

Cultural Capital, Social Capital and Communities of Practice in
Social Marketing

by

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*A Thesis Submitted in Fulfilment of the Requirements for the Degree of
Doctor of Philosophy of Cardiff University*

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January 2015

ABSTRACT

The overall goal of this thesis is to examine three divergent literature streams, cultural capital, social capital and communities of practice (CoPs), in the context of social marketing theory. The thesis explores the means through which social and cultural capital are exchanged between two groups using social marketing techniques within a CoP framework and considers anti-social behaviour, experiential marketing and relationship marketing literatures.

Four theoretical propositions are examined using mixed method and longitudinal action research approaches within a practical road safety intervention. The goal of the 'live' intervention sought to encourage the adoption of *advanced* driving practices in a group of young male drivers. Behaviour change was measured pre- and post- intervention using In Vehicle Data Recorders (IVDRs), questionnaire surveys and measured driver assessments. Supplementary qualitative insights were generated using observations, one-to-one interviews and focus groups. An understanding of advanced driving practices was achieved through extensive participation in advanced driver training by the researcher.

The results of the investigation identified two groups of road users each exhibiting distinct tastes and preferences within a framework of concepts derived from the work of French sociologist Pierre Bourdieu. The evidence suggests that following intervention, and including the socialisation of these groups, a positive shift occurred in the adoption of advanced driving practices.

Contribution is made to social marketing theory through the application of Bourdieu's cultural capital 'taste zones' applied to a social marketing context. Social marketing is then portrayed as playing a 'bridging' function between two groups. This approach portrays the role of social marketing as a facilitator of positive 'customer–customer' interactions as opposed to a more traditional 'customer–change-agent' orientation. Furthermore, the CoP concept is suggested as a viable mechanism through which this modified orientation can be achieved.

Key words: social marketing, cultural capital, social capital, communities of practice, road safety, advanced driving.

ACKNOWLEDGEMENTS

I would firstly like to thank the Economic and Social Research Council (ESRC) and Cardiff University, specifically Cardiff Business School, for funding this doctoral research. I would also like to thank Prof. Ken Peattie and Dr. Caroline Moraes for their comments during and following the viva. Their comments helped to shape the final story that detailed an unconventional research study.

I must also thank Bristol Social Marketing Centre (BSMC), the West of England Road Safety Partnership (especially Mike Baugh), Alpha Micro Systems (especially Alastair Frasier) and the Department for Transport (DfT).

I thank both members of my supervisory team, Alan Tapp and Tony Ellson, for their continual support throughout this challenging process. I owe much to Alan Tapp for the opportunity to be involved with the “Safer Roads Using Social Marketing” investigation. I will always be grateful for this unique opportunity. I thank Tony Ellson for his endless patience and reassurance throughout my PhD journey, especially during the write-up phase.

The members of the WST steering group also deserve a mention for their commitment to WST long before it was named as such. Special thanks go to Martin Evans and Tony Gilbert who took the greatest personal risk during the early stages of this unique project.

I must also recognise the significant input of Mark Pepper during this research. Since first meeting Mark outside Lawrence Weston Youth Club in

June 2009, his help has been invaluable. He has been a facilitator, a translator of Lawrence Weston-speak and a friend.

Completing this PhD dissertation has been a monumental task – a task that has not only dominated my life, but those around me. I must thank all of my friends and family who stood by me through to its completion.

This thesis attempts explains the phenomenon of “WST”. It may have, in a small way, changed the lives of those who were involved. It has certainly changed mine.

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Chapter One: Introduction

“Men don’t like to step abruptly out of the security of familiar experience; they need a bridge to cross from their own experience to a new way. A revolutionary organizer must shake up the prevailing patterns of their lives – agitate, create disenchantment and discontent with the current values, to produce, if not a passion for change, at least a passive, affirmative, non-challenging climate”

Alinski, 1971, p. xxi

1.0 Introduction

This research study examines the potential of three literature streams in social marketing. The literature review and subsequent research examines cultural capital, social capital and CoP literatures with aspects of the relationship marketing, anti-social behaviour and experiential marketing literatures also considered. In doing so, the study explores a theoretical model in which behaviour change (and perhaps the *raison d’être* of social marketing) is achieved through the application of ‘social exchange’ between social actors exhibiting different forms of cultural and social capital.

This approach differs from the traditional social marketing paradigm which, it is suggested, adopts a buyer-seller model between the change agent (the social marketer) and target audience. A theoretical framework is proposed which accommodates the key concepts from diverse but overlapping literature streams.

This introductory chapter contextualises the research area and explains its relevance, research objectives and thesis outline. The chapter includes a

theoretical model, research objectives, research propositions, anticipated contributions and an outline of the proceeding chapters. Ethical and confidentiality statements are also included in addition to a glossary of frequently used terms.

1.1 Social Marketing Theory

The theoretical development on which the research is based begins with social marketing theory. The emerging discipline of social marketing is based on commercial marketing theories (Peattie and Peattie, 2003). However, some authors have called for a consideration of theories and models outside of 'traditional' commercial marketing theory as a way of furthering the theoretical development of the social marketing paradigm. One such theory has been presented by Glenane-Antoniadia et al. (2003) who suggest that social marketers operate within an environment characterised by market failure and negative externalities. In this context, they suggest that social marketers may be "ill-equipped to foster change utilizing conventional marketing tools" (Glenane-Antoniadia et al., 2003, p. 323). Social Capital Theory, they propose, is a useful theory that allows social marketers to examine behaviour in terms of social context rather than in isolation. This approach is gaining momentum in the social marketing literature with calls to adopt a broader perspective that encompasses not just behavioural influences, but also the social and physical determinants of that behaviour (Hastings and Donovan, 2002, p. 4). Social marketing can therefore be divided into two categories: 1) individual level theories and, 2) theories which consider social and environmental influences on behaviour.

1.2 Social and Cultural Capital Theory

Social Capital is one of Pierre Bourdieu's signature concepts and relates to the structure of a person's network and the benefits that derive from this network. The social capital concept is divided by 'Bridging' and 'Bonding' forms of social capital (Putnam, 2000; Adler and Kwon, 2002; Ikeda, 2008; Brunie, 2009). 'Bonding' - or internal - social capital pertains to intra-community ties which provide the foundation for bringing individuals together, whereas 'Bridging' - or external - social capital relates to intercommunity ties (Adler and Kwon, 2002).

Whilst Glenane-Antoniadia et al. (2003) examined social capital theory in the context of social marketing theory, another of Bourdieu's key concepts has received limited attention in the social marketing literature. Cultural capital is described in the literature as a form of value associated with culturally authorised tastes, attributes, skills and awards (Webb et al., 2002). Interest in the cultural capital concept is extended to include a consideration of different forms, or styles, of cultural capital. Grenfell (2004, p. 96) states, "Between 'highbrow' and 'lowbrow' we can associate the dominant, consecrated culture of the ruling class and its opposite working-class culture; for example, tennis as opposed to football, the restaurant to the pub, reading literature to reading magazines, going to the theatre to watching TV".

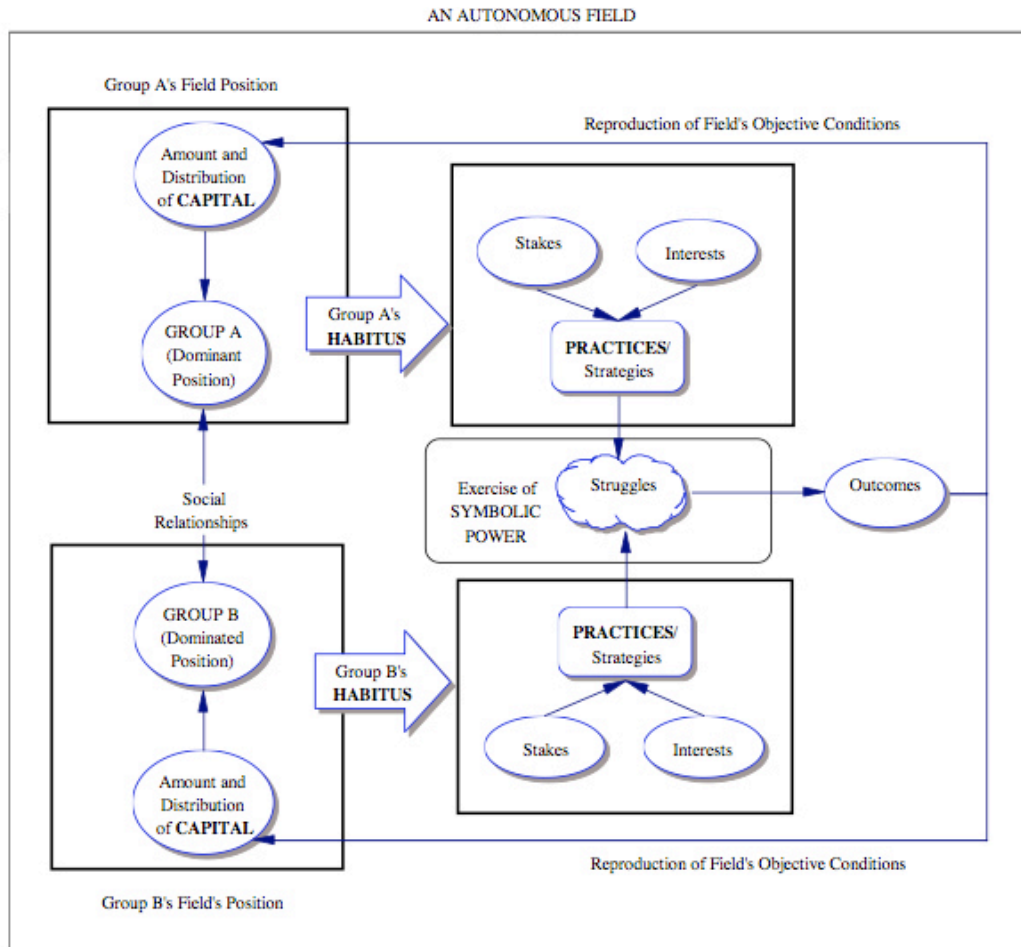


Figure 1: An Autonomous Field (Hurtado, 2009, p. 208)

Central to Bourdieu's discussion of social and cultural capital is the notion of an 'autonomous field' which is depicted in Figure 1 (Hurtado, 2009). Bourdieu claimed that in stable societies, social structures are reproduced by social practices (Hurtado, 2009). He saw these social practices and interactions taking place in 'fields' which function as sites of social competition. This implies the idea of a 'field of knowledge' within which players have 'stakes' in the game and have access to a portfolio of resources, which Bourdieu refers to as different types of 'capital' (economic, cultural and social). The figure shows that the objective conditions of the field are represented in terms of social positions and by both amount and distribution of different forms of

capital. The figure also highlights the struggles between groups through their strategies and practices. The circular movement in the model, as stated by Hurtado (2006, p. 207), “shows that the practices produce outcomes that have an impact on positions regarding the amount and distribution of capital, outcomes that ultimately reproduce the objective conditions of the field”.

However, Bourdieu recognised that if the objective conditions of the field changed significantly the practices generated would no longer reproduce the objective conditions of the field (Hurtado, 2006). Hurtado (2006, p. 207) discusses the effect of a change in the objective conditions of a field, “In that case, Bourdieu explains that the habitus will be out of phase with the field’s conditions”. This, Bourdieu calls “hysteresis,” which he states may have the impact of causing a shift in the agents’ pre-reflexive consciousness of the practices towards a more reflective and rational consciousness, which may lead the agents to modify the practices”. It is this idea that guides the research study.

In addition to a consideration of social marketing, social capital and cultural capital, the research seeks to identify an overarching framework to accommodate the observations made during a live intervention. The CoP framework was identified as being helpful in describing the process of behaviour change in this case.

1.3 Communities of Practice (CoPs)

CoPs can be informal groups that are sponsored by an organisation to facilitate knowledge sharing or learning (Cox, 2005). Wenger et al. (2002, p. 4) state that CoPs are, “Groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in the area by interacting on an ongoing basis”. The application of a CoP framework in this case will be to create the *Social Relationships* between two groups that feature in Figure 1.

Central to the CoP concept is situated learning theory. Situated learning theory is reliant on some form of participation in the desired behavioural practices. Therefore the goal of the CoP approach in this case is to create a mechanism through which a target community can interact socially with a secondary community, and as a result be taught (through an emphasis on participation) the practices common to the second community. The consideration of the CoP concept focuses on three factors, namely identity, practice and participation, and examines the process of individual learning in CoPs as suggested by Handy et al. (2006).

1.4 Background to Theoretical Development

The research focuses on the field of road safety and was undertaken during the United Nation’s Decade of Road Safety (see UN, 2011), the goal of which is to save 5m lives and prevent 50m serious injuries by 2020. According to data collected by the United Nations (UN, 2011), 1.3 million people die and between 20 million and 50 million more are injured as a result of road crashes

every year. Road traffic injuries are among the three leading causes of death for people between 5 and 44 years of age (UN, 2011). By 2030 road accidents could be the fifth leading cause of death, above HIV/ AIDS and lung cancer (The Economist, 2011). Young drivers are overrepresented in road safety crash statistics and the Organisation for Economic Co-operation and Development (OECD) estimates that over 8500 young drivers die in the 30 OECD countries each year. Road traffic accidents are the single biggest killer of young people under the age of 25 in developed nations (OECD, 2006). Young men are particularly at risk, with death rates of up to three times those of young women (OECD, 2006). In the UK fewer than one in eight drivers is aged under 25, yet one in three drivers who die are in this age group (DfT, 2011a).

Two overlapping characteristics have been shown to correlate with greater risk propensity and crash likeliness: low educational attainment (Murray, 1998; Bingham and Shope, 2005; Hasselberg et al., 2005; Laflamme et al., 2005; Vaez and Laflamme, 2005), and high social deprivation (Abdalla et al., 1997; Chichester et al., 1998; Department for Transport, 2007; Petridou and Tursz, 2001; Clarke et al., 2008; Fleury et al., 2010; DfT, 2011).

