the Headmaster armed several staff with digital cameras which had a zoom function and they photographed a number of pupils smoking at the far end of the tennis courts. In School 55, the assistant head reported how she uses a pair of binoculars to monitor pupil smoking:

TR: *I mean, I, the other thing is that we have a very, a big playing field, and pupils, it's an open school, the children can go anywhere at any time, um, so yeah, children could go to the other end of the field and it wasn't, it was done as a bit of a joke [laughs] but I was bought a pair of binoculars by the office staff, and I have caught children that way, because I can go into one of the science labs and I can spot the smoke with my binoculars, um, which is very good because often you can be suspicious, but you've got to actually catch [the/them?] smoke, um, so, er...*

SB: *[Laughs] Hi-tech.*

TR: *Er, yes [laughs], um, and when, when they say, but, but no, and I say well I saw you, and they, they're just amazed, and I just used the binoculars, so, [well?] yeah.*

School 55 (State, Eng)
Assistant Head /
PSE Co-ordinator, Female
(Lines 363-375)

While most schools relied on staff to identify pupils smoking, a few reported the use of **pupils to identify other pupils smoking**. Sometimes this was a case of pupils being more than happy to report other pupils smoking, whereas in other cases prefects and older pupils were asked or encouraged to identify pupils smoking. It is useful to refer to the experience of School 63 (State, Eng) here, as it is a reminder that pupils in schools operated within social structures and hierarchies which could mean that reporting smoking was problematic. Sixth-formers in this school were encouraged to report smokers (of tobacco and, the respondent implies, cannabis) to staff. However, many pupils refused to do this as the smokers had what the respondent referred to as a "heavy presence" (Assistant Head (Pastoral), male; line 404), implying that they might threaten physical retribution to anyone who they felt had reported them. School 23 (State, Eng) highlights that such issues (which are as much an issue in years 7-11 as they are in the sixth form) are not unique to School 63: "some of the older ones will say that if anybody dobs me in, I'll fill your face in sort of thing" (Deputy Head (Pastoral – with responsibility for policy development), male; lines 460-461).

The final main group of methods for identifying pupils smoking were classified as **automatic** as, while they needed a human operator to interpret their surveillance, the monitoring element was conducted by a machine. Increasingly schools are covered by CCTV (Closed-Circuit Television). Often, this is just for security, but sometimes this was also used to catch smokers. In some schools, the identification of smokers was a primary reason for installing CCTV, while for others it was a secondary and sometimes unanticipated use. The quality of CCTV systems appears to be variable. At one end of the scale, the Deputy Head (Pastoral – with responsibility for policy development) of School 23 (State, Eng) gave a detailed (and very enthusiastic) description of his state-of-the-art, almost total coverage CCTV system, with its powerful zoom that allowed the observer to read a cigarette packet and the function that allowed the operator to programme the cameras to conduct a repeating tour of the school site. At the other end of the scale, School 33 (State, Eng) reported that the CCTV images are actually too fuzzy to identify people from, so they

were just a deterrent rather than an actual method of identifying pupils breaking the policy. In addition to the fact that, as has been shown, pupils avoided smoking in sight of the cameras the usefulness of CCTV was also further questioned by the Deputy Head of School 62 who suggested that the best place to smoke and avoid detection beneath their CCTV cameras was directly beneath them. It was notable that pupils in School 09 (State, Eng) were reported to smoke out of site of the cameras, to the extent that the school no longer bothered to try and use CCTV to detect pupil smoking.

Similarly to CCTV, of those schools that used their smoke detectors to identify smoking misbehaviour, in some cases this was a direct intention of installing the detectors and in others it was secondary to fire detection. Several problems appeared to impede the use of smoke detectors. It was not unknown for pupils to tamper with them, removing their batteries or breaking them. For this reason, it was reported by some as necessary to either conceal the detectors (School 13 (State, Eng)) or important to not put standard smoke detectors in (School 23 (State, Eng)). Schools 23 and 26 both reported that the cost of the latter option could be prohibitive. Needing to get a detector that was wired in to the electrics and couldn't be tampered with, School 23 had decided against them. School 26 (State, Eng), however, decided to rent them instead of buying them. Other problems with smoke detectors were reported including dust setting them off so they were removed (School 37 (State, Eng)) and School 26 reporting that they had to put additional smoke detectors in because at first they didn't pick up smoking at the far end of one of the toilets.

The final two reported (**other**) methods of monitoring pupil smoking behaviour were in fact about reducing it in areas that were hard to monitor in order to improve detection. By locking toilet blocks that were a problem, and by not allowing pupils out of class unattended, these spaces where smoking misbehaviour could occur as they were difficult for staff to monitor were removed. However, it was still arguable that the smoking behaviour was merely displaced elsewhere.

7.2.4 Jurisdiction

At the end of Section 7.2.2, a link between physical space, jurisdiction and the extent to which pupils get away with smoking was mentioned. Jurisdiction was an important theme to emerge from the data regarding the difficulty of implementing pupil smoking policy. Jurisdiction concerned the times and places to which the school's authority, it's policies for pupils and the teachers' power to enforce those policies, extended. The authority of the school extending to the physical boundaries of the school and either end of the school day was commonly accepted. For pupils on campus during school hours, the authority of the school was widely accepted. However, four areas of school life emerged where the issue of jurisdiction was problematic or ambiguous. These areas were: pupils off-campus on their own; on school buses; on school trips and on the school site after school. In areas where the school's authority was not seen to extend, methods to identify smoking misbehaviour were unlikely to be implemented and, even where smoking behaviour was seen it was likely to be ignored and therefore to go unidentified.

7.2.4.1 Jurisdiction over pupils off-campus on their own

The most contested of these spaces involved the authority of staff over pupils off of the school site during breaktimes / lunchtimes and travelling between home and school. It should be emphasised that any discussion of off-campus jurisdiction generally concentrated on these times and not the weekends, holidays or once the pupils were home (apart from some exceptions, such as School 15 (State, Eng) were if parents wouldn't come to the school to discuss their child's smoking, staff would go to the home). Some schools clearly felt that they had jurisdiction over pupils at this time, and if staff saw or heard about pupils smoking then they would intervene and, if caught, pupils would be treated as if they were on the site. For example, the deputy head of School 52 reported an incident that had happened that day:

I just had a complaint today that that some were hiding under the old railway bridge smoking on their way home, well, you know, obviously if a thing like that happens we go and have a little look, you know

School 52 (State, Eng)
Deputy Head
(Pastoral/PSE),Male
(Lines 314-317)

Such investigations of off-site pupil smoking misbehaviour might be reported by non-school members (e.g. local residents) or staff reporting incidents to senior staff. At other times, staff seeing smoking misbehaviour dealt with it themselves by referring the offenders into the sanctions procedures.

Other schools took this further and actively patrolled off-campus for pupil smoking misbehaviour:

TR: *Some senior staff are asked to, to, er, patrol the roads and the park area, um, at break times and lunch times, therefore they would have to pick up on it, that would be part of their [job?].*

SB: *Yeah, yeah. And that happens every day or...?*

TR: *Yes, oh yes.*

School 18 (State, Eng) Teacher in charge of health education, Female
(Lines 275-279)

However, while some schools felt that they had a jurisdiction over pupils that extended beyond the edges of the school, others did not, and felt that teachers did not would tend not to address smoking misbehaviour where they saw it off-site:

Um, we certainly strongly discourage smoking in the vicinity of the school, but that's obviously more difficult to exercise, um, jurisdiction over than smoking inside the school.

School 38 (State, Eng) Head Teacher (with responsibility for policy), Male
(Lines 237-239)

Um, outside the school gates, I mean, I think the majority of staff would tend to ignore it

School 09 (State, Eng) Deputy Head, Female
(Lines 283-284)

In School 25 (State, Eng) staff had even been told by SMT that if the smoking behaviour is not on school site, then there was nothing that they could do about it.

The notion of the school's jurisdiction over pupils off-site on their own was clearly contested and there appeared to be two dimensions needing consideration. Firstly, there was a legal dimension to the issue regarding who had responsibility over the pupils and when. Only the head from School 32 (State, Eng) raised this, outlining how his new policy had taken a while to develop while he sought legal advice on the school's responsibilities to pupils on the journey to work. The conclusion was that they had no legal jurisdiction over pupils smoking on the way to and fom school. More often, the same question of whose responsibility pupils where and when, appeared to be asked within a moral framework. Extension of jurisdiction beyond the school site became an issue of moral conviction rather than legal requirement and this was much more flexible. School 52 (State, Eng) appeared to recognise the lack of a legal context to their extension of jurisdiction beyond the school when the Deputy Head said "we do, we spin them a line that once they come out of the door of the house that we are responsible for them until they've actually gone back in the door of the house" (lines 310-312). The use of the phrase "spin them a line" implied that the jurisdiction of the school over the pupils was constructed by the school, rather than born out of any legal jurisdiction.

It was also apparent that extension of the school's jurisdiction might be dependent upon individual staff. For example, when asked about staff picking up smoking, the respondent from School 31 said:

> *Um, [pause] it is challenged by staff, but I think it is become, it's becoming a, ooh, how can I say this, um, um, [pause] ah, a perfect example, myself, in the mornings when I'm driving into school and the children are in the lane and I know they're having a cigarette but I'm coming into school and I, I, didn't stop, you know, so, that's a perfect example with myself and I should imagine that's the case for most staff, um, but during school time, like breaks for example, we go around the area to patrol the areas where we know, we've identified areas where the smokers go, they're patrolled and it is challenged and we'll take the cigarettes off them and their lighters and things like that, you know.*
>
> *School 31 (State, Eng) PSE Co-ordinator, Female*
> *(Lines 264-273)*

Staff were busy people with many demands on them and on-site they were generally willing to carry out their duties. However, it seemed that perhaps a lack of jurisdiction was sometimes due to the fact that teachers wanted boundaries to their jobs, and did not always feel like tackling pupil misbehaviour at times when they felt that they were off duty. Of course, sometimes there were other barriers to addressing smoking misbehaviour outside of school, such as in School 35 (State, Eng) which was on a busy main road and where the Assistant Head reported that if you saw pupils smoking on the way to school you could not pull over as the road was too busy. Instead he pulled them out of registration later on and hoped that other staff would do the same. Clearly, this relied on the teacher being able to identify the pupils, however off-campus is a large place and staff cannot monitor the whole of it. They may also not recognise individual pupils. It also seemed that senior staff tended to take more responsibility where jurisdiction is extended off-site than non-senior staff did.

The school was defined as a physical space, and its boundaries marked the edge of its less contested jurisdiction. Beyond these boundaries, the extent of

school jurisdiction was more abstract. If this resulted in difficulties in defining where the authority of the school ended, one common solution was to use the school uniform as a marker of the school's jurisdiction: a pupil in school uniform was under the school's authority:

> *...the pupils are not allowed to smoke at all in school, on their way to school, while they're in school uniform or on their way home from school, on school buses...*
>
> *School 50 (State, Eng)*
> *Assistant Head /*
> *Head of Guidance, Male*
> *(Lines 125-127)*

> *And they're not [just?], they're, they're not allowed to school, to smoke on school premises and they're not allowed to, to smoke in town either, in, in their school uniform.*
>
> *School 57 (State, Cym)*
> *Deputy Head, Female*
> *(Lines 136-138)*

This second respondent apparently emphasised a difference between pupils smoking in town (school has no jurisdiction) and pupils smoking in town with their school uniform on (school claims jurisdiction). It was not uncommon for this to be framed in terms of the pupil in uniform being an ambassador for the school, hence they must be on their best behaviour while wearing the school uniform. However, the uniform here apparently took on different meaning. Metaphorically, the uniform became an extension of the fabric of the school: a pupil in school uniform was under the roof of the school. The Deputy Head of School 24 (State, Eng) even suggested that he had used the uniform as a marker of the extent of the school's authority over pupils when parents had questioned the schools jurisdiction over their children.

Clearly, issues of jurisdiction raised problems for staff identifying pupil smoking misbehaviour and referring them into sanctions procedures. Some schools used gating of their pupils (not allowing them off-site at break or lunch) in order to address this issue of jurisdiction: pupils on-site were clearly

under the school's jurisdiction and were easily monitored. Schools gated some, all or none of their pupils. An interesting example of this was School 63 (State, Eng), which allowed only Year 11 off-site. At some point, it had became clear that some of this year group were using a derelict house in the local village for smoking (and the taking of other substances). Instead of tackling the issue at the house, the school gated all Year 11 pupils for a while, keeping them within the jurisdiction of the school campus and contacted the local police who boarded the house back up. When the pupils were let back out, the school reported that the situation was better (although it is unlikely that this behaviour just disappeared). Other than the use of gating, enforcement of school policy to pupils during the school day was mediated by perceptions of the jurisdiction of the school.

7.2.4.2 Jurisdiction and school buses

School buses raised similar issues of jurisdiction, with many schools questioning who had authority over the buses. Feelings over buses were encapsulated by the following respondent:

> *So again, we have a, er, it's a bit of a funny wicket really in that, I have a responsibility to, of getting the kids on the bus safely and off the bus safely, once they're safely loaded, they are the responsibility of the county and the bus company, and so, but I deal with it, I mean I, you know, we don't, we don't, um, we don't say that, I mean if a parent rings up and says, ooh, so and so was smoking on the bus, you know, I don't want my kids subjected to that, then we deal with it and, and, er, but again, rather like kids coming to and from school on foot, it's a fairly dodgy wicket, I mean, at what point do they become the responsibility of their parents, you know?*
>
> *School 10 (State, Eng)*
> *Assistant Head, Male*
> *(Lines 487-496)*

Regardless of whether the school bus was LEA contracted, private hire or a public service bus, schools generally appeared to feel that they did not have any jurisdiction over them. Rather this rested with the bus company and/or driver. Only School 34 (Ind, Eng) reported a staff member being present on a

school bus, and this was exceptional even for this school with the staff member choosing to use the bus to get home. Despite the fact that jurisdiction lay with the bus company or driver, there was a general feeling that these people usually did nothing about pupils smoking misbehaviour (and shall be seen later in this chapter sometimes encourage it) so that if anything was to be done, schools had to somehow extend their jurisdiction over the bus. This appeared to be done in one of two ways. Sometimes they relied on pupils, parents or drivers to report incidents to them and if the culprits were identified, this was dealt with in school. As the following respondent (from a school that also reports the use of video surveillance on some of its buses) demonstrated, some schools actively recruited older pupils to report back on smoking activity on the bus:

> *...we have sixth formers who are, how can I say it, they lie doggo I think is perhaps the expression, while they're on the bus but they inform us of people who are smoking, right, so that, whereas they don't sort of stand up and say I'm goanna, I'm goanna tell on you, they will, um, come and speak to us cos we, we, know who's on every bus, and then we pick them like that, and if we find out who it is, you know, obviously, we, we speak to the parents, we, we speak to them and invoke the school, er, discipline procedure.*
>
> *School 52 (State, Eng)*
> *Deputy Head (Pastoral/PSE), Male*
> *(Lines 299-306)*

When this method was used, pupils were encouraged to do this discretely, so as to avoid any confrontation. A second way of extending the school jurisdiction was mentioned by Schools 08 and 32. In these schools, if the driver of a bus became aware of pupil smoking misbehaviour on board, that driver brought the bus back into the school. School 08 (State, Eng) owned three of their own buses and employed their own drivers in addition to using contracted buses, and this might have made it easier for the Headmaster to instruct drivers to bring the bus back if there was a problem. School 32 (State, Eng) also had drivers bringing buses back to the school if pupils were smoking on them. By bringing the school bus back onto the school campus, it was clearly under the jurisdiction of the school again (as defined by the physical

boundaries of the school). This was exemplified by School 32 where the driver's decision to return a bus appeared to reflect the feeling expressed by the Head that 'It's a grey area legally, isn't it? I, I'm not responsible for the buses and I'm not responsible for the students when they leave the school but, I mean they would bring them back here if [smoking misbehaviour happened]" (Head (with responsibility for introducing the policy), male; lines 194-196).

Conversely, acknowledging their lack of jurisdiction over the buses, some schools did not seek to gain this, leaving responsibility to the LEA, the bus companies or drivers. In some cases the schools would try and influence the bus while maintaining a distance. For example School 38 (State, Eng) asked the company to ban any pupils that had been reported to the school as smoking on the bus. Similarly, if drivers reported pupils smoking to School 48 (State, Eng), the school recommend that they withdraw the pupils' school bus passes, but reiterated that this decision was not up to the school.

Smoking on school buses was clearly an issue for schools and raised problems for issues of school policy enforcement. Regardless of who ran the bus, schools generally felt that they had no jurisdiction over them, but felt the need to extend their jurisdiction to buses in order that smoking misbehaviour was fully addressed.

7.2.4.3 Jurisdiction and school trips

The third area of school life which raised questions of jurisdiction involved school trips. There was no dispute that while on school trips, pupils are under the authority of the school. Again, school uniforms were often seen as a marker of this authority on these school trips. However, issues were raised where trips are concerned, which generally resulted from jurisdiction over other contexts that pupils may find themselves in. For example, the deputy head of School 39 (State, Eng) reported taking Year 11 on a trip to the local college, where students were allowed to smoke. While pupils were reminded that the school rules still applied while on this trip, the deputy head reported that she found it difficult to enforce this due to the different rules of the

college environment. This clash of contexts can also occur in unexpected places, as the Assistant Head of School 10 found out when a German exchange school was visiting their Welsh school for a week, and contingents from both schools went on a trip to a South Wales tourist attraction. Setting out on the German school's coach, staff from the exchange school were soon smoking in front of the pupils, while on the bus. The dialogue picks up at this point:

SB: *So, the staff from the German school were openly smoking in front of the pupils were they?*

TR: *Yes, er, I mean that's a slightly embarrassing situation, I mean, we, we announced to them, when it, when it became apparent that they, that they clearly are allowed to smoke, we pointed out that our school was a no-smoking zone, but [laughs] once they got onto their coach, they clearly felt that that was, er, a different, um, a, a different [laughs] situation, and they, their staff in effect then were in charge and so they did smoke again which is, um, you know, so that was a slightly embarrassing thing for our kids and for me but, um, er, obviously a different culture and different, different rules apply and things, but we did enforce that when they were on our campus, and pointed out that it was a no-smoking zone, um, [pause] and, you know, I mean, while our kids are out anywhere else that, then it certainly does apply.*

SB: *Right, okay. Sorry, can I just clarify, were the German pupils smoking as well?*

TR: *Yes, yes.*

SB: *Yeah. And what age were they?*

TR: *Um, they will have been, er, I mean it, it, you've got me wondering now, but I would have said fourteen, fifteen, but they may have been sixteen, I'm not sure what the law says in Germany, but they were, I, and again, there seemed to be a section of them that were allowed to smoke, and a section that weren't, so maybe it was just the older ones, sometimes difficult to tell isn't it?*

School 10 (State, Eng)
Assistant Head, Male
(Lines 357-380)

This demonstrated clearly how clashes of context on school trips sometimes challenged the school's authority and jurisdiction over their own pupils, and undermined attempts to enforce the school smoking policy. The German school staff feeling able to smoke on their own bus while respecting the no-smoking policy of their hosts while on their host's territory clearly demonstrated how different spaces could be subject to different claims for authority. If the space occupied by the school when on a trip was dominated by a set of rules in opposition to the school's rules on smoking, then a clash of policy occured, and the schools jurisdiction could be questioned and attempts to enforce its policy undermined.

7.2.4.4 Jurisdiction and pupils on site for official non-school activities after school

Finally, while it has been argued that the physical boundary of the school campus defines the generally accepted extent of the school's jurisdiction, this was not always the case. Schools are increasingly used outside of school hours when they are open to members of the public. As a result, pupils may be on the school site after school, at youth clubs for example. Questions as to the extent of the school's policy were raised at these times. For example:

> *...[the youth club is] open two evenings a week, we do have a problem on youth club nights because the youth club isn't run by the school even though it's on the school site, and while they don't allow them to smoke in the building they do allow them to smoke on the steps outside the building and I've taken that up with the youth leader because, on a, on a Tuesday morning and a Thursday morning we always find loads of cigarette butts outside the school, now, it's the same children, the same children who're coming to school and don't smoke in the day are allowed to smoke on the site in the night.*
>
> *School 07 (State, Eng)*
> *Head, Female*
> *(Lines 350-358)*

Understanding these processes of jurisdiction is crucial in understanding the school contexts in which policy and its enforcement are operating. Policy enforcement is not a straightforward process but has a time and space element to its effectiveness. In places or at times where the authority of the school is not recognised by staff, pupils or parents, policy enforcement may be weakened. This could potentially disrupt the messages regarding smoking behaviour being sent out by the school.

7.2.5 Staff attitudes and the identification of pupil smoking misbehaviour

Regardless of the methods in place and issues of jurisdiction, individual staff attitudes were also important in the extent to which pupils got away with smoking. While some schools reported pupil smoking being picked up consistently, others reported that it can be inconsistent, with staff 'turning a blind eye' to pupil smoking. For example:

> *Um, [pause] certain staff I can rely on picking it up all the time, other staff would not be too vigilant about it if the kids were putting them out as they were approaching, whereas I have a few staff, but not many, who wouldn't deal with it whatever happened.*
>
> *School 06 (State, Eng) Assistant Head Teacher, Male*
> *(Lines 283-286)*

Mostly, as in School 06, inconsistency in picking up smoking resulted from the fact that while the school expected all staff to apply sanctions to any pupil they found smoking, some staff chose to turn a blind eye. However, in School 14 it appeared as though there was no consistency expected of staff identifying pupil smoking from the school:

> *SB:* *Right. And do you think that ever staff see it and nothing is done because it's just too much hassle or...?*
>
> *TR:* *Um, you know, it, it's left to the discretion of staff really, nobody goes out to seek them out but if, if they*

> *are smoking somewhere obvious then it is dealt with, um, and quite often the message is sent well look, yeah, smoke yourself to death wherever you like but do it where I'm not going to see you, you know, because if I see you I've got to deal with it.*
>
> *School 14 (State, Eng) PSE Co-ordinator, Female*
> *(Lines 295-302)*

A few respondents speculated on reasons why staff chose to turn a blind eye to pupil smoking. The Deputy Head of School 09 highlighted two issues that might influence the extent to which staff ignore pupil smoking misbehaviour:

> *Um, outside the school gates, I mean, I think the majority of staff would tend to ignore it, inside school, [pause], that's a difficult one, I guess [pause], I mean, what you, how can I put this, very often, and smoking, this, this is, perhaps sounds a bit of a generalisation, but very often smoking and perhaps some of our more antisocial students, tend to sort of go hand in hand, you know, if I've got a group of year eleven, big lads, who're known for, sort of, quite antisocial behaviour, who're smoking behind a hut, you know, a young female member of staff [is/she?] probably, would choose to ignore it, I wouldn't, I'm deputy head, but, you know, I, I can understand totally where they're coming from.*
>
> *School 09 (State, Eng)*
> *Deputy Head, Female*
> *(Lines 283-292)*

Firstly, when the respondent said that most staff probably ignore smoking behaviour off-site, it suggested that turning a blind eye to pupil smoking may relate to staff notions about where their jurisdiction lies. Secondly, it suggested that there were occasions when staff felt too intimidated to tackle groups of smokers. While the respondent flagged up gender as an issue here, she also indicated that authority was also a factor in influencing consistency of applying sanctions to a pupil seen smoking. Not only was it possible that senior staff felt more empowered to address these issues but they might also be prepared (by virtue of their authority and role in the school) to take more responsibility for doing so. This notion was echoed in other schools that suggested that SMT took more regular responsibility for patrolling the school

than teaching staff. Whatever the reason for staff turning a blind eye, (the assistant head of School 34 (Ind, Eng) even suggested that smoking staff may be more lenient than non-smoking staff), ignoring pupil smoking behaviour effectively legitimised pupil smoking on site against policy. These actions sent out a mixed message to pupils, and undermined the school smoking policy and attempts to enforce it.

7.2.6 Implicit smoking spaces: pupils getting away with smoking

It was clear that some pupils got away with smoking on the school site and that staff were aware that this happened. It was commonly reported that addressing this was an endless battle which involved staff pushing smoking misbehaviour to different places, addressing it in these new places and pushing it to yet another places (Section 7.2.2). As a result, there would always be places where pupils managed to get away with smoking misbehaviour. However, there was also an acceptance that this would happen, an acceptance that was reinforced through discussion on the issues of jurisdiction and staff turning a blind eye to smoking misbehaviour. As a result, it was arguable that there appeared to be implicit spaces in schools where both staff and pupils knew that pupils could get away with smoking. Pupils who smoke would try and get away with it, and staff could not stop this fully. Both were aware that pupils would get away with smoking, and to varying extents this was allowed to happen. Returning to earlier arguments that while schools may never overtly allow pupils to smoke on the school site, pupils with an addiction need to satisfy their cravings, perhaps this was the only possible solution that existed to resolve this tension in schools.

7.3 The extent to which school smoking policy is supported by the application of sanctions to pupils caught breaking policy

7.3.1 Once pupils are identified smoking are sanctions applied correctly and consistently?

In some schools, the application of sanctions to pupils caught smoking was reported to be consistent across all staff:

> *TR:* *Yes, um, I mean I think that, what we always have to be very careful of, and I'm sure this is true in all institutions, educational and otherwise, that there has to be a uniformity of application, um, of any rule really, or regulation, and that, obviously, is dependent on the, the staff who apply it, um, we do try to make absolutely clear to all new staff who join us that, um, in treating smokers, as you would treat any other disciplinary offence, you, you must be fair and uniform in your approach, and so, we would always try, to the best of our ability, I mean [laughs] obviously, you know, everybody makes mistakes, everybody misses things from time to time, but, to the best of our ability, we would always try to actually apply the rules and regs as, as evenly as we can.*
>
> *SB:* *Right. And so the staff are very good at following that up, so staff...?*
>
> *TR:* *Yes, yes, yes they are, I mean I, I think, principally because they, they are very much concerned that it is a health issue, um, and part and parcel of, you know, the wider issue of, of health in the community in Wales anyway.*
>
> *School 19 (Ind, Eng) Senior Teacher, SMT (Pastoral), Male (Lines 192-207)*

In this school, consistent implementation of policy was paramount and dialogue with staff was used to ensure that this happened. The respondent also highlighted the need to get staff on-side in order to ensure that this consistency was achieved. While some schools reported that the correct sanctions were implemented as far as possible, acknowledging that it was difficult to be sure that this consistency was total, others reported a much more regular failure for

staff to implement the official sanctions, with the sanctions which were applied being dependent upon which staff member caught them:

SB: *Okay. In terms of, once pupils are caught smoking, I think you said about what would be done, what would be the normal procedure if a pupils is caught smoking?*

TR: *It depends who catches them really, to be honest. If it's someone who's got a fair amount of time on their hands then they will phone their parents and talk it through with them, if it's someone who's just busy they tend to turn a blind eye.*

SB: *Yeah, sure, sure. And how often do you think people would turn a blind eye, do you think that's quite a regular...?*

TR: *Yes, [I know it goes on?]. Or they go down make them put them out and make them, sort of, litter pick or something but it doesn't get dealt with as it should, as often as it should.*

School 04 (State, Eng)
Head of PSE, Female
(Lines 163-174)

The importance of individual staff attitudes in ensuring consistent enforcement was highlighted by School 23 (State, Eng) which had a well defined procedure in which different letters would be sent home, and different sanctions implemented depending on how many times a pupil had been caught smoking. However, this system relied on teachers who caught a pupil smoking, referring to the file where behaviour was recorded and sending the appropriate letter, which did not always happen. This was particularly the case with newer teachers, this emphasising again the point that communication of the sanctions procedure was crucial. This was echoed by the head of PSHE in School 33:

SB: *Sure. Okay. And the kind of sanctions that are enforced when pupils are caught smoking, are they quite consistently enforced would you say?*

TR: *Well this is something that we've got to look into, I personally was a, er, a year tutor a number of years*

ago, er, well about two years ago, and I was surprised last week that when I was talking to some year tutors they are following this procedure and others are just sending letters home, so I've raised this problem with the pastoral head and I'm now going to be invited to the next year tutor meeting to, er, make sure that these procedures are followed, I, and I think perhaps this is why, um, more pupils are smoking in school, not each year tutor [is?] are following the procedures, and if they just have a letter home, I don't think a lot of, er, that has a lot of effect.

School 33 (State, Eng) Head of PSHE (with responsibility for policy development) (Lines 136-147)

In some schools, inconsistency in staff application of sanctions meant that sometimes no sanctions were applied:

Yeah, it's on site, totally on, you know, no smoking on site, though, you know, we do have children who will smoke, um, and as far as possible if, if someone comes across someone smoking then they are given a detention, they are told to put their cigarette out, they are told, you know, obviously that, er, you know, smoke yourself to death somewhere else but don't do it where I've got to see you sort of thing.

School 14 (State, Eng) PSE Co-ordinator, Female (Lines 218-223)

Just like turning a blind eye to smoking when it is seen, the non-application of sanctions (where pupils know that they have "got away with it") effectively legitimised pupil smoking on site against policy. Such actions clearly undermined school policy and attempts to enforce it, sending out mixed messages to pupils.

It was apparent that there was between-school variation in the extent to which sanctions procedures were defined at the school-level. The Deputy Head of School 52 highlighted the importance of defined sanctions procedures for effective procedures:

...when you start, er, making guidelines up, or sorting and, and putting them in place I should say, um, you have, the only way that you make sure it works, it works is if people are consistent so every term we have to go through everything with the staff to make sure they understand what happens when, and this is not just for smoking but, you know, it's, er, if the pupils think that you're not being consistent, the system won't work whatever you're trying to do.

School 52 (State, Eng)
Deputy Head (Pastoral/PSE), Male
(Lines 359-365)

Some schools appeared to have very tightly defined sanctions procedures, sometimes with clear escalation procedures which it expected always to be followed. In contrast, in other schools these procedures appeared to be not as well defined, which sometimes led to staff being unsure as to what sanctions should be implemented and sometimes to this decision being made at an individual level. For example the respondent of School 54 was asked about the what the sanctions procedure was:

TR: *Well, it depends which teacher catches them.*

SB: *Right, so it would be dealt with by whoever catches them?*

TR: *Individualist, yeah.*

SB: *Okay. So there's no kind of procedure in place specifically for if you catch a smoker?*

TR: *No, no, no.*

SB: *Okay.*

TR: *Er, but, certainly they're not, they might be, often referred to the head of year but there isn't a specific procedure.*

School 54 (State, Eng) Health Education Co-ordinator, Female
(Lines 389-397)

In some schools, the responsibility for deciding on which sanctions to apply in any given situation appeared to be actively devolved to individual staff. This

clearly paved the way for inconsistent sanctions to be applied: even if the school had a portfolio of sanctions that staff knew they may use, there would likely be variation in how and when individuals saw fit to use them. In these cases, the decision appeared to be made at the middle-management level, arguably leading to less inconsistency than where decisions were left to individual staff:

> *SB:* *Right, right. Is there any sort procedure for deciding what the punishment should be or is that dealt with by the person who deals with the...?*
>
> *TR:* *It's really for the, you know, for the discretion of the head of year.*
>
> *School 49 (State, Cym) Deputy Head/PSE Co-ordinator, Female (Lines 353-356)*

While some respondents did not see this as problematic, others found it concerning. For example, the respondent in School 03 was worried about these trends in her school and was trying to standardise the approach to smoking misbehaviour:

> *Yeah, sanctions are, unfortunately really, almost, er, which is something I'm trying to fight against, almost left up to the individual head of year to deal with but I'm trying, I have been trying for a few years to get some sort of a common sanction, you know, and I, I have put some, er, sort of advisory, um, suggestions into place.*
>
> *School 03 (State, Eng) Health and Drugs Co-ordinator, Female (Lines 249-253)*

Where either sanctions were not well defined at the school level or where the school-level actively devolved responsibility for these decisions to individual members of staff it seemed that this sometimes led to inconsistent application of sanctions across the school.

In some schools, the type of sanction used appeared to vary between age groups, with some schools focussing a disciplinary approach on younger pupils and some on older pupils. For example, School 52 (State, Eng) reported that cessation was more likely to be targeted at younger pupils in order to modify the behaviour while they still could.