The concept of cultural capital is closely related to educational attainment, which has been shown to have a strong correlation with crash risk in the road safety literature. A tentative connection between three theoretical factors, education attainment, cultural capital and social capital, can be proposed for the purpose of the development of a theoretical framework.

1.5 Background to the Study

An opportunity arose to examine the concepts outlined above in combination with first-hand involvement in a part-government funded investigation called Safer Roads Using Social Marketing (SRUSM). The SRUSM investigation was co-funded by the Department for Transport (DfT), the University of the West of England, and the West of England Road Safety Partnership.

The investigation sought to apply social marketing principles in the context of a behaviour change intervention targeted at young male drivers. The output of this investigation was the 'Wheels, Skills and Thrills' intervention. This investigation commenced in 2008, with a literature review undertaken by the University of the West of England (Bird and Tapp, 2008) and concluded with the dissemination of results to the Department for Transport (see Baugh, et al., 2012).

The results of the WST intervention are reported herein in combination with insights generated by additional research activities, which investigated the concepts of cultural capital, social capital and communities of practice in this context.

1.6 Research Purpose, Objectives and Key Contributions

The starting point for the research is based on the assumption that the present social marketing paradigm adopts a buyer-seller model of behaviour change. The social marketing paradigm is a theoretical extension of commercial marketing theory (Peattie and Peattie, 2003), but a gap has been

identified in the extant social marketing literature in relation to the application of a community of practice framework for the goal of enacting socially beneficial change. A further gap in the social marketing literature has been identified in relation to the influence of cultural and social capital on behaviour.

The purpose of the study is to develop a way to facilitate the exchange of 'capital' between two groups. This approach uses a secondary group (or community) as the main behaviour change influence. The role of the change agent in this scenario is to create the social 'architecture' via which exchanges take place, exchanges that lead to sustainable behaviour change.

The following research objectives guide the purpose of this dissertation:

Research Objective 1 - To explore the concepts of cultural and social capital in the context of social marketing theory.

Research Objective 2 – To investigate how social marketing tools and techniques can be used to create a bridge between divergent levels of cultural and social capital.

Research Objective 3 – To investigate the potential of communities of practice in social marketing.

Anticipated key contributions and outcomes of this research are proposed as follows:

- High and low cultural capital. The concept of cultural capital has not been explored in the context of social marketing theory. Therefore the concept of cultural capital is explored in relation to behaviour and a link between cultural capital and social marketing is proposed.
- Social marketing as a 'bridge' between divergent levels of cultural and social capital in two cohorts. An outline of how social marketing tools and techniques can be deployed to overcome barriers between these groups is provided.
- Social marketing and communities of practice. The investigation of a CoP framework in combination with a social marketing approach opens a new avenue of research for social marketers.

1.7 Thesis Outline

The remaining twelve chapters contain the literature review (chapters two to six), research philosophy and methodology (chapter seven), fieldwork (chapter eight), findings and results (chapter nine), discussion, conclusions and implications (chapter ten), and references and appendix information (chapter eleven).

Chapters two to five contain the literature review, which culminates in the research propositions. Chapter six contains a summary of the literature review, research objectives and research propositions. Chapter seven considers the methodological practices used during the study outlined.

Chapter eight discusses the specific fieldwork that was undertaken during research activities and details the specific tasks and responsibilities of the researcher. Other research activities undertaken relevant to the research study are also highlighted. The chapter also outlines how data was collected, organised and analysed, which includes a technical overview of the IVDR technology. Chapter nine outlines the findings and the results of the study beginning with a discussion of behaviour change data gathered using IVDR, surveys and assessed drives. Each research proposition is then examined in turn. Finally, the discussion, conclusions, limitations and implications for future research are presented in chapter ten. These are discussed in relation to social marketing practice and theory with further consideration given to the implications of the study for road safety professionals. References and appendix information are provided in chapter eleven.

1.8 Ethics, Confidentiality Statement and Glossary

The names of steering group members have been included with permission. The names of WST participants have been changed or omitted entirely to protect individual identities.

1.9 Glossary of Frequently Used Terms

Associate: The title given to those who enrol on the 'Skill for Life' course

CoP: Community of Practice

DfT: The Department for Transport

EPHOD: Events per Hour of Driving

GPS: Global Positioning System

Group A: Participants of the Wheels, Skills and Thrills intervention

Group B: Members of the Bristol, Bath and Weston-Super-Mare Groups of the IAM

IAM: Institute of Advanced Motorists

IVDR: In Vehicle Data Recording

RoSPA: Royal Society of the Prevention of Accidents

Skill for Life: The name of the IAM's Advanced Driving Course – normally comprises of three classroom sessions (approx 9 hours total), on-road coaching to a given standard, followed by an assessed drive by an ex or serving Class 1 police driver

The System of Car Control: The method taught by the IAM as a way to negotiate hazards using 'IPSGA'

IPSGA: Information, Position, Speed, Gear, Acceleration. Also known as "The System of Car Control", IPSGA is the centerpiece of advanced driver training.

Observer: The title given to those who coach 'Associates' on the 'Skill for Life' course

KSI: Killed or Seriously Injured

ROI: Return on Investment

Steering Group: The WST Management Team

UWE: The University of the West of England

WST: Wheels, Skills and Thrills

Chapters Two to Six: Literature Review

2.0 Introduction

The literature review commences with a discussion of the road safety literature with an emphasis on young and young male drivers. Given the context of the research, **chapter two** explores the literature related to education attainment, social deprivation and crash risk. The chapter also outlines a range of measures that have been deployed to counteract young driver risk. The chapter includes a critical discussion of the evidence base on which success in road safety is defined and culminates in an in-depth discussion of advanced driving. The conclusion of the chapter also includes a brief discussion of the use of social marketing in the road safety field. **Chapter three** highlights a conceptual link between social deprivation, educational attainment and Bourdieu's concepts of social and cultural capital. The chapter uses Bourdieu's 'Taste Zones' to articulate the contrast in crash risk between young male drivers and advanced drivers. **Chapter four** discusses the use of social marketing in road safety; specifically its use as a way of encouraging the adoption of advanced driving practices by young male drivers. Social marketing tools, techniques and theories are outlined with relevant approaches highlighted that could be applied with the above goal in mind. The nature of the target behaviour is such that the anti-social behaviour literature is then considered. The chapter also highlights the evolution of the social marketing paradigm from the principle of single exchange to a greater emphasis on relationships. Finally, **chapter five** explores the literature in relation to the communities of practice (CoP) concept. This includes an examination of the key contributions in the field and a discussion of the

concept in relation to the other literature streams discussed during the literature review.

CHAPTER TWO

Literature Review - Road Safety

2.1 Introduction

Chapter two examines the road safety literature with an emphasis on young drivers. The chapter includes a discussion of risk factors associated with young drivers with subsequent sections focusing on young male drivers, educational attainment and crash risk, and social deprivation and crash risk. The chapter also examines intervention strategies that have been deployed to counter these behaviours. These are broadly categorised under the headings: licensing, technology, education, training and social engagement.

2.2 Increased Risk of Young Drivers

The latest figures published by the UK's Department for Transport (DfT) show an overall gradual reduction in road traffic collisions in 2009 compared to an average between 1994 – 1998 (DfT, 2011a): 1) The number of people reported killed in road collisions was down 38% to 2,222; 2) The number of people killed or seriously injured (KSI) was down 44% to 26,912; 3) The number of children aged 0-15 reported killed or seriously injured was down 61% to 2,671.

However, despite the overall downward trend of road collisions in general, a factor of concern to road safety practitioners is the disproportionate risk attached to young drivers. Road collisions are the leading cause of death for

young adults aged 15 – 24 and they account for over a quarter of deaths in the 15 – 19 age group (DfT, 2011a).

What has been more recently documented is a specifically high risk in the few months of driving (McCartt et al., 2003; Mayhew et al., 2003). McKenna (2010, p. 6) interprets this “high risk phase” as being the first 1000 miles of driving. The likelihood of committing a driving offence decreases by 8 per cent regardless of gender each year after obtaining a license, and the chance of an at-fault crash declines by 6 per cent each year – however, this decline is twice as fast for women as for men (Waller et al., 2000). The Royal Society for the Prevention of Accidents (RoSPA, 2002, p. 14) states, “there are a wide range of reasons why young and novice drivers have a higher accident risk”, including “age, lack of driving experience, overconfidence in their abilities, under-estimation of risk, poor hazard perception, poor attitudes to driving (which are usually linked to personal characteristics and general social attitudes), gender, peer pressure (from passengers) and parental influence”.

Numerous academic studies outline the range of influences (e.g., Møller, 2004; Shope, 2006; Constantinou et al., 2011) which contribute to the overrepresentation of young drivers in road collisions. The literature suggests that causes of accidents among young people are multifactorial including tendencies towards recklessness and thrill seeking, combined with feelings of invincibility and over-confidence (Clarke and Robertson, 2005). Accidents attributed to lack of observation and anticipation (Cavallo and Triggs, 1996) may be linked to ‘skill-risk optimism’ (White et al., 2011) in so far as young

drivers believe that they possess high level skills and that they are unlikely to have an accident when the statistics demonstrate the opposite on both counts. Shope (2006) categorises influences on driving behaviour into six factors: personality characteristics, developmental factors, driving ability, driving environment, perceived environment and demographic factors (see Figure 2). Berg (2006) perceives driver behaviour as a hierarchy as shown in Figure 3, ranging from 'vehicle manoeuvring' at the lowest level to 'goals for life and skills for living' at the top.

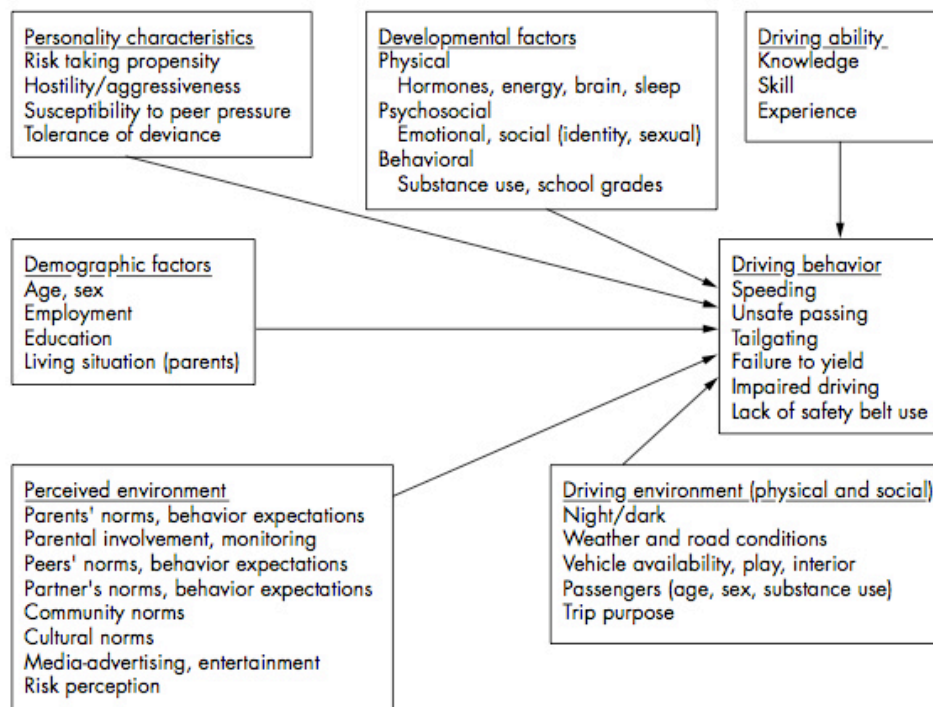


Figure 2: Factors Influencing Young Driver Behaviour (Shope, 2006, p. 11)

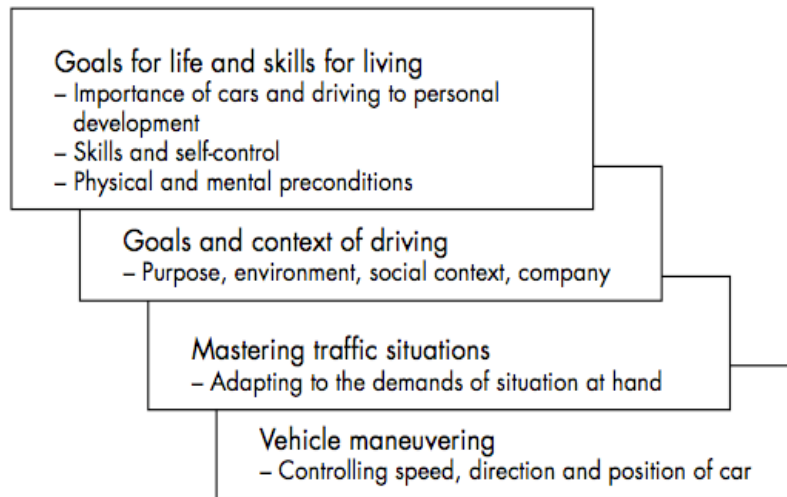


Figure 3: A Hierarchy of Driver Behaviour (Berg, 2006, p. 16)

2.3 Increased Risk of Young Male Drivers

Accident related death rates for young men are typically 3-4 times higher than those for women, even taking into consideration that men drive more than women, and this risk has increased considerably over the last decade for young men, but not young women (OECD, 2006). In the UK, young male drivers are substantially overrepresented in crashes, being involved in 12-14% of fatal accidents from 1991 to 2003, though only holding 7-8% of drivers licenses in the UK: large-scale analysis of U.K. data suggests that this peaks for men aged 20-22 and 17-19 in London (Grey et al., 2008). Males are also more likely to become persistent risky drivers between 21 and 26 years old, compared to little evidence of the same in 26 year-old females (Begg and Langley, 2004). According to Clarke et al. (2008, p. 524), "Generally, being a young (17-19 years) male accident-involved driver means being significantly more likely to be involved in accidents during the hours of darkness; on rural

curves; and actively involved in rear-end shunts...when compared with male drivers aged 20-25 years”.

2.4 Educational Attainment, Social Deprivation and Crash Risk

Education levels have been found to be more highly correlated to crash rates than other indicators of SES, both in terms of educational level reached and the grades received, with men with compulsory education only and lower average marks, and men with vocational (rather than academic) secondary education over represented amongst drivers involved in accidents (Murray, 1998). Other studies have found those with lower education levels are more likely to have crashes and to suffer severe injury (Hasselberg et al., 2005; Vaez and Laflamme, 2005), with a longitudinal study by Bingham and Shope (2005) linking risky driving to lower educational achievement, while low crash rates were associated with better marks in school. The magnitude of this effect is exaggerated for young men compared to young women (Hasselberg et al., 2005). A dated but large-scale follow-up study of 14,000 students also associated dropout rates and low grades with increased crash risk for young drivers (Harrington, 1972). The combination of education levels and crash rates are two-fold. Firstly the evidence suggests that higher grades equate to lower risk due to higher-level cognitive and intellectual skills (see above). But secondly, something not acknowledged in the literature, extended engagement with education is likely to postpone the acquisition of the driver's license. This has the effect of shifting the driver into an older age category, which, as the evidence from the literature suggests, is associated with

reduced crash likeliness (e.g., McCartt et al., 2003; Mayhew et al., 2003; McKenna, 2010; DfT, 2011a).

A study by Møller (2004) supports many of the claims finding that an early departure from education is associated with driving as a shared and worshipped activity thereby creating the basis for the use of the car as a tool for self-expression, showing-off, competing and entertainment with friends through risk-taking behaviour. According to Møller (2004, p. 1087), “A lifestyle with few planned activities, few hobbies and meeting with friends as the centre of activities seems to facilitate the use of the car in a way that leads to risk-taking behaviour”. Some of these differences may be observed as a result of driving having more meaning for those with lower educational attainment. Driving quickly and dangerously may become a ‘boy-racer’ sub-culture that has been described as a tribal behaviour by sociologists (e.g., Lumsden, 2009a) for these groups.

2.5 Social Deprivation and Crash Risk

Research into traffic fatalities has shown that high levels of social deprivation are associated with increased injury and fatality levels in road traffic collisions (Abdalla et al., 1997; Chichester et al., 1998; Department for Transport, 2007; Petridou and Tursz, 2001; Clarke et al., 2005). The multiplying effect of deprivation is likely to add underlying complexities to the influence on driving such as disruptive behaviours, emotional disturbance, poor anger management, increased short-termism and living for the moment, and

increased propensity towards recklessness and thrill seeking (Tapp et al., 2013).

Clarke et al. (2008) examined a sample of 893 fatal vehicle occupant cases from 10 UK police forces between 1994 and 2005 inclusive. Each case was summarised using objective features (such as time and place), summary narratives, sketch plans and lists of explanatory factors and assigned an Index of Multiple Deprivation (IMD) score based on the postcode of the primary fatality. Driving at excessive speed, driver intoxication, driver/passenger failure to wear seat belts, and unlicensed/uninsured driving were found to be most prevalent in the most deprived IMD quartiles. The authors suggest, “It would seem that, in the case of fatal accidents at least, certain groups of drivers cannot be told often enough of the dangers to which they can expose themselves and their passengers, and perhaps that additional measures focused on particularly disadvantaged groups need to be added to the provision of safety information” (Clarke et al., 2008, p. 11).

2.6 Countering Young Driver Risk

Countering the previously behaviours outlined with interventions has proven difficult as the evidence base remains sub-optimal in drawing definitive conclusions (Tapp et al., 2013). A range of attempts have been made to improve the driving standards of young drivers, some of which are outlined below.

2.7 Graduated Driver Licensing

One approach is Graduated Driver Licensing (GDL) which typically involves extended learner periods (normally under supervision) and limits on driving at night and carrying passengers (Williams et al., 2012). GDL schemes do appear promising in reducing crash rates among young drivers (Russell et al., 2011), although the magnitude of the effect has varied. GDL schemes require a significant restructuring of driver training legislation and policing and as such are subject to political will. Current legislative policy in the UK has yet to consider large-scale use of this approach.

2.8 Education and Training

Education and training approaches have been deployed in the road safety field in combination with changes in the road environment. The latter are expensive to administer and can cause disruption to the road network. Ogden (1996) believes that a safe road may be defined as one which is designed, managed or changed so that it: 1) warns the driver of any substandard or unusual feature; 2) informs the driver of conditions to be encountered; 3) guides the driver through unusual sections; 3) controls the drivers' passage through conflict points and road links; and 4) forgives a driver's errant or inappropriate behaviour.

Education and training to create safer driving behaviours have been extensively trialled in a variety of ways. These include post-licensure programmes such as Advanced Driving, Pass Plus, and Defensive Driving

courses and pre-licensure programmes such as school-based driver education interventions.

Education-based programmes have often been 'expert led' traditional designs that focus on fear appeals (e.g., demonstrations of crash consequences). However, there is little evidence that education and fear appeals are effective. Abraham and Michie (2008, p. 379) reviewed the effectiveness of a range of behaviour change techniques in health promotion and state, "theories advocating use of fear appeals were not supported because inclusion of threat-inducing arguments was not associated with effectiveness for any audience". Lewis et al. (2007) concluded that while fear arousal appears important for attracting attention, its contribution to behaviour change appears less critical than other factors, such as perceptions of vulnerability and effective coping strategies. Furthermore, threatening appeals targeting young males (a high-risk group of concern) have traditionally relied on the portrayal of physical harm. However, the available evidence questions the relevance, and hence effectiveness, of strong physical threats with this group (Lewis et al., 2007).

Helman (2012) argued that training programmes are often designed to provide participants with skills not directly related to crash reduction. In other words, if road traffic collision (RTC) reduction is the aim, the wrong training is being given. Helman (2012) suggested more attention should be paid, for example, to practising hazard perception skills, finding that insufficient

attention is given to factors such as the difficulty of transferring the training context into subsequent driving.

Systematic reviews of the effectiveness of driver training on road safety outcomes yield unflattering results for those involved in the field. For example, Adams (2010, p. 13) states, “after decades of road safety we still appear to be unclear about what works”. The dominant logic in the road safety field appears to be that while no clear benefit can be shown, activities are assumed to do no harm so are therefore justified and warrant continued investment (Christie, 2001; Stradling et al., 2006). A compendia statement by McKenna (2010, p. 9) summarised this school of thought by suggesting, “it is inconceivable that less training behind the wheel is better than more training”. More recently, McKenna (2012) noted that numerous researchers have found no evidence to support these interventions (e.g., Brown et al., 1987; Christie, 2001; Ker et al., 2005; Mayhew et al., 1998; Mayhew and Simpson, 2002) and some suggest that these interventions may in fact increase the crash risk (Roberts and Kwan, 2001; Williams, 2006; McKenna, 2012). Similarly a Cochrane review of school-based driver education (pre-licensure programmes) for the prevention of traffic crashes (Roberts and Kwan, 2008) found no evidence that driver education reduces road crash involvement.

Kardamanidis et al. (2010) sought to quantify the effectiveness of pre- and post-license *motorcycle* training on the reduction of traffic offences, traffic crash involvement, injuries and deaths of motorcycle rider. Intervention studies such as randomised and non-randomised controlled trials, interrupted

time-series and observational studies such as cohort and case-control studies are utilised. The review included 23 research studies made up of 3 randomised trials, 2 non-randomised trials, 14 cohort studies and 4 case-control studies. Each study varied in content and duration. The author states:

“The findings suggest that mandatory pre-licence training may present a barrier to completing a motorcycle licensing process, thus possibly indirectly reducing crash, injury, death and offence rates through a reduction in exposure to riding a motorcycle. However, on the basis of the existing evidence, it is not clear if (or what type of) training reduces the risk of crashes, injuries, deaths or offences in motorcyclists and the selection of the best rider training practice can therefore not be recommended” (Kardamanidis et al., 2010, p. 2).

McKenna (2012) suggested that despite the lack of a substantive evidence base, road safety interventions satisfy a number of goals; they allow authorities to be seen to be addressing a matter of public concern, they seem plausible to the intervention architects and the participants and they are politically uncontroversial leading to minimal legislation. Furthermore, McKenna (2010) evaluated a range of education and training schemes and arrived at the conclusion that education (knowledge acquisition) and training (skills acquisition) are often conflated and the evidence base for the effectiveness of either amongst young people is weak. The same author states, “In theory, improved vehicle control skills might indeed prompt safe behaviour, for example by improving hazard perception skills, or they might

prompt unsafe behaviour for example by encouraging faster speeds. It is an empirical question as to which result occurs” (McKenna, 2010, p. 7).

McKenna (2010) offered eight factors that contribute to the lack of clear beneficial effects of road safety education:

1) Inappropriate foundation for the intervention (i.e. not based on a formal body of knowledge and/or theory and are often not sophisticated).

2) Information deficit model, that is, the assumption that people suffer from a deficit of information (i.e. we need to provide information that driving a car in a certain way can result in major injury).

3) Dosage, that is, education interventions are often short in duration and cannot be expected to compete with more enduring pressures on an individual, as well as risk as a value, and value as a pleasure (i.e. raising awareness of risk may for some have the effect of decreasing the attractiveness of the enterprise, while for others it may do the opposite).

4) Social norms (i.e. the communication that risky behaviours are frequent and ‘normal’ may produce the opposite effect than desired).

5) Exposure to risk (i.e. completion of education might result in more exposure to risk due to enhanced perceived ability).

6) The economic climate (competitive factors are relevant here in that fast cars result in tax revenue for the government and are attractive to the consumer).

7) Technical issues related to choice criterion (interventions vary dramatically in what they measure, i.e. increase in knowledge, road collision involvement, speed or attitude).

8) Effect size and presentation (a combination of small effect sizes and small sample sizes make behaviour change difficult to detect and compare to other educational interventions).

Dann and Fry (2009) discussed the complex nature of 'success' in road safety and suggest road safety professionals face a conundrum in articulating success in a social marketing context. Writing in the *Australasian Marketing Journal* they opine: "In spite of overwhelming indications [in Australia] that road safety strategy initiatives have achieved significant successes over past 25 years, road safety faces a continuing situation where definitive 'success' is rarely achieved, 'failure' is enduring and the perceptual outcome of road safety strategy is represented as a 'crisis' situation in mainstream media" (Dann and Fry, 2009, p. 226).

2.9 Advanced Driving

There are some studies that have suggested dedicated training courses which concentrate on *specific skills training*, rather than the more general acquisition

of knowledge, appear to be promising. For example, Stanton et al. (2007) evaluated the effect of advanced driver coaching over a 15-month period with 75 drivers being subjected to over 650 hours of in-car observation. The study used three groups of drivers: Group 1 (the Treatment Group) took the IAM's Advanced Driver course; Group 2, (Control Group 1) were accompanied but not coached; and Group 3 (Control Group 2) received no intervention (thus controlling for the effect of time). Significant improvements on attitudes, skills and knowledge were identified in comparison to controls. Specifically, IAM coached drivers had better situational awareness. After receiving IAM coaching, drivers developed 24% more knowledge of the driving environment, and 38% of that knowledge was different to when they started the coaching programme. In addition, nine key areas of behaviour improved, including, amongst others, a more systematic driving technique, more appropriate speed and following distances, more use of mirrors, improved cornering and improved gear changes. IAM coached driver's attitude scores improved by 15% compared to the control groups of 'normal drivers' (that either remained the same or became slightly worse), meaning IAM coached drivers exhibited significantly less of the attitudinal concept related to fatal accident involvement.

Similarly, a study by Walker et al. (2009) later found a strong correlation between advanced driver training and situational awareness. The findings reinforce the IAM's description of those who have undertaken their training as "confident and decisive, but never reckless...enthusiastic about driving and make better progress than most other drivers" (cited in Haley, 2006, p. 46).

The goals of the IAM who administer the type of training outlined above are: a) to improve the standards of driving (and riding) on the roads; b) the improvement and promotion of road safety; and c), the administration of a nationally recognised advanced test (Clifford and Theobald, 2011).

Hopkin and Sykes (2012, p. 4) outlined the IAM advanced driving process: “Recommended preparation for the IAM advanced driving test is through a series of ‘observed drives’ (often over several months) accompanied by an expert IAM observer from a local IAM group (a ‘group observer’). Drivers also study the IAM manual, which contains detailed advice on the topics examined in the advanced test. The test itself involves an independent assessment of driving by a police-trained advanced driver, in which the examiner looks for a safe, systematic, smooth, economic and progressive drive with a balance of restraint and courtesy shown throughout.

Haley (2006) included a consideration of the advanced driving approach in his segmentation of the driving population depicting ‘driving experience’ as a curve that dissects the five driving segments shown below. He uses eight descriptions of a range of driving skills; car control, rules and regulations, fitness check, beliefs, learning from experience, sense of danger, observation, risk assessment and control to describe the five segments:

1. Beginner – just starting out, focused totally on passing the test. On average, drives only about 600 miles in this stage.

2. Inexperienced – has passed the test, is suddenly alone, and mainly reacting to situations created by other people.
3. Average – has reached the level of skill that happens more or less by itself. This is the vast majority, the middle 80%.
4. Advanced – consciously taking skills to a higher level. The Advanced tests are in this stage, but not a prerequisite.
5. Expert – has become a master in all of the skills. The complete expert remains a point at the top of the curve for everyone to aim at.

The literature associated with advanced driving has significant implications for the present study. The literature review highlights the importance of specific driving practices that are adopted and taught by the IAM. This according to Hayley (2006) involves *consciously* taking skills to a higher level. Successful application (e.g., attainment of the required IAM benchmark) of these advanced practices leads to a modification of behaviour which could be defined as a change in *driving style*. From this review we can therefore deduce that there is an advanced driving *style* made up of a sub-set of consciously applied driving practices. Arguably this differs from the interpretation of the driving practice as a set of habitual and subconscious processes.