An interesting dilemma was raised where schools reported the need to take discretion over sanctions procedures due to the situation of the individual pupil caught smoking. A typical example of this was reported in School 13:

> *SB:* *Okay. And in terms of the consistency of that sanction process, is that quite a consistent laid down process, or is that...?*
>
> *TR:* *It is consistent laid down, and I think most of the time it's followed through, there are maybe one or two cases where if you know by contacting the parent, you'll make another problem worse, er, exacerbate another issue, then we have, er, bought favours from the kids with it or put money in the bank with them or whatever you want to call it so that, um, we're not completely hidebound by it but it's something we try and stick to, it's something we try and say isn't a bargain, er, it isn't a bargaining process.*
>
> *School 13 (State, Eng) PSE line manager/ Key Stage 4 manager (Lines 120-129)*

Sometimes it was more problematic to implement the sanctions procedure than not to. However, inconsistency undermined the policy. It seemed that there was a genuine tension in the implementation of policy between the need for consistency and the need to be able to make choices to move away from policy in some circumstances. These were likely to be uncommon circumstances, however and the ability to make this discretionary choice could be made part of the policy and therefore not a contravention of it. More problematic was where widespread inconsistencies in sanctions at the school and staff level existed and undermined policy enforcement.

7.3.2 Authority - who is applying the sanctions?

In Section 7.2.5 it was suggested that, due to their authority, more senior staff may be more prepared to act on smoking misbehaviour than other staff. Underlying this is an important point: there was a hierarchy of staff in all schools, with pupils reacting differently to different levels of authority. Generally, this ran from dinner controllers (non teaching staff who monitored pupils at lunch time) up to members of SMT. This generalisation was not universal, as authority was also tied to respect which could be commanded or lost by staff at all levels of seniority. Authority therefore, was arguably a combination of seniority and a staff member's individual relationship with pupils. Generally, pupils were more likely to respond to demands from staff with greater authority. And on the whole, this involved staff with increasing seniority. These notions were highlighted by the head of PSHE in School 33 (State, Eng), for example, who discussed dinnertime staff as ineffective, suggesting that they should be replaced by teaching staff. The importance of this was that clearly, the seniority of the staff member enforcing policy and applying sanctions may have influenced policy effectiveness. School 64 (State, Cym) provided an interesting insight into the potential importance of authority and the implementation of pupil smoking policy:

At the beginning of the interview, the respondent described how over the previous 8 months, pupils' smoking misbehaviour had been getting worse with more and younger children apparently smoking. When asked why this was the case, the deputy head replied that while it could be that they were just getting better at identifying it, she felt that it was more that pupils were getting "more blasé about it, whereas maybe in the past they maybe dabbled but, er, were more cagey about it." (lines 96-97). She continued that prior to the last 8 months:

> *There was more, people were more in awe, they did, they were more afraid of mentioning the fact that they smoked, now I feel that people are, there're, there's a, a nucleus of pupils who are, don't care really whether they smoke or not and, and there's no real worry from the parental point of view.*

School 64 (State, Cym) Deputy Head (Pastoral/PSE/Health), Female (Lines 100-104)

When asked why this change may have occurred, she put this down possibly to pupil personality. The interview progressed until the discussion turned to sanctions and she was asked whether she felt that these were just having no effect on this new hard core of more blasé smokers, to which she replied:

TR: *Well, um, it is improving...*

SB: *Right.*

TR: *... but, um, I think now we, we're beginning to get back there because there was, we've been through a, a bit of a difficult patch where our headmaster left, um, our deputy head left first, then our, our headmaster changed schools and, er, I was, as deputy was acting head and I felt that there weren't enough bodies of authority around school to make our voice known so, um, things are getting back into shape a bit now...*

School 64 (State, Cym) Deputy Head (Pastoral/PSE/Health), Female (Lines 387-394)

Suddenly, the respondent mentioned this loss of members of SMT, and drew a link between this lack of authority around the school, and the recent changes in smoking behaviour. This appeared to be reinforced by the fact that their parents appeared not to be worried that their children smoked, and so there was no, or minimal clamping down on this behaviour from these people of authority in their lives too. Although only anecdotal, this illustrated well the potential importance of having staff members with authority involved with the enforcement of pupil policy. Some schools escalated the responsibility for dealing with sanctions up the levels of seniority. Other schools left responsibility for this at one level, whether this was always SMT; always middle management or always individual teachers. However, while clearly taking advantage of the natural hierarchy of staff within a school, it seemed that such escalation of sanctions served only to reinforce the notions of a staff

hierarchy of authority. However, this hierarchy did exist and as such the seniority of the person dealing with those caught smoking against policy may be important.

7.4 The extent to which actions by role models support or undermine school smoking policies

7.4.1 Staff smoking misbehaviour

Table 7.4 shows that 12 schools (27%) reported staff transgressing the smoking policy. While smoking against policy only occured in 1 school (8%) with a partial ban, it occurred in over one third (34%, 11 schools) of schools with a total ban. Where this smoking misbehaviour did occur, like pupil smoking misbehaviour it tended to be in hidden places however, this was no guarantee that pupils were not aware that it took place.

Table 7.4 Reported staff smoking misbehaviour by staff smoking restrictions

	Restricted staff s moking	Staff smoking ban
No staff smoke against policy	13; 15; 16; 18; 26; 27; 32; 47; 49; 50; 52;	01; 03; 04; 07; 08; 09; 14; 19; 23; 29; 33; 36; 38; 39; 55; 56; 61; 62; 63; 64; 66
Staff do smoke against policy and places they do this	25 *(one member of staff in her teaching room)*	06 *(one staff and caretaker in caretaker's office)* 10 *(staff in boiler house)* 31 *(staff in cubby holes)* 34 *(some staff very rarely after school in car park)* 35 *(some staff in store rooms occasionally)* 37 *(staff in out of the way places)* 40 *(some staff in their cars in the car park – none in the school since staff smoking caused a fire and a change in policy)* 48 *(staff allowed to smoke outside in places out of bounds to pupils)* 54 *(one did and it was dealt with, now staff smoke in their storerooms)* 57 *(teaching staff do not but caretaker does in his room)* 58 *(one staff member in a room attached to their teaching room but not during school hours)*

Not only did staff smoke against policy but the data also suggested that there was inconsistency in picking up this misbehaviour. While some schools reported that staff smoking misbehaviour was dealt with when identified, other schools looked the other way and allowed this to happen. For example, while School 06 (State, Eng) was a smoke-free campus, two or three staff had created their own smoking area in the caretaker's office, which had, the Assistant Head Teacher said, "basically become the designated smoking zone" (line 300). The school didn't implement any sanctions for this behaviour, and when asked if they had any plans to deal with this situation, the respondent said:

> *Um, [pause] we are possibly gonna look at putting some kind of ventilation there and making it an area which would be the smoking area if you see what I mean, um, but we haven't finally decided on that yet.*

School 06 (State, Eng)
Assistant Head Teacher, Male
(Lines 309-311)

In effect, the staff smoking misbehaviour had been legitimised by the school and in turning this into an official smoking area, the behaviour was effectively rewarded. When questioned further about this, the respondent indicated that the attitudes of SMT were important in dictating school attitudes towards smoking misbehaviour :

> *...the problem we've got is the no smoking policy was drawn up with a senior management team all of whom have left, and there's a new senior management team which has only been in place for about eighteen months, and it's not one of the priorities that they've got to, to be honest with you, um, so it, it isn't an issue with staff in that we feel we have to take disciplinary action at the moment, we've got two maybe three staff who go to the caretaker's room and smoke, one who goes on a daily basis, the other two on an ad hoc basis basically, so it's not a major issue for us at the present time.*

(Lines 318-326)

Not only did some figures of authority sometimes turn the other way, but the direct abuse of policy by these figures was also reported in some schools. For example, in School 26 staff were only allowed to smoke in a dedicated smoking room, however until recently one senior member of staff had regularly broken this policy:

SB: *we had a member of staff who re-, who retired recently and he was a pipe smoker, and, er, he was a very senior member of staff who had his own office and sometimes he would close the door and open the window and, and, er, he, he'd say well, there, there you are, you know, and I've been here years and years and years, I, I, you know, [I mean?] on your bike sort of thing [laughs] you know-*

SB: *[Laughs] Yeah.*

TR: *- and, and we'd sort of tolerated that a bit but, er, he, he had an office in a, in a sort of remote part of the school...*

School 26 (State, Eng)
Assistant Head, Male
(Lines 459-468)

In Section 6.3.3 it was demonstrated that schools did not go back against a trend of increasingly restrictive policies. It was apparent, however, that illicit policies sometimes countered this trend. For example, the respondent in School 62 (State, Eng) reported that the school had an "ostrich policy" (line 353). While the school was no smoking, staff smoked in an art room. Feeling that staff would do this somewhere, and because the room was not a visible place, the school had buried their head in the sand and ignored the problem, allowing this smoking area to become semi-legitimate. This room, which appeared to have fallen out of use as no members of staff were currently smokers was allowed, against policy, by the deputy head taking part in the interview (although he questions whether the head ever knew about this). The result was a dual policy: an official stance where staff were not allowed to smoke on site and an unofficial one where staff were allowed to smoke on site. School 26 was considering going one step further and, by adding ventilation to the unofficial smoking area, making it more official. It would be interesting to see whether this room found its way back into official policy. If it did, this would provide an exceptional example where a school was loosening its smoking restrictions. All of these examples highlighted the influence of SMT over the school's attitudes towards smoking and smoking behaviour, by their enforcement (or not) of staff policy.

During the interviews, it very quickly became clear that monitoring of staff smoking misbehaviour, was not perceived to be as necessary as monitoring pupils, to the extent where it often hadn't been considered. Very often, there even appeared a sense of resistance to this question being asked which seemed to be underlain by the sense that staff are a professional group of people who should be trusted to adhere to policy. Respondents were much happier responding to questions on monitoring of pupils than monitoring of their

colleagues. Across all schools, there was a notable difference in perceptions of monitoring staff smoking misbehaviour (deemed unnecessary) to pupil smoking misbehaviour (deemed necessary). This appeared to be based on the fact that staff were adults, who should be trusted to follow policy whereas pupils were less responsible with a tendency to break policy. Of the 8 schools were there was definite data on monitoring staff smoking misbehaviour, several methods were reported (Table 7.5)

Table 7.5 Methods used to identify staff smoking misbehaviour

	Restricted Staff Smoking	Staff Smoking Ban
Pupils report staff smoking	16	54
Staff are told to stop if they light up	18	
Smoke detectors		38
Other staff report it		64
No monitoring of staff smoking misbehaviour		14; 62; 63

Aside from the use of smoke detectors, all of these were fairly reactive, as opposed to proactive methods. In addition, it was interesting to note that schools that said that they do not monitor staff smoking misbehaviour all had a total ban for staff.

Few schools monitored staff smoking misbehaviour, and only some implemented sanctions where it was identified (Section 6.8.2). However, while sanctions seemed few and far between, staff smoking misbehaviour did occur. Where schools turned a blind eye to this, the smoking misbehaviour was legitimised. It is arguable that this undermined the policy, sending out inconsistent and mixed messages to pupils as well as staff. Ultimately, inconsistencies in enforcing staff smoking policy may not impact only on staff but also on the pupils and their perceptions of the school's attitudes towards smoking. In doing so, this may impact on the effectiveness of pupil policy in addressing smoking misbehaviour.

7.4.2 Parental attitudes

One of the biggest role-models and influences in most adolescents' lives is, arguably, their parents or guardians. The consequent importance of getting parents on-side to promote a unified non-smoking message between school and home has been suggested (Turner & Gordon, 2004a). It was reported that most parents supported this message, however, occasions were reported where the message from home was clearly in contrast to that from school. In these cases, the home message could undermine the health messages being conveyed by the school:

> *I mean, sometimes you're hitting your head against a brick wall when the parents buy the cigarettes for them.*
>
> *School 01 (State, Eng) Assistant Head (Pastoral), Female*
> *(Lines 398-399)*

These occasions were infrequent but they did occur. Sometimes this clash of messages was more obvious than others. The assistant head of School 07 reported an occasion when he gave back some confiscated cigarettes to a pupil's father:

> *SB:* *Yeah. Okay, okay. In terms of parents of the children, where you take action against smoking, do you find they're generally supportive of that?*
>
> *TR:* *[Laughs] Um, generally's a good word there, um, some are, some aren't, um, I've, er, confiscated cigarettes from pupils and returned them to the father at the end of the school day and then, er, no sooner have I given them back to the father then the father and the son are having a cigarette in the car outside the school gate.*
>
> *School 50 (State, Eng) Assistant Head / Head of Guidance, Male*
> *(Lines 519-525)*

In this case, not only was the message of the school undermined, but this was symbolised through an apparently very deliberate action. By taking the cigarettes that the assistant head had confiscated from the pupil, and then not only returning them to the pupil within sight of the school but also lighting up and smoking with them, a very clear statement was being made regarding the father's thoughts on the school's actions. For the son, the smoking behaviour was condoned and reinforced, undermining any health message that the school was promoting.

Generally schools felt that parents were supportive of the no-smoking message and school sanctions for pupil smoking misbehaviour. However, these examples demonstrated the importance of parents in supporting or undermining school smoking policy.

7.4.3 Other adults on site

As discussed in Section 6.3.4 there were other people whose work means that they played a part in school life, and their actions were also important in supporting school policy. In particular, cleaning staff had a role to play with schools reporting that their smoking behaviour sometimes undermined school policy:

SB: *And you mentioned also cleaning staff as well do.*

TR: *Yeah and the cleaning staff, [er/yeah?], but they do it openly [laughs].*

SB: *Right, so whereabouts would they do that?*

TR: *Problem is that they actually, they actually smoke in the, er, the entrances to the school so the first smell that you have when you walk through the school is cigarette smoke [laughs].*

School 03 (State, Eng)
Health and Drugs Co-ordinator, Female
(Lines 487-493)

As discussed in Section 6.3.4 sometimes these staff were covered by the school policy but transgressed it, other times they were subject to a different policy. Where cleaning staff are sub-contracted by a cleaning company, it appeared possible that this could sometimes, but not always, make addressing smoking misbehaviour more difficult. Some schools reported that they were not concerned about cleaning staff smoking as they where on site after school, however pupils are often on site after school too, particularly where school buildings are used for school and non-school activities after school hours.

The use of school buildings by others out of school hours was also potentially an issue where pupils also used these facilities. In Section 7.2.4.2, the example of School 07 was cited, where pupils attending an evening youth club on the school site (but not run by the school) were allowed to smoke outside the buildings on the school site in the evenings, although they were not allowed to do this during school hours. Such contradictions in policy served to undermine school smoking policy.

Smoking on school buses has been identified as an issue, particularly in relation to the school's jurisdiction. School bus drivers were also members of the WSE and often the bus driver was seen as the authority figure on the school buses. Some schools reported, however, that some bus drivers undermined the no-smoking on the bus policy by ignoring it. In some cases this was due to the driver feeling that they had little or no authority over pupils, being low down in the hierarchy of seniority that has been referred to. However, some drivers were reported to deal with this, even if it was by bringing the bus back to the school. In School 07 drivers were reported to allow pupil smoking on the buses in order that they could get away with it themselves:

> *We do get bus drivers smoking when they're not supposed to, we take that up with the bus companies, the parents complain about that because all the buses, all the school buses are supposed to be non smoking, um, but occasionally the drivers themselves smoke and smoke when they're driving and allow the children to smoke because obviously, it's a sort of tit-for-tat thing isn't it,*

you know, if the driver dobs on the children then they will dob on him.

School 07 (State, Eng)
Head, Female
(Lines 227-233)

It should be noted that this referred only to dedicated school buses: problems on public buses that pupils used to commute to school were a different issue.

These examples highlighted the important role that many members of the WSE played in either supporting or undermining the school smoking policy.

7.5 Developing an indicator variable to describe the supportiveness of the WSE towards school smoking policy

Many of the themes outlined above emerged as important through analysis of the data. Consequently, while these signpost potential topics for future policy analysis, it was not possible to use these directly to devise an indicator describing the extent to which the WSE in each school appears to support or undermine the school smoking policy. Instead, Table 7.6 shows the classifications devised to represent the supportiveness of the WSE using the two enforcement-level characteristics on which there were data for most schools:

Table 7.6 Classification of the supportiveness of the WSE

Level	Description
3	**WSE appears to be highly supportive of school smoking policy:** staff rarely turn a blind eye to pupil smoking AND there is rarely any smoking misbehaviour by staff
2	**WSE is generally supportive of school smoking policy:** either staff often turn a blind eye to pupil smoking OR there is often smoking misbehaviour by staff
1	**WSE appears to often undermine school smoking policy:** staff often turn a blind eye to pupil smoking AND there is often smoking misbehaviour by staff

Turning a blind eye to pupil smoking referred to staff ignoring pupils smoking behaviour where they saw it. This was used as a measure of the supportiveness of the WSE towards policy because it could be seen as legitimising pupil smoking misbehaviour and therefore undermining the pupil smoking ban. This argument is supported in Section 3.2.5. Staff smoking misbehaviour was used as a measure of the supportiveness of the WSE because it could also be seen as undermining the policy. As this indicator was concerned with the extent to which the WSE supported the existing policy, staff smoking misbehaviour was defined as staff smoking against policy (i.e. smoking on site when there was a ban or smoking in places other than those designated within a policy that restricts smoking). "Staff" in this indicator referred just to teaching staff, as there was more consistent data on them across schools. A reading of each school interview was used to categorise schools into the indicator shown in Table 7.7.

Table 7.7 Indicator variable describing supportiveness of the WSE towards school smoking policy

Level	Description	Schools	Number of schools	%[1]
3	WSE appears to be highly supportive of school smoking policy	01; 07; 08; 13; 14; 15; 16; 19; 23; 26; 33; 36; 38; 39; 47; 49; 52; 55; 56; 57; 62; 63; 64; 66	24	59
2	WSE is generally supportive of school smoking policy	04; 09; 10; 29; 32; 34; 35; 48; 50; 61	10	24
1	WSE appears to often undermine school smoking policy	03; 06; 31; 37; 40; 54; 58	7	17

[1]Percentage of 41 schools no data on schools 18; 24; 25; 27; 44

7.6 The policy context: developing an indicator variable to describe the overall consistency of no-smoking message produced by each school

Policy-level characteristics and the WSE were all part of the school approach to smoking policy. To reflect this, the indicators describing both were combined in order to give an indicator which described the overall consistency of no-smoking message produced by each school. To do this, first the three level variable in Table 7.6 was re-classified into the same 2-level classification used to describe the extent to which policy-level characteristics supported the production of consistent no-smoking messages (Table 6.37). This was reclassified as shown in Table 7.8. The justification for this reclassification was based on the notion that in levels 1 and 2 of the WSE variable (Table 7.6), smoking policy was undermined to some extent, therefore also undermining any messages about no-smoking that may be contained within the policy and therefore also undermining the production of consistent no-smoking messages. The classification of schools into this indicator can be seen in Table 7.9.

Table 7.8 Reclassification of supportiveness of WSE indicator

Level	Consistent messages level	Supportiveness of WSE level
2	Tends to support the production of consistent no-smoking messages	WSE appears to be highly supportive of school smoking policy
1	Tends to undermine the production of consistent no-smoking messages	WSE is generally supportive of school smoking policy AND WSE appears to often undermine school smoking policy

Table 7.9 Indicator showing supportiveness of WSE towards consistent no-smoking messages

Level	Consistent messages level	Schools	Number of schools	%[1]
2	Tends to support the production of consistent no-smoking messages	01; 07; 08; 13; 14; 15; 16; 19; 23; 26; 33; 36; 38; 39; 47; 49; 52; 55; 56; 57; 62; 63; 64; 66	24	59
1	Tends to undermine the production of consistent no-smoking messages	03; 04; 06; 09; 10; 29; 31; 32; 34; 35; 37; 40; 48; 50; 54; 58; 61	17	41

[1] Percentage of 41 schools as no data on schools 18; 24; 25; 27; 44

In order to get an overall score as to whether each school tended to support or undermine the production of no-smoking messages (i.e. the policy context), the indicators for policy-level characteristics (Table 6.38) and enforcement-level/WSE characteristics (Table 7.9) were combined and schools classified as to whether both, one or neither of these two characteristic-levels support consistent no-smoking messages (Table 7.10). This was the policy context.

Table 7.10 Policy context: indicator variable to describe the overall consistency of no- smoking message produced by each school (i.e. the policy context)

Level	Description	Schools	Number of schools	%[1]
3	**High consistency:** both policy-level characteristics and the WSE tend to support consistent no-smoking messages	01; 07; 08; 14; 19; 23; 33; 38; 39; 55; 62; 63; 64; 66	14	34
2	**Medium consistency: one** of policy-level characteristics or the WSE tend to support consistent no-smoking messages **but** the other tends to undermine them	04; 09; 10; 13; 15; 16; 26; 29; 31; 35; 36; 37; 47; 48; 49; 52; 54; 56; 57; 58; 61	21	51
1	**Low consistency:** both policy-level characteristics and the WSE tend to undermine consistent no-smoking messages	03; 06; 32; 34; 40; 50	6	15

[1]Percentage of 41 schools no data on schools (18; 24; 25; 27; 44)

7.7 Naturalisation or prioritisation: the status of school smoking policies

While conducting and analysing interviews, it became apparent that the status of smoking policy varied between schools. This variation could be broadly summarised as a dichotomy which was useful to consider given the variation in approaches to policy and its enforcement. On one side of this dichotomy were schools where smoking was treated as an important issue which was **prioritised** and policy and policy enforcement reflected this. On the other side were schools where smoking, smoking policy and its enforcement appeared to have a much lower priority. In extreme cases, policy appeared to have become **naturalised** into the school environment. The term naturalised was used because in these schools, the policy (e.g. pupils should not smoke in school) had become a part of the WSE to the extent that it was no longer salient but was, instead, taken for granted or assumed:

...nobody's ever asked if this is a no smoking area, you know, it's, it's just taken for granted.

School 56 (State, Cym), PSE Co-ordinator, Male
(Lines 217-218)

The most striking thing about these attitudes towards smoking was the fact that smoking had almost become a forgotten or invisible issue. Smoking policies had become such a part of the fabric of school life, that it was felt that they did not need to be articulated. In other words, there was an often explicit assumption that everybody knew what the school smoking policies were. This was especially commonly reported for pupil smoking policies. In other words, for example, it was 'common sense' that pupils should not smoke in school therefore it did not need to be said (see Section 6.3.2) as demonstrated by the following respondent while discussing the introduction of the school's smoking ban:

Um, staff were allowed to smoke, **obviously pupils weren't allowed to smoke**, but, er, staff were allowed to smoke.

School 33 (State, Eng), Head of PSHE(with responsibility for development of smoking policy), Female
(Lines 196-197 – author's emphasis)

While this naturalisation of policy was most common for pupil policy, it also happened to staff smoking policies. Sometimes it was assumed that all staff 'just know' what the policy was regarding them. For example, when asked about where policy was written for staff and pupils, the deputy head of School 23 said:

Er, it's written down in, um, the pupil handbooks, er, and, er, it's just, er, understood by staff.

School 23 (State, Eng), Deputy Head
(Pastoral - with responsibility for policy development),
Male
(Lines 256-257)

Naturalisation appeared to occur because smoking policy had been in place, unchanged, for a long period of time. As one respondent said:

> *...when policies are long embedded, and people are used to them, I think one of two things can either happen, it can either be completely forgotten about, and people have forgotten they were ever there in the first place, or they can become extremely easy to implement, and very self-sustaining because nobody ever questions them...*
>
> *School 38 (State, Eng) Head*
> *Teacher (with responsibility for*
> *policy), Male*
> *(Lines 514-518)*

It could be argued that if smoking policy had become an assumed part of everyday school life, this suggested that it was commonly understood and accepted as a part of school life: an achievement which may have heralded greater compliance. However, the term naturalised policy was not used to describe such a situation. Instead, it described schools where policy had become taken for granted or assumed to the extent that stating and defining the policy appeared to be of little concern to the school which saw the policy as obvious. The idea that naturalisation occurred where policy had been in place for a long time was further supported by the fact that this attitude was much more common regarding pupil smoking than staff smoking with (ubiquitous) pupil smoking bans having already been shown to be much older than staff smoking bans to the point they are seen as 'obvious' (Section 6.3.2). Data suggested that there were two general reasons as to why this naturalisation had occurred:

1. *There was little apparent problem with smoking in a school*
2. *Smoking was low on the list of priorities within a school*

In the first scenario, smoking had become a low priority because the school had little apparent problem with smoking on site and there was no large-scale problematic behaviour to raise the profile of policy. It was felt that all members of the school knew what the policy was, largely abided it and consequently, smoking policy was seldom, if ever, considered. However, as School 36 demonstrated, it was possible that as soon as this apparent harmony was broken, smoking policy might step out of the shadows of the routine of daily structures and become reconceptualised as being important. At the beginning of the interview, it was clear that smoking policy was taken for granted:

> *Well, to be honest, um, this is very small school, um, we, we just assume nobody smokes within the school, we, we're such a small school that we keep tabs on everything, you know, we don't have a smoking policy as such, except that it's not allowed.*
>
> *School 36 (Ind, Eng),*
> *Teacher in charge of PSE,*
> *Female*
> *(Lines 87-90)*

However, it then transpired that the recent discovery of smoking among year ten and sixth form pupils both on the school premises and in a lane just offsite (leading to an increase in staff patrols of this area), had caused a certain amount of turmoil within the school; a re-conceptualisation of smoking policy as important and a re-evaluation of the school's ethos regarding smoking and how it was approached:

TR: *You know, we're looking at all these different things now, since all this has come about.*

[Break in text]

SB: *...is there anything, before we finish, that you think you would like to add regarding smoking or smoking policy in your school or in general?*

TR: *Well, I would just like to tell you that, you know, this has made us think about, when you've actually had to say things like not having a written no-smoking policy, um, we are actually looking into getting signs throughout the school and we are sort of thinking about how we're going to cope with this little problem that has sort of emerged over the last few weeks, you know, so we are sort of very aware and we are on to this now, so we're looking, probably be looking from, for some advice from somewhere, or to see what other schools do, you know? Cos we've not had this problem before, and it's a particular group of girls, you know that are causing, they cause problems with other things as well but, um, you know, and, and I'm, I'm sure a lot of them smoke outside the school, you know, but, er, yeah, so I've nothing really else to say about that.*

School 36 (Ind, Eng),
Teacher in charge of PSE,
Female
(Lines 583-584; 600-615)

In the second scenario, naturalisation and the taking for granted of the policy occurred where smoking was a long way down the list of priorities in a school. Where other problems had become prominent, smoking had become unimportant and passé, an issue of yesterday subsumed by 'harder' drugs; healthy eating; bullying; truancy or other problems. Occasionally, respondents seemed to convey a sense that the research was wasting its time with an out-of-date issue not worth considering. Sometimes, this de-prioritising of smoking and smoking policy also appeared to be related to policy fashions. Many policies competed for attention within schools and at any moment in time it appeared as though there was a 'hot issue' that schools were addressing (at the time of writing, in Welsh schools the vogue policy is healthy eating) which may be dictated by local priorities as well as governmental or popular pressure and interactions between them. It was not only other health issues that push smoking down the list of importance, but issues such as truancy, absenteeism and general discipline might also dominate smoking policy within a school. During the research, it often felt as though policy related to smoking was just not in vogue at this time. Where it was still covered under generic drugs policies, schools sometimes seemed to be more interested in those other

drugs (particularly where smoking involves cannabis rather than only tobacco) than in tobacco:

> *And I mean I, and I think probably, they would know, if they were caught with drugs, they would know, if they were caught with alcohol, they would know that they would be, the, the punishment would be far more severe than if they were caught smoking.*
>
> *School 26 (State, Eng),*
> *Assistant Head, Male*
> *(Lines 525-528)*

Clearly, the school policy status dichotomy presented here was a generalisation and schools lay on a spectrum between the two. However, this dichotomy provided a useful context for understanding between-school variation in school smoking policies.

-8-

Analysis of indicator variables

8.1 Introduction: collaboration on statistical analysis

Chapters 6 and 7 described the analysis of interview data on school smoking policy that achieved Research Objective 2 (Section 3.5.1). These chapters also described the creation of indicator variables to summarise policy- and enforcement-level characteristics suggested as important to policy effectiveness in Welsh schools to achieve Research Objective 3. These indicators are summarised in Table 8.1. The following chapter outlines the analysis of these variables in association with Year 10 and 11 pupil data collected via HBSC data (see Table 1.1) that achieved Research Objective 4 and helped address its secondary Research Objectives. To do this, the analysis aimed to compare the extent to which any of the indicators outlined in chapters 6 and 7 and summarised in Table 8.1 were associated with self-reported pupil smoking behaviour. It should be noted that due to small numbers in each level, the staff and pupil policy dissemination indicators have been collapsed from 4 levels into 2. In each case, levels 1 (school uses no methods) and 2 (school uses just unwritten methods) were collapsed to create the new **level 1 (school does not use written dissemination methods)** and levels 3 (schools use just written methods) and 4 (schools use written and unwritten methods) were collapsed to form the new level **2 (school does use written dissemination methods)**. It should also be noted that, for the purpose of statistical analysis, it was decided to remove the 3-level variable describing the extent to which the WSE is supportive of the school smoking policy and use instead, only the 2-level indicator describing the extent to which the WSE supports consistent no-smoking messages. This was because in order to get the 2-level variable, the 2 levels of the 3-level variable were collapsed into one level making these very similar variables. As a result, the one with more observations in fewer categories was used.

For the sake of transparency, the collaboration over this part of the analysis is reiterated at this point. The author independently collected interview data on policy contexts, and analysed these in order to develop an understanding of policy- and enforcement-level characteristics, and to develop summary indicator variables to describe them. Having done this, in order to build on the work of Moore *et al* (2001), statistical analysis of these variables based in better quality data and describing policy context in more detail was done in conjunction with Dr Nora Wiium and Professor Laurence Moore, who are experienced statisticians and users of multi-level modelling techniques and who are collaborating with the author on publications emerging from statistical analysis based upon his qualitative findings. It is the intention of the author that the existence of collaboration at this stage of the thesis and presentation of these results alongside the qualitative findings in order to maximise research findings, is transparent throughout this thesis.

Table 8.1 Summary of school-level policy variables included in analysis

Indicator type (chapter)	Indicator	Levels
Policy- level characteristics (Chapter 6)	Policy restrictions	2. School has both pupil and staff smoking bans 1. School has pupil smoking ban but staff allowed to smoke in restricted areas
	Policy formality	3. Both staff and pupil smoking policies are written 2. One of the staff or pupil policies is written, and one is unwritten 1. Neither staff or pupil smoking polic ies are written
	Staff policy rationale	2. Health is a factor in the rationale behind school staff smoking policy 1. Health is not a factor in the rationale behind school staff smoking policy
	Introducing staff policy	2. School tended to use **consultative** approaches when introducing more restrictive staff smoking policies 1. School tended to use **prescriptive** approaches when introducing more restrictive staff smoking policies
	Disseminating pupil policy	2. School **does** use written dissemination methods 1. School **does not** use written dissemination methods
	Disseminating staff policy	2. School **does** use written dissemination methods 1. School **does not** use written dissemination methods
	Sanctions for pupils breaking policy	2. Schools tends towards the inclusion of health in their sanctions 1. School tends towards disciplinary sanctions
	Policy supportiveness of consistent no-smoking messages	2. Policy-level characteristics tend to support the production of consistent no-smoking messages 1. Policy-level characteristics tend to undermine the production of consistent no-smoking messages
Enforcement-level characteristics / WSE (Chapter 7)	WSE supportiveness of policy	3. WSE appears to be highly supportive of school smoking policy 2. WSE is generally supportive of school smoking policy 1. WSE appears to often undermine school smoking policy
	WSE supportiveness of consistent no-smoking messages	2. Tends to support the production of consistent no-smoking messages 1. Tends to undermine the production of consistent no-smoking messages
Policy context (Chapter 7)	School supportiveness of consistent no-smoking messages (i.e. policy context)	3. **High consistency:** both policy-level characteristics and the WSE tend to support consistent no-smoking messages 2. **Medium consistency: one** of policy-level characteristics or the WSE tend to support consistent no-smoking messages **but** the other tends to undermine them 1. **Low consistency:** both policy-level characteristics and the WSE tend to undermine consistent no-smoking messages

Note: as explained in chapters 6 and 7, the higher numbers reflect the classifications of policy assumed to be the most effective

8.2 Analysis of the associations between policy and adolescent smoking behaviour

8.2.1 Analysis of the association of indicator variables describing policy- and enforcement-level characteristics with pupil smoking prevalence

In each analysis, alongside weekly and daily smoking prevalence, daily smoking on school premises was also included to investigate the possibility raised within the literature that policy may push smoking behaviour off site rather than reduce prevalence (Gordon & Turner, 2003a; Northrup *et al,* 1998; Pentz *et* al, 1998; Turner & Gordon, 2004a). Prevalence figures were derived from HBSC questions (Table 8.2). Pupils stating that they smoked at least once a week but not every day were classified as weekly smokers in general; those stating that they smoked every day were classified as daily smokers in general and those that said they smoked on the school premises during school hours every day were classified as daily smokers on the school premises.