This has implications for interventions targeting young drivers who are likely to exhibit a set of practices culminating in a *driving style* different to that of advanced drivers. The goal of any advanced-driving focused intervention from a practical perspective is therefore to encourage the *conscious* adoption of

advanced driving practices with the goal of shifting the *driving style* towards that of IAM advanced drivers.

2.10 Technology in Road Safety

Technology has long played a strong role in terms of safety in the automotive sector through efforts by manufacturers and sector legislators. Examples include improvements in *primary safety* including technological aspects of a car's design that *prevent* a collision (such as anti-lock braking systems and stability control) and *secondary safety* that prevent or reduce the risk of harm to occupants in the event of a collision (such as airbags, seatbelts and crumple zones). The establishment of independent bodies such as Euro NCAP, who work closely with manufacturers to conduct independent assessments of vehicle safety performance, has helped consumers to make informed choices in relation to vehicle safety.

2.11 In-Vehicle Data Recording (IVDR)

The use of in-car technology or 'black box' technology has led to a growth in interventions supported by remote recording and quantification of driver performance. Known as 'in-vehicle data recorders' (IVDRs), IVDRs identify driving 'incidents': occasions where braking or cornering forces are outside what would be considered normal levels. An incident, therefore, is created by aggressive braking, cornering at speed, or both. In the present study IVDR has the potential to be used as a means of creating proxies for driving style which reflect the application of certain driving practices. IVDRs can also be fitted with in-car feedback allowing drivers to receive feedback, which may in

turn lead to adjustment of driving practices. Bolderdijk et al. (2011) conducted a field experiment using IVDR to test a PAYD (Pay As You Drive) incentive structure related to driving speed. The experiment found that the scheme had an overall positive effect on reduced speeding across 141 participants.

The mid 2000s heralded an increased interest in IVDRs by the insurance sector (Roadsafe, 2006) with, for example, the introduction of PAYD schemes offering reduced premiums in return for lower risk driving. At the time of writing the signs are that PAYD schemes are set for significant commercial expansion amongst mainstream population sectors in the UK.

The use of IVDRs has also attracted the attention of the public sector. A small-scale trial undertaken by Staffordshire Council's Road Safety and Sustainable Travel Unit demonstrated improvements in driving behaviour of drivers who had passed their test in the last 12 months. The scheme, which ran in 2009, claimed successful behaviour modification with improved driving skills amongst its cohort using *only* in-car real time feedback of driving incidents linked to web-based feedback and incentives (Fylan and Fylan, 2009). However, it is worth noting that those who signed up for the scheme were typically self-selecting from better off social groups, raising concerns that such schemes are unlikely to attract the most at risk groups. Engagement with the scheme also appeared to be heavily reliant on parental influence, which has been noted as a significant factor in the adoption of safe driving practices in young drivers (Füller and Bonney, 2004; Mayhew, 2007; Taubman-Ben-Ari et al., 2012).

2.12 IVDR as a Feedback Mechanism

The use of IVDR outlined above demonstrates its use not only as a measurement tool, but also as a feedback mechanism used to modify behaviour. The technology is therefore of particular interest in the present study, especially as it offers the potential for providing feedback to participants in relation to *driving style*. According to McKenzie-Mohr and Schultz (2014, p. 41), feedback is essential for reaching a goal: “without updated information about our behaviour, it is difficult (if not impossible) to achieve a desired outcome”. However, Schultz (2010) suggested that feedback is only effective when a person *wants* to achieve the outcome (emphasis added). McKenzie-Mohr and Schultz (2014, p. 41) also state, “although the research findings with regard to feedback are mixed, there is clear evidence that coupling the feedback with a meaningful referent can produce durable changes in behaviour”. They cite examples of where normative referents have been used to produce reductions in energy consumption (Ayres et al., 2009; Alcott and Rogers, 2012) such as amount of energy used and cost of electricity. In this case the in-car LED feedback is an example of a normative (used broadly to mean ‘an ideal standard’ or ‘model’) referent that acts as a dynamic proxy for a particular driving style. It is difficult to predict the likely effect of this type of feedback *in isolation*, given that the studies discussed above combined feedback with an incentive structure.

The use of feedback as a component of behaviour change interventions has been coupled with a consideration of control theory (Carver and Scheier, 1982; Abraham and Michie, 2008). Control theory relies on a ‘comparator’

which acts a reference point for behaviour which can interact with other techniques i.e. goal setting and action planning to change behaviour (Carver and Scheier, 1982). The same authors state, “If a discrepancy is perceived between the present state [in this case current behaviour] and the reference value [the normative standard], a behavior is performed, the goal of which is to reduce the discrepancy” (Carver and Scheier, 1982, p. 112). Abraham and Michie (2008, p. 382) offer a practical example of control theory in a behaviour change context, which includes the use of normative referents; “Provide feedback on performance. Providing data about recorded behaviour or evaluating performance in relation to a set standard or others’ performance, i.e., the person received feedback on their behaviour”.

IVDR therefore offers the opportunity to provide normative feedback to participants against a given standard or comparator. It is likely that the potency of this approach could be improved if coupled with an appropriate incentive structure. The use of feedback and normative references also has relevance to aspects of advanced driver tuition discussed during section 2.9 (Advanced Driving). These ideas are revisited in later chapters of the thesis.

2.13 Social Marketing and Advanced Driving Practices

Smith (2006) reviewed the applicability of commercial and social marketing as a tool to improve driver safety (see Figure 4). Five key elements of the social marketing approach are:

- 1) a programme management process (sequenced action steps);

- 2) designed to influence human behavior (sic) on a large scale;
- 3) by creating benefits and reducing barriers that matter to specific audiences;
- 4) through consumer orientated decision making (audience behaviour (sic) is key);
- 5) leading to increased societal benefit (as defined by somebody).

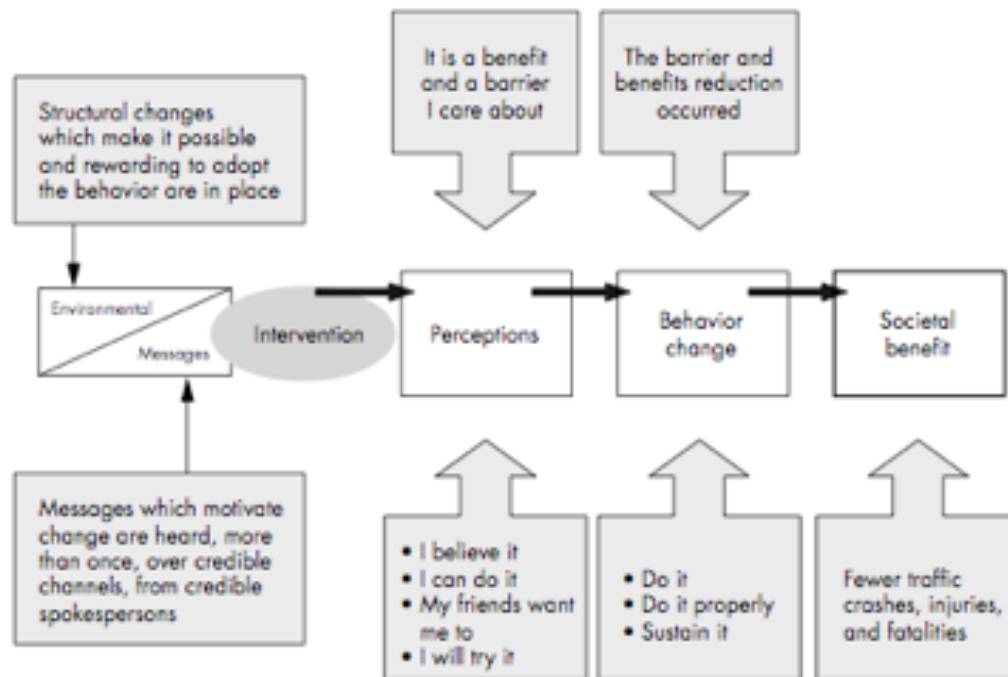


Figure 4: Conceptualisation of Social Marketing (Smith, 2009, p. 41)

The model highlights the importance of environmental influences on behaviour and that *structural changes* should be made in order to make it possible and rewarding for an individual to adopt the desired behaviour. This has implications for the present study if the goal is for young drivers to be incentivised and / or rewarded for adopting advanced driving practices. A consideration would be how *social barriers* between young male drivers and institutions such as the IAM could be overcome, and how positive *messages* would be exchanged between the two groups.

The model emphasises that, “messages which motivate change are heard, more than once, over credible channels from credible spokespersons” (Smith, 2009, p.41). Taking the example of advanced driving, would a member of the IAM be considered a *credible* voice from the perspective of a young male driver? If so, the goal of the intervention would be to encourage the adoption of advanced driving practices in a target audience of young male drivers using this as a guiding principle. According to Smith’s (2009) model, successfully doing so would change the participant’s perceptions (in this case, toward advanced driving practices), enact behaviour change (through adoption of these practices), which would lead to social benefits (reduced driver risk).

The model raises pertinent questions regarding the nature of behaviour change and its measurement in this case. Although the catalyst for behaviour change would be advanced driver tuition, the ultimate measure of success resulting in this behaviour change is an assumed reduction in the likelihood of road traffic accident involvement. However, it is challenging to establish a direct correlation between individual behaviour change and the *occasional negative behaviour* which results in a road traffic collision.

As a case in point, Rothschild et al. (2006) reported the findings from a social marketing–based intervention to reduce the number of alcohol-related driving fatalities. The Road Crew intervention focused on offering drinkers alternatives to drink driving in the form of ‘rides’ throughout their evening (NSMC Showcase, 2010), therefore reducing the likelihood of the *occasional negative* behaviour of drink driving. As of 2008, Road Crew “had given over

97,000 rides, prevented an *estimated* [emphasis added] 140 alcohol-related crashes, saved an *estimated* [emphasis added] six lives from alcohol-related crashes (NSMC Showcase, 2010, p. 1).

According to the author, “Results showed a significant shift in riding/driving behaviour, especially among 21-34 year olds, a *projected* [emphasis added] decline in alcohol related crashes in the first year, no increase in drinking behaviour, and large savings between the reactive cost of cleaning up after a crash and the proactive cost of avoiding a crash” (Rothschild, 2006, p. 1218). Note the use of the term *projected* in the above description of the intervention’s results. This kind of results projection differs from the measurement of outcomes in cases that focus on the ‘uptake’ of certain behaviours such as immunisation. In these scenarios ‘success’ is defined by the total number of changed behaviours in terms of *doing something* (e.g., getting immunised against a certain disease). In contrast Road Crew (and the present study) are engaged in a different approach making measurement of an intervention’s success difficult to quantify. The goal of the intervention in these cases seeks to *discourage* individuals from doing something that *might* lead to a road traffic accident. This makes success difficult to evaluate because there are no guarantees that doing the behaviour (e.g., drink driving) will lead to the negative outcome. This requires the social marketers to make certain assumptions that there is a direct correlation between the adoption of the desired behaviour (e.g., taking a road crew ‘ride’) and the negative outcome (e.g., a road traffic accident).

2.2.0 Chapter Two Summary

Chapter two highlights the disproportionate risk associated with young male drivers from areas of high social deprivation coupled with low educational attainment. It is suggested that due to a combination of these factors, 'hard to reach' drivers are likely to exhibit a multiplier effect in terms of road traffic accident risk. A range of interventions that have been deployed to counter young driver risk are outlined but the chapter highlights that the evidence base for 'what works' remains inconclusive in this field.

The body of literature around advanced driving is highlighted as exhibiting a robust evidence base and is discussed as a potential intervention technique. Advanced driving is conceptualised during the chapter as a conscious driving style involving the application of a series of practices. The goal therefore of a behaviour change intervention would be to encourage young drivers to emulate the practices of advanced drivers.

IVDR is highlighted as a valuable research tool both as means of measuring and modifying behaviour. IVDR offers the potential to objectively measure driving style against given benchmarks. Its use also facilitates the use of normative feedback in combination with appropriate incentives.

Finally, social marketing is explored as a means to encourage the adoption of advanced driving practices in the target audience; social marketing is revisited in more detail during chapter four. Chapter three examines the reasons behind crash likeliness in terms of educational attainment and levels of social

deprivation. This is achieved through a discussion of the sociological concepts of social and cultural capital.

Chapter Three

Literature Review – Cultural and Social Capital

3.0 Introduction

The goal of chapter three is to highlight relevant theories from the sociology literature that in combination with social marketing tools and techniques will be used to inform the intervention design. The goal of the intervention being to encourage a group of high-risk drivers to adopt a series of pre-defined advanced driving practices.

The idea that practices have a social value guides this section of the literature review. Because of the inherently voluntary nature of participation and exchange in the present study, capitals that are non-financial are given particular attention. Two capitals are explored in detail: social and cultural capital.

Cultural capital is selected on the basis that the practice in question has been shown to include some form of scholastic endeavour. Cultural capital is a useful theory to further explore the concepts of social deprivation and educational attainment through a social perspective.

The social capital concept is selected as a way of extending the discussion in the social marketing literature introduced by Glenane-Antoniadia et al. (2013). Secondly, the social capital concept is a useful concept through which to

discuss the potential exchange of value *between* groups of people who exist within separate social networks.

3.1.0 The Cultural Capital Concept

The concept of cultural capital is a signature concept of French sociologist Pierre Bourdieu. Bourdieu (1984) positioned cultural capital in relation to two other forms of capital: social and economic. Bourdieu's central thesis was that people acquire economic, social and cultural capital, which they deploy in social arenas known as 'fields' in order to compete for positions of distinction and status (Bourdieu, 1984; Webb et al., 2002). Bourdieu (1990) defined fields as "networks of social relations, structured systems of social positions, within which struggles or manoeuvres take place over resources, stakes and access". He later expanded this definition to include consideration of power relations in field structures: "The structure of the field is a state of the power relations among agents' institutions engaged in the struggle, or, to put it another way, a state of the distribution of the specific capital which has been accumulated in the course of previous struggles and which orients subsequent strategies" (Bourdieu, 1993, p. 73). Bourdieu saw society as being differentiated by a number of semi-autonomous fields, governed by their own 'rules of the game' and offering their own particular economy of exchange and reward (Benson, 1999).

Bourdieu's theory of cultural capital is a useful theory for disentangling the relationship between class and consumption in contemporary postmodern societies (Holt, 1998). In Bourdieu's most famous work "Distinction", cultural

capital generally referred to the role that cultural knowledge, taste, practices, dispositions, attitudes, and goods play in the reproduction of social class and inequality (Bourdieu, 1984). Capital, whether cultural, social or economic is a resource from which people draw in order to advance or maintain their status in society (Steward, 2008). Holt (1998, p. 3) interprets Bourdieu's central thesis as a "multi-dimensional status game". The term cultural capital is closely linked to notions of class. The term 'social class' is attributed to Max Weber (1978) who asserts that in addition to economic resources, social hierarchies are produced and reproduced through 'styles of life' based on noneconomic criteria such as morals, culture and lifestyle expressed and sustained through interaction with social peers (Holt, 1998).

Bourdieu and Passeron (1973, p. 488) are generally credited with the term 'cultural capital' and broadly defined it as the "instrument[s] for the appropriation of symbolic wealth socially designated as worthy of being sought and possessed". Webb et al. (2002, p. 37) later defined cultural capital as, "A form of value associated with culturally authorized tastes, consumption patterns, attributes, skills and awards". Over the last thirty years, the concept of cultural capital has been used as an important means of stimulating debate about the ways in which cultural processes are implicated in the reproduction, generation and contestation of social division (Bennett and Savage, 2004). Throsby (1999, p. 7), speaking from an economist's perspective distinguished between two types of cultural capital: *tangible* and *intangible*. The former exists in locations, buildings, structures and sites endowed with cultural significance. Examples include artworks, artefacts in the form of private goods

such as paintings, sculptures and other objects. The latter comprises of “the set of ideas, practices, beliefs, traditions and values which serve to identify and bind together a given group of people” (Throsby, 1999, p. 7).

The focus of Bourdieu’s early cultural capital research focused on the effect of schooling as a theoretical explanation for the unequal scholastic achievement of children originating from different social classes (Bourdieu, 1984). Bennett and Savage (2004, p. 8) state, “Bourdieu believed that only the school could rise to the challenge of offsetting the effects of different class backgrounds so as to distribute more widely those distinctive cultural competencies, the cultural capital, needed for effective understanding of, and participation in, those cultural activities that are ranked most highly in conventional hierarchies of the arts and culture”. In other words, cultural capital is a form of currency that children from certain backgrounds can convert into academic success through an ‘academic’ market that rewards a certain inherited disposition. In relation to this stream of cultural capital research Holt (2010, p. 3) states:

“Cultural capital is fostered in an over determined manner in the social milieu of cultural elites: upbringing in families with well-educated parents whose occupations require cultural skills, interaction with peers from similar families, high levels of formal education at institutions that attract other cultural elites studying areas that emphasize critical abstract thinking and communication over the acquisition of particularized trade skills and knowledge, and then refinement and reinforcement in occupations that emphasize symbolic production”.

Contemporary cultural capital research focused on cultural and social exclusion (e.g., Lamont and Lareau, 1988). Following Bourdieu's work on cultural capital, Lamont and Lareau (1988) proposed a research agenda which decoupled cultural capital from the French context in which it was conceived, to take into consideration the distinctive features of American culture. Lamont and Lareau (1988, p. 164) defined cultural capital as: "widely shared, legitimate culture made up of high status cultural signals (attitudes, preferences, behaviours, and goods) used in direct or indirect social and cultural exclusion".

From the overview of cultural capital presented, the concept (from a Bourdierian perspective) refers to the role that cultural knowledge, taste, practices, dispositions, attitudes, and goods play in the reproduction of social class and inequality (Bourdieu, 1984). Later conceptualisations of the concept viewed it as a contributory factor in social exclusion (Lamont and Lareau, 1988). In order to further this discussion, and to understand *how* cultural capital is developed, Bourdieu's notion of habitus is now considered.

3.1.1 Cultural Capital and Habitus

Central to the discussion of cultural capital is Bourdieu's notion of Habitus. Bourdieu (1990, p. 52) defined Habitus as, "a durably inculcated system of structured, structuring dispositions". Habitus is used by Bourdieu to describe a certain disposition that is inculcated through the family structure which leads an individual to be predisposed towards certain cultural activities; namely those that carry a greater level of cultural cache relative to other cultural

activities. Bourdieu (1990) believed that it is through incorporation and coordination of these character traits that social mobilisation occurs.

Bourdieu (1990) recognised that habitus can also result in the persistence of social structures as well as upward mobility. In other words, parents and the family unit play a strong role in 'prepping' young minds towards participation in highbrow cultural activities. These highbrow activities are seen as having greater legitimacy relative to the legitimate culture that dominates a society. Schooling then consecrates this default disposition by certifying this disposition beyond the family unit, or as Reed-Danahay (2005, p. 47) puts it, "The school does not act primarily, however, to teach children anything they don't already know, but to certify the knowledge of the children of the dominant class by giving them high marks, certificates, and diplomas". The same author (Reed-Danahay 2005, p. 47) calls this the "cultivated habitus" that "privileges the cultural capital (including world views, linguistic codes, certain types of knowledge, and material objects – such as books) of a particular social class, the dominant social class". Hurtado (2009, p. 206) states, "Habitus is structured (by one's past); it is structuring (it shapes social practices); and it is also a structure (an integrated set of dispositions which generate perceptions and actions). Bourdieu (1984) observed a division between high and low cultural consumption practices each with their own *habitus*.

According to Bourdieu's (1984) notion of habitus, cultural capital is acquired at a young age via the family structure and leads to a disposition towards certain

cultural pursuits, namely highbrow cultural activities. With this in mind, the next section explores the idea of high and lowbrow taste in more detail.

3.1.2 High and Low Cultural Capital

Bourdieu saw those who possess cultural capital as having acquired competence in society's high status cultural forms (Mahar et al., 1990). Bourdieu (1984, pp. 14–16) distinguished between “taste zones” corresponding to different levels of education.

He described legitimate (highbrow) taste as belonging to the highly educated who display an aesthetic disposition, prioritising form over content, while the popular (lowbrow) taste is mostly that of people with a low level of education, who prioritise the practical over the aesthetic. Grenfell (2004, p. 96) related the high- low dichotomy to Bourdieu's work by stating, “Between ‘highbrow’ and ‘lowbrow’ we can associate the dominant, consecrated culture of the ruling class and its opposite working-class culture; for example, tennis as opposed to football, the restaurant to the pub, reading literature to reading magazines, going to the theatre to watching TV”. In relation to consumption patterns in the United States, Holt (2010) used the high- low cultural capital dichotomy to distinguish between patterns of taste. He described high and low forms of cultural capital in the following terms: 1) material versus formal aesthetics; 2) referential verses critical interpretations; 3) materialism versus idealism; 4) local versus cosmopolitan tastes; 5) communal verses individualist forms of consumer subjectivity; 6) autotelic verses self-actualising leisure.

In a UK context, Scherger (2009, p. 30) states, “In the contemporary British context, important social boundaries are not only or even mainly to be found between highbrow and more popular forms of participation, but more importantly between participation and non-participation”. Lareau and Weininger (2003) suggested the highbrow interpretation is not essential to Bourdieu’s conceptualisation of cultural capital and has resulted in a narrow view and use of the term. The authors suggested that cultural capital should not be partitioned from skills, ability or achievement, which can be achieved through various means including schooling. The authors also argued that during two decades of cultural capital research, the interpretation of cultural capital referred exclusively to knowledge or competence of highbrow cultural activities independent of technical ability or skill. Instead they developed an alternative interpretation of cultural capital less focused on ‘elite status cultures’; rather they advocated a micro-interactional process “whereby individuals’ strategic use of knowledge, skills and competence come into contact with institutionalized standards of evaluation” (Lareau and Weininger 2003, p. 599).

In summary, the concepts of highbrow and lowbrow forms of cultural capital are useful as overarching concepts for exploring the behaviours, preferences and driving practices of the two groups identified earlier in this thesis (young male drivers and advanced drivers). Further theoretical constructs from the cultural capital literature are required in order to explore cultural capital in more detail during the present study. It is for this reason that different forms of cultural capital are now considered.

3.1.3 Forms of Cultural Capital

Bourdieu (2001) described cultural capital as being made up of three components: embodied, objectified and institutionalised. **Embodied Cultural Capital** constitutes a certain intangible disposition that an individual 'owns' and refers to the way dominant cultural goods are understood by an individual, which exists in the mind. For Bourdieu, the embodied state was the most important (Throsby, 1999). Bourdieu noted that "most of the properties of cultural capital can be deduced from the fact that, in its fundamental state, it is linked to the body and presupposes embodiment" (Bourdieu, 1986, p. 244). Bourdieu (1976, p. 193) described embodied capital as "[a] common code enabling all those possessing that code to attach the meaning to the same words, the same types of behaviour, and the same works". These dispositions are said to be long lasting and are instigated at a young age through the socialisation of an individual within a family unit. Embodied capital is difficult to recognise because unlike objectified and institutionalised forms of cultural capital it does not have a tangible component. This could translate in children who are perceived as being talented or gifted as a result of a process of endowment of dominant cultural capital from birth. Embodied cultural capital is acquired through the investment of an individual (through self-improvement) and refers to the knowledge and beliefs that are valued by people, and which are acquired by lived experiences. However, Bourdieu (1990) recognised that an individual must believe that the action or improvement is natural and right in order for it to become embodied. This form of capital (which includes attitudes, beliefs and dispositions) cannot be easily transferred instantaneously; it comes with engagement and practice. According to Portes

(1998, p. 4), individuals can “increase their [embodied] cultural capital through contacts with experts or individuals of refinement”. Embodied cultural capital can be negatively influenced by low parental expectations, low teacher expectations and lack of community and employment opportunities (Portes, 1998).

Objectified Cultural Capital is conveyed through material goods that are endowed with cultural meaning (books, pictures, instruments, machines, magazines etc.) and is transferable in its materiality. It is important to note that objectified capital is not the item or object itself but the value that is placed in the possession of the item. The concept refers to the ownership and appreciation for cultural goods that are acquired through economic capital. They can be appropriated both materially with economic capital and symbolically via embodied capital (Bourdieu, 1984). Unlike embodied capital, objectified capital can be observed directly as it has tangible properties. Mere ownership does not qualify as objectified capital: it includes the ability to use, appreciate, understand the significance, and enjoy that which one owns. Doing so requires a set of special skills and knowledge. Other examples of objectified cultural capital could include personal grooming and clothing preferences.

Institutional Cultural Capital relates to scholastic titles that endow upon the owner an association with a particular institution. An example would include educational certificates of achievement from institutions that convey a certain degree of cultural competence upon the holder. In this case, for example,

academic certificates become a form of credential belonging to its owner. Bourdieu (1984, p. 248) states that institutional cultural capital in the form of academic credentials and qualifications create a “certificate of cultural competence which confers on its holder a conventional, constant, legally guaranteed value with respect to power”.

In its **objectified and institutionalised** states, cultural capital can be purchased and personally transferred, whereas **embodied cultural capital** accumulates through a mix of formal education, informal education and social experience (Davis, 2010). A central notion of cultural capital is that it takes time to accumulate. When we discuss cultural capital we should therefore think in terms of *investment* in cultural capital. Bourdieu saw cultural capital in its objectified or embodied form as offering the potential for profit.

These three forms of cultural capital are now taken forward for further consideration in relation to the process of advanced driver training and advanced driving practices.

3.1.4 Cultural Capital and Advanced Driving

Shope (2006) outlined seven contributory factors on young driver risk (see Figure 2). Of these factors, three factors could be related to cultural capital: ‘demographic factors’ (education, living situation), ‘developmental factors’ (school grades) and ‘perceived environment’ (parents’ norms, behaviour expectations, parental involvement, monitoring). Beyond Shope’s (2006) model, chapter two also identified advanced driving as a form of driving

practice at the upper levels of five driver segments (see Haley, 2006). Hopkin and Sykes (2012, p. 4) outlined an overview of the advanced driving process which included the use of the terms *study* and *test*: “Drivers also *study* the IAM manual which contains detailed advice on the topics examined in the advanced *test*” (Hopkin and Sykes, 2012, p. 4, emphasis added). This overview denotes that achieving advanced driver status requires some form of scholastic endeavour which, in the words of Haley (2006, p. 45), involves the driver “*consciously* taking skills to a higher level” (emphasis added).

Based on this supposition, the author proposes that advanced driving practices belong in the upper echelons of Bourdieu’s ‘taste zones’. Defining advanced driving in this manner allows a division of driving practices in lowbrow and highbrow terms. It may also be possible to deduce a connection between advanced driving and “the dominant, consecrated culture of the ruling class” (Grenfell, 2004, p. 96). Again, Hopkin and Sykes’ (2012, p. 4) overview is considered: “The test itself involves an independent assessment of driving by a police-trained advanced driver, in which the examiner looks for “a safe, systematic, smooth, economic and progressive drive with a balance of restraint and courtesy shown throughout”. Given that the concept of cultural capital is assumed to denote knowledge or competence of highbrow aesthetic culture, we could suggest that through the use of qualified police drivers, advanced driving achieves the status of highbrow through “culturally authorised” (Webb et al., 2002, p. 37) consumption practices. However, the use of police-trained drivers may constitute a form of symbolic domination, also known as “symbolic violence” (Steward, 2008, p. 64). Steward (2008, p.

64) states, “The concept of symbolic violence holds that the value given to any cultural preference, experience, or attitude is socially constructed”. The concept may be relevant in this case in that those who belong to the *dominating* classes (those in positions of authority, i.e., the police) impose a certain type of social order based on the assumption that their thoughts and perceptions are *right*, or to use a Bourdieuan term, *legitimate*. Or, in other words, the power associated with dominant cultural capital influences the lives of individuals by legitimating the claim that specific cultural norms and practices are superior to others (Lareau, 1987).