Table 8.2 HBSC questions used to derive pupil smoking prevalence figures

Question	Responses
How often do you smoke tobacco at present? (Please tick ONE box only)	*Every day* *At least once a week, but not every day* *Less than once a week* *I do not smoke*
How often do you smoke tobacco on the school premises during school hours? (Please tick ONE box only)	*Every day* *More than once a week* *Occasionally* *Never*

Initial cross-tabulation of each indicator against smoking prevalence allowed assessment of which indicators it would be worth pursuing further in the analysis (Table 8.3).

Table 8.3 Prevalence of daily smoking, weekly smoking and daily smoking on the school premises within the levels of each policy-level variable (95% confidence intervals)

	Weekly smoking in general (%)	Daily smoking in general (%)	Daily smoking on school premises (%)
Policy restrictions			
2. Total ban (31 schools, 1313 pupils)	21.9 (18.2 to 25.5)	16.4 (13.0 to 19.7)	8.6 (5.9 to 11.4)
1. Restricted teacher smoking (14 schools, 612 pupils)	23.0 (17.2 to 28.9)	18.6 (12.8 to 24.4)	11.7 (6.3 to 17.1)
Policy formality			
3. Both written (11 schools, 459 pupils)	23.1 (16.5 to 29.7)	16.6 (10.6 to 22.5)	6.3 (2.7 to 9.9)
2. One written (18 schools, 818 pupils)	19.6 (15.1 to 24.0)	14.9 (10.4 to 19.5)	9.0 (4.5 to 133.5)
1. None written (3 schools, 117 pupils)	13.7 (-13.4 to 40.7)	12.0 (-11.5 to 35.5)	8.6 (-9.8 to 27.0)
Staff policy rationale			
2. Health is a factor (23 schools, 1010 pupils)	23.2 (18.9 to 27.4)	17.5 (13.7 to 21.3)	9.1 (5.9 to 12.4)
1. Health is not a factor (17 schools, 721 pupils)	21.1 (15.9 to 26.2)	16.0 (10.9 to 21.0)	9.3 (4.5 to 14.1)
Introducing staff policy			
2. Consultative (14 schools, 611 pupils)	23.1 (16.6 to 29.5)	16.7 (10.6 to 22.8)	9.5 (4.2 to 14.8)
1. Prescriptive (10 schools, 412 pupils)	22.1 (14.3 to 29.9)	16.3 (10.1 to 22.4)	8.5 (3.9 to 13.1)
Disseminating pupil policy			
2. Written methods (24 schools, 1040 pupils)	20.9 (17.0 to 24.8)	15.0 (11.7 to 18.3)	6.7 (4.4 to 9.0)
1. No written methods (17 schools, 730 pupils)	23.8 (18.1 to 29.6)	19.2 (13.5 to 24.9)	13.3 (8.0 to 18.7)
Disseminating staff policy			
2. Written methods (23 schools, 955 pupils)	22.8 (18.3 to 27.4)	17.4 (12.9 to 21.8)	8.8 (5.1 to 12.6)
1. No written methods (12 schools, 556 pupils)	20.1 (14.0 to 26.2)	15.1 (10.2 to 20.0)	9.0 (4.7 to 13.4)
Pupil sanctions			
2. Tend towards health (18 schools, 739 pupils)	24.4 (19.4 to 29.3)	18.1 (13.6 to 22.7)	8.0 (5.1 to 10.8)
1. Tend towards disciplinary (25 schools, 1097 pupils)	20.3 (16.2 to 24.5)	15.7 (11.7 to 19.6)	10.3 (6.3 to 14.3)
Policy supportiveness of consistent no-smoking messages			
2. Supports messages (24 schools, 1004 pupils)	23.2 (19.0 to 27.5)	17.2 (13.3 to 21.2)	8.8 (5.6 to 12.0)
1. Undermines messages (19 schools, 832 pupils)	20.4 (15.5 to 25.3)	16.0 (11.4 to 20.6)	10.0 (5.5 to 14.5)
WSE supportiveness of consistent no-smoking messages			
2. Supports messages (23 schools, 993 pupils)	20.6 (16.1 to 25.2)	15.9 (11.7 to 20.1)	8.2 (4.5 to 11.9)
1. Undermines messages (17 schools, 711 pupils)	23.1 (18.9 to 27.2)	16.7 (13.1 to 20.4)	9.7 (6.8 to 12.6)
School supportiveness of consistent no-smoking messages			
3. High consistency (13 schools, 550 pupils)	23.3 (16.7 to 29.8)	18.4 (11.7 to 25.0)	8.4 (2.7 to 14.1)
2. Medium consistency (21 schools, 897 pupils)	20.3 (15.7 to 24.9)	14.4 (10.9 to 17.9)	8.6 (5.7 to 11.5)
1. Low consistency (6 schools, 257 pupils)	23.0 (17.5 to 28.4)	18.3 (10.8 to 25.8)	10.5 (2.7 to 18.3)

This initial cross-tabulation revealed that for some indicators there appeared to be either no clear pattern in how smoking prevalence is distributed across the levels of the indicator, or no pattern that is repeated across all categories of smoking prevalence. In other words, it was apparent that there was no association between these policy characteristics and lower levels of smoking prevalence. For example, it was expected that written dissemination of both policies would lead to more awareness of policy and therefore of any no-smoking messages contained within it and would therefore be associated with lower smoking rates. However, cross-tabulation showed that where both staff and pupil policies were written 23.1% of Year 10 and 11 pupils reported being weekly smokers; where one was written 19.6% reported weekly smoking and in schools where none were written the fewest pupils reported being weekly smokers (12.7%). Additionally, the association of policy formality with prevalence shows 6.3%, 9% and 8.6% reporting of weekly, daily and daily on-site smoking respectively. Only 2 individual policy-level indicators show any trend in the expected direction across all 3 prevalence categories. Higher smoking prevalence was associated with both weaker *policy restrictions* (i.e. schools where staff are allowed to smoke in restricted areas) and with weaker *pupil policy dissemination* (i.e. no use of written methods). No other individual policy-level variables demonstrated trends (either in expected or unexpected directions) across all prevalence categories.

In addition, the enforcement-level compound variable describing the overall supportiveness of the WSE towards consistent messages demonstrated a trend in the expected direction with a WSE that undermines consistent no-smoking messages being associated with higher smoking prevalence across all three prevalence categories, than a WSE that supports consistent no-smoking messages.

Due to these findings, further statistical analysis was only conducted on five variables. These included the three variables described above as demonstrating trends across all three prevalence categories (*policy restrictions; disseminating pupil policy* and *WSE supportiveness of consistent no-smoking messages*). In addition, the two other compound variables, one at the policy-level (*policy*

supportiveness of consistent no-smoking messages) and one at the overall policy-context level (*school supportiveness of consistent no-smoking messages*) were also included in further analysis due to the fact that they were stronger variables being based on several policy characteristics odds ratios were then calculated for these indicators (Table 8.4). These indicators were subjected to a multilevel logistic regression analysis against weekly smoking, daily smoking and daily smoking on the school site. These odds ratios were constructed in a univariable model (i.e. no other variables were adjusted for) with each indicator being analysed against prevalence independently of the other indicators. For each indicator, the level assumed to be the strongest policy characteristic was used as the reference category (i.e. value = 1) with odds ratios showing the comparative likelihood of being a weekly, daily or daily on the school site smoker across the other levels of the indicator. Any value above 1 for a level of an indictor meant that pupils in schools with this policy characteristics were relatively more likely to smoke compared to the reference category. Any value below 1 meant pupils are less likely to smoke.

Table 8.4 Pupil smoking behaviour: unadjusted odds ratios (95% confidence intervals) for school level variables from multilevel logistic regression (N = 1941)

	Weekly smoking in general		***Daily smoking in general***		***Daily smoking on school premises***	
	OR	*(CI)*	*OR*	*(CI)*	*OR*	*(CI)*
Policy restrictions						
Total ban	1.00		1.00		1.00	
Restricted teacher smoking	1.06	(0.72 to 1.57)	1.17	(0.74 to 1.85)	1.37	(0.70 to 2.68)
Disseminating pupil policy						
Written methods	1.00		1.00		1.00	
No written methods	1.19	(0.81 to 1.76)	1.35	(0.86 to 2.12)	2.16	(1.13 to 4.10)
Policy supportiveness of consistent no-smoking messages						
Supports messages	1.00		1.00		1.00	
Undermines messages	0.81	(0.56 to 1.19)	0.87	(0.56 to 1.36)	1.00	(0.50 to 1.97)
WSE supportiveness of consistent no-smoking messages						
Supports messages	1.00		1.00		1.00	
Undermines messages	1.17	(0.80 to 1.71)	1.07	(0.69 to 1.66)	1.32	(0.67 to 2.58)
School supportiveness of consistent of no-smoking messages						
High consistency	1.00		1.00		1.00	
Medium consistency	0.81	(0.48 to 1.37)	0.72	(0.40 to 1.31)	1.04	(0.40 to 2.70)
Low consistency	0.98	(0.48 to 2.03)	0.99	(0.44 to 2.25)	1.23	(0.33 to 4.60)

Three indicators displayed increased odds of being a smoker as policy characteristics became weaker across all prevalence categories. These were policy restrictions; disseminating policy and WSE supportiveness of consistent no-smoking messages. For example, pupils in schools that did not use written methods of dissemination were 1.35 times more likely to be daily smokers in general than pupils in schools that did use written methods. Two indicators, policy supportiveness of consistent no-smoking messages and school

supportiveness of consistent no-smoking messages did not display this pattern. Schools where policies undermined consistent no-smoking messages were associated with a reduced likelihood of pupils being weekly and daily smokers compared to schools where policy supported consistent no-smoking messages, with no apparent effect of this characteristic on daily smoking on-site. School supportiveness of consistent no-smoking messages (the policy context) was also associated with a reduced likelihood of pupils being weekly and daily smokers in schools that tended to be less supportive of consistent messages. There was, however, an increased likelihood of pupils being daily smokers on-site as schools became less supportive of consistent no-smoking messages.

However, in all but one of these the 95% confidence interval extended below 1 which immediately indicated that these results were not statistically significant ($p<0.05$). However, the dissemination of pupil policy did appear to be significantly associated with pupil smoking prevalence on the school site, with pupils in schools with no written methods of disseminating pupil policy to pupils being more likely to smoke on the school site (OR=2.16, CI = 1.13 to 4.10) than those pupils in schools who used written methods to disseminate their pupil policies to pupils. As outlined in Section 5.5.3, further analysis of the association between dissemination and smoking that controlled for pupil-level characteristics was necessary in order to assess whether this association was being confounded by compositional characteristics (i.e. pupil-level characteristics associated with smoking behaviour) rather than being a contextual (i.e. school policy) effect. Several pupil-level variables were controlled for in the analysis, data on which was obtained from responses to HBSC questions (Table 8.5). Some other theoretical predictors (e.g. parental expectations of performance at school and parental support) could not be used in this analysis as the data were not available from the 2001/2 Welsh HBSC survey.

Table 8.5 Pupil-level variables included in multi-level analysis of the association between significant policy characteristics and smoking prevalence

Pupil-level variable	Levels (from responses to HBSC questions)
Gender	Boy Girl
Year group	Year 10 Year 11
Best friend smokes?	No Yes, sometimes Yes, daily
Parents smoke?	None smoke One smokes Both smoke
Ease of talking to parents about bothersome things	Easy to talk to both parents Easy to talk to one parent Difficult to talk to both parents
Family structure	Living with both parents Living with one parent
Alienation score	*A composite variable scored from 0 to 3 with scores nearer to 3 being less alienated*

Four pupil-level variables were discovered to be significantly associated with pupil smoking prevalence and are presented here. These variables were gender; parents smoke; alienation score and best friend smokes. These were similar to those variables which Moore *et al* (2001) discovered to be significantly associated with daily and weekly pupil smoking (they did not include prevalence data for daily smoking on the school premises in their study). Of these, the variables *pupil gender* (boy, girl) and *best friend smokes* (no; yes sometimes; yes daily) used the same levels as the Moore *et al* study. In addition, in using a compound variable *parents smoke* (none smokes; one smokes; both smoke), its significance reflects the fact that Moore *et al* found mother's smoking to be significantly associated with smoking prevalence. The alienation score should also be mentioned here. Moore *et al* constructed a variable which they called *alienation score*. This composite variable reflected alienation from school and was constructed from data on pupils' enjoyment of

school; pupils' self perceived performance at school and their intention to stay in full time education at age 16. For this analysis a similar composite variable was created to describe alienation from school. This score ranged from 0 to 3 and was calculated using responses to three HBSC questions as summarised in Table 8.6. Cumulative scores were then used to create an alienation score between 0 and 3.

Table 8.6 Calculation of alienation variable using HBSC questions

HBSC question	HBSC question responses	Reclassification
How do you feel about school at present? (Please tick ONE box only)	(A) I like it a lot (B) I like it a bit (C) I don't like it very much (D) I don't like it at all	1. Like school (A&B) 0. Dislike school (C&D)
In your opinion what does your class teacher(s) think about your school performance compared to your classmates? (Please tick ONE box only)	(A) Very good (B) Good (C) Average (D) Below Average	1. Average and above (A,B & C) 0. Below average (D)
What do you think you will be doing when you leave school? (Please tick ONE box only)	(A) Going to university (B) Going to further education (C) college (D) Getting a job (E) Work related training (F) Unemployed (G) Don't know	1. Continue in education (A,B&C) 0. Not continue in education (D,E & F)
		1 is generally not alienated **0 is generally alienated**

Four models were tested at this stage of analysis:

Model A:

a random intercept model adjusting for no covariate (i.e. the null model)

Model B:

a random intercept model including all significant pupil-level variables in the present study except best friend smoking

Model C:

a random intercept model including significant school policy indicators and controlling for all pupil-level predictors except best friend smoking

Model D:

a random intercept model including significant school policy indicators and controlling for all pupil-level predictors as well as best friend smoking

These are presented in Tables 8.7 (against *weekly smoking in general*); 8.8 (*daily smoking in general*) and 8.9 (*daily smoking on school premises*). In each analysis, models C and D differed in that the former did not control for best friend smoking while the latter did. The reason for presenting these two different models was that it has been argued by Aveyard *et al* (2005) that as most friends that influence an individual pupil (and it is peer influence that the HBSC best friends question is aiming at collecting data on) will attend the same school, they will be subject to the same school-level forces (contextual or collective) that may cause inter-school variation. Consequently, if school-level characteristics can influence smoking behaviour, peer influence (best friend smoking) may be a school-level characteristic and not a pupil-level one. As such, both models were run for comparison.

Analysis of this data showed two things. Firstly, across all smoking prevalence categories, the importance of best friend's smoking behaviour as a predictor of an individual pupil's smoking behaviour was clear with pupils who have a best friend who smokes daily having a much greater tendency to be a weekly (OR=28.62); daily (OR=27.85) or daily on-site smoker (OR=25.05) themselves than pupils whose best friend does not smoke. The importance of this pupil-level characteristic is demonstrated across all smoking prevalence categories, the introduction of best friend smokes in model D appears to reduce the explanatory importance of the other pupil-level variables.

More important for this study were the findings for dissemination of smoking policy which was the only characteristic that had demonstrated any potentially significant association with reduced adolescent smoking prevalence (Table

8.4). Once other significant pupil-level variables had been controlled for (even in model C without best friend smokes), across all prevalence categories, while all models still showed a tendency for smoking behaviour to be associated with non-written dissemination methods, all of the 95% confidence intervals around these OR's crossed 1 and therefore could not be said to be significant at this level. For example, while pupils in schools with non-written dissemination methods appeared to be 2.17 times more likely to be daily on-site smokers than pupils in schools with written methods, the 95% confidence interval around this was 0.76 to 6.23 (Table 8.9). As this extended around 1, these results were not statistically significant ($p<0.05$).

A fifth model (Model E) was also tested, which consisted of a random intercept model including significant school policy indicators and pupil-level predictors as well as possible interaction between school and pupil variables. This concluded that there was no interaction effect between any of the school policy indicators and pupil-level variables.

These results suggested that the indicators derived from qualitative analysis and describing the policy context at both the policy-level and enforcement-level (i.e. supportiveness of WSE) failed to explain school-level variation in pupil smoking prevalence, especially once pupil-level characteristics had been controlled for.

8.2.2 Pupil perception of policy

The above indicators were derived from data on school policy gained from staff. It was possible that pupil perception of policy may differ to what the teachers stated that the policy was. In order to assess this, where possible pupil and staff perceptions of policy were compared using data on pupil perceptions of policy obtained from HBSC data. The HBSC questions used, and their responses are summarised in Table 8.10, and the comparison of perceptions can be found in Table 8.11.

While all schools had a ban on pupil smoking, 12.7% of pupils reported that they did not know that this was the case with 2% saying that their school had no policy and 10.7% saying that they did not know what the policy was. Even in schools with a written pupil policy for pupils, 33% of pupils still were not aware of this. Also interesting is the fact that in schools with staff smoking bans, pupils often seemed unaware of this status. In schools with such bans, 76.6% of pupils were unaware that staff were not allowed to smoke in rooms for staff only (26.3% wrongly reporting that they could and 50.3% not knowing what the policy was); 47.3% (6.8% and 40.5%) of pupils were unaware that staff where not allowed to smoke in other parts of the school building and 51.6% (10.1%, 41.5%) of pupils did not know that staff were not allowed to smoke outdoors on the school premises. Analysis showed that there was no relationship between these perceptions and individual smoking behaviour.

Table 8.10 Summary of HBSC questions and their response categories used to compare pupil perception of policy with staff reporting of policy

Question	Responses
Does your school have a rule that pupils must not smoke on the school premises? (Please tick ONE box only)	Yes No Don't know
In which of the following ways are pupils made aware of this rule? (Please tick ONE box for EACH line) It is written down for pupils They are told by teachers No smoking signs in the school	(For each method pupils could respond) Yes No Don't know There is no rule Responses to it is written down for pupils were used to calculated responses to whether pupils thought the policy was written. While signs could be thought of as written, qualitative data reveals that their use varies therefore responses to this were not used.
Are teachers allowed to smoke in a room for teachers only? ? (Please tick ONE box only)	Yes No Don't know
Are teachers allowed to smoke: (Please tick ONE box for EACH place) In a room for teachers only In the canteen/cafeteria In the corridors? In other parts of the school building? Outdoors on the school premises? Outside of the school premises?	Yes No Don't know Responses for in a room for teachers only; in other parts of the school building and outdoors on the school premises were used. Responses for in the canteen and in the corridors were not used as only 0.7% and 0.6% of pupils respectively said yes to these Outside of the school premises was excluded from the analysis as it was felt that this was ambiguous and could mean anything from outside the school gate to the staff's own houses

Table 8.11 Pupil perception of policy compared to policy as reported by staff

Policy as reported by staff (45 schools)	Perception of policy as reported by pupils (%) (1941 pupils)			
	Schools have policy on pupil smoking			
	Yes	***No***	***Don't know***	
Pupil smoking policy restrictions				
Total ban (i.e. all schools)	87.3	2.0	10.7	
	Pupils made aware of rule through written document			
	Yes	***No***	***Don't know***	***There is no rule***
Formality of pupil smoking policy				
Written somewhere	48.9	14.0	33.0	4.1
Not written anywhere	30.1	23.5	40.3	6.1
	Teachers allowed to smoke in room for teachers only			
	Yes	***No***	***Don't know***	
Staff smoking policy				
Total ban	26.3	23.5	50.3	
Staff smoke in restricted areas	64.1	8.1	27.8	
	Teachers allowed to smoke in other parts of school building			
	Yes	***No***	***Don't know***	
Staff smoking policy				
Total ban	6.8	52.7	40.5	
Staff smoke in restricted areas	9.2	54.1	36.7	
	Teachers allowed to smoke outdoors on school premises			
	Yes	***No***	***Don't know***	
Staff smoking policy				
Total ban	10.1	48.4	41.5	
Staff smoke in restricted areas	9.9	54.3	35.8	

Table 8.7 Weekly smoking in general: odds ratios (95% confidence intervals) for pupil level variables from multilevel logistic regression (N = 1941 pupils in 45 schools)

	Model A	*Model B*	*Model C*	*Model D*
Constant	-1.317(0.091)	-3.064(0.174)	-3.106(0.202)	-4.267(0.254)
Gender				
Boy		1.00	1.00	1.00
Girl		2.20 (1.46 to 3.32)	2.21(1.39 to 3.52)	1.68(0.91 to 3.10)
Parents smoke?				
None smokes		1.00	1.00	1.00
One smokes		2.37 (1.51 to 3.73)	2.28(1.37 to 3.80)	1.80(0.90 to 3.57)
Both smoke		3.55 (2.10 to 6.00)	3.54(1.96 to 6.40)	2.69(1.22 to 5.95)
Alienation score (OR per unit increase)		2.43 (1.89 to 3.12)	2.46(1.85 to 3.27)	2.01(1.36 to 2.95)
Best friend smokes?				
No				1.00
Yes, sometimes				5.70(2.41 to 13.52)
Yes, daily				28.62(13.59 to 60.28)
Dissemination of smoking policy				
Written			1.00	1.00
Not written			1.13(0.56 to 2.27)	1.07(0.50 to 2.29)
Unexplained school level variance	0.227(0.079)	0.219(0.086)	0.249(0.96)	0.145(0.089)
Explained variance	-	3.432	3.290	23.860
Proportion explained	-	49%	48%	87%

Table 8.8 Daily smoking in general: odds ratios (95% confidence intervals) for pupil level variables from multilevel logistic regression (N = 1941 pupils in 45schools)

	Model A	*Model B*	*Model C*	*Model D*
Constant	-1.681(0.108)	-3.625(0.206)	-3.727(0.238)	-4.914(0.304)
Gender				
Boy		1.00	1.00	1.00
Girl		2.33(1.47 to 3.70)	2.35(1.39 to 3.97)	1.73(0.87 to 3.43)
Parents smoke?				
None smokes		1.00	1.00	1.00
One smokes		2.50(1.49 to 4.21)	2.31(1.28 to 4.16)	1.83(0.84 to 3.97)
Both smoke		4.16(2.32 to 7.46)	4.29(2.23 to 8.26)	3.49(1.47 to 8.31)
Alienation score (OR per unit increase)		2.51(1.91 to 3.30)	2.50(1.83 to 3.42)	2.01(1.33 to 3.05)
Best friend smokes?				
No				1.00
Yes, sometimes				3.21(1.03 to 9.99)
Yes, daily				27.85(11.70 to 66.29)
Dissemination of smoking policy				
Written			1.00	1.00
Not written			1.29(0.59 to 2.83)	1.25(0.55 to 2.84)
Unexplained school level variance	0.333(0.110)	0.293(0.112)	0.310(0.121)	0.151(0.103)
Explained variance	-	4.063	3.883	20.281
Proportion explained	-	53%	52%	85%

Table 8.9 Daily smoking on school premises: odds ratios (95% confidence intervals) for pupil level variables from multilevel logistic regression (N = 1941 pupils in 45schools)

	Model A	*Model B*	*Model C*	*Model D*
Constant	-2.506(0.160)	-4.349(0.282)	-4.601(0.326)	-5.641(0.410)
Gender				
Boy		1.00	1.00	1.00
Girl		2.14(1.18 to 3.88)	2.07(1.05 to 4.07)	1.38(0.59 to 3.20)
Parents smoke?				
None smokes		1.00	1.00	1.00
One smokes		1.56(0.78 to 3.15)	1.42(0.64 to 3.13)	0.98(0.37 to 2.61)
Both smoke		3.86(1.87 to 7.96)	3.88(1.72 to 8.739	2.82(1.01 to 7.89)
Alienation score (OR per unit increase)		2.68(1.90 to 3.79)	2.67(1.81 to 3.95)	2.01(1.23 to 3.29)
Best friend smokes?				
No				1.00
Yes, sometimes				1.00(0.10 to 9.83)
Yes, daily				25.05(7.49 to 83.76)
Dissemination of smoking policy				
Written			1.00	1.00
Not written			2.04(0.69 to 6.00)	2.17(0.76 to 6.23)
Unexplained school level variance	0.745(0.237)	0.688(0.240)	0.592(0.229)	0.283(0.168)
Explained variance	-	2.782	2.673	10.310
Proportion explained	-	41%	41%	74%

-9-

Discussion and Recommendations

9.1 Introducing the discussion

Chapters 6 and 7 presented the findings of the qualitative analysis in developing understanding of policy-level and enforcement-level characteristics which may influence policy effectiveness. These chapters also described the reduction of these data into indicators to describe between-school variation in these policy characteristics. Chapter 8 then outlined the analysis of these indicators in association with pupil smoking prevalence data collected by the 2001/2 HBSC study in Wales. This final chapter discusses the findings of these analyses with particular reference to elements of the literature review (Chapters 2 and 3) and the limitations of the methods adopted (Chapters 4 and 5). At the end of this chapter, some general conclusions; recommendations and suggestions for future research are also made.

9.2 The usefulness of the framework of analysis used in the study

Sections 3.5 outlined a framework for analysis which while not new in itself, appeared rarely to have been applied specifically to school smoking policies before. Borrowing from other literatures and particularising them to school smoking policy, the work synthesised a framework where policy context was examined through investigation of policy-level characteristics; the extent to which the WSE produces a value-context that is supportive of this policy and the extent to which these individually promote or undermine consistent no-smoking messages and together define the extent to which the school policy context promotes or undermines consistent no-smoking messages. In general, this framework appears to be a potentially useful approach to school smoking policy providing a hook on which to hang investigation into policy context - a

term whose meaning can sometimes be vague. The use of this model is recommended in future investigations of school-based policy. Analysis of interviews has contributed to the literature by developing understanding around policy characteristics (Section 9.3). Below, potential areas for investigation within this proposed model are also highlighted.

9.3 Interview findings

9.3.1 Policy-level characteristics

Chapter 6 discussed analysis of policy-level characteristics highlighted in the literature as potentially important in mediating policy effectiveness. Adoption of qualitative techniques within a mixed-method framework, contributed to the literature by allowing a more in-depth and complex investigation of these characteristics than achieved in many papers and the results of which are discussed here.

9.3.1.1 The importance of policies that ban smoking

While much of the literature promotes the importance of banning smoking on school sites, in line with previous study findings, schools in this study displayed variation in their smoking policy restrictions. However this variation was only at the staff level with universal pupil smoking bans commonly underlain by the notion that it was 'obvious' that pupils should not smoke in schools and that it had 'always' been this way. Consequently, while all schools were promoting no-smoking messages via pupil bans, accepting the importance of role-modelling to promote behavioural norms, not all schools supported this with staff smoking bans. If total bans are important, it may be useful to understand the reasons for differences between attitudes towards staff and pupil policies in order that more schools may be encouraged to implement bans. It seems possible that this may be related to wider social attitudes towards smoking with British society widely having deemed smoking as unhealthy for children for much longer than it has for adults (although this

is also possibly connected to paternalistic conceptualisations of the child). This is reinforced by the past twenty years which have witnessed much staff policy change with a universal trend of increasing restrictiveness on staff smoking which seems to reflect changing social attitudes towards adult smoking. A counter-argument is that schools universally report very few or no smokers among their teaching staff, and that as the number of smokers decline it is easier to implement more restrictive policies as the pressure from smokers is less than that from non-smokers. However, changes in staff policy do further appear to echo changes in social attitudes towards smoking behaviour with the social marginalisation of smokers seemingly embodied in the clear verbal and physical marginalisation of those places where staff are still allowed to smoke in schools. Accepting this argument, it is likely that as social pressure increases, alongside resultant legal pressures from the introduction of national public smoking bans, most or all schools will eventually implement staff smoking bans. As a result, it is arguable that the drive to encourage all schools to implement total bans will become obsolete. Instead, investigations into policy effectiveness, and potential interventions to moderate it, will have to place more emphasis on the detail and implementation of such bans.

9.3.1.2 Policy formality

Despite evidence suggesting that written policies are associated with lower pupil smoking, this study found that, as in the past, school policy formality varied across Wales. These data suggest that while staff policies have become more formal both in general, and specifically in schools with staff smoking bans, there are less formal pupil policies in 2002 than in both 1995 and 1998 (Table 9.1). While the tightening of staff policy appears to follow social changes as outlined in Section 9.3.1.1, pupil trends require more consideration. It is possible that as the interview data used by this study to collect data on policy formality is open to more (mis)interpretation by the researcher than the survey data presented by the other studies, this has contributed to suggesting an apparent reduction in pupil policy formality that may not be accurate. However, there is a strong argument that in allowing probing and clarification of respondents answers, interviews lead to a more accurate representation of

the policy situation than data collected by survey instruments. Consequently, it may be that data collected in this work provide a more accurate picture of smoking policy than earlier studies and in fact surveys have over-estimated the number of formal pupil policies in place. These arguments may also explain the increase in reporting of formal staff policies.

Alternatively, the trend may be accurate and pupil smoking policies have become less formalised over the last 4 years. An explanation may be that pupil smoking policies have become more naturalised (Section 7.7) due to changing policy priorities. If policies have become lower priority, for any of the reasons described in Section 7.7, this may lead to a reduction in the number of written pupil smoking policies. Where policy reviews write or re-write policies, perhaps a low priority smoking policy is overlooked due to attention on higher priority issues. Alternatively, if schools have increasingly felt pupil smoking bans to be 'obvious', perhaps a written policy is not felt to be necessary. Finally, if there is a decline in the perceived importance of smoking policy, a written policy may just become forgotten and unused which ultimately amounts to an unwritten policy.

Table 9.1 Variation in Welsh staff and pupil policy formality 1995-2002 (percentages)

		1995 (Hartland *et al*), 1998	1998 (Moore *et al*, 2001)	2002 (Burgess, 2006)[1]
Formality of pupil policies in all schools	Formal	58	71	50
	Informal	39	25	32
Formality of staff policies in schools with staff smoking bans only	Formal	38		50
	Informal	51		31
Formality of staff policies in all schools	Formal		38	50
	Informal		47	32

[1] *The percentages in this column exclude figures for respondents who did not know the policy formality or where the data for this were unclear*

Accepting the importance of written policies, it is important to consider that data from this study showed that while 68% of schools had at least one written policy, only 25% of schools had a written policy for both staff and pupils. Applying the argument that formal policies also lead to greater consistency of message, this means that only one-quarter of schools were giving the strongest consistent messages through policy formality. Given 1995 Welsh national targets of 95% of schools with formal pupil policies (Hartland *et al*, 1998), it seems that more needs to be done to encourage Welsh schools to adopt formal staff and pupil smoking policies.

Data also revealed that while staff can usually access policies where they are written for pupils, pupils cannot always access them where they are written for staff. This may mean that pupils are less likely to know what the policy is for staff than staff are to know the policy for pupils. While it may be argued that staff need to know the pupil policy as they have to enforce it, accepting the argument that it is important to have consistent universal messages, it seems equally important that a smoking ban for staff is written where pupils can see it. Clearly, where staff are allowed to smoke, providing a written copy of this policy to pupils may lead to more consistent messages.