The impact of this conceptualisation of advanced driving allows us to view driving practices as a form of consumption. Furthermore, the evidence presented in chapter two in relation to educational attainment, levels of social deprivation and crash likelihood, may allow those belonging to these groups to be defined as exhibiting lowbrow consumption practices in relation to driving practices. In doing so, we can relate the high and low dichotomy to a risk spectrum based on the assumption that advanced drivers exhibit a lower risk profile resulting from the application of these driving practices.

In relation to the previously discussed concept of fields, Hurtado (2009) outlines the model of an autonomous field (Figure 1). Taking the two groups discussed during previous sections of the literature review, we might hypothesise that the model reflects the relationship between young male drivers (Group B in the model) and advanced drivers (Group A in the model) at a broad sociological level. We could also hypothesise that

conceptualisations of lowbrow and highbrow cultural capital could be applied to the model with Group A and Group B exhibiting lowbrow and highbrow tastes respectively. Similarly each group has its own habitus (see p. 44), which influences the *stakes* and *interests* a person deploys within the context of a field-specific strategy. Importantly, the model uses the term *practices* to describe the behaviour of both groups. This is pertinent to the present study given the emphasis placed on advanced driving practices as the primary target behaviour.

The model recognises the presence of struggles which occur when the practices of the two groups come together. Practices are defined as strategies in the model, which the author suggests are made up of 'stakes' and 'interests'. This terminology has similarities to some of the core principles of cultural capital (e.g., capitals are deployed in social structures to compete for social positions).

In this case, having defined driving as a series of practices, we might assume there to be the potential for the group in the dominating position to exercise its symbolic power. It is within this 'zone' that social marketing could be a useful tool to overcome these struggles. It might be useful to term these struggles as *barriers*. Overcoming barriers to the adoption of particular behaviours is one of social marketing's main functions and could be deployed to this end in the present study. Note also the inclusion of '*social* relationships' (emphasis added).

The model in its above form suggests that outcomes result in the 'Reproduction of Field's Objective Condition'. However, if the status quo of this interaction (through social relationships) could be overcome, the overall 'conditions' of the field might change. It is also possible that a shift could take place leading to positive behavioural and social outcomes in terms of the 'position' of those involved. These outcomes would be instigated by the 'social marketing-mediated' relationships that are built between the two groups. In summary, Hurtado's view of an autonomous field is shown to be a useful lens through which to view the two groups and their behaviours (in terms of stakes and interests).

The preceding section outlined the connection between cultural capital and advanced driving. The main factor being that the nature of advanced driver tuition involves a process of scholastic endeavour on the part of the participant. The next section describes how the concept of cultural capital might be used by social marketers in a behaviour change context.

3.1.5 Cultural Capital and Social Marketing

Cultural capital can be leveraged by social marketers in a number of ways. The suggestion that people have socially competitive tendencies which are deployed in fields (Bourdieu, 1984) offers social marketers the opportunity to feed these tendencies by creating the means through which people can compete using social marketer-mediated resources. One way that this might be achieved is through the use of certificates to recognise benchmarks of behaviour (i.e. creating levels that function as behavioural targets). As long as

these levels (which are essentially hierarchies of behaviour) are considered “worthy of being sought and possessed” (Webb et al., 2002, p. 37), individuals might aspire to change their behaviour to achieve the status associated with this recognition. Furthermore, the idea that information has an inherent social value again offers the potential to feed this social process.

Pertinent to the current study is the idea that individuals can increase their levels of cultural capital through “contacts with experts or individuals of refinement” (Portes, 1998, p. 4). Social marketers might therefore identify individuals who exhibit the *desired* behaviour, and engineer the means through which those exhibiting the *undesirable behaviour* can be socialised with these individuals. This, in social capital terms, is known as ‘bridging’ social capital (which is discussed in the next section) but the *outcome* would be the transfer of cultural capital from one group to the other. Another way to categorise these groups might be through the use of the high / low dichotomy (as previously discussed).

The downside of the concept, specifically in relation to the concept of habitus, suggests that an individual’s behavioural preferences are likely to be established from a young age according to the social context in which they are formed. This could mean that attitudes, behaviours and preferences, for example, are to some extent ‘hard-wired’ and are challenging to modify.

Having discussed the concept of cultural capital, the following section discusses the concept of social capital. It does so as a means to articulate the

way in which individuals belong within social groups and the value that can be derived from membership.

3.2.0 The Social Capital Concept

The concept of social capital implies individuals belong within social networks and those networks afford an individual certain benefits. Mathwick et al. (2008, p. 832) described social capital as “an intangible resource embedded in and accumulated through a specific social structure”. According to Portes (1998, p. 1), “Social capital is arguably one of the most successful “exports” from sociology to other social sciences and to public discourse during the last two decades”. A range of disciplines including economics, political science and organisational theory have adopted the concept, however the root of social capital theory stems from the field of sociology (Portes, 1998). Portes (1998) distinguished between three basic functions of social capital, applicable in a variety of contexts: (a) as a source of social control; (b) as a source of family support; and (c) as a source of benefits through extra-familial networks. Social capital has been viewed as link in a social network but also the network itself, the norms that support it and the knowledge that is carried over the network (Ikeda, 2008). According to Putnam (2000, p. 19):

“Whereas physical capital refers to physical objects and human capital refers to the properties of individuals, social capital refers to connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them. In that sense social capital is closely related to what some have called “civic virtue.” The difference is that “social capital” calls

attention to the fact that civic virtue is most powerful when embedded in a sense network of reciprocal social relations. A society of many virtuous but isolated individuals is not necessarily rich in social capital”.

Adler and Kwon (2002, p. 17) defined social capital as “the goodwill that is engendered by the fabric of social relations and that can be mobilized to facilitate action” and furthermore, “the breath of the social capital concept reflects a primordial feature of social life - namely, that social ties of one kind (e.g., friendship) often can be used for different purposes (e.g., moral and material support, work and non-work advice)”. The term ‘fabric’ of relationships, which is central to the concept, denotes a system of interweaving interactions between members of social networks. In relation to the sources of these resources, Adler and Kwon (2002, p. 18) state, “Social capital’s sources lie – as do other resources – in the social structure within which the actor is located. Indeed, we can differentiate social capital from other types of resources by the specific dimension of social structure underlying it; social capital is the resource available to actors as a function of their location in the structure of their social relations”. Adler and Kwon (2002) published their conceptual model of social capital (see Figure 5 below).

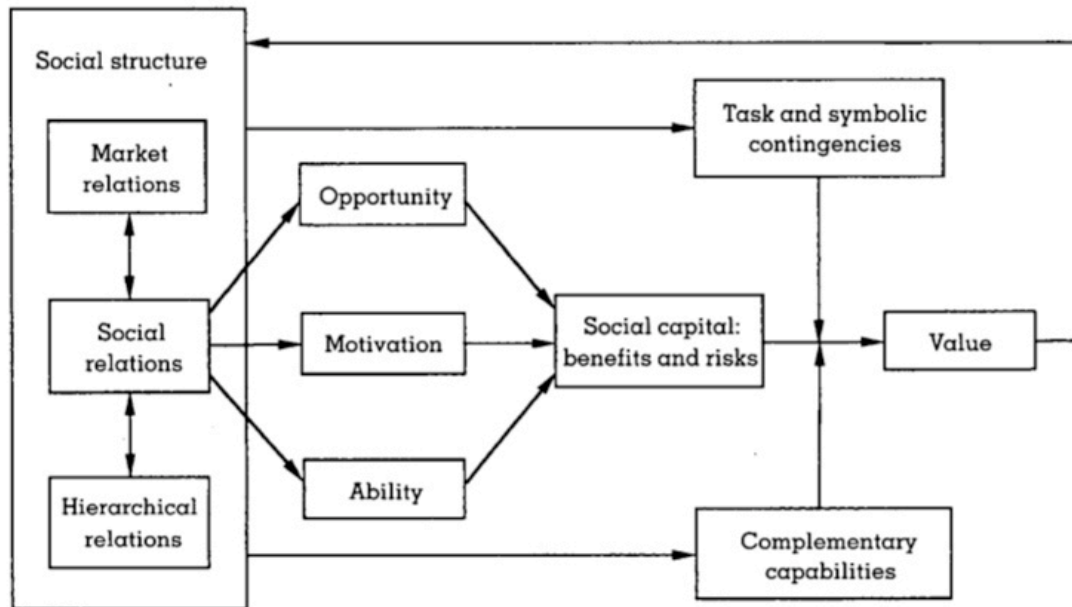


Figure 5: A Conceptual Model of Social Capital (Adler and Kwon, 2002, p. 23)

The authors differentiate between three types of social structure in which exchange can take place. In market relations goods and services are exchanged in a specific and explicit way for money or barter. The terms of this type of exchange are symmetrical. In contrast, hierarchical relations are asymmetrical in nature (although the exchange function is also explicit) due to the social hierarchy being a form of domination and “obedience to authority for material and spiritual security” (Adler and Kwon, 2002, p. 19). Finally, social relations (e.g., favours or gifts) are symmetrical (the time horizon is not specific nor explicit) and tacit (a favour is made on the understanding it will be returned someday). Social relations are linked to the three concepts of motivation, opportunity and ability.

Motivation refers to the reasons why an individual participates in social interactions in which the nature of 'return' is not guaranteed. The authors largely attribute this to the notion of "generalised reciprocity" (Adler and Kwon, 2002, p. 25). Putnam (1993, pp. 182 - 183) suggests that generalised reciprocity involves, "not 'I'll do this for you, because you are more powerful than I,' nor even 'I'll do this for you now, if you do that for me now,' but 'I'll do this for you now, knowing that somewhere down the road you'll do something for me'". Ability refers to the ability of an individual to enter into a reciprocal arrangement with another person within the social structure, in other words, 'do they have anything to offer?'. And finally, opportunity refers to the extent to which there are restraints placed on an individual in order to enter into these relationships (Adler and Kwon, 2002). The authors emphasise that even favourable conditions in relation to motivation, opportunity and ability do not always lead to positive outcomes in social capital terms as denoted by the terms benefits and risks in the model. They suggest that "social capital investment may not be cost efficient in certain situations" (Adler and Kwon, 2002, p. 30).

The model raises interesting questions regarding the type of social structure that might define the goals of the research. The exchange between Group A and B is not likely to be based on market relations because the intention is to create a mechanism whereby *practices* are passed to Group A from Group B without any specific exchange taking place. Similarly the two groups are not part of a hierarchical social structure. The most appropriate description from the model to describe the potential social structure that would guide the

present study are *social relations*. Having discussed the main concepts of social capital and Adler and Kwon's conceptualisation of the concept, the next section discusses the different *types* of social capital present in the literature.

3.2.1 Bridging and Bonding forms of Social Capital

Two views of social capital are prevalent in the literature: internal and external (Putnam, 2000; Alder and Kwon, 2002). Theoretically, the internal view is closely related to social identity theory, whereas the external view adopts more of a social network theory perspective. Putnam (2000) sees the role of social capital *internally* as a form of social 'glue' that bonds actors within a network together, for example, through relatives and friends. This form of network can have negative consequences for social capital generation if group norms are too well entrenched. The external view sees social capital as an *external* function that ties an individual to others outside of their immediate social circle. This dichotomy is also referred to as *bonding* and *bridging* forms of social capital respectively. 'Bonding' - or internal - social capital pertains to intra-community ties which provide the foundation for bringing individuals together, whereas 'bridging' - or external - social capital relates to intercommunity ties which provide access to new information and resources (Brunie, 2009, p. 255). Bonding social capital is said to occur among homogeneous populations (Leonard, 2004, p. 929). According to Ikeda (2008, p. 171) the common ground between different views of social capital held by Jacobs (1961), Coleman (2000) and Putnam (2000) is a view of social capital that sees it as "consisting of relations of members of a community that help to create value for those and perhaps other members of the community".

According to Putnam (2000, p. 22), “Bonding social capital is good for undergirding specific reciprocity and mobilizing solidarity”, whereas bridging social capital is better for “linkage to external assets and for informational diffusion”. The next section relates the social capital concept to advanced driving.

3.2.2 Social Capital and Advanced Driving

The conclusion of chapter two highlighted the potential of social marketing to encourage behaviour change in a target audience. A key part of Smith’s (2006) model involved overcoming structural barriers. Given the strong evidence base associated with advanced driving, we can assume that affording access to this form of practice participation by those with low educational attainment from areas of high social deprivation would reduce their crash risk. One example of a structural barrier may include the presence of excessive forms of bonding social capital. In such as case members of the high risk demographic may face a structural barrier in accessing advanced driving tuition, or in other words, the advanced driving narrative caused by a social glue (Putnam, 2000). Components of Adler and Kwon’s (2002) model above may also function as barriers to adoption of advanced driving in terms of *opportunity, motivation and ability*. In relation to these factors, Fishbein et al. (1975, p. 5; italics added) state, “A person must have a strong positive *intention* to perform the behaviour in question; the individual must have the *skills* necessary to carry out the behaviour; and the environment must provide a context of *opportunity*, or be free from constraints, such that the behaviour can occur”. The framework can be divided into three questions (Fishbein et al.

1975): (1) Does the target group have the opportunity to engage in the desired behaviour? (2) Does the target group have the motivation to engage in the desired behaviour? (3) Does the target group have the ability to engage in the desired behaviour? Overcoming these barriers may, in theory, constitute a form of bridging social capital – as opposed to excessive bonding social capital - if members of the high risk demographic could be persuaded to engage in advanced driving practices through the use of social marketing tools. The next section discusses social capital in relation to social marketing.