Across all schools, while the percentage of written staff and pupil policies were the same (50%), written policies for pupils were proportionally more common in schools that banned staff smoking (56%) than in those that didn't (33%). Written staff policies were equally as common in each type of school (50%). While these counts of schools are only descriptive, they are suggestive of the idea that perhaps school-level attitudes towards smoking are an important factor in individual policy characteristics. This is because, assuming that written policies are associated with smoking being a higher priority, schools that ban staff smoking also tend to prioritise pupil smoking policy as demonstrated by their greater tendency to have a written version of the pupil smoking ban that is present in all schools.

9.3.1.3 Introducing more restrictive policies into a school – methods, rationales and attitudes

While this work identified and sought to fill an apparent gap in the literature by asking about the *methods* of introducing pupil policies, it was interesting that when respondents were asked about this, very often they could not answer this question. This appeared related to the feelings that pupil smoking bans were 'obvious' and had 'always' been in place, discussed above. These data also suggest that something of the tradition of schools is important when considering pupil policies. While this may be changing to some extent, schools largely remain unique socio-legal environments where neither staff nor pupils expect pupils to have much voice in decisions surrounding their governance. Policy tends to be introduced and pupils are expected to follow this unquestioningly. Turner & Gordon (2004a) have suggested that pupils should be made aware as to the rationale for smoking policy, and be involved with its development and implementation. Generally, however, schools do not appear to consider the introduction of pupil smoking policies and even where school councils are involved in making policy, schools are unlikely to agree to a request for pupils to be allowed to smoke on site. Consequently, involving pupils in the introduction of pupil policy seems to lack potential. Turner & Gordon (2004a) have suggested that pupils could be involved in deciding how a policy is implemented. While there may be some potential in this, it seems that perhaps the focus should remain on other policy characteristics which may lend themselves more easily to reinforcing the no-smoking messages of policy. Having said this, perhaps one area where pupils could be involved in policy introduction would be the in the introduction of a total school ban in those schools where this is yet to happen. However, their role in this would have to be well defined.

More data are available regarding the *rationale* behind pupil smoking bans. Broadly, these may be divided into health or disciplinary approaches towards pupil smoking policy. As discussed in Chapter 6, however, these are best indicated through analysis of sanctions used for pupils breaking policy and as such are discussed in 9.3.1.5.

While investigation into the introduction of more restrictive staff smoking policies showed that approaches tended to be either prescriptive or consultative, the extent to which the latter were genuinely consultative varied. This is important as it is arguable that the methods of introducing a policy are important in getting staff on-side and willing to enforce a policy rather than alienating them from the outset. A consultative approach would seem key to this. However, consultation may be awkward where the SMT see the more restrictive policy as necessary or where there is no alternative option to introducing the more restrictive policy. In this case, it probably needs to be transparent that the change will be made, with discussion focussing around why this is necessary and the importance of policy compliance. This is not just in order that smoking staff do not feel disenfranchised, but also so that non-smokers are brought on-side too: the importance to some non-smokers of not offending or making life difficult for their friends and colleagues has been demonstrated in the qualitative analysis and is important for schools to address. Especially if this more restrictive policy is a total ban as part of creating a whole school approach to promote consistent messages, it is important to emphasise this during its introduction and reiterate the importance of enforcing the pupil policy as part of this too in order to improve the extent to which the enforcement-level characteristics/WSE support the policy. It is clearly important then, for schools to consider how they introduce more restrictive staff policies to staff and the impact that this process will have on policy acceptance and compliance. Some respondents also mentioned that bans actually helped some staff quit and reports of schools offering staff cessation support in parallel to introducing a staff smoking ban seem to suggest an interesting way forward that other schools may wish to adopt.

Policy rationale varied between schools with considerable variation being notable even within the four broad categories of health rationales; logistical rationales; policy development as a result of pressure to change policy and unplanned policy evolution. Where policy was unplanned with no rationale behind it, this sometimes seemed to lead to some ambiguity and confusion as to what the policy was, suggesting the importance of having a planned, purposeful policy. However, like methods of policy introduction, the rationale

behind the introduction of a more restrictive staff smoking policy may also influence staff acceptance of it. It seems important that any smoking policy is thought through, purposively developed and justifiable. Looking at the wide range of rationales given by schools, it seems that some of these are more purposeful and justifiable than others, potentially leading to better compliance. For example, it would seem that an approach involving concerns over the health of pupils and/or staff may be better received than one developed due to a lack of space for a staff smoking room. The source of any pressures to develop new policy may also be important, with policy resulting from internal staff pressure possibly having greater staff ownership and compliance than a policy introduced because the SMT or a governing authority demand it. In these latter cases, particular care must be taken in how policy is introduced in order to keep staff on-side.

9.3.1.4 Policy dissemination

The literature suggested that while policy dissemination is potentially important, the quality of dissemination varies between schools and that dissemination can be a policy weakness. Good quality dissemination is important in order that once you have a policy, you let people know what that policy is. Given this, it was notable how apparently chaotic the picture of dissemination across Welsh schools seemed to be. Focusing on the dissemination of policies to the people they directly applied to (i.e. pupil policy to pupils and staff policy to staff) for both of these groups there was considerable variation in the methods used.

Each method of disseminating pupil policy to pupils could be described in terms of three dimensions: whether it was pupil-targeted or parent-targeted; written or unwritten or whether it was proactive, reactive or passive. The potential effectiveness of these methods varied, with those that were written and proactive seeming particularly strong. Others, however, seemed potentially less effective with four reported methods of dissemination not being able to be classified as dissemination at all and one school even reporting that no methods of dissemination were used. Weaker methods

included reactive dissemination methods which seemed at best inefficient, and at worst unfair – although the suggestion that smoking pupils get to know the policy because they are told it when they break it does partly support the assertion by Unger *et al* (1999) that smoking pupils may be more aware of the policy than non-smokers. Disseminating policy through word of mouth is also classified as a weak and passive method because while it may be a legitimate and effective process through which pupils get to know the policy, it is not something which the school actively does. The need for the school to take an active role is highlighted by the Assistant Head who said that pupils knew what the policy was because they had not been allowed to smoke at their primary school. While this may be a valid point, it again hints at the notion that it is 'obvious' and well-known that pupils should not smoke in school. However, this still does not acknowledge *how* pupils get to know that they must not smoke on site. If this question is not asked, it must bring into question the effectiveness of dissemination. It is important to note that most schools report using more than one method of disseminating pupil policies to pupils. In this case, less effective methods may be used to support more effective ones. Also, non-dissemination methods such as PSE and curriculum may be used to support dissemination. However, there is considerable variation in the cross-section of methods employed by schools with some employing a broad range of approaches and others using only one or more less effective methods. Overall, there was considerable variation in the dissemination of pupil policy to pupils from the apparently very effective to the apparently ineffective.

Dissemination of staff policy displayed similar patterns to pupil policy with each method being able to be described by two of the same dimensions: whether dissemination was written or unwritten or whether it was proactive, reactive or passive. Again, there was variation in the extent to which reported dissemination methods might be effective. There was, however, less between-school variation in the combination of methods used with nearly a quarter of schools using just one method of disseminating staff policy. The feeling that staff just knew the policy and did not have to be told it was also apparent in some schools, again bringing into question the effectiveness of dissemination.

It was also apparent that where pupil smoking policies were always seen to apply to all pupils, in some schools staff smoking policies were seen only as applying to staff who smoked. This is potentially problematic because it may result in the policy not being effectively disseminated to everyone. It also implies that smoking policy is being used just to control the behaviour of smokers rather than being about a whole-school, whole-staff effort to promote no-smoking messages.

Overall, it is clear that there was considerable between-school variation in the effectiveness of dissemination of both staff and pupil policy to their respective target groups in Welsh schools. Considering the importance of dissemination, it is necessary to address this. One method may be to include notes on the importance of effective dissemination and outlines of appropriate methods in guidelines for making school smoking policy. Also, perhaps investigation of smoking policy in order to identify potentially effective interventions should include a greater focus on dissemination.

9.3.1.5 Types of sanctions employed when smoking policy is transgressed

Welsh data on the sanctions employed when smoking policy is broken, again echoed the broader literature in finding between-school variation in the type of sanction used. Interview data reveal that although schools universally ban pupils from smoking on the school site, there is variation in their approach towards pupil smoking behaviour with schools treating smoking as a health and/or disciplinary issue to varying degrees. This is important given that the literature highlights the potential importance of supportive sanctions procedures that emphasise cessation and (protective) health reasons for acting to stop pupils smoking. If there is an association between health approaches and lower adolescent smoking, the current variation in Welsh policy approaches would need to be addressed by encouraging all schools to adopt health approaches to smoking. A part of this challenge might be to change attitudes as it was apparent that while some schools thought that it was important for them to address smoking, others felt that schools were being unfairly blamed for and burdened with responsibility for wider social

problems. These attitudes, especially at SMT level, may be important in influencing the school approach to pupil smoking policy.

While Turner & Gordon (2004a) noted that the addictive nature of tobacco smoking limits the effectiveness of staff dealing with the problem, data from this study reveal in more detail the problems that not only the addiction, but recognising the addiction in a health approach to policy, causes. Schools recognising that smoking was a complex health problem with negative impacts on education as well as health, made various attempts to deal with this, usually through the provision of some form of cessation support either in the sanctions procedure or elsewhere in the school. However, it was apparent that not only was this often done on their own initiative with little support from elsewhere, but that regardless of the extent to which they recognised and addressed smoking as a habit, being schools and with all the social expectations discussed in Section 6.3.2, they could never legitimise this by allowing pupils to smoke on the school site. There seems to be an inherent tension here: clearly, to allow addicted pupils to smoke on site would appear to legitimise this behaviour and undermine the consistent no-smoking message. However, to on the one hand acknowledge the complexity of addiction and that not getting a nicotine fix may reduce pupils' concentration and the quality of their work and behaviour, yet to still insist that they cannot smoke during the school day, appears to undermine the acknowledgment of smoking as an addictive behaviour. Schools that have looked to resolve this tension by allowing pupils to smoke under staff supervision have found, from the media and popular reaction, how difficult this is in the current social context – such decisions can lead to a head-teacher losing their job. This tension raises questions as to how effective in-school cessation and cessation support can be. It is clearly important for schools to support their smokers and amongst the variety of sanctions and combinations of sanctions employed by schools where pupils break smoking policy (which are rarely the most severe sanctions possible) those which combine sanctions and cessation support seem to be potentially a useful way forward. Again, this supports the existing literature (Peck *et al*, 1993; Pentz *et al*, 1989; Tubman & Vento, 2001; Turner & Gordon, 2004b) The data also clearly suggested that either schools need better external support

in providing cessation services or better signposting towards where these services and resources may be accessed.

It is interesting that while schools always appear likely to include some element of a disciplinary approach in their sanctions, they will not necessarily include elements of a health approach to pupil smoking in their sanctions and/or school. This possibly reflects the fact that while all schools may see the maintenance of discipline as not only part of their role, but also necessary within the school environment, they varied in the extent to which they perceived tackling smoking (alongside other health issues) as part of the school's remit. However, if supportive approaches are preferable and more beneficial to reducing smoking among pupils, then it would seem necessary for all schools to include these elements to their sanctions procedures. It is also possible that the fact that very few schools use the most severe sanctions for smoking misbehaviour suggests that in terms of discipline, other offences are seen as more serious than smoking. Perhaps this is due to changing social attitudes more broadly, and it would be interesting to compare changes in the severity of sanctions imposed over time to establish any trend.

Finally, with regards sanctions for staff, it was notable that they seemed to be far more *ad hoc* and less thought through than sanctions for pupils, with only 24 schools reporting any sanctions and 21 of these being verbal warnings with no further procedure. Many schools seemed to feel that these procedures were unnecessary as staff breaking policy was a rare occurrence. Whether this is the case or not in a particular school, in order that staff smoking misbehaviour is dealt with consistently, it would seem a necessary first step for schools to develop sanctions procedures for staff caught smoking.

9.3.2 Enforcement-level characteristics

Chapter 7 discussed the analysis of enforcement-level characteristics. This contributed to the literature, not only by using more in-depth data than other studies, but also by focussing on some characteristics that have been less often discussed in the smoking policy literature (e.g. physical space). The literature

suggests that while it is important for policy to be consistently enforced in order to produce consistent messages, both between- and within-school variation in consistency of policy enforcement occurred. This Welsh study supported these findings. It also added to existing knowledge by asserting that these enforcement-level characteristics could be used to indicate the extent to which the WSE produced a value-context in which smoking policy operated defined as the extent to which the WSE supported or undermined the policy.

9.3.2.1 Extent to which smoking policy is supported by the identification of pupil smoking misbehaviour

The concept of a "smokers' corner" as a place where pupils tended to congregate to smoke was common to all schools. While all schools had their own geographies of smoking misbehaviour, across all schools these could be categorised into seven types of places. All of these were areas that tended to disrupt the identification of pupil smoking for various reasons. Despite this, while schools varied in the methods they reported to identify pupil smoking behaviour, by far the most commonly reported methods were staff patrols or blitzes. Although the fact that respondents were asked directly whether they use either of these methods may have contributed to their high reporting, it was certainly apparent that these are the methods most often used by schools to identify pupil smoking misbehaviour. While patrols involve staff walking round the school picking up on smoking misbehaviour where it is seen, blitzing targets problem areas. However, if pupils deliberately choose to smoke in places which interrupt these types of surveillances, how effective can these methods genuinely be? Questions of effectiveness also apply to other reported methods. For example, pupils already avoid smoking in places where the CCTV cameras are focused and such avoidance strategies would surely eventually be adopted for the remote sensing options as they ceased to become novel. Effectiveness of surveillance is thrown further into question by consideration of the often repeated feeling that all staff monitoring achieves is to move smoking from one place to another. In other words, the geography of smoking behaviour in any given school is dynamic and traditional staff surveillance methods serve only to cause shifts in the spatial patterns of smoking misbehaviour rather than reducing or stopping it. This shows how the

physical space of the school, which is not usually considered in understanding the effectiveness of the WSE in supporting smoking policy, can have an influence on this and should be considered when investigating the effectiveness of the methods used to identify pupil smoking misbehaviour.

Physical space can be seen to have even more impact on the identification of smoking behaviour, and the consequent effectiveness of policy, when issues of jurisdiction are considered. Interview data demonstrated that policy enforcement is not a straightforward process and that jurisdiction may be important in understanding policy contexts. Jurisdiction concerns the limits of the school's authority over pupils and their smoking behaviour and has both a time and a place dimension with variation occurring in the extent to which jurisdiction was seen to extend off-site and beyond the ends of the school day. At times and in places where the school jurisdiction is not perceived to extend, pupil smoking behaviour will go unidentified either because there are no surveillance strategies in place to detect it, or because where it is seen by staff it is just ignored and therefore effectively goes unidentified. This can result in inconsistent messages. For example, if a school does not see its jurisdiction extending off-site at any time, and pupils are allowed off-site at break times, they are able to get away with smoking within the school day which potentially sends mixed messages. Other clear examples of this were where pupils participating in after school activities on-site but not run by the school (e.g. youth clubs), were allowed to smoke and when taking pupils on school trips, the context of the trip undermines the restrictions and messages of the school smoking policy. If consistency of message is important, then understanding how schools see their jurisdiction, and encouraging them to extend this appropriately, may also be important. However, to be successful, extension of jurisdiction must accept that there are limits (physical and otherwise) to the school's responsibility. In terms of encouraging schools to exercise authority, an interesting theme arising from the interviews is the attitude of some schools that "if you are in school uniform you represent the school" – attitudes that were also found by Darling & Reeder (2003). By using the school uniform as a marker of the school's jurisdiction, the authority of the school when pupils are off-site may be embodied in a physical indicator. This

could be applied at lunchtime; when pupils are travelling between school and home or on school trips and is a potentially useful approach for schools that want to extend their jurisdiction over smoking but find it difficult to set boundaries beyond the school site and school day – although pupils may of course try and get around this by removing their uniform when off-site.

School jurisdiction is potentially important in illuminating the policy context by adding to understanding of the supportiveness of the WSE in terms of where and when pupil smoking behaviour is identified and acted on. The importance of what is termed in this project jurisdiction supports the findings of other studies, most notably the work of Darling & Reeder (2003); Gordon & Turner (2003a); Turner & Gordon (2004a,b). Contrary to Turner & Gordon (2004a) however, this study suggests that not only are there staff who would support a policy that extends off-site and beyond the school day, but that in some schools such policies are already in place with the jurisdiction of the school being extended beyond the more traditional physical and temporal boundaries of the school. The fact that studies have independently uncovered similar issues regarding off-site pupil smoking, further indicates that it would certainly be interesting and worthwhile to explore these issues further. The concept of jurisdiction as a complex process subject to school- and individual-level discretion as outlined here would be a useful hook on which to hang these investigations. In doing so, it may be useful to consider more specific inquiries such as the clarification of school notions of their own jurisdiction; how these are contested within individual schools and consideration of the possibility of, and potential for, extending the jurisdiction of schools.

Jurisdiction may also help explain suggestions in the literature that smoking bans may serve only to push smoking off of the school site (Gordon & Turner, 2003a; Northrup *et al,* 1998; Pentz *et al,* 1998; Turner & Gordon, 2004a). If school authority is only perceived by pupils to extend to the physical boundaries of the school, they may feel that smoking off-site provides their best opportunity to smoke. Similarly, if staff feel their authority stops at the school gate, they are unlikely to enforce the ban away from the school, allowing pupils to get away with smoking in these places. It would be

interesting to investigate the relationship between perceptions of school jurisdiction and the enforcement of school smoking bans. While the literature focuses on pupil smoking behaviour in these discussions, the impact on staff smoking behaviour may also be investigated, alongside exploring staff perceptions of where their jurisdiction as a role-model ends.

Also central to the identification of pupil smoking misbehaviour is staff attitudes, with some staff choosing to turn a blind eye to pupil smoking even where there are processes in place to detect it. This behaviour was also identified by Reid (1985) and Turner & Gordon (2004b). Where this happens, it leads to smoking misbehaviour effectively going unidentified. Variation in the extent to which staff identify pupil smoking misbehaviour where they see it and where protocol requires that they pick up on it, leads to potential inconsistency in supportiveness of the policy and of policy no-smoking messages. Turner & Gordon (2004a) state that not enforcing a ban could even be seen as encouraging pupils to smoke. It would seem that this may be the case where pupils are aware that staff have turned a blind eye to their smoking behaviour. Staff turning a blind eye sometimes appears to be related to individual staff members' notions of the jurisdiction of the school – the role of these individual-level senses of jurisdiction are important to include in any future study of the importance of school jurisdiction. It seems possible that schools need to encourage all staff to follow the agreed protocol. This may involve explaining the importance of consistent messages to staff. Reporting of some situations where staff feel too intimidated to approach smokers (also reported by Gordon & Turner, 2003a) also suggests that it may be necessary to implement structures to support staff where they pick up smoking misbehaviour, just as higher-level school structures should always support staff to act in line with school policy.

As discussed in Section 7.2.6, it is apparent that with the endless shifting of smoking from place to place, both staff and pupils know that there are places where pupils will get away with smoking. Staff have also come to accept this. While they continue to attempt to identify smoking misbehaviour, it is possible that the existence of these spaces is quite convenient for some

schools. As discussed above, schools that recognise that smoking is a behaviour born of addiction and as such some pupils will always need to smoke, may find themselves in a situation where they cannot allow pupils to smoke on site as they have seen the negative consequences of this tactic elsewhere, but they also know that for some pupils, not getting a nicotine fix reduces the quality of their concentration, work and behaviour. Perhaps, these implicit spaces where pupils get away with smoking, and both staff and pupils know it, sometimes become a resolution to this tension - this space is accepted at some level because it allows pupils to smoke on the school site without schools being seen to legitimise the behaviour as they can argue that they have strategies in place to deal with this. It seems likely that any strategy targeted at removing all spaces where pupils get away with smoking is likely to fail – if they want/need to smoke, pupils will always find a way to get away with it and indeed, these places may also be to the advantage of the school. Indeed, this may also partially explain why schools see their jurisdiction as ending at the boundary of the school site: as well as genuine issues regarding the limitations of what staff should be expected to do, it also allows a place for pupils to smoke. Consequently, if smoking bans do serve only to push pupil smoking behaviour off the school site then this is not only an issue of jurisdiction as outlined above, but is also an artefact of schools needing on one hand to be seen to ban pupils smoking, but also accepting on the other that those pupils with a habit need to smoke during the day. In this way, the school is distanced from a behaviour it is seen to ban, yet also benefits from pupils smoking and consequently not presenting the potentially educationally disruptive symptoms of withdrawal during the school day. It should be emphasised that the extent to which these are conscious processes is open to debate. Many decisions about jurisdiction are probably made on the grounds of individual notions of staff responsibility, staff and pupil protection and logistical concerns. However, it does seem possible that underneath these, the resolution of tension offered by these implicit spaces where pupils can get away with smoking is useful to the functioning of the school. If these places are unlikely to ever be removed, this adds to the argument that it is important for school policy to take a health-based approach which focuses on addressing the issue by creating an environment that discourages smoking uptake and by implementing strategies

to encourage and enable smokers to quit, all of which should be based upon evidence of best practice. Realistically, perhaps this is the best way in which school policy can reduce adolescent smoking prevalence, rather than just its presence on the school site which is what is mostly addressed through the identification of smoking behaviour and application of merely punitive sanctions.

While physical space is mentioned in the HPS literature and in discussions of the hidden curriculum, it is not often considered in studies of the effectiveness of smoking policy. In applying some of these ideas to smoking policy, this qualitative study has shown that the physical environment could have important implications for the investigation of the effectiveness of school smoking policy which future work should explore further. Weight is added to this suggestion by the work of Turner and Gordon, as cited above, who used similar qualitative methods in a study in Scotland and whose findings echo some of the factors outlined in the construction of the above argument. It is worth stressing here that this analysis was conducted prior to exposure to Turner and Gordon's work, adding extra weight to both sets of findings - for similar qualitative studies, which are uncommon in the investigation of smoking policy, to independently draw similar conclusions around several factors, suggests that these are areas worth investigating further. Analysis using the concept of jurisdiction as outlined in this thesis may be a useful way to take this forward.

9.3.2.2 Extent to which smoking policy is supported by the application of sanctions to pupils caught breaking policy

The literature described the potential importance of consistent policy enforcement and while Section 9.3.1.5 focussed on the *types* of sanctions in place, this section is concerned with the *extent to which these sanctions are adhered to* (i.e. consistency). The extent to which the correct sanctions were put in place varied between schools with reasons why procedures were not adhered to also varying. Firstly, individual staff attitudes to smoking and the appropriate sanctions for smoking may lead to variation in the correct

application of sanctions. This includes staff turning a blind eye at the identification level (i.e. applying no sanctions) and also, in some cases, staff applying their own sanctions rather than the official ones. Secondly, variation in the implementation of sanctions may also be due to how well sanctions procedures are managed at the school level. Interview data suggest that such procedures are not always very well defined which, in some cases, leads to uncertainty of the correct official procedure. In other schools, there is no set sanction procedure for pupils caught smoking with discretion regarding appropriate sanctions being delegated to either middle management (i.e. year/department heads) or to individual staff. Where any of these happen, application of the wrong sanctions; mixed sanctions or even no sanctions potentially leads to inconsistent messages. While some schools recognised this, it would seem important for all schools to: standardise their sanctions procedures for pupils caught smoking; communicate them to staff and ensure that all staff follow them in order to produce not only consistent messages through the implementation of sanctions, but also a fairer sanctions procedure which may be less likely to alienate pupils. This is potentially complicated by reporting that discretion is sometimes needed in applying sanctions to pupils caught smoking (e.g. where it is would cause unnecessary problems for a pupil if a procedure stating that parents must be contacted were followed). However, these are likely to be uncommon incidences and such discretion could be built into a policy. Instead, focus should remain on minimising widespread inconsistency in the application of sanctions procedures.

The importance of issues of staff authority also became very apparent through respondents' discussion of sanctions procedures. Not only was there the notion that senior staff may be more prepared to act on smoking behaviour due to their authority, but data also suggested that pupils respond differently to different levels of authority. In every school, there was a hierarchy of staff authority which this work argued can generally be seen to run from dinner controllers up to SMT, with pupils generally more likely to respond to demands from staff with greater authority. Gordon & Turner (2003a; 2004a - as Turner & Gordon) suggest that actually, staff authority over pupils is created not by their rank within the school, but by their relationship with the

pupils. This is a valid and useful argument and in fact, perhaps a more accurate understanding of staff authority emerges from seeing the interaction between hierarchy and staff-pupil relationships – both may be important not only on their own, but also in the way that the rank influences the relationship with pupils and vice versa. But, how does this information allow suggestion for improvements in policy implementation? Gordon & Turner (2003a) suggest that schools need to involve support staff [who are traditionally seen as having lower authority and so their argument can be assumed to also apply to similar groups such as dinner controllers] in policy enforcement by "communicat[ing] to pupils that these staff are conferred with this authority, thus empowering them to play their part in the invoking of the appropriate school procedures" (p.338). This suggestion seems problematic, however: if authority is, as they argue, concerned with staff relationships with pupils, how can authority (i.e. a relationship with the pupils) be conferred – this suggestion implies that hierarchy is the major issue as the power has to be seen to be conferred from a higher rank. It is also unclear how this process would work in practice. If hierarchy is important, the challenge to change notions of authority is vast, arguably requiring a shift in the long-standing culture of schools which is built around hierarchies of authority. So, what are the possible ways forwards? Perhaps, if relationships are key, it would be useful to provide all staff with training in building and maintaining better relationships with pupils in order to build respect and authority. Alternatively, if the hierarchy is important, perhaps the solution is to exploit it, for example by using escalated sanctions procedures where escalation is up the line of seniority – although arguably this reinforces the traditional school hierarchy. Perhaps, more realistically, the answer is to adopt several approaches. The challenge to change school culture is massive, but may be won in the long-term by building respect for all staff through helping them build better relationships and by communicating the authority of all staff to pupils. However, in the shorter-term, perhaps it is useful to exploit the levels of authority and ensure that those with authority, whether through seniority or relationships with pupils, are involved in policy enforcement. Although, whether it is possible to do this without reinforcing the existing hierarchy is debatable.

9.3.2.3 Extent to which actions by role models support or undermine school smoking policies

Accepting the importance of role-modelling outlined in the literature, the no-smoking behaviour of on-site role models and other actions to support this are crucial in supporting the policy and producing consistent messages. Despite this, there was variation in the no-smoking message given out by role-models on site. With regards staff, this was not just where policy allowed staff to smoke, but where staff smoked despite a smoking ban being in place. Even more concerning, in some schools this staff smoking misbehaviour is legitimised by the school turning a blind eye to it. It also apparent that the attitudes of one or more members of SMT may influence these attitudes towards staff smoking misbehaviour. It is possible, too, that with all schools seemingly irreversibly moving towards having smoking bans (see Section 9.3.1.1), some schools are using these methods to provide facilities for their smoking staff while stating a smoking ban. Whether staff smoking against policy results from the parallel existence of such official and unofficial policies, or staff just breaking policy, this can clearly lead to inconsistent messages if pupils become aware of it. The potential problem of staff smoking misbehaviour is compounded when considering interview data suggesting that in many schools it was generally felt that monitoring of staff smoking misbehaviour was unnecessary as it did not happen, when other interview data strongly suggests that staff smoking misbehaviour did occur. It would seem important that schools encourage compliance with staff smoking policy, by highlighting the importance of adherence and implementing sanctions where policy is broken. Better monitoring may be necessary to identify staff smoking misbehaviour, and more enforcement of staff policy where policy is transgressed. Certainly, schools should not be legitimising smoking misbehaviour, and SMTs need to be made aware of the importance of this despite the fact that they may be reluctant to do any of these things for fear of alienating both smoking and non-smoking staff.

While parents are on site less often than staff, due to their influence in their children's lives, their role in supporting or undermining school policy may be

crucial. A parent condoning smoking behaviour clearly undermines any policy promoting a no-smoking message. As such, Lister-Sharp *et* al (1999) recommended that schools involve parents in promoting health, which Turner & Gordon (2004a) have also argued can be applied to smoking. However, getting some parents on-side may be very difficult, especially where parents themselves are smokers and/or are wary of the school and sceptical of its authority over certain issues. Perhaps this is why studies of school smoking policies focus more on the role of staff than parents in supporting this – maybe staff are seen as easier to manage than parents, with their behaviour easier to modify, although whether this is correct or not is debatable. The role of parents and the focus on schools is discussed further in Sections 9.4.3 and 9.4.4.

Finally, there are other role-models who work within and around the school and whose actions may support or undermine smoking behaviour. While these groups tend to belong to those peripheral groups mentioned in Section 6.3.5, it is still important that their actions support school policy. It may be the case, however, that their behaviours are more difficult to manage. This may be true, for example, where cleaning staff are employed by a company contracted to the school. Similarly, the actions of bus drivers may be difficult to manage depending on who employs them (e.g. school; local authority) which could be important as the response of bus drivers to pupil smoking appearing to vary, with one school even reporting that some drivers agree not to report pupils smoking if in turn they do not report the driver smoking. While these people might be seen as more peripheral to school life, or their actions perceived as more difficult to manage, promotion of a consistent no-smoking message necessitates their cooperation and it would seem that any actions that undermine this should be addressed. With these groups operating on the margins of traditional understandings of school jurisdiction (e.g. after school; off-site), the need for clarification of school notions of their own jurisdiction and investigation into the possibilities and problems with extending school jurisdiction (Section 9.3.2.1) is reinforced.

9.3.2.4 Naturalisation or prioritisation: the status of school smoking policies

The term naturalised policy describes schools where policy has become taken for granted or assumed to the extent that stating and defining the policy appears to be of little concern to the school which sees the policy is obvious (Section 7.7). As discussed, this most commonly happens with regards to the pupil policy and is not a positive situation. The problem is that when this happens, the smoking policy itself essentially becomes invisible: it is not a policy, just a fact of school life. As such, it becomes assumed that every pupil, every member of staff and anybody else connected to the school knows that pupils should not smoke on site. When this happens, it is possible that the policy becomes forgotten and people stop considering the rationale behind the policy, and how the policy may be disseminated or enforced and these may even stop. This was exemplified by those respondents who, when asked about the dissemination of pupil policy to pupils, assured the researcher that all pupils knew what the policy was, but could not identify ways in which the school spread or reinforced this message. Where smoking is a low priority, it may be considered a nuisance issue and staff may be more likely to ignore pupils smoking. It is possible that at this point smoking is in greater danger of becoming treated more as a disciplinary than a complex health issue. Where smoking policy is naturalised, smoking issues and smoking have lost their profile within the school and may cease to be promoted. As a result, policy may become complacent and suffer through not being thought through, coherent, or integrated.

The naturalisation and prioritisation of smoking policy are clearly two extremes, with schools being most likely to fall somewhere between the two. However, this dichotomy may help us to understand why smoking policy varies between schools and, as themes that arose from the interviews, future work should investigate these further. The current study certainly suggests an apparent need to ensure that smoking remains a high priority in all schools. This is regardless of the extent to which a school perceives themselves to have a smoking problem and of the other priorities in the school. Although this may be a difficult balance, it seems necessary that smoking policies remain high

profile so that they do not become forgotten and can instead be kept clear, structured and updated.

9.3.3 The achievements of interview findings: limitations and conclusions

There were some limitations to the collection and analysis of interview data that should be noted. Firstly, in using only one respondent from each school, policy data privileged just one voice in each school. This seems problematic, especially considering that in order to improve on Moore *et* al's (2001) study, the collection of more than one teacher questionnaire was targeted in order to improve the validity and reliability of data. While the use of one respondent might not be a major issue for qualitative research where findings may be viewed as co-constructed knowledge, for example, it may present more of an issue for indicator development. This is discussed further in Section 9.4.2. A similar concern revolves around the fact that, being a doctoral thesis, all interviews were conducted and analysed by one researcher. Consequently, interpretation of interview data is all highly subjective with no inter-coder validation. Again, while this is an accepted part of qualitative research, it does form a concern with regards the creation of indicators for quantitative analysis. However, this is unavoidable in doctoral research.

Due to resource constraints, a planned case study element to the project had to be dropped. Through the purposive selection of 8 case study schools, this phase had aimed to collect in-depth data from staff, pupils and other people associated with the school. The unavoidable loss of this phase resulted in the loss of two main pieces of qualitative data to the analysis. Firstly, a recurring theme in the literature is the lack of longitudinal data on smoking policy and smoking prevalence in order to assess causality. It had been hoped that, had any association between policy and prevalence been discovered, a breadth of more in-depth data, particularly from case studies, would have contributed to understandings of causality. With interviews alone not revealing this detail, there was very little data on causality. Perhaps more importantly, a clear gap in this research is the lack of pupil voice regarding policy. All data used is very staff-centred. The original third phase of research had sought to address this by

giving pupils a voice. However, with the loss of this stage, pupil voice was largely lost from the work, being present only in restricted amounts in the HBSC data. Future work should certainly seek to address both of these limitations. With interviews revealing that "other" adults on school site was a contested group and different to that anticipated at the outset, this phase would also have allowed further investigation into how this category is constructed in different schools and policies applied to them.

Despite their limitations, interview findings have added to the literature on policy contexts by providing more in-depth and complex data which extend existing knowledge of the between- and within-school variability of policy-level characteristics. Not only is such a qualitative approach uncommon in studies of smoking policy, but to the author's knowledge, such a large-scale empirical investigation into Welsh school smoking policies using interview data and quantitative analysis has also rarely, if ever, been done before. In addition, this work has furthered understanding of policy contexts through the framework of analysis applied to it in which understandings of the importance of the consistent messages in policy and the WSE are applied specifically to smoking policy. Some of these Welsh findings reinforce earlier studies while this work also adds to existing literature on policy by using more in-depth data to investigate characteristics of policy often mentioned in the smoking policy literature as well as some characteristics more seldom encountered (e.g. physical space). This analysis has also suggested ways forward for future research, particularly through investigation of the extent to which the WSE supports or undermines smoking policy thus supporting or undermining consistent no-smoking messages. The potential importance of some of the characteristics discussed with regards to the WSE are particularly supported by the fact that Turner & Gordon's work (as cited above) in a separate Scottish study using similar qualitative methods, had similar findings. For similar studies, to independently draw similar conclusions around several factors, adds strength to the argument that these characteristics are worth investigating further. In doing so, it is certainly worth taking forward the framework of analysis outlined in this thesis. In particular further investigation needs to uncover more potentially influential characteristics of the WSE in order to

create a more complex understanding of policy enforcement. Those enforcement-level factors presented here that emerged from the analysis as potentially important (e.g. physical space; jurisdiction) also need more comprehensive investigation in the future.

9.4 Quantitative analysis findings

9.4.1 The lack of any significant association between policy characteristics and adolescent smoking behaviour

Having achieved Research Objective 3 (Section 3.5.1) by creating indicators summarising between-school variation in policy- and enforcement-level characteristics (Chapters 6 and 7), Chapter 8 presented the results of analyses that sought to fulfil Research Objective 4 by using these to assess the relationship between school policy and pupil smoking prevalence. The creation and analysis of these indicators contributed to the literature by using a rigorous mixed-methods approach not adopted in many other studies in order to create indicators to analyse the association between school smoking policy and pupil smoking. As outlined in section 2.4.3, this study built on Moore *et al's* earlier Welsh study (2001) by using a mixed-methods approach to collect more in-depth and rigorous data on school smoking policies. This included developing school-level indicators (Research Objective 3) describing characteristics of policy that analysis of interview data (Research Objective 2) identified as potentially moderating the extent to which school smoking policies reduced adolescent smoking behaviour. Some of these indicators were similar to indicators developed by Moore *et al*, only described using more rigorous methods. All indictors developed were analysed using a similar strategy to that adopted by Moore *et al.* Consequently, this discussion of the results of Research Objective 4 focuses on comparing them to Moore *et al's* findings. These indicators also added to the literature by interpreting the extent to which policy-level characteristics and the WSE as indicated by enforcement-level characteristics promoted or undermined no-smoking messages and analysing the extent to which this was associated with pupil

smoking. This analysis sought to address the following secondary Research Objectives (Section 3.5.1):

- *Conduct multi-level analyses of the new policy indicators in association with self-reported data on pupil smoking prevalence from HBSC 2001/2 in order to:*
- *Examine the extent to which various policy-level characteristics are associated with lower levels of adolescent smoking in Welsh schools*
- *Examine the extent to which smoking policies that produce more consistent no-smoking messages are associated with lower levels of adolescent smoking in Welsh schools*
- *Examine the extent to which Wider School Environments (as defined by enforcement-level characteristics) that are more supportive of school smoking policies are associated with lower levels of adolescent smoking in Welsh schools*
- *Examine the extent to which schools where the whole policy context (i.e. policy and its enforcement) is more supportive of producing consistent no-smoking messages are associated with lower levels of adolescent smoking in Welsh schools*

In contrast to Moore *et al's* similar Welsh study, and the findings of many other studies outlined in Chapter 3, analysis showed no statistically significant correlation between any policy characteristics and adolescent smoking prevalence. Consequently, the findings relate to the secondary Research Objectives as follows:

1. According to the statistical analysis, no policy-level characteristics are significantly associated with lower levels of adolescent smoking in Welsh schools
2. According to the statistical analysis , smoking policies that produce more consistent no-smoking messages are not significantly associated with lower levels of adolescent smoking in Welsh schools
3. According to the statistical analysis, WSE's (as defined by enforcement-level characteristics) that are more supportive of school smoking policies are not significantly associated with lower levels of adolescent smoking in Welsh schools
4. According to the statistical analysis, schools where the whole policy context (i.e. policy and its enforcement) is more supportive of producing consistent no-smoking messages is not significantly associated with lower levels of adolescent smoking in Welsh schools

Having drawn these conclusions, Research Objective 5 becomes highly important and the qualitative analysis must be included in interpreting these findings.

Consideration of possible factors leading to such a large discrepancy in results between the earlier study based on 1998 survey data and those based on 2002 data raises some important questions that have resonance with studies investigating the effectiveness of school smoking policies beyond Wales. There are three possible over-arching explanations for this discrepancy: (1) this study's findings were inaccurate; (2) Moore *et al's* findings were inaccurate or (3) there has been a change in the association between smoking policy characteristics and smoking behaviour. Each of these possibilities will be discussed below. In order to do so, a *convergent paradigms* approach to methods is adopted and the findings of the qualitative analysis are used here to help interpret the quantitative findings[1].

9.4.2 The possibility that the current study's findings were inaccurate

The first consideration is the possibility of inaccuracy in the current study's findings with them producing a false negative result. The chances of such a result occurring due to sampling error were minimised by the strict random stratified sampling method and replacement school strategy used to select schools for HBSC. However, it is possible that there may be a self-selection bias in those schools that agreed to the further teacher interviews although a response rate of 78% for interviews reduces the likelihood that this is the case. Aside from the possibility that this occurred by chance, there are limitations to the research which may have influenced the results.

As suggested in Section 5.2, having laid aside methodological debate on the compatibility of approaches in order to undertake multi-method research, it may be useful to return to these in interpreting the findings. One limitation of

[1] As they relate to the quantitative analysis which is the collaborative phase of this project, some of these interpretations are included in a paper currently being co-authored with Dr Wiium and Professor Moore.

the multi-method approach is the fact that the complexity of the interview data is lost to the statistical analysis by the reductionist approach in which indicators are created to summarise the policy characteristics discussed in the qualitative analysis. In this way, despite the fact that the indicators here are based on more in-depth and complex data collected within a more rigorous (mixed-methods) approach than those in many other studies, as with any such analysis, they cannot capture the full complexity and variation of policy in schools. Not only does such an approach reduce the data, but it also relies on subjective interpretation of data to do so. For example, on occasions respondents would appear to contradict themselves and it was necessary to read through the whole interview transcript, sometimes listening to the interview again, and make a judgment as to which category the policy should be attributed. While these judgements were generally fairly clear after looking at the whole interview, the element of subjectivity in indicator construction, and the potential for over-interpretation or misinterpretation of the data is a limiting factor that could lead to inaccuracy in the statistical analysis. This is potentially compounded by the fact that, being a doctoral project, this stage of analysis was undertaken by just one researcher. In addition, limitations of the qualitative data must also be accepted. The respondent can only report their perception of policy and their reporting may be inaccurate. Particularly, because a respondent does not mention a particular method of identifying smoking behaviour, for example, does not mean that it is definitely not used. While a purely qualitative method may accept this, approaching an interview as a co-constructed social experience, quantitative approaches tend to demand an accurate representation of an assumed reality – hence questionnaire responses are designed to be largely exhaustive (although the success of this is debatable). As such, it may be argued that the inherent tension in the knowledges that these methods seek to construct are irresolvable and as such, in trying to describe complex qualitative data, the indicators fail and it is this that leads to the lack of statistical significance in the findings. However, an alternative view is that the differences between methods should be celebrated, with the *convergent paradigms* approach arguing that the strengths of one method can be used to support the limitations of another (Section 5.2). It is this approach that is adopted here. Thus, it is assumed that the lack of

statistically significant findings are not the result of incompatible methods of data collection and analysis but instead that the qualitative findings may be able to help interpret this lack of an association in other ways. In addition, the impact of these limitations were reduced as qualitative analysis and construction of indicators was done thoroughly, methodically and blind to the pupil data.

Having accepted the use of indicators, some potential limitation in their creation may have affected the results. A weakness in the indicator describing the extent to which the WSE supports policy should be noted. Qualitative analysis of the extent to which the WSE supported policy and consistent no-smoking messages identified several themes important for future consideration. However as these themes emerged from interviews, data on them were not available for all schools. Consequently, indicators for this characteristic were represented by proxy variables using just two pieces of information that were available for all schools (staff turning a blind eye to pupil smoking and staff smoking misbehaviour). This meant that the complexity of the supportiveness of the WSE revealed by qualitative analysis (and needing further investigation) was reduced to a fairly simple representation of this which did not capture the complexity of the phenomenon. While this indicator itself was removed from the analysis (Section 8.2), it was used as the basis for the indicator describing the WSE supportiveness of consistent messages. As such, this indicator certainly does not reflect the complexity of the WSE, which requires further investigation including following up in all schools on some of the characteristics identified in Chapter 7. Another limitation in indicator development occurred in the creation of the indicator combining all policy-level characteristics to establish the extent to which they together supported consistent no-smoking messages in each school. When combining the consistency scores for each indicator, averaged scores were rounded off, with scores of 1.5 being attributed to level 2. Perhaps it would have been more accurate to have had a middle level or even to have either used averages as continuous scores. Another potential weakness of indicator development is that there maybe inaccuracy in the

assumptions made regarding the extent to which various characteristics supported or undermined consistent messages.

Another limitation to the study which may have effected the results of the analysis was that, as outlined in Sections 5.4.3 and 6.3.3, due to complications with data collection, there was a time lag between the HBSC (pupil) data collection and the interview (staff) data collection, meaning that the data were not as contemporaneous as had been intended. However, qualitative data allowed this to be addressed by removing the two schools whose policy had changed in the intervening time period. All other school policies had been in place for at least a year prior to HBSC data collection and so could be assumed to be related to the policy data given by staff (Section 6.3.3).

A final limitation that may have moderated the findings is the fact that all policy-level data were derived from interviews with just one respondent in each school, thus privileging this one voice. In this case, questions over intra-person reliability (i.e. if you asked the same person the same questions again, would you get the same answers?) and inter-person reliability (i.e. if you asked another person in the school the same questions would you get the same answers?) are raised. These are issues with any research, but acutely felt by positivistic approaches and were compounded by the loss of the teacher survey data to the study (Section 5.3) which had been intended to help validate these data. However, the impact of these were minimised by the fact that respondents were purposively selected based on their confidence in their knowledge of school smoking policy and its enforcement. As a result of this, they tended to be in positions which meant they were likely to have a closer working relationship with the policy than the average member of staff (e.g. members of SMT; PSE co-ordinators). Therefore, while inter-person reliability may be an issue, reporting of policy by chosen respondents was arguably more specific and confident than other members of staff would have been. Despite the fact that, as with Moore *et al's* study, indicator development relied on only one respondent, these are arguably still more reliable data than the earlier study used because of the more rigorous and complex methods of data collection and analysis used to derive them. With interviews allowing

questioning, probing and clarification of a local policy 'expert' and their responses, it is arguable that a more accurate (to use a positivistic notion) understanding of the policy situation could be obtained.

9.4.3 The possibility that Moore et al's findings were inaccurate and there is no policy effect

The second possible explanation for the discrepancy is that the findings of Moore *et* al (2001) were inaccurate. Aside from the limitations identified in their own work and other methodological or sampling errors that may have produced false positive findings, it is also possible that the original findings were a chance result. That said, there is other literature to support the thesis that school smoking policies may have a role to play in influencing smoking behaviour. However, the possibility of publication bias is worth raising here, as also suggested by Clarke *et al* (1994) (Section 2.4.2). Despite long-standing interest in school smoking policy, as indicated in Section 2.4.2, the literature on the topic has appeared to remain relatively small. While some studies do suggest the lack of an effect, the majority of those published do find a potential association between policy characteristics and smoking behaviour. It is possible that perhaps there is a raft of unpublished work on smoking policy that demonstrates there is no policy effect with publishing bias in favour of an association between policy and smoking prevalence being either due to editorial control or decisions by groups with negative findings not to publish. This is of course speculation, and is a hypothesis that would be very difficult to test, but publication bias is known to lead to misrepresentation of research. The question that this raises is whether in fact, the weight of unpublished evidence suggests that there is no policy effect, while that selected or submitted for publication demonstrates that there is. The suggestion that perhaps there is no policy effect is possibly further supported by the fact that some published findings are often inconclusive. Moore *et al's* work highlighted the need for a more complex and in-depth study examining smoking policy and enforcement. In answering this call, perhaps this study has revealed that actually there is no policy effect in Welsh schools and,

potentially, beyond. If this is the case, it would have implications for the future of research on smoking policies in schools.

It is possible that a focus on school smoking policies is born out of the convenience of schools as research sites as much as anything else. In Section 2.4.1 it was shown that with smoking uptake being influenced by many factors, a focus on school smoking policy stemmed from the supposition that if there was a policy effect it would be easy to modify both the policy and the effect. Perhaps the potential convenience of a policy effect, alongside the logistical convenience of conducting research in schools combine to maintain a focus on school smoking policy that is not fully justified. Firstly, the extent to which this is true is debatable. As this work has shown, the success of policy is as much about the extent to which the WSE supports policy and enforcement-level characteristics, as it is about policy-level characteristics alone. It has also been demonstrated here that these enforcement-level characteristics are reliant on discretion at the individual level, depending upon individual attitudes towards smoking and smoking policy. Clearly, if there is a policy effect, it is likely that to improve policy in all schools will require more complex and longer-term cultural and attitudinal changes as well as changes to policy-level characteristics. Referring particularly to support and behaviour control, which were associated with reduced smoking in pupils across all social backgrounds, Aveyard *et al* (2004b) have recently suggested that changing school culture may be the new challenge in adolescent smoking prevention. The need for the WSE to support policy, and the cultural changes this may necessitate may be one way that this challenge may be met. This is supported by claims that there are many influences on adolescent smoking uptake (Section 2.4) and that of the school may not be the most important influence in pupils' smoking behaviour (Gordon & Turner, 2003a; Turner & Gordon, 2004a; Wakefield *et al*, 2000; Wiium *et al*, 2006). In particular, the importance of parents as role models is often highlighted. Parents condoning or not objecting to smoking may pass these values onto their children. It is also possible that parents who are resistant to the idea that schools have any jurisdiction or authority over smoking may also pass these ideas to their children and undermine smoking policy effectiveness and enforcement. While

Turner & Gordon suggest that staff enforcement of policy may only have limited effect on pupil smoking (2004a) it would seem that this argument can be made for policy more broadly. Perhaps not only is it the case that schools are not the most important places to tackle smoking, but within schools, maybe policies are not the most effective method of controlling this. While a focus on smoking policy is clearly important, as demonstrated by those schools where policy has become naturalised and taken for granted, there is possibly a need to recognise the limitations that such policies can achieve. This argument not only recognises that schools are not isolated environments but also that policy is not the only thing that defines them.

9.4.4 The possibility that there has been a change in the association between smoking policy characteristics and smoking behaviour in Wales

If neither of the above two scenarios are correct, and both studies represent an accurate picture of associations between policy and prevalence in Wales at the time they were conducted then the question must be asked as to what has changed in the intervening four years? In answering this, it is useful to consider that much work regarding the importance of smoking policy is based around the importance of role-modelling. Policy may have been important in the past in reducing staff smoking so as to set non-smoking examples. However, all schools reported very low numbers of staff smokers and it is possible that the influence of staff smokers as role-models is similarly small in all schools. For this reason, policy restrictions may have less effect on reducing pupil smoking through moderating the behaviour of staff role models.

If school policy is concerned with promoting no-smoking messages, as in Section 9.4.3, it is worth considering the suggestion that school and school policy may not be the most important influence on pupil smoking behaviour. It appears as though smoking messages and promotion of both smoking and non-smoking norms are increasingly found in places other than schools, families and friends (e.g. films; celebrity role-models; public debate around smoking bans). Perhaps this deluge of messages dilutes the effect of each one,

especially weakening the role of school policy in promoting what is normative smoking behaviour.

The issue of naturalisation may also shed some light on possible changes in the effectiveness of smoking policy (Sections 7.8 and 9.3.2.4). In some schools, it is clear that smoking policy has been taken for granted and almost forgotten. One reason for this was that in these schools smoking had become a low priority. This seemed partly related to policy fashion with 'hot policies' sometimes appearing to dominate all those policies competing for implementation within a school. Policy fashion could be dictated by local priorities or governmental and popular pressure and interrelations between them. For example, at the time of writing, healthy eating appears to dominate the school policy landscape in Wales. Perhaps this explains why smoking seems to have become a passé issue in some schools, and slipped down the list of priorities. It is possible that ever-increasing social and governmental pressure to tackle other issues, mean that local priorities are set accordingly and smoking has become a much lower priority across Wales. As such, while smoking policy rhetoric may reflect social pressure for smoke-free school environments, much less attention is paid to smoking policy than to those policies that are more in vogue at the time and as such, policy implementation suffers. Having argued that implementation is as important as policy, this could have reduced smoking policy effectiveness in recent years. The idea that policy rhetoric may be a lot stronger than policy practice appears to be reinforced by those examples where schools legitimise staff smoking behaviour which contravenes smoking policies. The notion that smoking is lower on the list of priorities in some schools was further reinforced by several respondents stating that by focusing on smoking in an interview, the problem was made to seem much worse than it was.

Another possibility is that, with increasing social pressure and moves towards smoking bans, there has been a lot of pressure on schools to reduce smoking and to have smoking policies. Consequently, more schools have smoking policies, therefore there is less variation in the presence of school smoking policies and the policy effect is reduced. However, Table 9.1 suggests that

while in 1998 96% of schools reported having a pupil policy and 85% a staff policy, in 2002 these figures had reduced to 82% and 81% respectively. While these differences may be an artefact of the methods of data collection (the 1998 study used a close-questioned questionnaire whereas the 2002 study drew these data from semi-structured interviews), these data certainly do not suggest an increase in the presence of smoking policies. Variation in the characteristics of these policies and their enforcement further suggests that this may not be the case.

Finally, if the effectiveness of smoking policies has changed, it may be speculated that perhaps attitudes towards schools are changing. In Section 9.4.3, it was suggested that resistance to school authority and jurisdiction over smoking may undermine the effectiveness of policy enforcement. Perhaps it is the case that pupils are becoming more resistant to the moral authority of the school regarding smoking, and it is these changes in pupil attitudes that have caused smoking policies to loose their effectiveness.

Finally, it is possible that the findings are confounded by another factor. Table 8.11 shows that there was some discrepancy between staff reporting of policy and pupil perceptions of that policy. Although all schools banned pupil smoking, 12.7% of pupils did not know that there was a ban on pupil smoking in their school. In addition, this table also shows that in schools with staff bans, pupils were not aware this was the case. In these schools, 76.6% of pupils were unaware that staff where not allowed to smoke in rooms for staff only; 47.3% of pupils where unaware that staff were not allowed to smoke in other parts of the school building and 51.6% of pupils did not know that staff were not allowed to smoke outdoors on the school premises. These perceptions were not associated with individual smoking behaviour. While only descriptive, these findings seem to suggest that smoking policies are not being effectively disseminated to pupils. If pupils do not know what the pupil policy is then the policy is undermined. Similarly, if the purpose of smoking bans for staff is to provide a consistent no-smoking message, yet pupils are not aware of the existence of a ban, the intent of the policy is also undermined. Potentially, then, poor dissemination is maybe part of the reason why smoking

policy in Welsh schools appears possibly to be ineffective at lowering pupil smoking. The potential of dissemination as a mediating influence in the effectiveness of smoking policy is further supported by the apparently chaotic and variable nature of dissemination across Welsh schools (Sections 6.7; 9.3.1.4). The fact that whether pupil policy dissemination was written or not was the only factor to appear significantly associated with daily smoking on-site (Table 8.4) further supports the possibility that dissemination of policy is a key area of Welsh school smoking policies that may need addressing. Although this association disappeared once other pupil-level variables were controlled for (Table 8.9) on the weight of evidence presented here, further investigation into the role of policy dissemination is recommended.

9.5 General conclusions

By fulfilling the criteria set out in Section 3.5.2, this work has contributed to the literature in several ways. Firstly, by adopting a mixed-method approach, it has collected and used more complex, rigorous and in-depth data than often used in studies of school smoking policy to contribute to understandings of how policy characteristics vary between schools. It also did this by using a mixed-method approach to combine the strengths of qualitative and quantitative approaches and also by adopting a framework of analysis that brought together ideas from various literatures that had not before, as far as the author was aware, been applied to Welsh school smoking policies and seldom applied explicitly to studies more broadly. This framework distinguished between policy- and enforcement-level characteristics, assuming that in order to be effective and reduce adolescent smoking behaviour, it was important both for policy-level characteristics to produce consistent messages regarding the importance of no-smoking, and for the Wider School Environment (WSE) (including enforcement-level characteristics) to support this. The study investigated variation in policy- and enforcement-level characteristics (as indicators of the value-context produced by the WSE) and how they supported or undermined consistent no-smoking messages. Together, these created the policy context. In doing so, it has further contributed to the literature by

investigating not only characteristics commonly discussed in the school smoking policy literature, but also some enforcement-level characteristics and elements of the WSE that are less often mentioned in the literature. In investigating school smoking policies in Wales, and in finding a mixture of evidence that supports and contradicts earlier work, this study answers calls in the literature for further work on policy context, and in particular work that uses in-depth and more complex data in order to make a worthwhile contribution to the literature.

In finding no statistically significant relationship between smoking policy characteristics and adolescent smoking prevalence, this study contradicts the findings of Moore *et al* (2001) on which this work particularly builds. If both of these studies have findings that represent the situation in Wales at the time they were conducted, then in the four years between data collections something has changed to moderate policy effectiveness. It is also possible that the findings of this study misrepresent the role of school smoking policy in Wales. Alternatively, it is possible that this study, using more in-depth data than often used in smoking policy investigations, accurately suggests that Welsh school smoking policy is not as effective at moderating pupil smoking behaviour as had been hoped. Whether policy effectiveness has been tempered in recent years, or whether a longer-lived pattern of policy ineffectiveness has been uncovered, it is possible that the effectiveness of school smoking policy has been over-stated in the literature due to publication bias and the desire to find health promotion solutions in schools as convenient sites for both research and intervention. The suggestion that school smoking policy may not be effective in reducing adolescent smoking supports assertions made elsewhere in the literature, as outlined throughout Chapters 2 and 3.

Despite the quantitative findings, the qualitative work provides a useful insight into smoking policies. Firstly, this work suggests that while some have argued that a focus on school smoking policy is useful because if there is an effect, policy is easy to modify, this may not be the case. If policy is as much about the extent to which individual-level discretion and attitudes create a WSE that supports policy through enforcement-level (and other) characteristics, then

policy modification may necessitate cultural and attitudinal changes within the school as well as easier to make changes to policy-level characteristics. Naturalisation of smoking policy clearly suggests that maintaining a focus on smoking policies in schools is important in order that they do not become taken for granted, poorly constructed and weakly implemented. In addition, the notion that there will always be implicit spaces were pupils can get away with smoking, alongside evidence that schools can successfully combine sanctions procedures with cessation support adds to the argument that perhaps schools can most effectively reduce adolescent smoking prevalence by having policy that creates an environment that discourages smoking uptake and by implementing strategies to encourage and enable smokers to quit. As such, the argument for a focus on smoking policy in order to maintain consistent no-smoking messages across the school is still a fairly persuasive one. It is important that policy rhetoric does not surpass policy practice in order that no-smoking messages, if they have any influence on pupil smoking behaviour, are not undermined. It may be necessary, however, to re-evaluate the extent to which smoking policies may influence adolescent smoking behaviour. It is necessary that further work addresses the questions: is there a policy effect; if so, what are the limits of this effect; have the presence or extent of an effect changed over time and if so, how? In order to do so, it would be useful to take forward use of the framework for analysis proposed in this thesis. Particularly, the importance and complexity of the WSE should be further investigated both by following up on elements of the WSE identified as potentially interesting in Chapter 7 and by exploring other important elements. The importance of consistent no-smoking messages within these, and in the combination of these to form the local policy context also require further investigation. Finally, all of the issues discussed above potentially have resonance beyond Wales and as such it is important that they are also followed up in other national contexts.

9.6 Taking the work forward

Finally, this work ends with some recommendations of ways to take this work forward.

9.6.1 Dissemination of findings

The author is currently collaborating with Dr Wiium and Professor Moore on a paper reporting the quantitative analysis presented in Chapter 8. In addition, he will seek to publish at least one sole-authored paper based on his own qualitative analysis. Publication will target the journal *Tobacco Control* in the first instance. The author will also seek to present his findings at selected seminars and conferences. The Health and Society Research Group seminar series run within the School of Social Sciences, Cardiff University will certainly be targeted. A summary of the research findings will also be disseminated to all those respondents who expressed interest in having a copy. Under the terms of the studentship, copies of the thesis will also be submitted to WORD.

9.6.2 Recommendations

While the quantitative findings bring the effectiveness of smoking policy into question, qualitative analysis still suggests the potential importance of certain characteristics of policy and the WSE in moderating policy effectiveness. A summary of related recommendations made in this chapter are below. All of these require further investigation.

- Welsh schools need to be encouraged to have total smoking bans which need to be written and effectively disseminated so that all members of the school community know the policy as it applies to everyone. Between-school variation in dissemination of policy in Welsh schools needs to be addressed and all schools encouraged to undertake effective, planned dissemination preferably using at least some proactive and written methods.

- School smoking policies must remain a high priority in Welsh schools and not taken for granted. All smoking policies need to be high profile and kept clear, structured and updated. Policies should not be allowed to just evolve.

Instead, all smoking policy should be thought through, purposively developed and with a justifiable rationale in order to maximise policy acceptance and compliance.

- Welsh Schools should consider how they introduce more restrictive staff policies into the school, and the potential impact that this may have on policy acceptance and compliance. Staff cessation support in parallel to the introduction of a staff smoking ban may be one useful strategy to employ.

- In order that staff smoking misbehaviour is dealt with consistently, more Welsh schools should develop sanctions procedures for this.

- Welsh school staff should not "turn a blind-eye" to pupil smoking misbehaviour by pupils but should be consistent in identifying it and applying the correct sanctions. Structures should be implemented to support staff in this. Discretion may need to be given to staff to alter the sanctions where they are aware that applying them may cause unnecessary problems for the pupils (e.g. the decision not to send a letter home when it is known that this may cause unnecessary and extreme problems for the pupil).

- The argument that there will always be implicit spaces where pupils can get away with smoking, suggests that perhaps the most effective way for schools to reduce adolescent smoking prevalence is by having policy that creates an environment that discourages smoking uptake and by implementing strategies to encourage and enable smokers to quit, all of which should be based upon evidence of best practice. Evidence suggests that incorporating cessation support into sanctions procedures for pupils caught smoking may be a positive part of such an approach.

- Consideration must be given by Welsh schools and others, to the extent of school jurisdiction over smoking misbehaviour.

- With regards policy enforcement, Welsh schools need to be aware that pupils may respond better to people they perceive to have more authority. While respect for all staff may be built in the long-term through helping them build better relationships with pupils, in the shorter-term, perhaps it is useful to exploit the levels of authority and ensure that those with authority, whether through seniority or relationships with pupils, are involved in policy enforcement.

- All adults on site should be encouraged to promote no-smoking messages. In particular, Welsh schools should not legitimise staff smoking misbehaviour.

- Even where schools provide some cessation support for pupils, the apparent need for appropriate and obvious external support has been raised. It seems that there is potential for a national team of cessation support workers that could work in schools, providing cessation support for pupils.

- In order to help create a WSE that supports policy and produces consistent no-smoking messages, staff and parents need to be educated in the importance of consistent policy and policy enforcement in order to help promote a consistent non-smoking message to pupils. Welsh schools should be encouraged to address elements of the wider school environment that undermine a strong ethos towards smoking policy (e.g. turning a blind eye towards smoking).

9.6.3 Future research

In addition to further investigation as to the effectiveness of the above recommendations, the following ways forward are suggested:

Further investigation is clearly needed as to the effectiveness of school smoking policies in moderating adolescent smoking behaviour. Questions that need addressing include:

- Is there a policy effect?
- What are the limits of this effect?
- Has the presence or extent of an effect changed over time? If so, how?

Investigations into these questions should involve further use of in-depth, complex data, both in its own right and as part of a mixed-method approach.

Some ways forward would include replication of this study in other national contexts to see if the results are similar. It would also be useful to repeat the study in Wales using more than one respondent in each school and/or more than one researcher to code and analyse data. This study should also try and avoid the complications reported in this project that led to the staff and pupil data not being as contemporaneous as planned and create a more complex indicator of the supportiveness of the WSE by investigating in all schools characteristics reported in Chapter 7 as being potentially important. It would also be useful to pursue case studies in schools as had originally been planned as a third phase to this work. This would allow the reinstatement of pupil voice, and other adult voices to the work. The author is currently in talks with members of the Smoke Free Cardiff team (an externally funded part of the NHS for Wales) to develop such work building on the findings of this project.

The use of the framework for analysis presented in this study appears to be a potentially useful way to consider not only smoking policy, but other school policies giving a hook on which to hang any investigation of school-based policy by examining the extent to which the WSE is supportive of policy, and promotes or undermines consistent messages surrounding that policy thus producing a value context in which that policy operates. At the same time, further investigation of the characteristics of the WSE and the importance of consistency in this framework would be useful.

Rising from this project, further work should also investigate:

- the notion of jurisdiction developed here including exploration of school notions of their own jurisdiction; how these are contested within individual schools; consideration of the possibility of, and potential for extending the jurisdiction of schools and investigation of the relationship between perceptions of school jurisdiction and the enforcement of school smoking bans.
- differences between naturalised and prioritised policies as highlighted here, and assess the extent of any association of the extent of naturalisation with policy-level and enforcement-level characteristics, the supportiveness of the WSE and adolescent smoking behaviour. This may include examination of historical changes in the priority of smoking policy, as demonstrated through changes in the severity of sanctions imposed on smokers for example, and an analysis of whether these reflect changing social attitudes more broadly
- the importance of policy dissemination
- the potential for smoking cessation in schools, especially in combination with sanctions procedures
- the importance of consistent messages

There is also clear potential for a longitudinal study that assesses causality with regard to any associations that may exist between smoking policy and adolescent smoking prevalence.