3.2.3 Social Capital and Social Marketing

Cultural capital has not been explored in the social marketing literature; however, one study in the social marketing literature explored the concept of social capital. According to Glenane-Antoniadia et al. (2003, p. 323), the application of social capital theory in social marketing takes into account both market failure and externalities (which they suggest are “amplified” for social marketers), as well as behavioural and social issues. In this context social marketers may be “ill-equipped to foster change utilising conventional marketing tools” in the context of “intricate” exchange systems (Glenane-Antoniadia et al., 2003, p. 323). The authors use an example relating to smoking cessation where the product is either not smoking around others or giving up. Negative externalities in this case are brought about by the consequences of passive smoking on the part of those who are outside of the initial exchange. Social marketing’s role in this case is to recognise the role of social actors within a network who can impose social costs on, or withdraw benefits from the smoker. The individual will either choose to continue

smoking and lose network benefits or cease smoking. The approach relies on 'boundary spanners' who can be empowered (through the dissemination of information) to encourage different standards of behaviour within a given social network. The suggestion is that social capital theory is a useful theory to supplement social marketing theory and implies a shift from a transactional orientation to a relational approach. The notion that social marketers should concern themselves with behaviour in context rather than in isolation is gaining momentum in the literature, with calls to adopt "a broader perspective that encompasses not just behavioural influences, but also the social and physical determinants of that behaviour" (Hastings and Donovan, 2002, p. 4). The author proposes that the social capital concept is incompatible with a short-term orientation, placing as it does the building of networks and relationships that provide benefits and value to those who participate in such networks.

There are examples from the literature of social marketing's use as a means of modifying behaviour through participation in activities at both individual and group level. In this sense, it could be argued that participation functions as a means through which an individual can build their own social capital inclusive of, and beyond, specific behavioural goals set by the social marketer. For example, Lowry et al. (2011) incorporated a one-hour intensive one-on-one session designed to increase adoption of breastfeeding. Front-line clinical staff led the sessions which offered the 'customer' the opportunity to ask the expert questions specific to their own circumstances. The intervention resulted in improvements in breast-feeding rates in an area of high social

deprivation. In a similar community, during a nutrition related-intervention called Bostin Value, weekly cookery classes were offered (in conjunction with recipe cards and money off vouchers) to improve fruit and vegetable consumption (Woodhouse et al. 2012). According to the authors, participation in these practical cookery activities were considered to be the main catalyst for change in the cohort of participants, with the other aspects listed above used as mechanisms for supporting and incentivising a gradual shift in *practical* behaviour (emphasis added). The National Social Marketing Centre also lists a number of case studies (see NSMC, 2014) in which participation is the catalyst for behaviour change. The closest example to the type of participation entailed by advanced driver coaching is an intervention called Fit Fans. This intervention, which targeted obesity in men aged between 40 – 65, offered a structured 12-week programme covering nutritional information, exercise advice and exercise sessions. Both of these examples used ‘experts’ (or in other words behavioural role models) who could pass on their knowledge and experience in a specific behavioural context. The social marketer in each case facilitated this relationship which, could be justified as resulting in improvements in levels of field-specific (e.g., nutrition or exercise) social capital on the part of the target participant. In each of these cases, a social relationship is formed between the target audience and the expert.

3.3.0 Chapter Three Summary

Chapter three uses theories from the sociology literature to hypothesise a connection between educational attainment, levels of social deprivation and the concepts of cultural and social capital. The chapter explores the concepts

of cultural (including the concept of habitus) and social capital (including concepts of bridging and bonding form) in relation to a high risk demographic of road users and advanced drivers. Cultural capital is shown to relate to the two above crash factors in three ways: 1) the role that cultural capital plays in the reproduction of social class and inequality (Bourdieu, 1984); 2) the role of cultural capital in the appreciation of legitimate and high status cultural signals (Lamont and Lareau, 1988); and 3) the role that practices play as 'markers' of certain preferences. The ways in which cultural capital can be leveraged as a resource by social marketers is also discussed.

Key theoretical constructs from the social capital literature are considered and related to the process of advanced driver tuition and advanced driving. The concept of social capital is also shown to relate to educational attainment and levels of social deprivation in the sense that social networks play a strong role in influencing behavioural preferences and taste. Bourdieu's 'taste zones' (Bourdieu, 1984) are identified as a way to define the two groups under consideration: young male drivers and advanced drivers. As a result of this, the concepts of high and lowbrow consumption – and their corresponding forms i.e., embodied, objectified and institutionalised cultural capital - are taken forward as a descriptive tool within the design of a theoretical framework. The conceptualisation of cultural capital recognises the impact of highbrow appreciation in the context of institutions (for example, the IAM) that place value on certain tastes, knowledge and understandings of cultural practices. Hurtado's (2009) view of an autonomous field is discussed as a template on which to discuss the characteristics and interactions between the

groups examined. Social relations are identified as a key idea from the model in conjunction with the constructs of motivation, opportunity and ability. This model shows some of the pertinent factors that should be considered where attempts are made to bridge the behavioural preferences of those who exhibit highbrow (dominant position) and lowbrow (dominated position) taste. Examples of where social marketing has been used to encourage participation in forms of training activities are identified. Key to behaviour change in these contexts is a human interaction component. The next chapter continues this idea of 'bridging' taste and practices through a discussion of the social marketing concept.

Chapter Four

Literature Review - Social Marketing

4.0 Introduction

As a result of discussions in chapter three, social marketing is now explored as a theoretical tool to be deployed as a means to bridging the behavioural practices of advanced drivers, who are defined as exhibiting highbrow tastes, and a demographic of high-risk road users, who are defined as exhibiting lowbrow taste.

Chapter four provides a more in-depth overview of the social marketing concepts than that provided at the conclusion of the road safety chapter (chapter two). The section examines the guiding principles of social marketing. This is followed by a discussion of relevant theories from the social marketing literature, the goal being to explore the main behaviour change theories that may aid theoretical development during the study.

4.1.0 The Broadened Concept of Marketing

The broad approach of social marketing – which is born out of a theoretical extension of the commercial marketing concept – involves the application of commercial marketing techniques to the goal of benefiting individuals and society at large. The *raison d'être* of *commercial* marketing involves the satisfaction of needs and wants through consumption of goods and services *at a profit*. However, it is asserted that increased levels of consumption per se

may not itself help to improve the well being of members of a given population.

Social Marketing's inception derived from attempts to enact social change through 'social campaigns' during the 1940's and 50's. Weibe (1951) evaluated four social change campaigns and found a relationship between the use of commercial marketing techniques and positive behavioural outcomes observed, leading him to ask the question, *why can't you sell brotherhood like you sell soap?* This observation has been well cited in the social marketing literature ever since. This led proponents to suggest that the marketing concept can be extended to include non-business activities offering the opportunity for marketing people to apply their skills to socially beneficial activities (Kotler and Levy, 1969). Fox and Kotler (1980, p. 32) later echoed this sentiment and stated, "We foresee that social marketing specialists, combining business marketing skills with additional training in the social sciences, will be working on a wider range of social causes with increasing sophistication". This theoretical extension foresees marketing's mission as providing a larger social purpose besides the generation of financial profit. The first formal definition of social marketing was published in 1971 by Kotler and Zaltman (1971, p. 5) as, "...the design, implementation and control of programs calculated to influence the acceptability of social ideas and involving considerations of product planning, pricing, communication, distribution, and marketing research".

Much of social marketing's early practical deployment can be labelled as 'health promotion'. The notion that communication materials could (and should) be pre-tested with the target audience was a relatively new concept to health promotion professionals (Leathar and Hastings, 1987). Similarly, the inherent limitations of social advertising as a credible behaviour change approach outside of a broader social marketing framework came as a revelation (Hastings and Haywood, 1991). Later developments in social marketing began to recognise that communications alone were not enough to change behaviour, not least because of the inherent difficulties in measuring the impact of communications-only approaches. During this era the same well-known advocates (such as Kotler and Lee, 2004) also developed concurrent paradigms including those covered by terms such as corporate social marketing (CSM) and societal marketing. Kotler and Lee (2004, p. 14) defined societal marketing as "a powerful, if often misunderstood strategy that uses marketing principles and techniques to foster behaviour change in a target population, improving society while at the same time building markets for products and services". This definition highlighted some of the conceptual overlap between social marketing, corporate social responsibility and societal marketing.

This extended concept of commercial marketing speaks of a new bottom line in terms such as "well-being" and "societal benefit" instead of "revenue", "shareholder value", and "profit". Beyond 'marketing with a conscience' social marketing requires a reconceptualisation of the term 'product' to involve the

adoption of social ideas that have essentially become a new commodity beyond their generic names such as steel, soap or toothpaste.

4.1.1 Criticisms of the Social Marketing Concept

For some, however, the very notion of social marketing challenged the underlying principles of marketing and more broadly, commerce. Milton Friedman (1970, p. 8) argued, “there is one and only one social responsibility of business - to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.” Of course, Friedman talks here about ‘business’ rather than ‘marketing’ per se. His sentiments are echoed by Luck (1974) who objected to social marketing based on the idea that replacing tangible products with ideas or values threatened the economic exchange concept.

Some have argued that social marketing is being used to control members of society through propaganda (Laczniak et al., 1979). Laczniak et al’s (1979) paranoia that social marketing was a ‘cover up’ for malevolent propaganda is revisited by O’Shaughnessy (1996, p. 62) who asked: “Is conventional social marketing, long seen as the modern way of communicating social agendas, now facing a rival in the rise/rebirth of a more polemical approach to social persuasion – one which can in truth be called social propaganda?”

In “*The Marketing of Social Causes: The First 10 Years*”, Fox and Kotler (1980) suggested that the territory of marketing has expanded to include the

marketing tasks of non-profit organisations and the marketing of worthwhile causes and outlined a number of major criticisms of the social marketing concept. Firstly they considered the argument that social marketing is not 'real' marketing due to the absence of markets, transactions, and prices. Their counter argument was based on the existence of new fields of scholarly interest that have resulted from expanding into new theoretical territories which has resulted in fields such as "economic anthropology, social psychology and quantitative geography" (Fox and Kotler, 1980, p. 30). Secondly, their rebuttal to the 'marketing is manipulative' criticism is, "If the social marketer simply makes the strongest possible case in favour of a cause without distorting the facts, the approach is not manipulative" (Fox and Kotler, 1980, p. 30).

Foxall (1989, p. 8) suggested that, "while the so-called extended concept marketing has impinged upon the consciousness of marketing educators and researchers, the other side of the debate has generally been ignored". Foxall (1989) questioned the inclusion of human exchange relationships into the subject matter of a discipline whose domain had conventionally been limited to marketing managers and the consumers of their economic products and services.

The positive perception of the potential of holistic marketing techniques in the field during the 1980's resulted in a reduction in debates about whether social marketing *should* be used for social change, and rather focuses around *how*

the tools of commercial marketing could be transferred into the social change arena. However, a number of criticisms of the concept were still present.

For example, Buchanan et al. (1994) were highly critical of the use of marketing techniques in the field of health promotion. They focused on Hastings and Haywood's (1991) contribution entitled "Social marketing and communication in health promotion". They asked three questions of the tenets of social marketing outlined in the above paper: "Are these ideas new? Are they more effective than current health promotion practices? Do they raise any particular ethical concerns?" (Hastings and Haywood, 1991, p. 135). The paper was a scathing attack on many of the most widely held beliefs of social marketers. Buchanan et al. (1994, p. 55) were particularly uncomfortable with the nature of the relationship in commercial marketing based as it is on strategic pursuit of self-interests leading to "an adversarial bargaining relationship". Buchanan et al. (1994, p. 55) also stated, "There is a primordial marketing principle: *caveat emptor*. The two parties are drawn together by a cost-benefit calculus, and as soon as the costs are perceived to be too high by one or the other, the relationship is terminated". According to the authors, the health field attracted those motivated by a sense of caring for others rather than the pursuance of self-interest. They state, "if enough people can be talked around into thinking the reason for doing health promotion is for the gains health promoters get for the themselves, we believe the field will be sapped of a major source of strength" (Buchanan et al., 1994, p. 55).

In the first edition of the *Journal of Social Marketing*, Lefebvre (2011) identified six challenges applicable to social marketing: (1) equity, (2) social networks as determinants of behaviours, (3) critical marketing, (4) sustainability, (5) scalability, and (6) comprehensive programming or the total market approach. Furthermore Glenane-Antoniadia et al. (2003) identified two main criticisms of the social marketing concept. They argued social marketers operated in an environment characterised by amplified market failure brought about by externalities. This notion was later confirmed by Karnani (2011, p. 73): “When there is market failure, private profits and public welfare are not congruent, and the free market under-supplies the socially useful goods”. Applying a similar approach to Arnold and Fisher’s dichotomy (1996), they classified the social marketing literature into two broad classifications based on the tools or means the social marketer advocates: ‘Traditionalists’, who focus on the use of conventional marketing principles, such as one or all components of the marketing mix; and ‘convergers’, who take an interdisciplinary approach to the study of social marketing. True to their convergent orientation they suggested social capital is an appropriate and useful theory to supplement traditional notions of marketing.

Although social marketing had its opponents, it is now recognized as a bona fide sub-set of marketing thought (Gordon, 2011) with peer reviewed journals – such as the *Journal of Social Marketing* and *Social Marketing Quarterly* - dedicated to further developing its theoretical interests and practical application. However, it is interesting to note that more social marketing

articles were published in health-related journals than marketing-related journals between 1998 – and 2012 (Truong, 2014).

4.1.2 Critical Social Marketing

Lazer and Kelly (1973) argued that the use of social marketing to engender social good should involve consideration of the impact of commercial marketing activities on society. Lazer and Kelly (1973, p. ix) state, “Social marketing is concerned with the application of marketing knowledge, concepts, and techniques to enhance social as well as economic ends. It is also concerned with analysis of the social consequences of marketing policies, decisions and activities. This would become commonly referred to as ‘upstream social marketing’ constituting a further weapon in the social marketing armoury. The approach would later be included under the umbrella of ‘critical social marketing’ (cf. Gordon, 2011 for a contemporary review).