Appendix 1

Systematic search strategy for the review of the literature on the association between school smoking policies and adolescent smoking misbehaviour

A1. Systematic Search Strategy

In order to ensure that the review of evidence regarding the association of school smoking policies with adolescent smoking was comprehensive, a systematic search strategy was employed. Terms were searched for in titles, abstracts, keywords and, where possible other text. Databases were selected to cover a potential range of medical, educational and sociological approaches to school smoking policies. ASSIA was initially introduced to search for hidden curriculum literature as BIDS had not returned many hits – it was not used when looking for literature on the health promoting school, a section which by this point had been largely completed. ASSIA was also subsequently used for searches on school smoking policies. The terms and databases used for this search are shown table A1.1. Where possible, English language only was selected, and coverage tended to include all years in the database. These first searches were conducted in October/November 2004. It was reassuring that many of the relevant hits were articles that the author was already aware of as being significant papers on the subject (see section A.2). This also highlighted the lack of papers on this subject at the time (see chapter 2).

Table A1.1 – Original search terms and resulting hits

	PubMed	*Web of Science*	*BIDS*	*ASSIA*
health* & promot* & school*	13040	1971	**29**	-
"health* promot* school*"	0	**67**	**2**	-
health & promoting & school	684	338	**4**	-
"health promoting school"	**26**	**34**	0	-
health* & school*	185104	17610	547[1]	-
"health* school*"	**183**	**288**	**8**	-
"healthy schools"	-[2]	10[2]	-	-
"healthy school"	-[2]	127[2]	-	-
school & environment & health	11677	760	**21**	-
"school environment" & health	178	113	5	-
"school environment*" & health	**178**	**137**	**7**	-
setting* & health*	64769	33159	**821**	-
settings & health	14286	7878	259	-
settings & approach & health	1615	751	38	-
settings & approach & health & school*	0	62	5	-
settings & health & school	**950**	484	15	-
settings & health & school*	2 (?)[3]	**619**	17	-
informal & curriculum	**426**	**110**	**5**	**16**
"informal curriculum"	10	16	0	-
hidden & curriculum	**122**	**147**	**15**	**26**
"hidden curriculum"	41	122	12	-
school* & smok* & polic*	**871**	**226**	**4**	**42**
school* & polic*	17719	5576	2055	1662
smok* & polic*	3238	1797	166	378
educ* & smok* & polic*	**773**	**320**	**13**	**91**

Notes

[1] While BIDS returned very few papers for health* & school*, only 'hits' for "health* school*" were examined. This was to maintain consistency with other database searches, and a result of the fact that the less specific search tended to bring up a lot of unrelated research in addition to relevant hits also returned from the more specific category

[2] While running these on web of science, it was realised that they were all covered by the search term "health* school*" which returned an easily manageable number of hits and so only the search "health* school*" was run on PubMed

[3] When this search was originally conducted, it was repeated several times, always returning 2 papers. When this search was re-done on 28th November 2004 (as the original figure was still puzzling) it returned 3595 hits. The assumption is that some restriction on the search criteria was inadvertently entered the first time. In this case, due to the large number of hits returned, the search term "settings & health & school" would have been the list of papers trawled through anyway.

As standard, the use of * denotes any wildcard entry (e.g. smok* would return hits for smok*er*; smok*ing*; smok*es* etc) while the use of inverted commas denotes the search for an exact phrase and a lack of inverted commas denotes a search for any of the terms.

Figures shown in bold illustrate those lists of papers which matched the search terms ('hits') that were selected and trawled through for relevant literature. Given both the time and resource constraints, and that this was just one part of

a wider literature review with complimentary strategies, these lists were selected largely for the manageability of the number of papers for one researcher to trawl through but also to maintain consistency of which search terms were used across all databases. The potential limitations of this method are acknowledged, particularly the fact that this sometimes led to discontinuity in the numbers of hits that led to acceptance or rejection of a given set of hits.

While every attempt (e.g. inter-library loans; British library) was made to obtain all relevant articles, this was not always possible particularly if the article was only of tangential interest. However, the vast majority of articles of immediate interest were obtained.

A2 Follow up of the systematic literature search

While finalising the literature review, the systematic searches were repeated in May 2006 in order to supplement the other less systematic approaches that had been ongoing since the earlier draft. At this time, all earlier searches were repeated including those where too many hits had led to the rejection of a set of papers matching a search term. As the original search was October / November 2004, it was intended to date restrict searches to between September 2004 and May 2006 (the use of September 2004 as a lower limit was to allow for any lag in database updating at the time of the original search). In Web of Science and ASSIA, it was not possible to specify months and so searches ran from January 2004 up until the date the search was undertaken in May 2006. All searches were also restricted to English language. In ASSIA, searches were limited to peer reviewed journal hits only. It should be noted that at the time of this search, the BIDS database was running very slowly and so, as it had returned very few useful hits on the last search, only searches on smoking policy specifically were run. The results are shown in table A.2.

Table A1.2 – Follow up search terms and resulting hits

	PubMed	*Web of Science*	*BIDS*	*ASSIA*
health* & promot* & school*	2723	578	769	-
"health* promot* school*"	0[1]	16	-	-
health & promoting & school	136	138	181	-
"health promoting school"	7	9	-	-
health* & school*	30875	5270	-	-
"health* school*"	57	89	-	-
"healthy schools"	-	6	-	-
"healthy school"	-	36	-	-
school & environment & health	402	308	-	-
"school environment" & health	48	47	-	-
"school environment*" & health	48	65	-	-
setting* & health*	12167	11237	-	-
settings & health	2999	2925	-	-
settings & approach & health	320	281	-	-
settings & approach & health & school*	105	24	-	-
settings & health & school	222	189	-	-
settings & health & school*	887	224	-	-
informal & curriculum	76	48	-	12
"informal curriculum"	3	9	-	-
hidden & curriculum	30	37	-	4
"hidden curriculum"	15	32	-	-
school* & smok* & polic*	**205**	**85**	**77**[2]	**32**
school* & polic*	3596	1681	3724	452
smok* & polic*	679	625	601	111
educ* & smok* & polic*	164	116	100	31

Notes

[1] It unclear why (as in the first search) this returns no hits when "health promoting school" returns 7 - it would be expected to return at least 7.
[2] This seems high when the last search returned just 4 papers, so the query was re-run for *all* years and again returned 77 hits. It was the same when the search was restricted to 2005-6. The BIDS database not running well anyway, and so all 77 hits were examined

As a result of the fact that the BIDS database was running very slowly, only the queries relating specifically to smoking policy were run.

A2 Other methods of identifying literature

The above strategy was a systematic method to reinforce other methods that had been employed:

A2.1 Professional daily contact

As ever, many interesting papers were discovered in professional daily life through conversations with colleagues; browsing journals and attendance of seminars and conferences. In particular, at the outset of the PhD, Professor Laurence Moore had provided a set of core papers on the subject.

A2.2 Reference 'snowballing'

References cited in other papers are always useful ways in which one paper can lead to other papers, which lead to other papers and so on.

A2.3 Journal/citation alert browsing

The traditional method of browsing appropriate journals is increasingly being supplemented by internet citation alert systems which deliver the contents of new journal volumes to your PC. Such systems were discovered quite far into the work! More traditional methods of journal browsing involved the use of Cardiff University libraries; the Health Promotion Library for Wales in Cardiff and the resources of the Cardiff Institute for Society Health and Ethics.

A2.4 Cited reference searches

Seemingly the inverse of following up references from journals, it is also possible to search for papers that cite a given reference. Such a search was conducted, via Web of science, for papers citing the work on which this study builds (Moore *et* al, 2001) and the paper which arguably is one of the foundations of much modern work on school smoking policies (Pentz *et al,* 1989). Again, this search strategy was discovered some time into the work, and in the future could be better integrated into ongoing literature searching. The results of the two searches conducted are:

1. Articles citing Moore *et al* 2001. Last done 20th October 2004. 19 hits. (repeated 22 October 2004, 19 hits). (http://portalt.wok.mimas.ac.uk/portal.cgi?DestApp=WOS&Func=Frame) (1981-2004: all years available)
   Reason: this is both a commonly cited article and one upon whose findings this work is based

2. Articles citing Pentz *et al* 1989 Last done 20th October 2004. 58 hits. (repeated 22 October 2004, 58 hits). (1981-2004: all years available)
   Reason: this is arguably a landmark citation being the first major article on this topic so many cite it

These were both repeated at the same time the systematic literature search was repeated.

A2.5 Tobacco control journal search

Tobacco control is arguably the dominant journal relating to tobacco. Consequently, searches were often conducted using its own search engine to browse all backdated copies of the journal. One such search that was key to the literature review was:

Tobacco Control. Author search. "Wakefield" as author. Last done 25th October 2004. 23 hits. (Jan 1992 – Jun 2004: all years available)
Reason: following up the further work of Melanie Wakefield due to interest in an earlier paper she had worked on

Appendix 2

Notes from piloting teacher questionnaire

HBSC Teacher Questionnaire: Piloting

A. Pilot Context

Venue: [redacted]

Date: 27th November 2001

Sample Size: 5 teachers

Data collectors: [redacted]

Notes:

Five teachers of different subject areas and with varying levels of teaching experience both (a) in general and (b) in the school, sat down with the researchers over lunch. The format of the pilot consisted of the teachers answering the questionnaire, and discussing problems with as they came across them. During this discussion, I made notes on the points that were being raised as did my co-researcher. The respondents were also encouraged to write notes on their questionnaires where they felt it to be relevant. The session took place over the lunch hour and, unfortunately, time did not allow for any in-depth discussion after the questionnaire had been completed. After the session my co-researcher and I compared notes.

The notes for further development and alteration of the questionnaire, then, arise from the notes made during the session, alongside the notes made by the respondents on their questionnaires.

The group consisted of: 4 non-smokers (one of whom had only recently given up, due to the introduction of the policy); 1 smoker.

B. Comments On The Questionnaire

- Year 7/11 smoking pattern questionnaires (**Q1-6**): teacher reporting that it is sometimes difficult to distinguish between a Year 7 and Year 8 pupil. *Maybe I need some explanation as to the point of this question? Although the idea had been not to provide a background, in order to increase*

reporting unrelated to thoughts of policy (see notes on questionnaire design)

- **Q1-3** Year 7 pupils do not have a common room. *Is it worth taking this category out?*
- **Q1** Questioning of the term 'allowed to': the respondent needs to read Q2 in order to realise that this contrasts 'allowed' to, with actually do. *Perhaps it would be better to re-phrase this question, but being careful not to refer explicitly to the rules (see notes on questionnaire design)*
- **Q2** Year 7 don't have a common room. (*Might they in some independent schools, especially if boarding schools?)*
- **Q3** Ambiguity in question. What does 'enforcement' mean? For example, pupils do not smoke in the canteen, therefore is this (a) enforced daily, as they don't do it, as they know it is banned or (b) not enforced as because they don't do it, there is no need for staff to enforce it. *This is important: enforcement clearly occurs in the canteen daily, as the pupils do not smoke there. It is where pupils do smoke that the policy is not enforced. It is crucial to phrase this question correctly as it is fundamental to part of the analysis (the geography of enforcement). It has to be clarified so that answers are unambiguously about where smoking occurs / doesn't occur (i.e. policy is not enforced / enforced). Perhaps it would be better to focus on the 'how often pupils smoke in given places' question, or re-phrase this question to change to emphasis to 'monitoring' of smoking, rather than enforcement: is this less ambiguous in terms of the data which this question aims to capture?*
- **Q4** Year 11 don't have a common room. *They might in some schools: more likely than for Q2 (above)?*
- **Q6** 'School trips' doesn't fit in with the categories (i.e. school trips do not happen every day, so how do they respond to this?)
- **Q7** Questioning the use of the term 'informal' in the category on the 'informally used' places. *Is there a need to distinguish between informal and illicit? Balance between using words that are not emotive (e.g. illicit), but which are accurate. In this question, is this illicit smoking?* Because they haven't yet answered questions on school smoking policy, one teacher

felt the need to write that there was a no-smoking policy which effected their answers to this question. This may frustrate some respondents until they read the questions on policy. However, most didn't seem to mind, and at the most, it will lead to extra comments on the questionnaire.

- **Q8** Suggestion that 'canteen' and 'corridors' are irrelevant categories for asking where staff smoking occurs. *I think it is still worth leaving these in, if only as it may show up places where there are real smoking issues (1998 WYHS, under each of these categories, only 1 school reported yes) which may be useful for informing interviews, and in selection of schools for case studies.*
- **Q9** (Similar points to those for Q3, above). Respondent questions the fact that enforcement of policy doesn't apply for teachers, as they know the rules and they stick to it (especially in the staff room). *As before, there is a tension here between implicit v active policy enforcement (i.e. is the policy being continually enforced by the fact that staff know the rules and don't smoke. Need to clarify the thinking behind the question and its subsequent wording).* Several teachers reported (both verbally and written) the fact that, in fact, some members of staff still do smoke on the school premises, despite the school policy to the contrary. *This highlights the fact that, in fact policy enforcement is not a given, and that there are still areas where, due to a lack of enforcement (e.g. peer-reporting; structured monitoring (largely due to a lack of visibility in the places where it occurs)), smoking still occurs on the school premises. Also interesting to note, is the way in which, through the course of this discussion, one new teacher who is a smoker, discovered from the older (non-smoking) teachers that some teachers still smoked discretely on-site, and got away with it. This is an example of how informal networks (relate to network theories?) of support amongst smokers can spring up, almost as acts of resistance/rebellion to policy and change.* Possibly the need for a 'we do not have this place' category.
- **Q13** Mis-direction from Q10: is tick 'no' or 'don't know', directs the respondent to Q13 which ask further about this question. Also, question reported to be ambiguous. *Perhaps the go to in Q13 should be changed*

(go to 14?). Also, could the question be re-worded to remove ambiguity? Perhaps the grammar in the instruction in brackets could be improved. Perhaps I should add a 'none of them' category, as some respondents, where all were left blank, felt the need to write none beside it to show that they hadn't just left the question blank. (This may also be beneficial when it comes to data entry).

- **Q14** Does it need the 'yes', 'no' and 'don't' know categories: just tick the boxes that apply? *If do this, would need to emphasise that respondents can tick more than one box*. Actions may be different for individual teachers. *This question is as much about perceptions of school policy as accuracy of policy (see notes on importance of perceived policy). Maybe make it clearer (underline?) that the question is asking about actions advocated by the school? Do I need to make it clearer that this question is about teacher's perceptions of school policy?*
- **Q14-19** Repetitive questions on enforcement of smoking policy. One teacher only answered the first of these questions and not the rest. Perhaps the same issues are raised as Q1-6. *Again, perhaps it is worth highlighting the point of these questions (to gauge actions across a range of circumstances).*
- **Q20** One teacher asked if this includes a regular patrol. *Maybe put a (e.g. regular patrol, CCTV...) after the question?*
- **Q26** 'Know' should be 'No'. One teacher, again, said that instead of ticking 'yes', 'no' 'don't' know for each statement, you could just tick the ones that apply. *I think it is far better to adopt the tick for every line method, for the reasons outlined in the general points section, below. Do I need to add a question that examines actions on persistent smoking by a teacher in contravention to the school policy?*
- **Q27** Clarify whether the question means CCTV installed to monitor smoking as its primary purpose, or whether it is used for this tangentially to the original purpose of its installation. (i.e. is CCTV used (a) primarily/only for monitoring smoking behaviour (b) does monitoring of smoking behaviour occur as an indirect result of the CSV's primary function or (c) was the CCTV installed for one reason, and is now used

directly for monitoring smoking behaviour. Also, teachers mentioned the role of pupils reporting illicit teacher smoking behaviour: if this happen, action can become formalised against the teacher (as happened in this school). *Need to add a 'pupil reporting' category.*

- **Q29** Should be affect in the question. *Are there issues with the differences between 'parents of existing pupils visiting the school' and 'parents of potential pupils visiting the school' (i.e. too blatant to get information? Does it get the information I require: more interested in regular v one-off visitors as opposed to existing v potential client).* One teacher said that need to specify that can tick more than one box for each category of visitor. *Put e.g. 'You can tick more than one box on each line) comment in after the question.*
- **Q33** Very subjective/ambiguous categories. *Need to alter these? But then, is it about perception within the school, of the staff towards the policy?* Maybe need to add a 'don't know, I don't deliver it' category.
- **Q37** Add a 'don't know' plus 'go to' (38/39?)
- **Q38** Year Head – put capital 'H' in. *Do I need to specify Deputy Head?* The need to differentiate this person as possibly being a general PSE co-ordinator: one respondent had written this on their paper.
- **Q39** Linking to the above, one respondent had put "As PSE co-ordinator role' under allocated extra time response. *Do I need to distinguish this as a role for which extra time is allocated?*
- **Q40** Put a category in that allows the respondent to say that they are this person. On teacher mentioned that it would also be worth adding the category 'I don't know/don't deliver this'. *I believe that this is covered by 'never'. Even if a teacher doesn't deliver it, they may be required to know about health issues. If they don't, then never is a sufficient answer: this question is about contact with local 'expertise' in health education/promotion matters.*
- **Q42** Suggestion that less than adequate and inadequate are essentially the same category.

- **Q47** Need to account for the middle management positions. *Refer to Q38: change Q47 categories to be like Q38 ones. Do I need to specify Deputy Head?*
- **Q50** Importance of social networks in guesstimating this, if there is no smoking on the premises. It is only by socialising with other staff, that you know (sometimes contrary to your assumptions) whether a particular person smokes or not. *Is this also effected by the fact that smokers tend to go to the same places to smoke, and so are more aware of who smokes, and who doesn't? Perhaps it is worth putting words which suggest 'in your perception', in the question. Perhaps it would be worth, in the analysis, to examine the differences in response to smokers and non-smokers with regards to this question (although, a problem with this is the fact that there will be no accurate figure to compare estimates with).* Is there a better way to collect this information (at least make the scale more readable? **Issues of coding: some respondents coloured up to a point between two lines: make it more clear that need to tick a point on the line (Same issues as with HBSC survey Q's along the same lines.**

C. General Points

- Sitting with teachers and talking to them was useful drew more info out which I wouldn't have got in a questionnaire alone. These include: how policy has changed; the fact that all the teachers go to the local garden centre to smoke; the smoker was a new teacher and had only been there a few months, and had not known the school as it was when smoking was allowed on site and he learned that in the school, some staff still smoke discretely and get away with it – he wanted to know where, the others wouldn't tell him – it was interesting to see how this sharing of knowledge to undermine policy potentially worked. One teacher had always smoked, but had quit when the school gave them a year of smoking in an outbuilding before banning it outright. Their comments on the fact that you never know who smokes now: until you socialise with people and see

people smoking who you wouldn't expect to. The fact that year 7 probably don't know who smokers are in staff, but year 11 might. Especially as, when the smokers had to use a separate staff room, it was a very visible place, and it was very obvious who smoked and who didn't. Also, some year 11 would now probably mis-report who smoked or not, for example, they would probably all say that the teacher (who I gathered had been in the school for a while, and was a very experienced teacher) smoked, as he had been well known for it, and they wouldn't be aware that he had given up. All of these issues that can be obtained face-to-face hint at the importance of the telephone interviews in getting detail on important elements of the WSE

- Teachers talking: stop communicating while filling in questionnaire (about perceptions). However, when staff talked about the issue: drew far more points out, and could see which staff did/didn't know about smoking (in the pilot, using the questionnaire as a focus in a group situation was interesting idea stimulating for discussion). Are their implications here form follow up interviews? Would it be a good idea to interview if possible, more than one member of staff and in a group, to draw out ides. (Hindered if decide to do phone interviews etc) .
- Question on policy change? Pupils and staff?: not much use, as have no baseline measurement of smoking rates before the policy change: all do is compare schools within the sample
- Info from HBSC about numbering introductory paragraphs (before questions) (how make them stand out and make sure that they are read?)
- Replace GOTO with GO TO. May be even replace GO TO with ARROWS??
- Some questions replace the yes no don't know with just tick appropriate (as suggested??) My problem with this, is that (a) have to make clear can tick as many boxes as like, and (b) consequently doing tit the way I have done, encourages people to answer for each response
- Inconsistencies in logic/grammar between statements and response categories (i.e. do the response categories make sense when read with the response categories?)

- Q43: a more explicit "Teachers should not be allowed to smoke on school premises??' Tied into a 'what do you believe' Q??
- Q on how long ago given up (try and tie in if the policy had any effect on their smoking habits (e.g. a new policy can encourage people to give up: anecdotal evidence from pilot, that this has the potential to be an interesting issue in smoking prevalence among staff and consequently role models for pupils (or is it relevant, as if staff are theoretically not smoking on-site and in view of the pupils, then they should be not visible smokers to pupils (except outside of school, where the school cannot control policy) However if the policy could reduce levels of smoking in staff as well, then this also has added benefits for both the adult health of the teaching population too: so additional knock-on benefits).
- Issue of cleaners smoking: link to Q28/29: add in this as a category or example of long-term contractors: keep then separate so regular contractors (e.g. cleaners v irregular e.g. builders) is one easier to legislate for?. Need to add for contractors etc
- Teachers perceptions v school smoking policy
- Look at comments on piloting annotated: anything that said should look at in pilot?
- The direction policy from (e.g. consultation) see notes on pilot: follow up in interviews
- Logos on the front?
- Words explaining that's some questions are repetitive, but important to answer all, in order to collect data on differences etc
- What do I do if answers are given which are logically inconsistent (data cleaning protocol)
- ADD CODING INDICATORS?

Appendix 4

Cover letter for 2002 teacher questionnaire (English language version – a Welsh language version was also made available)

Note:

This is a representation of the original cover letter that has been reduced from its original size.

Cynulliad Cenedlaethol Cymru
The National Assembly for Wales

Adran Hybu Iechyd/Health Promotion Division
4ydd Llawr/4th Floor
Parc Cathays / Cathays Park
Caerdydd / Cardiff
CF10 3NQ

February 2002

Dear Teacher

You will have been handed this letter by a fieldworker from the Health Behaviour in School-aged Children (HBSC) study. Enclosed with it is a questionnaire relating to school policies and practices on restricting smoking. This element of the study is being undertaken as part of a project funded by the Wales Office for Research and Development, in collaboration with the National Assembly's Health Promotion Division who manage the HBSC study. The aim of the work is to investigate the relationship between school smoking policies and adolescent smoking rates. This work builds on a European Commission funded project undertaken alongside the 1998 HBSC study and aims to produce an in-depth analysis of school policy at the national level.

It is important to the project that we obtain five teacher questionnaires from each school participating in HBSC. I would be very grateful if you could spend some time, while your class is undertaking the HBSC survey, to complete this questionnaire. Please remember that all the information you provide will be treated in the strictest confidence and that individuals and/or schools will not be identified. Once you have finished the questionnaire, please seal it in the envelope provided and return it to the fieldworker. Should you, for any reason, not be able to complete the questionnaire at this time, please could you complete and return it in the pre-paid envelope as soon as possible.

If you have already answered another copy of the questionnaire, it would be very helpful if you could pass this letter and questionnaire to a colleague and ask if they could complete and return it in the pre-paid envelope as soon as possible. This will allow us to obtain the five teacher responses required from each school.

I would like to thank you in advance for taking the time to answer this questionnaire and contributing to an important area of research. If you have any questions about this element of the research, please feel free to contact me on [redacted].

Yours sincerely

Stephen Burgess
Researcher, Cardiff University School of Social Sciences

Appendix 5

Teacher questionnaire follow up – cover letter to schools where the names of staff receiving the original questionnaire were available

Note:

This is a representation of the original cover letter that has been reduced from its original size.

Cynulliad Cenedlaethol Cymru
The National Assembly for Wales

Adran Hybu Iechyd/Health Promotion Division
4ydd Llawr/4th Floor
Parc Cathays / Cathays Park
Caerdydd / Cardiff
CF10 3NQ

May 2002

Dear

You may remember that earlier this year, pupils from your school took part in the HBSC survey conducted by the National Assembly for Wales. At the same time, we invited you to answer a teacher questionnaire which formed part of a study on school smoking policies and adolescent smoking. Our aim was to conduct this questionnaire with five teaching staff in each of the sixty-two schools taking part in the HBSC survey.

We have now received a large number of these, and are very grateful to everyone who has already helped us by returning their questionnaire. However, there are still some responses missing, and the purpose of this letter is to try and get as many of these back as possible.

Although we have a record of who in your school received a teacher questionnaire, we cannot identify these individual responses, and so we don't know who has already returned them. Consequently, in schools where we have received less than five responses, we are writing to all teachers who received a copy of the questionnaire, asking them if they have returned it.

If you haven't yet returned a completed questionnaire, I would be very grateful if you could help us by filling in and returning the enclosed spare copy within 3 days of receiving this letter, and using the freepost envelope provided. I have also enclosed a copy of the original covering letter. This replacement questionnaire has a number on it. This number allows us to record the receipt of your questionnaire, so that we do not need to contact you again. Your confidentiality will be maintained and, once we have recorded the receipt of your questionnaire, your name will not be matched up with your responses.

If you have already completed and returned the questionnaire, may I take this opportunity to thank you again, for taking the time to help us with this project. If you could return the blank questionnaire in the freepost envelope provided, I would be very grateful.

If you have any questions relating to this work, please feel free to contact me using the details below. Once again, our sincere thanks for your help in this very important area of research.

Yours sincerely,

Stephen Burgess
Researcher, Cardiff University School of Social Sciences
Tel: [redacted] **E-mail:** [redacted]

Appendix 6

Teacher questionnaire follow up – cover letter to schools where the names of staff receiving the original questionnaire were not available

Note:

This is a representation of the original cover letter that has been reduced from its original size.

Cynulliad Cenedlaethol Cymru
The National Assembly for Wales

Adran Hybu Iec hyd/Health Promotion Division
4ydd Llawr/4th Floor
Parc Cathays / Cathays Park
Caerdydd / Cardiff
CF10 3NQ

May 2002

Dear

May I begin by introducing myself. My name is Stephen Burgess, and I am a researcher based at Cardiff University School of Social Sciences. Currently, I am being funded by the National Assembly for Wales to undertake some research into school smoking policies and adolescent smoking.

I am writing to you in your capacity as liaison for the HBSC survey, conducted in your school earlier this year by the Health Promotion Division of the National Assembly. At the same time as this study, you may remember that we distributed five teacher questionnaires, which formed part of this related research into school smoking policy. While we have now received a large number of these questionnaires back from many schools, in some we have still not yet received all five. It is crucial to our study that we obtain all of these.

The purpose of this letter is to ask if you, with your knowledge of the HBSC study, would help us collect the outstanding questionnaires form your school. I appreciate that this is a big favour to ask, and, as a trained teacher myself, fully realise that during the school year there is no good time to make such a request. As such, I would be extremely and sincerely grateful for any time that you could spare to help us.

If you feel that this request places too much demand on your time, or if you wish to discuss anything else related to this letter or this research, then please don't hesitate to contact me using the details below.

If, however, you do feel that you are able and happy to help us out, then please use the attached information sheet which explains how we would like you to help us.

Thank you very much for your time, and I apologise for any inconvenience that this letter may cause you. Once again, I would be very grateful for any help that you could offer us.

Yours sincerely

Stephen Burgess
Researcher, Cardiff University School of Social Sciences
Tel: [redacted]
E-mail: [redacted]

Appendix 7

Information sheet attached to follow up letters in schools where the names of staff receiving the original questionnaire were not available

Note:

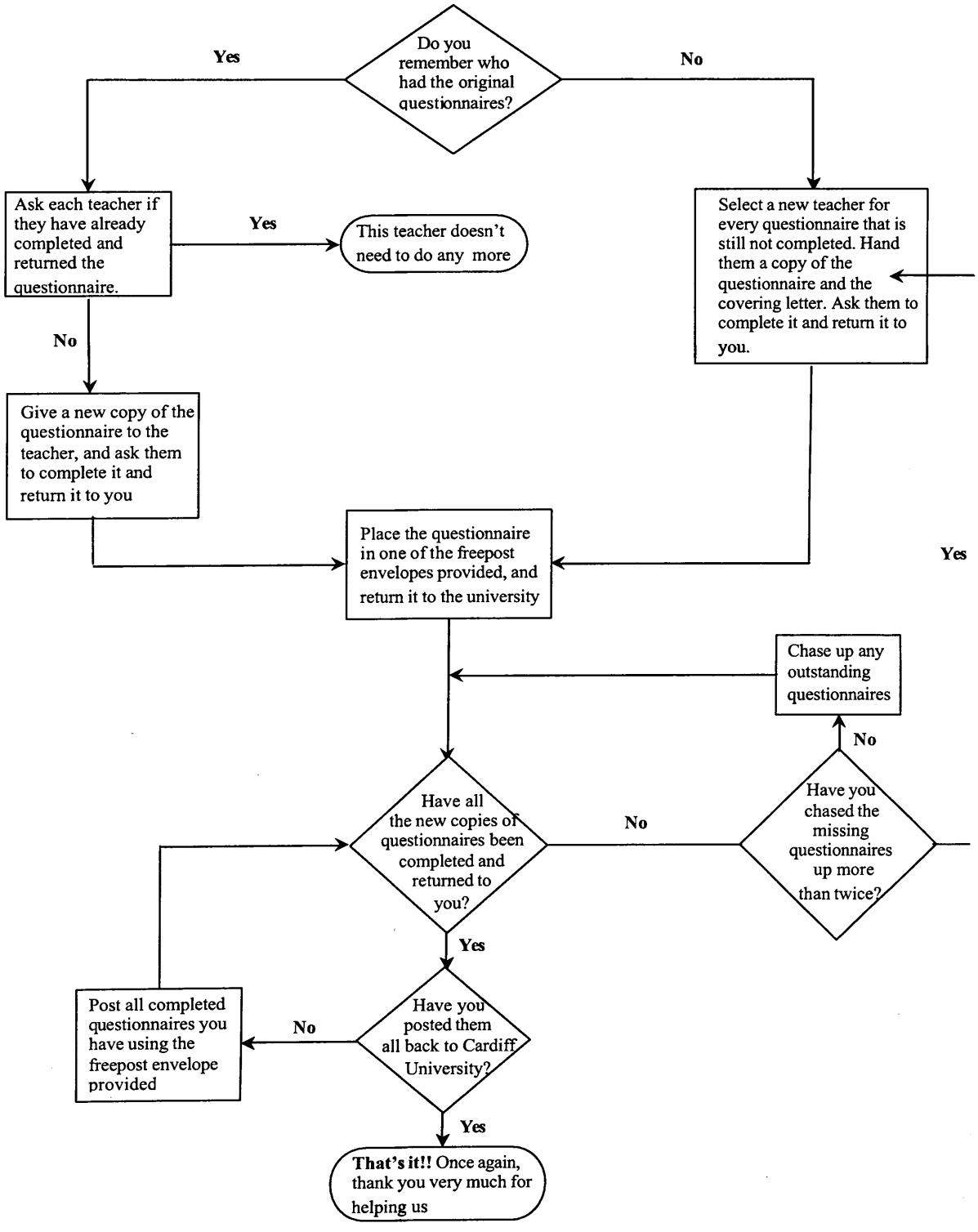
This is a representation of the original information sheet cover letter that has been reduced from its original size.

Information Sheet

The main problem with the collection of questionnaires lies in the fact that we do not have a record of which teachers where handed the questionnaire in your school. Generally, however, these are likely to have been the teachers of classes participating in the HBSC survey.

I have included with this letter, the same number of questionnaires as we have outstanding from your school. Each questionnaire is accompanied by a copy of the original covering letter, and a freepost envelope for its return. Please use the flowchart below which summarises how we would like you to go about helping us to collect five completed teacher questionnaires from your school.

Once again, thank you very much for your time and help.



Appendix 8

Teacher telephone interview schedule

Note:

This is a representation of the original interview schedule that has been reduced from its original size.

Teacher Telephone Interview Schedule

Introduction

- **Consent** Forms
- **Negotiate** recording the interview
- Explain have to read them some introductory information

Is the school a Welsh medium school?

No ⇒ Introduction: Script1
Yes ⇒ Introduction: Script2

Introduction: Script 1

Thank you for agreeing to do this interview. It should last about half an hour and forms part of the research for a study investigating the relationship between school smoking policies and adolescent smoking rates. This is an independent study which is funded by the Wales Office for Research and Development. Some of the data for my project is being provided by the Health Promotion Division of the Welsh Assembly Government.

Some staff in your school have already completed teacher questionnaires on issues surrounding smoking policies and smoking behaviour in the school. The purpose of this interview is to collect more detailed information on school smoking policy from a member of school staff who has a good working knowledge of that policy.

You are not obliged to take part in this interview, and you are free to end the interview at any time, and do not have to give a reason for doing so. If at any time you are unsure of what I have said, or want me to clarify or repeat anything, please feel free to stop me and ask.

As we have discussed, I am recording this interview, and this may be transcribed to help with data analysis. I would like to assure you that

your interview will remain anonymous, and all tapes and transcripts will be kept locked up at Cardiff University, where only researchers on the project will have access to them. Sometimes, in writing up, it is necessary to quote someone, or a specific example, from the research. When this happens, no individual or school will be identified, with all comments and examples remaining anonymous. If, however, you wish to say something without it being recorded, you may ask me to stop the tape at any time.

Dou have any questions before we start?

Are you happy to proceed with the interview?

Yes ⇒ Script A1

No ⇒ End Interview

Introduction: Script 2

Thank you for agreeing to do this interview. I appreciate that usually your school would choose Welsh as its preferred language, and I would like to thank you again for allowing this to be conducted in English. The interview should last about half an hour and forms part of the research for a study investigating the relationship between school smoking policies and adolescent smoking rates. This is an independent study which is funded by the Wales Office for Research and Development. Some of the data for my project is being provided by the Health Promotion Division of the Welsh Assembly Government.

Some staff in your school have already completed teacher questionnaires on issues surrounding smoking policies and smoking behaviour in the school. The purpose of this interview is to collect more detailed information on school smoking policy from a member of school staff who has a good working knowledge of that policy.

You are not obliged to take part in this interview, and you are free to end the interview at any time, and do not have to give a reason for doing so. If at any time you are unsure of what I have said, or want me to clarify or repeat anything, please feel free to stop me and ask.

As we have discussed, I am recording this interview, and this may be transcribed to help with data analysis. I would like to assure you that your interview will remain anonymous, and all tapes and transcripts will be kept locked up at Cardiff University, where only researchers on the project will have access to them. Sometimes, in writing up, it is necessary to quote someone, or a specific example, from the research. When this happens, no individual or school will be identified, with all comments and examples remaining anonymous. If, however, you wish to say something without it being recorded, you may ask me to stop the tape at any time.

Dou have any questions before we start?

Are you happy to proceed with the interview?

Yes ⇒ Script

A1 No ⇒ End Interview

Section A: Introduction and Respondent Selection Information

- *Start by asking a few questions about your knowledge of school smoking policy?*

A1. First, have you previously answered the teacher questionnaire about school smoking policy and practice that was distributed to some teachers in your school earlier this year. This was at the same time pupils took part in the Health Behaviour in School-aged Children survey conducted by the Welsh Assembly?

- Note answer

A2. In what capacity or capacities are you involved with smoking policy in your school?

- *Establish respondents current position in school*
- *Probe all capacities*
- *For how long (each one)*
- *What do/did these roles involve*
- *How does each role relate to policy*

A3. How confident are you that your knowledge of your school's smoking policy and its enforcement will allow you to discuss this policy accurately and in detail?

- ***If not why***
- *more accurate than anyone else in your school*
- *less accurate than anyone else in your school*
- *(If because no policy ask about their knowledge of rules)*

Section B: Smoking Policy and Smoking Behaviour

- *Talk about smoking policy in your school.*

B1. How much is smoking a problem in your school?

- *Why do you feel this way*
- *Why is it this way*
- *How long has it been this way*
- *What was it like before*

B2. What is your school smoking policy?

B3. Is this written down anywhere?

- *Negotiate getting a copy of this sent (freepost address)*
- *Where*
- *For who*

B4. Does the policy cover pupils?

- *Separate or generic policy?*

B5. Does the policy cover staff?

- *Separate or generic policy?*

B6. Who else does the policy cover?

- *Separate or generic policy?*
- ***Non teaching staff***
- ***Parents***
- ***Cleaners***
- ***Visitors***
- ***Contractors***
- ***Supply teachers***
- *How are they made aware*

B7. Why was this policy first introduced?

- *When*
- *What was before?*

B8. Who was involved in designing the policy?

- *Staff; pupils; parents; governors etc*

B9. How was it introduced to the school?

- *Any resistance*

B10. *Ensure check staff and pupil policies*

a) Does the policy state where smoking is allowed on the school premises and by who?
b) Does the policy state what methods the school will use to monitor smoking?
c) Does the policy state how the school will it, and what sanctions will be used if it is broken?
d) Does the policy state how people should be made aware of its existence and content?
e) Does the policy discuss smoking on school trips?

B11. Does the smoking policy apply when staff and pupils are on school trips?

- *Differences in rules*
- *Differences in actions*
- *Residential trips (pupils and staff rules)*
- *Does smoking mis-behaviour happen on school trips*
- *How much is "got away with"*

B12. Are smoking rules different for members of staff when pupils are not on the premises?

B13. How are pupils made aware that this policy exists, and what it says?

- *Written ways*
- *Verbal ways*
- *Are made aware of how policy applies to staff*

B14. How are staff made aware that this policy exists, and what it says?

- *Written ways*
- *Verbal ways*
- *Are made aware of how policy applies to pupils*

B15. Are there are any places in your school where some or all pupils are allowed to smoke?

- *Who allowed*
- *Where*
- *How often do pupils smoke in each of these places*
- *What times of the school day*
- *Why do these places exist and for how long have they existed*
- *How are they supervised*
- *How widely publicised are these places? (staff; pupils; parents; wider community)*
- *Differences between allowed to and not stopped from doing (e.g. outside school gates)*

B16. Do pupils ever smoke in places where they are not allowed to?

- *Which year groups*
- *What places*
- *How often do pupils smoke in each of these places*
- *What times of the school day*
- *Patterns (e.g. differences between year groups on all topics above)*
- ***Outside gates?***
- ***In toilets?***
- ***School buses?***

B17. Are any sanctions normally used to discipline pupils who are caught breaking the smoking policy?

- *What are they (different ones)*
- *When will they each be used (year group; repeat offences etc)*
- *Is there a strict procedure for their use or is it arbitrary*
- *Are there checks that sanctions are used correctly*
- *Who normally deals with pupils breaking smoking policy*
- *Do staff ever take their own actions*
- *Escalation*
- *How often is nothing done*
- ***Do you have to catch child with cigarette in hand?***

B18. Are there are any places in your school where teaching staff are allowed to smoke?

- *Where*
- *How often do teaching staff smoke in each of these places*
- *What times of the school day*
- *How long has this been allowed*
- *How widely publicised are these places? (staff; pupils; parents; wider community)*
- *Differences between allowed to and not stopped from doing (e.g. outside school gates)*

B19. Do staff ever smoke in places where they are not allowed to?

- *Where*
- *How often*
- *What times of the school day*
- *Any that aren't caught?*
- ***Outside school gates?***

B20. Are any sanctions normally used to discipline teaching staff who are caught breaking the smoking policy?

- *What are they (different ones)*
- *When will they each be used (seniority of staff; repeat offences etc)*
- *Is there a strict procedure for their use or is it arbitrary*
- *Are there checks that sanctions are used correctly*
- *Who normally deals with staff breaking smoking policy*
- *Escalation*

B21. How does your school monitor smoking on the school premises, what methods are used?

- *For pupils and staff*
- *Where each method most likely used and how often*
- *Effectiveness of methods*
- *Predictability of methods (e.g. patrol times; visibility)*
- *Who involved in monitoring*
- *Are there checks that monitoring procedures are followed correctly*
- *(Remember to think about routine **v** non-routine / unplanned monitoring)*
- *Staff seeing pupils smoking off-site*
- *School buses*

B22. Are there any places in the school where monitoring of smoking behaviour is more effective and regular than in other places?

- *Where*
- *Why*

B23. Does your school use CCTV as a method for monitoring smoking behaviour?

- *How long for*
- *Installed specifically for this, or is smoking monitoring a secondary outcome*

B24. Does your school use smoke detectors as a method for monitoring smoking behaviour?

- *How long for*
- *Installed specifically for this, or is smoking monitoring a secondary outcome*

B25. To what extent are all pupils who smoke against school policy caught and how many get away with it?

- *How much is seen and identified, how much goes unnoticed*
- *How many 'get away with it'*
- *Where do they 'get away with it' the most. Why.*
- *Where are they identified the most. Why.*
- *What restricts identification of smoking behaviour*
- *Do staff ever 'turn a blind eye'*
- ***Strategies** for avoiding detection*

B26. To what extent are all staff who smoke against school policy identified?

- *How much is seen and identified, how much goes unnoticed*
- *How many 'get away with it'*
- *Where do they 'get away with it' the most. Why.*
- *Where are they identified the most. Why.*
- *What restricts identification of smoking behaviour*
- *Do staff ever 'turn a blind eye'*

B27. How supportive do you find parents of smoking education and the school's actions on smoking?

- *Parents smoking on site*
- *Examples of parents in favour of their child smoking*
- *Mixed messages*
- *Communication lines between home and school (e.g. homework diaries)*
- *Home-school relationships including communication on policy for pupils and staff*

B28. What other policies does your school have?

- *For staff and pupils*
- *Written or unwritten*
- *Pressures from above*
- *Guidelines ever provided? From who?*

B29. Does any local sharing of health policy information or identified models of effective practice occur between schools?

- How
- Who

B30. Is there any health provision for pupils in your school provided by outside agencies (e.g. school nurse?)

- Confidential resources
- How does this work (times of day, arranging to see)
- Pupil access and privacy

B31. Are pupils allowed off of the school premises at lunchtimes?

- *Which year groups*
- *Do any year groups need parental consent first*

B32. Are any of the school buildings used by the public outside of school hours?

- *What are they used for*
- *Any school staff, pupils or parents use them*
- *Different smoking rules*
- *Ownership and management of buildings: who sets and enforces rules?*

B33. Is there currently a member of staff in your school who is responsible for the development and dissemination of smoking policy?

- *Who*
- *More than one person?*
- *What does this involve*
- *Do they involve others*
- *Incentive allowance and/or extra allocated time*
- *How much time do they spend on policy*
- *How often do they meet with other staff to discuss policy issues*
- *Are they involved with the development of other policies within this role*

B34. Is there currently a member of staff in your school who is specifically employed as a health education co-ordinator, or who has been given special responsibility for health education?

- *Who*
- *More than one person?*
- *What does this involve*
- *On their own or in conjunction with others*
- *Incentive allowance and/or extra allocated time*
- *How much time do they spend on this*
- *Does this person ever meet with other members of staff, to discuss health education issues. Formal or informal contexts. How often.*
- *Does this person ever take INSET days on health education issues? How often? When was the last time?*
- *Does this person ever receive training on health education issues? How often? When was the last time?*

B35. Since September last year have any smoking education initiatives been run within the school?

- *What*
- *What involve*
- *Which year groups*
- *For how long*
- *E.g. TAG's; national no-smoking days etc*

B36. Since September last year, have any smoking education initiatives been run within your local community which may impact upon your school smoking action or policy?

- *What*
- *What involve*
- *Run by who*
- *Target group*
- *How is respondent aware of each of these*
- *E.g. local GP or pharmacy projects; local youth work projects; local health promotion initiatives*

B37. Using a scale of 0 to 8, what proportion of your staff would you say smoked, where:

0	1	2	3	4	5	6	7	8
None of them		About a quarter		About half		About three quarters		All of them

B38. How would you describe your own tobacco smoking habits? This could include cigarettes, cigars or pipes.

I smoke every day	1 ☐	⇒**B41**
I smoke at least once a week, but not every day	2 ☐	⇒**B41**
I smoke less than once a week	3 ☐	⇒**B41**
I do not smoke	4 ☐	⇒ **B39**

B39. Have you ever smoked tobacco (cigarettes, cigars or pipes)?

Yes, I used to smoke every day	1❑	⇒**B40**
Yes, I used to smoke at least once a week, but not every day	2❑	⇒**B40**
Yes, I used to smoke less than once a week	3❑	⇒**B40**
Yes, I have tried a cigarette, cigar or pipe once or twice, but have never smoked regularly	4❑	⇒**B41**
No, I have never smoked	5❑	⇒**B42**

B40. How long ago did you give up smoking tobacco completely?

Less than one year	1❑	⇒**B41**
One to two years	2❑	⇒**B41**
Three to four years	3❑	⇒**B41**
Five or more years	4❑	⇒**B41**
Don't know	5❑	⇒**B41**

B41. Have you ever smoked in school?

- *Within terms of a smoking policy?*
- *Contravening a smoking policy*

B42. *If there are any particular issues arising from analysis of teacher questionnaires that don't feed in elsewhere, ask them here.*

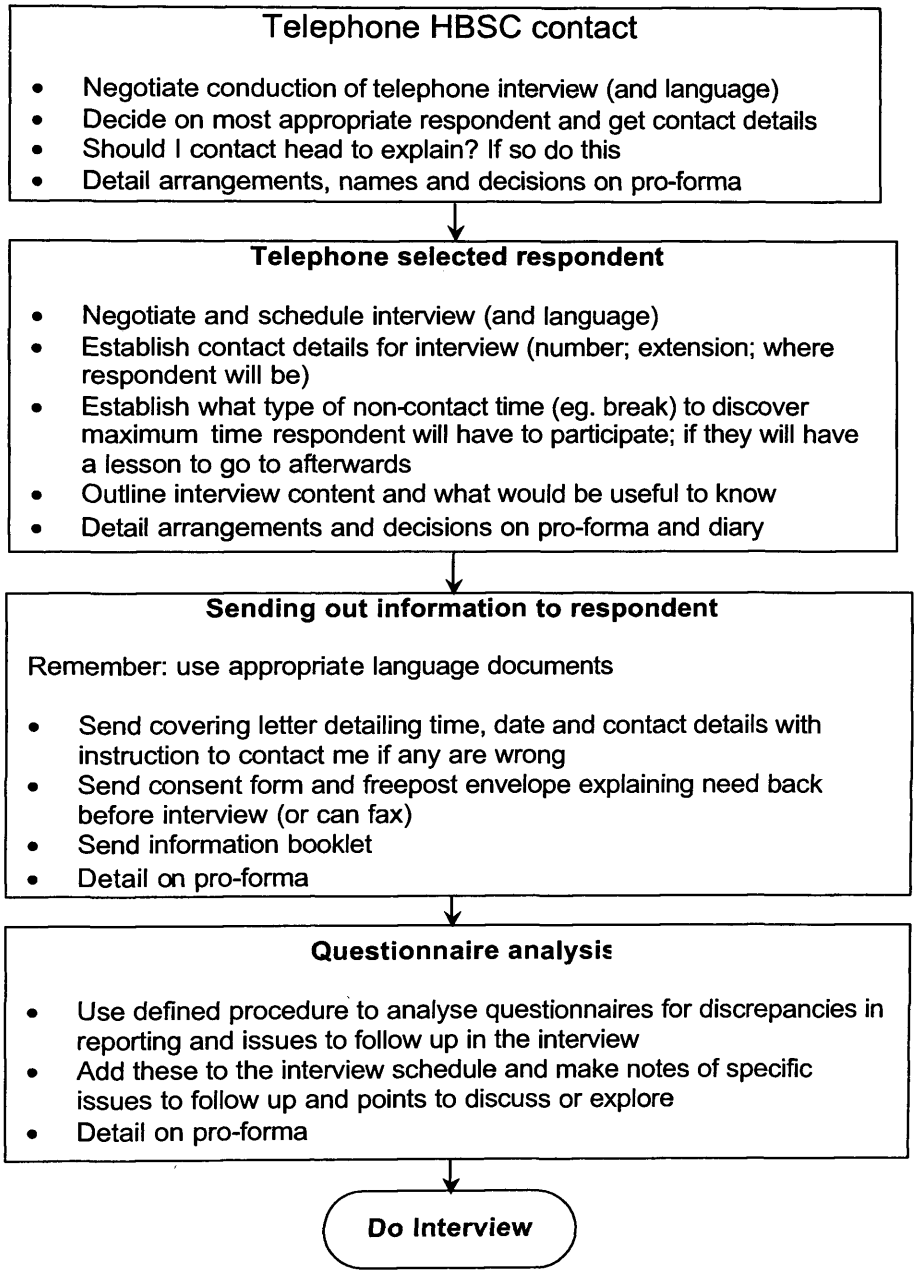
B43. Before I finish, is there anything else that you would like to add regarding smoking policy or smoking behaviour in your school, that you feel is relevant and that hasn't already been discussed?

Ending Interview

- Thank them for taking part
- Contact me if any questions
- Check have my details
- Would they like a summary of findings
- Possibility of approaching for case studies (explain what involved)

Appendix 9

Strategy for arranging teacher telephone interviews


Telephone HBSC contact
• Negotiate conduction of telephone interview (and language)
• Decide on most appropriate respondent and get contact details
• Should I contact head to explain? If so do this
• Detail arrangements, names and decisions on pro-forma
Telephone selected respondent
• Negotiate and schedule interview (and language)
• Establish contact details for interview (number; extension; where respondent will be)
• Establish what type of non-contact time (eg. break) to discover maximum time respondent will have to participate; if they will have a lesson to go to afterwards
• Outline interview content and what would be useful to know
• Detail arrangements and decisions on pro-forma and diary
Sending out information to respondent
Remember: use appropriate language documents
• Send covering letter detailing time, date and contact details with instruction to contact me if any are wrong
• Send consent form and freepost envelope explaining need back before interview (or can fax)
• Send information booklet
• Detail on pro-forma
Questionnaire analysis
• Use defined procedure to analyse questionnaires for discrepancies in reporting and issues to follow up in the interview
• Add these to the interview schedule and make notes of specific issues to follow up and points to discuss or explore
• Detail on pro-forma
Do Interview

Appendix 10

Letter confirming teacher telephone interview

Note:

This is a representation of the original confirmation letter that has been reduced from its original size.

[redacted]

17th December 2002

Dear [redacted]

Re: School smoking policy project

Following our telephone conversation yesterday, I am writing to thank you for agreeing to help with the above research project by taking part in a telephone interview. As we agreed, I will telephone you to see if you are able to take part in this interview on 17th December at 15:00. If I am not able to reach you at this time, then I will try and catch you at another time, as you suggested.

I have enclosed an information booklet which describes the aims of this project and what taking part in the interview will involve. I hope that this information will answer any questions that you have about this research. If there is anything that you wish to discuss or clarify beforehand, please feel free to contact me.

I have also included a consent form with this letter. Please could you complete this and return it to me before the interview using the freepost envelope provided. Alternatively, if you wish to fax this back please telephone me so that I can arrange it with the office. This consent form provides a record of the fact that you have agreed to participate. It also allows me to ensure that you have received a copy of the information booklet and my contact details, in case you have any questions to ask either before or after the interview.

I would like to assure you that the inclusion of your name and school on this consent form is for recording purposes only. Consent forms will be kept separately from interview data and will not affect your anonymity.

Thank you again for your help with this project, and I look forward to speaking to you soon.

Yours sincerely,

Stephen Burgess

Tel: [redacted]
Email: [redacted]

Appendix 11

Teacher telephone interview Information booklet

Note:

This is a representation of the original information sheet that has been reduced from it's original size.

School Smoking Policy Project

Information sheet for staff taking part in telephone interviews

Introduction

My name is Stephen Burgess, and we recently spoke on the telephone. As I explained, I am an employee of Cardiff University currently doing some research on school smoking policies, and rules on smoking, in your school. This project is funded by the Wales Office for Research and Development, who are part of the *Welsh Assembly Government.*

I would like to thank you very much for agreeing to help me with this research. I am grateful to you for finding the time to share your expertise of your school's smoking policy, which will be of great value to this project. As promised, I am sending you this information booklet outlining the work that I am doing, and explaining what will happen during the telephone interview.

If you have <u>any</u> questions about this research, please feel free to contact me at Cardiff University (details on the back page).

Background

Adolescent smoking is increasing across Europe and North America, and the issue is one of increasing academic and political importance. In Wales, the National Assembly has recognised the need to address youth smoking behaviour. It is in this climate of interest that this project is grounded.

The main aim of this project is to examine the use of school smoking policies in Welsh secondary schools. While it is an independent project, this research is closely associated with the *Health Behaviour in School-aged Children* (*HBSC*) study that your school participated in during February 2002. In each of the 59 schools that took part in *HBSC*, I have already collected preliminary data on teacher perspectives of

smoking in your school. As you know, in this phase of this project I am following up on some issues raised by the earlier work, and exploring your school's policy in more detail.

Why have I been selected?

As I explained on the telephone, in each school I am interviewing a member of staff with expert knowledge of their school's smoking policy. In addition, the selected respondent must fit certain criteria. As you know, as the result of discussions between you, your school and myself, it is felt that you are well qualified to help me with this interview.

What will the interview involve?

The interview will be conducted on the telephone at the agreed time, and using the contact details which you have provided. The interview will last approximately twenty minutes to half an hour.

The interview will cover issues surrounding your school's smoking policy, and smoking issues in general. For this reason, as we have discussed, it would be helpful if, during the interview, you could have accessible, any documents that you think are relevant and helpful.

I understand that this interview will have to be conducted during your non-contact time, and appreciate that these times are valuable to you. Consequently, I would like to re-iterate that I am sincerely grateful for your help and participation.

Confidentiality

This research is completely confidential and anonymous. With your permission, in order to aid analysis of the data, the interview will be recorded and transcribed. These tapes and transcripts will be kept locked up, and your name will not appear on the transcripts. Only researchers at Cardiff University will have access to these interviews.

Sometimes in writing up, it is necessary to quote someone, or something specific from the research. Where this happens, no individual or school shall be identified. All comments and illustrations will remain anonymous.

Once again, thank you very much for you time, and I look forward to speaking to you on the day of the interview. Should you have any questions in the meantime, then please don't hesitate to contact me.

Stephen Burgess

Telephone: [redacted]
E-mail: [redacted]

Appendix 12

Teacher telephone interview consent form

Note:

This is a representation of the original consent form that has been reduced from its original size.

CARDIFF UNIVERSITY
PRIFYSGOL CAERDYDD

Telephone Interview Consent Form

Project Title: **Adolescent Smoking In Wales: The Role of School Smoking Policies And The Wider School Environment**

Researcher: **Stephen Burgess**

When we spoke on the telephone recently you kindly agreed to take part in a telephone interview as part of the above research project. I would be very grateful if you could you complete this form, and return it to me before the interview using the freepost envelope provided. In the meantime, if you have any questions regarding this work, please feel free to contact me.

Please initial box

1. I confirm that I have read and understand the information booklet dated 4/12/02 (version 2.0) for the above project, and have been given the opportunity to ask questions. ☐
2. I understand that my participation in this project is voluntary, and I am free to withdraw at any time, without giving any reason. ☐
3. I understand that the interview will be recorded and transcribed, and that these tapes and transcripts will be kept locked up by the researcher. My name will not be used when the results of this work are written up, and while quotes and examples may be used, myself and my school will remain anonymous. ☐
4. I agree to taking part in this research. ☐

School Name _____

Your name _____ Your signature _____ Date _____

Stephen Burgess, Researcher _____ *9th December 2002* Date

Appendix 13

Teacher telephone interview cover sheet

Interview Details

A. Contact Information

School:			ID:
Contact Name:		Contact's Position:	
Date of Interview:		Time of Interview:	
Telephone Number (including extension):			

B. Interview Details

Start Time:	
End Time:	

Running Time:	

Details of Interview schedule used (e.g. version):

Comments on interview context:

- *What 'gap' the interview filled (e.g. breaktime) / anything need to finish for*

- *Privacy*

- *Other*

Apparent mood and enthusiasm of respondent and engagement in interview:

My General comments on the interview:

General Information

	Yes	No	On its way
Completed Consent Form Received?			

	Yes	No	Received
Is the respondent sending a copy of the written policy?			

	Yes	No
Is there a Mindisc copy of interview?		

	Yes	No	Backup Tape Number
Is there an audio cassette copy of interview?			

	Yes	No	Responder Unsure
Can I approach the school to participate in case studies			

	Yes	Nc
Does the respondent want a copy of the summary of findings?		

References

Alesci, N.L., Forster, J.L. & Blaine, T. (2003) 'Smoking, visibility, perceived acceptability, and frequency in various locations among youth and adults' in *Preventive Medicine*, **36,3** pp.272-281

Anderson, P. & Hughes, J.R. (2000) 'Policy interventions to reduce the harm from smoking' in *Addiction*, **95,Supplement 1** pp.S9-S11

ASH (2004a) *Factsheet no 26: Tobacco and Ethnic Minorities*, [WWW] <URL: http://www.ash.org.uk/html/factsheets/html/fact26.html> [accessed 1st April 2006]

ASH (2004b) *Key dates in the history of anti-tobacco campaigning*, [WWW] <URL: http://www,ash.org.uk/html/factsheets/chronologies.php> [accessed 28th October 2004]

Aveyard, P., Markham, W,A. & Cheng, K.K. (2004a) 'A methodological and substantive review of the evidence that schools cause pupils to smoke' in *Social Science & Medicine*, **58,11** pp.2253-2265

Aveyard, P., Markham, W.A., Lancashire, E., Bullock, A., Macarthur, C., Cheng, K.K. & Daniels, H. (2004b) 'The influence of school culture on smoking among pupils' in *Social Science & Medicine,* **58,9** pp.1767-1780

Backinger, C.L., Fagan, P., Matthews, E. & Grana, R. (2003) 'Adolescent and young adult tobacco prevention and cessation: current status and future directions (Review)' in *Tobacco Control,* **12, Supplement IV** pp.iv46-iv53

Barbeau, E.M., Leavy-Sperounis, A. & Balbach, E.D. (2004) 'Smoking, social class, and gender: what can public health learn from the tobacco industry About Disparities In Smoking?" in *Tobacco Control*, **13**, pp.115-120

BBC News (2001) *School's smoking policy attacked*, [WWW] <URL: http://news.bbc.co.uk/1/hi/wales/1389270.stm> [accessed 14th June 2001]

BBC News (2002) *Pupils allowed to smoke at school*, [WWW] <URL: http://news.bbc.co.uk/1/hi/england/1770453.stm> [accessed 19th January 2002]

Bhopal, R., Vettini, A., Hunt, S., Wiebe, S., Hanna, L & Amos, A. (2004) 'Review of prevalence data in, and evaluation of methods for cross cultural adaptation of, UK surveys on tobacco and alcohol in ethic minority groups' in *BMJ Online First,* <URL: www.bmj.com DOI: 10.1136/bmj.37963. 426308.9A> [accessed 1st April 2006]

Bobak, M., Jarvis, M.J., Skodova. Z. & Marmot, M. (2000) 'Smoke Intake Among Smokers is Higher in Lower Socioeconomic Groups' in *Tobacco Control*, **9** pp.310-312

British Medical Association (2003) *Adolescent Health*, British Medical Association: London

British Sociological Association (2002) *Statement of Ethical Practice For The British Sociological Association*, [WWW] <URL: www.britsoc.co.uk/Library/Ethicsguidelines2002.doc> [accessed 9th June 2004]

Brundtland, G. (2002) 'Foreword by Director General of WHO' *in* Mackay, J & Eriksen, M. *The Tobacco Atlas*, WHO: Geneva, p.9

Bryman, A. (2001) *Social Research Methods*, Oxford University Press: Oxford

Burton, D (2000) 'Data collection issues in survey research' *in* Buton, D (*ed*) *Research training for social scientists*, pp.320-334 Sage: London

Bush, J., White, M,, Kai, J., Rankin, J. & Bhopal, R. (2003) 'Understanding Influences On Smoking In Bangladeshi and Pakistani Adults: Community Based, Qualitative Study' in *British Medical Journal* **326** pp.962-967

Cardiff University (2003a) *Data Protection Act 1998: Using Personal Data In Your Research (Information Services Guidelines)* Information Services, Cardiff University: Cardiff

Cardiff University (2003b) *Introduction to the Data Protection Act (Information Services Guidelines)* Information Services, Cardiff University: Cardiff

Charlesworth, A. & Glantz, S.A. (2005) 'Smoking in the movies increases adolescent smoking: a review' in *Pediatrics*, **116,6** pp.1516-1528

Charlton, A. & While, D. (1994) 'Smoking Prevalence Among 16-19 Year Olds Related To Staff And Student Smoking Policies In Sixth Forms And Further Education' in *Health Education Journal*, **53** pp.28-39

Clarke, V., White, V., Hill, D. & Borland, R. (1994) 'School Structural And Policy Variables Associated With Student Smoking' in *Tobacco Control*, **3,4** pp.339-346

Clements, A,, Gordon, C., Harris, L., Parry-Langdon, N. & Roberts, C. (2004) *Tobacco Smoking, Cannabis Use and Alcohol Use: HBSC Briefing Series:2*, , Research and Evaluation Branch, Health Promotion Division, Welsh Assembly Government: Cardiff

Cook, T.D. (2003) 'The case for studying multiple contexts simultaneously' in *Addiction*, **98, Supplement 1** pp.151-155

Crawford, M.A., Balch, G.I., Mermelstein, R., the Tobacco Control Network Writing Group (2002) 'Responses to tobacco control policies among youth' in *Tobacco Control*, **11** pp.14-19

Cummings, K.M., Morley. C.P., Horan, J.K., Steger, C. & Leavell, N-R. (2002) 'Marketing to America's youth: evidence from corporate documents' in *Tobacco Control*, **11, Supplement 1** pp.i5-i17

Currie, C. & Smith, B. (2002) 'General Description of HBSC Study' in Currie, C., Samdal, O., Boyce, W. & Smith, B. (eds.) *Health Behaviour in School- Aged Children: a WHO cross-national study. research protocol for the 2001/2001 survey* HBSC: Edinburgh

Daily Post (Liverpool) (2002) *Pupils smoke – with school head's blessing; lung cancer research expert welcomes experiment* (by Stuart Dye) January 21 2002, p.5

Daily Telegraph, The (2001) *School lets its pupils smoke*, (by Richard Alleyne) June 15th 2001, p.3

Darling, H. & Reeder, A. (2003) 'Smoke free schools? Results of a secondary school smoking policies survey 2002' in *The New Zealand Medical Journal*, **116,1180** [WWW] <URL: http://www.nzma.org.nz./journal/116-1180/560/ >

Darling, H., Reeder, A.I. Williams, S. & McGee, R. (2006) 'Is there a relation between school smoking policies and youth cigarette smoking knowledge and behaviours?' in *Health Education Research*, **21,1** pp.108-115

Denman, S. (1999) 'Health promoting schools in England – a way forward in development' in *Journal of Public Health Medicine*, **21,2** pp.215-220

Department for Education and Employment (1999) *National Healthy School Standard: Guidance*, DfEE: Nottingham

de Vaus (1986) *Surveys in social research: second edition,* Allen & Unwin: London

de Vaus (2002) *Surveys in social research: fifth edition*, Routledge: London

de Vries, H., Candel, M., Engels, R. & Mercken, L. (2006) 'Challenges to the peer influence paradigm: results for 12-13 year olds from six European countries from the European Smoking Prevention Framework Approach study' in *Tobacco Control*, **15**, pp,83-89

Department of Health (1998) *Report of the Scientific Committee on Tobacco and Health* TSO: London

Department of Health (2005) *More people to benefit from Nicotine Replacement Therapy*, **Press Release,** Thursday 29th December 2005, Ref: 2005/0461 [WWW] <URL: http://www.dh.gov.uk/PublicationsAndStatistics/PressReleases/PressReleasesNotices/fs/en?CONTENT_ID=4125796&chk=sA/zwP> [accessed 27th December 2006]

Dillman, D. (1978) *Mail and telephone surveys: the total design method*, Wiley: New York

Dillman, D. (2000) *Mail and internet surveys: the tailored design method*, Wiley: New York

Doll, R (1998) 'Uncovering the effects of smoking' in *Statistical Methods in Medical Research*, **7**, pp.87-117

Edwards, R. (2004) 'The Problem of Tobacco Smoking' in *British Medical Journal* , **328** pp.217-219

European Commission (2000) *Report on the state of young people's health in the European Union*, EC: Luxembourg

European Commission (2004a) *Public Health: Tobacco*, [WWW] <URL: http://europa.eu.int/comm/health/ph_determinants/life_style/Tobacco/tobacco_en.htm> [accessed 23rd April 2006]

European Commission (2004b) *Tobacco Control General Policy* [WWW] <URL: http://europa.eu.int/comm/health/ph_determinants/life_style/Tobacco/general_policy_tobacco_control_en.htm> [accessed 23rd April 2006)

European Network on Young People and Tobacco (2006a) *European Network on Young People and Tobacco* [WWW] <URL: http://www.ktl.fi/portal/english/osiot/research,_people___programs/epidemiology_and_health_promotion/projects/enypat/> [accessed 23rd April 2006]

European Network on Young People and Tobacco (2006b) *Adolescent Smoking Cessation*, [WWW] <URL: http://www.ktl.fi/portal/english/osiot/research,_people___programs/epidemiology_and_health_promotion/projects/enypat/programmes/adolescent_smoking_c_essation/ >[accessed 23rd April 2006)

European Network on Young People and Tobacco (2006c) *Smokefree Class Competition*, [WWW] <URL: http://www.ktl.fi/portal/english/osiot/research,_people___programs/epidemiology_and_health_promotion/projects/enypat/programmes/smokefree_class_competition/ > [accessed 23rd April 2006]

Evans-Whipp, T.; Beyers, J.M.; Lloyd, S.; Lafazia, A.N.; Toumbourou, J.W.; Arthur, M.W. & Catalano, R.F. (2004) 'A review of school drug policies and their impact on youth substance use' in *Health Promotion International*, **19,2** pp.227-234

Feldman, M.S. (1992) 'Social limits to discretion: an organizational perspective' in Hawkins, K. (ed) *The uses of discretion*, pp.163-183 Clarendon Press: Oxford

Florida Department of Education (2003) *Supplemental Academic Instruction Categorical Fund Annual Report of 2002-3*, Bureau of Instructional Support and Community Services, Florida Department of Education: Tallahassee [WWW] <URL: http://www.firn.edu/doe/bin00014/pdf/sai-doc.pdf> [accessed 28th January 2005]

Florida Department of Education (2005) *Florida Middle Grades Reform* [WWW] <URL: www.flmiddlegradesreform.com> [accessed 28/1/05]

Forey, B,, Hamling, J., Lee, P., & Wald, N (eds). (2002) *International Smoking Statistics: Second Edition: A collection of historical data from 30 economically developed countries,* Oxford University Press: Oxford

Framework Convention Alliance (2004) *The Framework Convention on Tobacco Control* [WWW] <URL: http://www.fctc.org/treaty/index.php > [accessed 22nd April 2006]

Frey, J.H. (1989) *Survey Research By Telephone: Second Edition* Sage: Newbury Park

Frey, J.H. & Oishi, S.M. (1995) *How to conduct interviews by telephone and in person,* Sage: Thousand Oaks

Gådin, K.G. & Hammarström, A. (2000) 'School-related health - a cross-sectional study among young boys and girls' in *International Journal of Health Services*, **30,4** pp.797-820

Gately, I (2002) *La Diva Nicotina* Scribner: London

Gillham (2000) *Case study research methods*, Continuum: London

Godeau, E., Rahav, G. & Hublet, A. (2004) 'Tobacco smoking' in Curry, C., Roberts, C., Morgan, A., Smith, R., Settertobulte, W., Samdal, O. & Barnekow Rasmussen, V. (eds) *Young people's health in context: Health Behaviour in School-aged Children (HBSC) Study: international report from the 2001/2002 survey*, WHO: Denmark

Goldstein, A.O., Peterson, A.B., Ribisl, K.M., Steckler, A., Linnan, L., McGloin, T. & Patterson, C. (2003) 'Passage of 100% tobacco-free school

policies in 14 North Carolina School Districts' in *Journal of School Health*, **73,8** pp.293-299

Goodin, R (1986) 'Welfare, rights and discretion' in *Oxford Journal of Legal Studies* **6,2** pp.232-261

Gorard, S., Fitz, J. & Taylor, C. (2001) 'School choice impacts: what do we know?' in *Educational Researcher*, **30,7** pp.18-23

Gordon, J. & Turner, K.M. (2003a) 'Ifs, maybes and butts: factors influencing staff enforcement of pupil smoking restrictions' in *Health Education Research*, **18,3** pp.329-340

Gordon, J. & Turner, K.M. (2003b) 'School differences in pupil smoking: a consequence of a trade-off between health and education agendas?' in *Health Education Research*, **18,5** pp.580-591

Government Social Research (2004) *Social Research in the Office for National Statistics (ONS)* [WWW] <URL: http://www.gsr.gov.uk/about_depts/ons.asp> [accessed 4th November 2004]

Graham, H. (1996) 'Smoking Prevalence Among Women In The European Community 1950-1990' in *Social Science and Medicine*, **43,2** p.243-254

Gray, J.H. & Densten, I.L. (1998) 'Integrating quantitative and qualitative analysis using latent and manifest variables' in *Quality Quantity*, **32** pp.419-431

Griesbach, D. & Currie, C. (2001) *CAS Fact sheet 3: Smoking in Scottish Schools* Child & Adolescent Health Research Unit: Edinburgh, [WWW] <URL www.education.ed.ac.uk/cahru/publications/CAS_FactSheet3.pdf>

Griesbach, D., Inchley, J. & Currie, C. (2002) 'More than words? The status and impact of smoking policies in Scottish Schools' in *Health Promotion International*, **17,1** pp.31-41

Grinyer, A (2002) 'The Anonymity of Research Participants: Assumptions, Ethics and Practicalities', *University of Surrey Social Research Update*, 36. [WWW] <URL: http://www.soc.surrey.ac.uk/sru/SRU36.html > [accessed 9th June 2004]

Hammond, R. & Rowell, A,. (2001) 'Trust us: we're the tobacco industry' [WWW] <URL: www.ash.org.uk > [accessed 28th May 2006]

Hartland, J., Tudor-Smith, C. & Bowker, S. (1998) 'Smoke-free policies in schools: a qualitative investigation of the benefits and barriers' in *Health Education Journal*, **57** pp.51-59

Hawkins, K. (1992) 'The use of legal discretion: perspectives from law and social sciences' in Hawkins, K. (ed) *The uses of discretion*, pp.11-46 Clarendon Press: Oxford

Heckert, K.A. & Matthews, K. (2000) 'Toward totally smokefree schools and beyond: the Crown Public Health Smokefree Schools Grant program' in *Health Education and Behaviour*, **27,3** pp.328-338

Health Promotion Wales (1993) *Creating a smoke free school*, Health Promotion Wales: Cardiff

Health Promotion Wales (1998) *In perspective – secondary schools. Case studies from the European Network of Health Promoting Schools Project Wales. Written by the project schools*, Health Promotion Wales: Cardiff

HMSO (1998) *Smoking Kills: A White Paper On Tobacco* HMSO: London

Hox, J (2002) *Multilevel analysis: techniques and applications*, Lawrence Erlbaum Associates: Mahwah

Husten, C.G., Chrismon, J.H. & Reddy, M.N. (1996) 'Trends and effects of cigarette smoking among girls and women in the United States, 1965-1993' in *Journal Of The American Medical Women's Association*, **51,1** pp.11-18

Independent on Sunday (2002) *School cigarette break* 20th January 2002 p.4

Jarvis, M. & Wardle, J. (2006) 'Social patterning of individual health behaviours: the case of cigarette smoking' in Marmot. M. & Wilkinson, R.G. (eds.) *Social Determinants of Health: Second Edition,* Oxford University Press: Oxford

Kiefe, C.I., Williams, O.D., Lewis, C.E., Allison, J.J., Sekar, P. & Wagenknecht, L.E. (2001) 'Ten-year Changes in Smoking Among Young Adults: Are Racial Differences Explained by Socioeconomic Factors in the CARDIA study?' in *American Journal of Public Health*, **91,2** pp.213-218

Konu, A.I.; Lintonen, T.P. & Rimpela, M.K. (2002) 'Factors associated with schoolchildren's general subjective well-being' in *Health Education Research*, **17,2** pp.155-165

Konu, A. & Rimpela, M (2002) 'Well-being in schools: a conceptual model' in *Health Promotion International*, **17,1** pp.79-87

Kvale, S (1996) *InterViews*, Sage: Thousand Oaks

Lantz, P.M., Jacobson, P.D., Warner, K.E., Wasserman, J., Pollack, H.A., Berson, J. & Ahlstrom, A. (2000) 'Investing in youth tobacco control: a review of smoking prevention and control strategies' in *Tobacco Control*, **9,1**, pp.47-63

Lavrakas, P.J. (1993) *Telephone Survey Methods: Sampling, Selection and Supervision, Second Edition* Sage: California

Lee, A. (1999) 'Health-promoting schools: new challenges to school teachers' in *Journal of Public Medicine*, **21,4** pp.483-484

Levy, D.T., Chaloupka, F. & Gitchell, J. (2004) 'The effects of tobacco control policies on smoking rates: a tobacco control scorecard' in *Journal of Public Health Management Practice*, **10,4** pp.338-353

Lister-Sharp, D.; Chapman, S.; Stewart-Brown, S. & Sowden, A. (1999) 'Health promoting schools and health promotion in schools: two systematic reviews' in *Health Technology Assessment*, **3,22**

Lucas, K. & Lloyd, B. (1999) 'Adolescent smoking: the control of mood and body image concerns' in *Health Education*, **99,1** pp.17-26

Lynagh, M.; Schofield, M.J. & Sanson-Fisher, R.W. (1997) 'School health promotion programs over the past decade: a review of the smoking, alcohol and solar protection literature' in *Health Promotion International*, **12,1** pp.43-60

Lynagh, M,. Perkins, J. & Schofield, M. (2002) 'An evidence-based approach to health promoting schools' in *Journal of School Health*, **72,7** pp.300-302

MacDonald, S., Geesink, I. & Moore, L. (2005) 'Evaluation of European Adolescent Smoking Cessation Pilot Programme: report for the Welsh Assembly Government' *Working Paper 73, Cardiff School of Social Sciences, Cardiff University* [WWW] <URL: http://www.cardiff.ac.uk/schoolsand divisions/academicschools/socsi/publications/abstracts/paper73.html>

MacFadyen, L., MacAskill, S., Stead, M. & Eadie, D. (2003) *A Review of adolescent smoking cessation: technical report no.3*, Research and Evaluation Branch, Health Promotion Division, Welsh Assembly Government: Cardiff

Mackay, J. & Eriksen, M. (2002) *The tobacco atlas*, WHO: Geneva

Maes, L. & Lievens, J. (2003) 'Can the school make a difference? A multilevel analysis of adolescent risk and health behaviour' in *Social Science & Medicine*, **56** pp.517-529

Marmot, M. (2006) 'Introduction' in Marmot. M. & Wilkinson, R.G. (eds.) *Social determinants of health: second edition,* Oxford University Press: Oxford

Massey, J.T. (1988) 'An overview of telephone coverage' *in* Groves, R.M., Biemer, P.P., Lyberg, L.E., Massey, J.T., Nicholls II, W.L., Waksberg, J. (eds.) *Telephone Survey Methodology* Wiley: New York

May, T. (2001) *Social research: issues, methods and process*, Open University Press: Buckingham

Mayhew, K.P., Flay, B.R. & Mott, J.A. (2000) 'Stages in the development of adolescent smoking: review' in *Drug and Alcohol Dependence*, **59, Supplement 1** pp.S61-S81

McLellan, L.; Rissel, C.; Donnelly, N. & Bauman, A. (1999) 'Health behaviour and the school environment in New South Wales, Australia' in *Social Science and Medicine*, **49,5** pp.611-9

Medicines and Healthcare Products Regulatory Agency (2005a) *Report of the Committee on Safety of Medicines Working Group on Nicotine Replacement Therapy*, London: MHRA [WWW] <URL: http://www.mhra.gov.uk/> [accessed 30th December 2006]

Medicines and Healthcare Products Regulatory Agency (2005b) *New advice on use of nicotine replacement therapy (NRT): wider access in at-risk populations website date 29th December 2005* [WWW] <URL:

http://www.mhra.gov.uk/home/idcplg?IdcService=SS_GET_PAGE&useSecondary=true&ssDocName=CON2022933&ssTargetNodeId=221> [accessed 30th December 2006]

Mehl, GL. (2003) 'Young people and the need for qualitative research' conference paper delivered at World Conference on Tobacco Or Health (WCTOH), Helsinki 2003. Session : *Adding tools to the methods toolbox: using qualitative research methods to improve programme and policy responses.* in WCTOH (eds) *Conference abstracts.*

Meighan, R. & Siraj-Blatchford, I. (2003) *A sociology of educating*, Continuum: London

Mendlinger, S. & Cwikel, J. (2008) 'Spiraling between qualitative and quantitative data on women's health behaviours: a double helix model for mixed methods' in *Qualitative Health Research*, **18,2** pp.280-293

Mirror, The (2001) *School allows kids of 11 smoking breaks* (by Nicola Porter), June 15th 2001, p.1&7

Molyneux, A., Lewis, S., Antoniak, M., Hubbard, R., McNeil, A., Godfrey, C., Madeley, R. & Britton, J. (2002) 'Is smoking a communicable disease? Effect of exposure to ever smokers in school tutor groups on the risk of incident smoking in the first year of secondary school' in *Tobacco Control*, **11,3** pp.241-245

Moore, L., Roberts, C., Tudor-Smith, C. (2001) 'School smoking policies and smoking prevalence among adolescents: multilevel analysis of cross-sectional data from Wales' in *Tobacco Control*, **10,2** pp.117-123

MREC, Wales (Undated) *Guidelines For Researchers: Patient Information Sheet and Consent Form*, MREC, Wales: Cardiff

Myers, K.A. (1989) 'An overview of school smoking policies in England and Wales' in *Health Education Journal*, **48,3** pp.110-112

National Audit Office (2003) *Making a difference: performance of maintained secondary schools in England*, The Stationary Office: London [WWW] <URL: http://www.nao.org.uk/pn/02-03/02031332.htm>

Northrup, D.A., Ashley, M.J. & Ferrence, R. (1998) 'The Ontario Bban on smoking on school property: perceived impact on smoking' in *Canadian Journal of Public Health*, **89,4** pp.224-228

Nutbeam, D. (1992) 'The health promoting school: closing the gap between theory and practice' in *Health Promotion International*, **7,3** pp.151-153

Nutbeam, D. & Aaro, L.E. (1991) 'Smoking and pupil attitudes towards school: the implications for health education with young people' in *Health Education Research*, **6,4** pp.415-421

Nutbeam, D., Smith, C., Moore, L. & Bauman, A. (1993) 'Warning! Schools can damage your health: alienation from school and its impact on health behaviour' in *Journal of Paediatrics and Child Health*, **29, Supplement 1** pp.S25-S30

OCMO (2004) *Strategic Direction for Tackling Smoking in Wales*, [WWW] <URL: http://www.cmo.wales.gov.uk/content/work/tobacco/strategy-e.htm> [accessed 11the October 2004]

O'Donnell, S. (2004) *International Review of Curriculum and Assessment Frameworks*, Qualifications and Curriculum Authority/National Foundation for Educational Research, London

Office for National Statistics (2004) *Living In Britain – No 31: Results From the 2002 General Household Survey*, TSO: London [WWW] <URL: http://www.statistics.gov.uk/lib2002/downloads/smoking.pdf>

O'Hara Tomkins, N., Dino, G.A., Zedosky, L.K., Harman, M. & Shaler, G. (1999) 'A collaborative partnership to enhance school-based tobacco control policies in West Virginia' in *American Journal of Preventive Medicine*, **16,Supplement 3** pp.29-34

Ogilvie, D. & Petticrew, M. (2004) 'Reducing Social Inequalities In Smoking: Can Evidence Inform Policy? A Pilot Study' in *Tobacco Control*, **13** pp.129-131

Olds, R. & Symons, C.W. (1990) 'Recommendations For Obtaining Cooperation to Conduct School-based Research' in *Journal of School Health*, **60,3** pp.96-98

Oppenheim, A.N. (1992) *Questionnaire design, interviewing and attitude measurement,* Continuum, London

Peck, D.D., Acott, C., Richard, P., Hill, S. & Schuster, C. (1993) 'The Colarado tobacco-free schools and communities project' in *Journal of School Health,* **63,5** pp.214-217

Pentz, M.A., Brannon, B.R., Charlin, V.L., Barrett, E.J., MacKinnon, D.P. & Flay, B.R. (1989) 'The power of policy: the relationship of smoking policy to adolescent smoking' in *American Journal of Public Health*, **79,7** pp.857-862

Royal Pharmaceutical Society (2006) 'Restrictions lifted on nicotine replacement therapy' in *Pharmaceutical Journal*, **276,7382** pp.3

Pickett, W., Northrup, D. & Ashley, M.J. (1999) 'Factors influencing implementation of the legislated smoking ban on school property in Ontario' in *Preventive Medicine*, **29,3** pp.157-164

Poulson, L.H., Osler, M., Roberts, C., Due, P., Damsgaard, M.T. & Holstein, B.E. (2002) 'Exposure to teachers smoking and adolescent smoking

behaviour: analysis of cross sectional data from Denmark' in *Tobacco Control*, **11** pp.246-251

Powell, L., Tauras, J.A. & Ross, H. (2005) 'The importance of peer effects, cigarette prices and tobacco control policies for youth smoking behaviour' in *Journal of Health Economics*, **24,5** pp.950-968

Prout, A. (2005) *The Future of Childhood* Routledge Falmer: Oxford

Rasbash, J., Browne, W., Goldstein, H., Yang, M., Plewis, I., Healy, M., Woodhouse, G., Draper, D., Langford, I., Lewis, T. (2000) *A user's guide to MLwiN: version 2.1d for use with MLwiN 1.10* Institute of Education: London

Reid, D. (1985) 'Prevention Of Smoking Among School Children: Recommendations For Policy Development' in *Health Education Journal*, **44,1** pp.3-12

Reid, D.J., McNeill, A.D. & Glynn, T.J. (1995) 'Reducing The Prevalence Of Smoking In Youth In Western Countries: An International Review' in *Tobacco Control,* **4,3** pp.266-277

Reitsma, A.H., & Manske, S. (2004) 'Smoking in Ontario schools: does policy make a difference?' in *Canadian Journal of Public Health,* **95,3** pp.214-218

Rimal, R. & Real, K. (2003) 'Understanding the influence of perceived norms on behaviours' in *Communication Theory*, **13,2** pp.184-203

Roberts, C., Kingdon A., Frith, C., & Tudor-Smith, C. (1997) *Young People in Wales: Lifestyle Changes 1986-1996 Technical Report 24*, Health Promotion in Wales: Cardiff

Roberts, C., Kingdon, A., Parry-Langdon, N, & Bunce, J, (2002a) *Young People in Wales: Findings From The Health Behaviour in School-aged Children (HBSC) Study (1986-2000) Technical Report No.1*, Research and

Evaluation Branch, Health Promotion Division, National Assembly for Wales: Cardiff

Roberts, C., François, Y., King, A., King, M, (2002b) 'Description of Survey Procedures And Methods: Sampling' *in* Currie, C., Samdal, O., Boyce, W. & Smith, B. *(eds.) Health Behaviour in School- Aged Children: a WHO Cross National Study. Research Protocol for The 2001/2001 Survey* HBSC: Edinburgh

Roski, J.; Perry, C.L.; McGovern, P.G.; Williams, C.L.; Farbakhsh, K. & Veblen-Mortenson, S. (1997) 'School and community influences on adolescent alcohol and drug use' in *Health Education Research*, **12,2** pp.255-66

Royal College of Physicaians (2000) *Nicotine addiction in Britain: a report of the Tobacco Advisory Group of the Royal College of Physicians* Royal College of Physicians: London

Sale, J.E.M., Lohfeld, L.H. & Brazil, K. (2002) 'Revisiting the quantitative-qualitative debate: implications for mixed-methods research' in *Quality & Quantity*, **36** pp.43-53

Samdal, O.; Nutbeam, D.; Wold, B. & Kannas, L. (1998) 'Achieving health and educational goals through schools – a study of the importance of the school climate and the students' satisfaction with school' in *Health Education Research*, **13,3** pp.383-397

Schneider, C.E. (1992) 'Discretion and rules: a lawyer's view' in Hawkins, K. (ed) *The uses of discretion*, pp.47-48 Clarendon Press: Oxford

Sharp, S. & Croxford, L. (2003) 'Literacy in the first year of schooling: a multilevel analysis' in *School Effectiveness and School Improvement*, **14,2** pp.213-231

Sinha, D.N., Gupta, P.C., Pednekar, M.S., Jones, J.T. & Warren, C.W. (2002) 'Tobacco use among school peronnel in Bihar, India (Letter)' in *Tobacco Control*, **11** pp.82-85

Smokefree Class (2006) *Smokefree Class Competition – a Europe-wide programme*, [WWW] <URL: http://www.ift-nord.de/ift/sfc/> [accessed 23rd April 2006]

St Leger, L. (1998) 'Australian teachers' understandings of the health promoting school concepts and the implications for the development of school health' in *Health Promotion International*, **13,3** pp.223-235

St Leger, L. (2001) 'Schools, health literacy and public health: possibilities and challenges' in *Health Promotion International*, **16,2** pp.197-205

St Leger, L. & Nutbeam, D. (2000) 'Research into health promoting schools' in *Journal of School Health*, **70,6** pp.257-259

Shafey, O. & Guindon, E. (2003) 'Methods' in *Tobacco control country profiles 2nd edition)*, The American Cancer Society, WHO and International Union against Cancer: Atlanta

Smith, C.; Roberts, C,; Nutbeam, N. & Macdonald, G. (1992) 'The health promoting school: progress and future challenges in Welsh secondary schools' in *Health Promotion International*, **7,3** pp.171-179

South Wales Echo (2001a) *City school allows pupils to smoke*, (by Kathryn Summers) June 14th 2001, p.1-2

South Wales Echo (2001b) *Letter: Smoking policy a shock*, (from D. Yeo) July 16th 2001, p.33

Stead, M, Hastings, G. & Tudor-Smith, C. (1996) 'Preventing adolescent smoking: a review of options' in *Health Education Journal*, **55** pp.31-54

Stephens, D.Y. & English, G. (2002) 'A statewide school tobacco policy review: process, results, and implications' in *Journal of School Health*, **72,8** pp.334-338

Stewart, D.E.; Parker, E. & Gillespie, A. (2000) 'An audit of health promoting schools policy documentation' in *Journal of School Health*, **70,6** pp.253-254

Sunday Mail (2002) *Pupils to get cigarette breaks* January 20th 2002 p.18

Sze, S (1988) 'Forum interview with Szeming Sze, WHO: from small beginnings' *World Health Forum 9*, pp.29-34. [WWW] <URL: http://whqlibdoc.who.int/analytics/WHForum_1988_9(1)_29-34.pdf> [accessed 19th February 2003]

Tashakkori, A. & Creswell, J.W. (2007) 'Editorial: the new era of mixed methods' in *Journal of Mixed Methods Research*, **1,1** pp.3-7

Tashakkori, A. & Teddlie, C. (1998) *Mixed methodology: combining qualitative and quantitative approaches* Sage: Thousand Oaks

Teacher Support Network (2006) *National Healthy School Standard*, Teacher Support Network Website [WWW] <URL: http://www.teachersupport.info/index.cfm?p=500> [accessed 29th September 2006]

Teddlie, A. & Tashakkori, A. (2006) 'A general typology of research designs featuring mixed methods' in *Research in the Schools*, **13,1** pp.12-28

Thun, M., & da Costa e Silva, V. (2003) 'Introduction and overview of global tobacco surveillance' in *Tobacco Control Country Profiles 2nd edition*, The American Cancer Society, WHO and International Union against Cancer: Atlanta

Times, The (2002) *Head lets addict pupils smoke*, January 19th 2002 [WWW] <URL: http://www.thetimes.co.uk/article/0,,2-2002031867,00.html>

Trewin, D. & Lee, G. (1988) 'International Comparisons of Telephone Coverage' in Groves, R.M., Biemer, P.P., Lyberg, L.E., Massey, J.T., Nicholls II, W.L., Waksberg, J. (eds.) *Telephone Survey Methodology* Wiley: New York

Trinidad, D.R., Gilpin, E.A. & Pierce, J.P. (2004) 'Compliance and support for smoke-free school policies' in *Health Education Research*, [WWW] advance access publication <URL: http://her.oupjournals.org DOI: 10.1093/her/cyg143>

Tubman, J.G. & Vento, R.S. (2001) 'Principal and Teacher Reports of Strategies to Enforce Anti Tobacco Policies in Florida Middle and High Schools' in *Journal of School Health,* **71,6** pp.229-235

Turner, K.M. & Gordon, J. (2004a) 'Butt in, butt out: pupils' views on the extent to which staff could and should enforce smoking restrictions' in *Health Education Research*, **19,1** pp.40-50

Turner, K.M. & Gordon, J (2004b) 'A fresh perspective on a rank issue: pupils' accounts of staff enforcement of smoking restrictions' in *Health Education Research*, **19,2** pp,148-158

Turunen, H.; Tossavainen, K.; Jakonen, S.; Salomaki, U. & Vertio, H. (1999) 'Initial results from the European Network of health promoting schools program on the development of health education in Finland' in *Journal of School Health*, **69,10** pp.387

Tyas, S.L. & Pederson, L.L. (1998) 'Psychosocial factors related to adolescent smoking: a critical review of the literature' in *Tobacco Control*, **7** pp.409-420

UN (2004) *The United Nations System*, [WWW] <URL: http://www.un.org/aboutun/unchart.pdf>

Unger, J.B., Rohrbach, L.A., Howard, K.A., Cruz, T.B., Johnson, C.A. & Chen, X. (1999) 'Attitudes toward anti-tobacco policy among California youth: associations with smoking status, psychosocial variables and advocacy actions' in *Health Education Research*, **14,6** pp.751-763

Wakefield, M. & Chaloupka, F. (2000) 'Efectiveness of comprehensive tobacco control programmes in reducing teenage smoking in the USA' in *Tobacco Control*, **9** pp.177-186

Wakefield, M.A., Chaloupka, F.J., Kaufman, N.J., Orleans, C.T., Barker, D.C. & Ruel, E.E. (2000) 'Effect of restrictions on smoking at home, at school, and in public places on teenage smoking: cross sectional study' in *British Medical Journal*, **321** pp.333-337

Wakefield, M., Flay, B., Nichter, M. & Giovino, G. (2003) *Role of media in influencing trajectories of youth smoking* in Addiction, **98, Supplement 1** pp.79-103

Wanless (2002) *Securing our future health: taking a long-term view* London: Her Majesty's Treasury

Wanless (2003) *The review of health and social care in Wales* Cardiff: Welsh Assembly Government

Wanless (2004) *Securing good health for the whole population* London: Her Majesty's Treasury

Welsh Assembly Government (2002a) *Well being in Wales: consultation document*, WAG: Cardiff

Welsh Assembly Government (2002b) *The National Assembly for Wales (The Official Record) Tuesday 17th December 2002* [WWW] <URL: http://www.wales.gov.uk/assemblydata/N000000000000000000000000000005406.pdf>

Welsh Assembly Government (2002c) *Plenary Debate 17th December 2002* (Summary of feedback from Well Being in Wales as presented to Assembly Members prior to the debate and as presented to the public on -line). [WWW] <URL:http://www.wales.gov.uk/subihealth/content/wellbeing/plenary-e.pdf >

Welsh Assembly Government (2006a) *Rationale and evidence for smoking prevention in schools*, [WWW] <URL: http://new.wales.gov.uk/topics/health/improvement/children/schools/smoking/rationale/?lang=en> [accessed 24th September 2006]

Welsh Assembly Government (2006b) *Smoking in secondary schools*, [WWW] <URL: http://new.wales.gov.uk/topics/health/improvement/children/schools/smoking/secondary/?lang=en> [accessed 24th September 2006]

Welsh Assembly Government (2006c) *Health Promoting Schools*, [WWW] <URL: http://www.cmo.wales.gov.uk/content/work/schools/wnhss-e.htm > [accessed 24th September 2006]

Welsh Assembly Government (2006d) *health.e.school:* [WWW] <URL: http://www.healtheschool.org.uk/> [accessed 24th September 2006]

Welsh Assembly Government (2006e) *health.e.school: Secondary school* [WWW] <URL: http://www.healtheschool.org.uk/secondary/index.htm> [accessed 24th September 2006]

Welsh Assembly Government (2006f) *health.e.school: Secondary smoking* [WWW] <URL: http://www.healtheschool.org.uk/secondary/smoking.htm> [accessed 24th September 2006]

Welsh Office (1998a) *Better Health Better Wales: A Consultation Paper* TSO: London

Welsh Office (1998b) *Better Health Better Wales: Summary of proposals put forward by respondents to the consultation exercise* TSO: London

Western Mail (2001) *School lets pupils smoke,* June 15th 2001, p.7

Whitelaw, S.; Baxendale, A.; Bryce, C.; Machardy, L.; Young, I. & Witney, E. (2001) ''Settings' based health promotion: a review' in *Health Promotion International*, **16,4** pp.339-353

WHO (1986) *Ottawa Charter for Health Promotion*, WHO Regional Office: Ottawa, [WWW] <URL: www.paho.org/English/AD/SDE/HS/OttawaCharter Eng.pdf>

WHO (1998) *Health21: The Health for all Policy Framework for the WHO European Region*, WHO Regional Committee for Europe: Copenhagen [WWW] <URL: http://www.who.dk/document/health21/wa540ga199 heeng.pdf>

WHO (2000) 'Constitution Of The World Health Organization' in World Health Organization Basic Texts 43rd Edition, WHO: Geneva [WWW] <URL: http://policy.who.int/cgi-bin/om_isapi.dll?infobase=Basicdoc&softpage= Browse_Frame_Pg42> [accessed 19the February 2002]

WHO (2003a) *WHO Framework Convention on Tobacco Control*, WHO: Geneva, [WWW] <URL: http://www.who.int/tobacco/framework/ download/en/>

WHO (2003b) WHO Definition of Health [WWW] <URL: http://www.who.int/about/definition/en/> [accessed 19th February 2003]

WHO (2005) *The Health for All Policy Framework for the WHO European Region: 2005 Update*, WHO Regional Office for Europe: Copenhagen, [WWW] <URL: http://www.euro.who.int/document/e87861.pdf>

Wiium, N., Torsheim, T. & Wold, B. (2006) 'Normative processes and adolescent's smoking behaviour in Norway: a multilevel analysis' in *Social Science & Medicine*, **62** pp.1810-1818

Willemsen, M.C. & de Zwart., W.M. (1999) 'The effectiveness of policy and health education strategies for reducing adolescent smoking: a review of the evidence' in *Journal of Adolescence,* **22,5** pp.587-599

Williams, T. & Jones, H. (1993) 'School health education in the European Community' in *Journal of School Health*, **63,3** pp.133-5 Source: *Expanded Academic ASAP*. Thomson Gale. Cardiff University. 30 Sep. 2006 [WWW] <URL: http://find.galegroup.com/itx/infomark.do?&contentSet=IAC-Documents&type=retrieve&tabID=T002&prodId=EAIM&docId=A13906024&source=gale&srcprod=EAIM&userGroupName=ucw_itc&version=1.0.>

Wold, B. & Currie, C. (2001) *Control of adolescent smoking: transnational variation in prevalence of adolescent smoking: the role of national tobacco control policies and the school and family environment*, Research Centre for Health Promotion, University of Bergen: Bergen

Wold, B., Torsheim, T., Currie, C. & Roberts, C. (2004a) 'National and school policies on restrictions of teacher smoking: a multilevel analysis of student exposure to teacher smoking in seven European countries' in *Health Education Research*, **19,3** pp.217-226

Wold, B., Currie, C., Roberts, C. & Aaroe, L.E. (2004b) 'National legislation on school smoking restrictions in eight European countries' in *Health Promotion International*, [WWW] on-line advance access publication <URL: http://heapro.oupjournals.org/cgi/reprint/dah410v1>

Yach, D. & Ferguson, B.J. (1999) 'Can we stop children and adolescents from smoking?' in *Social Science and Medicine*, **48, supplement 1** pp.757-758

Yorkshire Post (2002) *Storm over school's smoke break* (by Ian Waugh) January 23 2002