In a revival of interest in the social consequences of commercial marketing (see Lazer and Kelly, 1973), social marketers described this as critical social marketing (Gordon et al., 2010). Gordon (2011) explored the definition, application and domain of this sub-set of social marketing. Critical social marketing concerns itself primarily with the impact of commercial marketing on society that social marketers consider malevolent, for example techniques used to encourage the consumption of tobacco or unhealthy food. The author outlined a schema of social marketing delineated by ‘upstream’ and ‘downstream’ considerations. Upstream social marketing focuses on

regulators, managers and policy makers, downstream social marketing targets *individual* behaviour change.

4.1.3 Community Based Social Marketing (CBSM)

Before considering the specific strategic tools of the social marketing concept, the field of community based social marketing (CBSM) is considered. This review does so because of the nature of the research investigation into a specific geographic community – an area of high social deprivation in Bristol (see p. 136 for an overview of the target community).

The concept of CBSM recognises the importance of the communities in which individuals live, thus recognising that individual behaviour change occurs in the context of other socio-demographic factors. Chapter two highlighted the connection between social deprivation and crash risk, which implied there are social factors influencing behavioural actions and choices in such geographical areas. CBSM is a development of the social marketing concept that recognises non-individual level based behaviour through a consideration of social norms and social influences that exist outside of an individual's control (McKenzie Mohr & Smith, 1999). CBSM involves principles, strategies and practices for influencing human behaviour in a manner that emphasises the *community participation* of those whose behaviour is targeted (McKenzie Mohr and Smith, 1999). CBSM also draws heavily on research in social psychology that suggests behaviour change approaches are often most effective when they are carried out at the community level and involve direct contact with people. As such it is an alternative to information intensive

campaigns that rely heavily on media and awareness generation. Lefebvre (2010) claimed that the connection between social determinants and disparities in health outcomes might be traced to disparities in information and communications resulting in differences among social groups in accessing, seeking, processing and using health information. Lefebvre (2008) also suggested that communication inequalities may act as a significant deterrent to obtaining and processing information, in using the information to make prevention, treatment and survivorship-related decisions, and in establishing relationships with providers - all of which impact prevention and treatment outcomes. McKenzie Mohr (2011) outlined four new components of CBSM that build upon the traditional 4 P's: commitments (good intentions to action), social norms (building community support), social diffusion (speeding the adoption of new behaviours) and prompts (remembering to act).

The connection between CBSM and social marketing best practice is apparent through a CBSM-specific version of the social marketing process involving five steps: selecting behaviours, identifying barriers and benefits, developing strategies, conducting a pilot, and broad-scale implementation. McKenzie Mohr and Smith (1999) outlined three broad approaches to community based social marketing. One approach is to treat community as a *segmentation variable*. A second approach treats community as a *geopolitical designation* or to use marketing mix terminology, community as *place*. The third community based approach sees *communities as interveners*. However the approach remains subordinate to the 'mainstream' social marketing model (Lefebvre, 2001), despite the recognition that behaviour is often influenced by

contextual factors beyond the control of those whose behaviour we wish to affect (Hastings et al., 2000). Using the terminology of the brand community literature, the CBSM approach utilises a 'triad' approach, with the change agent, the community and the individual interacting (McAlexander et al., 2002).

From the CBSM approach therefore we can derive two key points of particular importance to the present study: 1) an emphasis on *people* rather than *communications* and 2) the involvement of the target community in question in creating an intervention designed to modify behaviour. We can reasonably assume that the application of social marketing (in a community based social marketing context) would involve people i.e., young male drivers (lowbrow) and advanced drivers (highbrow). Secondly a goal of the intervention design should be to include members of the target audience in the creation of the intervention. One way of articulating this *involvement* is through the concept of co-creation which is discussed next.

4.1.4 Value Co-creation

Recent developments in the commercial marketing field have emphasised the importance of value co-creation between buyers and sellers. For example, Vargo and Lusch (2004) argued the new dominant logic of marketing is based on perspectives focusing on intangible resources, the co-creation of value, and relationships. This so-called service-dominant logic has gained wide acclaim in the commercial marketing field as a departure from the goods-dominant logic of previous marketing eras. Peñaloza and Venkatesh (2006, p.

299) called this a “paradigmatic shift from marketing techniques and concepts to markets as a social construction”. They proposed six pillars relating to this supposed shift (Peñaloza and Venkatesh, 2006):

- 1) Re-visioning the creation of value in markets to include meanings;
- 2) Reconsidering the efficacy and limits of working from the perspective of the marketer;
- 3) Incorporating consumer subjectivity and agency;
- 4) Reformulating the nature of relationships between consumers as social beings inhabiting communities;
- 5) Addressing cultural difference in the form of sub-cultural differences within nations and international difference between nations in level of development;
- 6) Exhorting the importance of marketer reflexivity.

Hartmann et al. (2011) suggested that it is through *practices* that value co-creation activities (in the form of consumer collectives) create value. Their conceptualisation of value creation is based on individuals as ‘carriers of practice’ (Reckwitz, 2002) and practices as ‘carriers of value’ (Schau et al., 2009) and that “the source of value lies not only in the performance of practice but also in their consumption” (Hartmann et al., 2011, p. 519). Thus practices have a *social* value beyond their performance. They distinguish between two ‘families’ of practices, 1) social *intransitive* practices, in which the performance of a practice involves a non-human object and, 2) social *transitive* practices in which the performance of the practice involves another human subject

(Hartmann et al., 2011, p. 519). Their finding suggested that “community practices do not create value simply through performance but that their consumption matters to consumers in negotiating community membership, community attachment, and value creation” (Hartmann et al., 2011, p. 519). Furthermore, they state, “there is a systematic relationship between the performance and consumption of certain community practices, which is embedded in a system of generalized reciprocity and accumulated cultural capital” (Hartmann et al., 2011, p. 519).

The concept of value co-creation is an extension of the idea developed by researchers interested in user-driven product innovation (Prahalad and Ramaswamy, 2004) which has gained momentum in the marketing field, and more recently, in the field of branding (Hatch and Schultz, 2010). Merz and Vargo (2009) have called co-creation ‘a new brand logic’. Prahalad and Ramaswamy (2004) defined co-creation as the amalgamation of four building blocks. They provided four examples by which co-creation occurs: dialogue, access, transparency and risk. Hatch and Schultz (2010, p. 591) presented an integrative framework in the form of a 2 x 2 model that sought to integrate a full stakeholder engagement perspective rather than just consumers and marketers. The two dimensions relating from an investigation into the LEGO brand are defined as ‘stakeholder/company engagement’ (dialogue + access) and ‘organisational self-disclosure’ (transparency and risk). Desai (2009) saw the relationship between social marketers and their customers as a series of interactions. He states, “Through these interactions, customers engage with social marketers to co-create different aspects of the market offerings, and

social marketers engage in customers' value-generating process to co-create better value-in-use" (Desai 2009, p. 112). The author recognised the "value generating process" of this approach, which has received little attention in the social marketing literature.

One impact of this approach has led to a greater emphasis on long-term relationship building rather than short-term exchanges. In the commercial marketing literature this stream of research has been labelled 'relationship marketing' and places emphasis on customer satisfaction, trust and commitment. Like relationship marketing, co-creation involves doing things *with* customers, not *to* them, which appears to have some resonance with the CBSM approach. In the social marketing field, Desai (2009) advised social marketers to involve consumers in co-creating the offer, experience, behaviour change, and benefits. Through engagement with "the people formally know as the audience" (Lefebvre, 2007, p. 381) the boundaries of the source-message-channel-receiver have been blurred. Lefebvre (2007) outlined 5 E's to guide practitioners through this new era of technology: education, engagement, entertainment, empowerment and evangelism.

Given the importance placed on building and maintaining relationships in both the commercial and social marketing fields, the next section briefly considers the relationship marketing literature.

4.1.5 Relationship Marketing

Relationship marketing refers to all marketing activities directed toward establishing, developing and maintaining successful relationships. Gummesson (1999, p. 1) defined relationship marketing as “marketing seen as relationships, networks and interactions”. The idea that marketers (and social marketers) are able to build relationships with a target audience has implications for the study. Firstly, the idea that participants might engage in a series of structured interactions implies the need for relationships in some form. But also the study examines the ideas of cultural and social capital. It is important to note that these ‘capitals’ are more likely to be exchanged through *real* relationships and social interactions that occur over an extended period of time. Therefore relationship marketing is seen as a useful consideration in the design of a social mechanism that goes beyond short-term exchanges.

Harker (1999) conducted a review of the relationship marketing literature with the goal of producing a working definition of RM. He outlines twenty-six definitions of relationship marketing spanning from the 1980’s to 1999. As a result of this analysis, Harker (1999, p. 16) suggested a definition of RM as: “Any organization engaged in proactively creating, developing and maintaining committed, interactive and profitable exchanges with selected customers [partners] overtime is engaged in relationship marketing”. However, as Gummesson (1987) pointed out, no definition of relationship marketing can be precise and all-inclusive, as they can only be used as vehicles for thought, as perspectives or as indications of essential properties of a phenomenon.

The development of marketing as a field of study and practice has undergone a reconceptualisation in its orientation from transactions to relationships (Kotler, 1990; Webster, 1992). The relationship concept in the commercial marketing field is an attempt to involve and integrate customers, suppliers and other infrastructural partners into a firm's developmental and marketing activities (McKenna, 1991; Shani and Chalasani, 1991). This idea has similarities with the notion of co-creation discussed in previous chapters. Grönroos (1994, p. 14) states, "In industrial marketing, services marketing, managing distribution channels and even packaged goods marketing itself, a shift is clearly taking place from marketing to anonymous masses of customer to developing and managing relationships with more or less well-known or at least somehow identified customers".

According to Morgan and Hunt (1994, p. 21), "Understanding relationship marketing requires distinguishing between the discrete transaction, which has a 'distinct beginning, short duration, and sharp ending by performance,' and relational exchange, which 'traces to previous agreements [and] . . . is longer in duration, reflecting an ongoing process".

Godson (2009, p. 4) saw relationship marketing as a strategy that "includes all the relationships which a business must manage, both internal and external, in order for it to remain competitive and meet its customers needs effectively". He suggested a contrast between linear and constellation marketing relationship as shown in Figure 6.

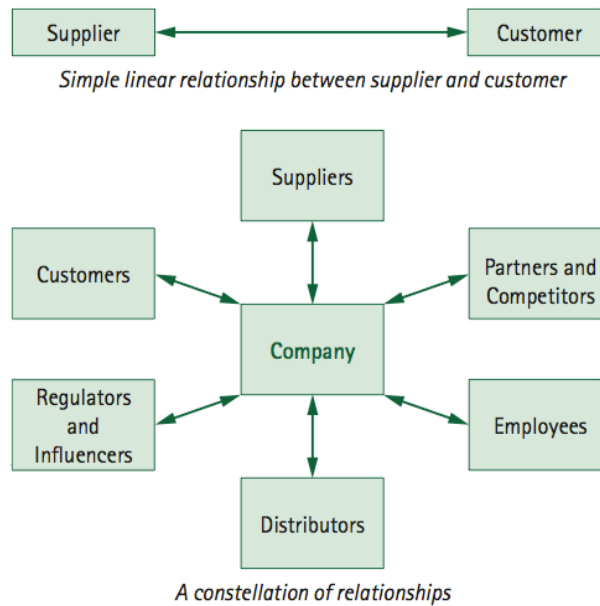


Figure 6: The Contrast Between Linear and Constellation Marketing (Godson, 2009, p. 50).

Christopher et al. (1991) outlined the key differences between transaction marketing and relationship marketing. They also argued the 4 P's model is unable to capture the full extent of complexities of marketing in the context of relationship marketing practice. An extended marketing mix is suggested with an additional three P's: people, processes and provision of service.

It has been argued that the social marketing discipline has been slow to react to this paradigm change in the field (Hastings, 2003) preferring instead to align itself with an model of customer orientation dominated by the exchange paradigm advocated by early contributions to the field. This apparent oversight is surprising given the nature of behaviours that social marketers seek to address, which are often high involvement, are reliant on the development of trust and are often multifaceted (Hastings, 2003). Hastings

(2003, p. 9) outlined three ideas from relationship marketing that have particular potential in social marketing: “(1) Social marketers should think in terms of relationships, not transactions; (2) these relationships should not just be nurtured with customers but also suppliers, stakeholders, competitors, and employees; (3) outcomes, although ultimately governed by the bottom line, should give as much emphasis to service quality as the sales graph”. Having considered relationship marketing, the next section outlines the main components of the social marketing approach.

4.1.6 Components of the Social Marketing Approach

The behaviour change tool of social marketing has at its disposal a range of tools and theories. Social Marketing has also been characterised by nine fundamental principles (Smith, 2006, pp. 39 - 40): “1) The marketing mix; 2) let’s make a deal; 3) change conditions before messages; 4) it’s about behaviour, not awareness; 5) mine is better than his; 6) the audience is always right; 7) what do they have in common; 8) behaviours are different—marketing adjusts to the differences; 9) involvement”. Before discussing the specific components of the social marketing approach, it is worthwhile to consider its *strategic* orientation. This orientation is achieved through the application of various incarnations of the ‘social marketing process’. A brief comparison of the typical social marketing process follows. These steps are used during chapter eight (fieldwork) as a way of defining the chronology of the research.

Weinreich's latest version (2010) of the process is defined as a series of steps that are followed during the development of a social marketing programme.

These steps are:

- 1 – Analysis;
- 2 – Strategy Development;
- 3 - Program and Communication Design;
- 4 – Pretesting;
- 5 – Implementation;
- 6 – Evaluation and Feedback.

The National Social Marketing Centre have also suggested that social marketing strategy development also follows the following six steps: 1 – getting started, 2 - scope, 3 – develop, 4 – implement, 5 – evaluate, and 6 – follow-up (NSMC, 2011).

Both models suggest a period of 'analysis' or 'getting started'. In the case of the NSMC, they suggest this includes four considerations: 1) The issue or challenge you want to address; 2) the resources and assets you might be able to draw on; 3) potential risks; and 4) initial timescales (NSMC, 2014). Weinrich (2010, p. 23) states, "...you must understand the problem you are addressing, the audiences you are targeting, and the environment in which the program will operate".

Following on from the strategy development phase, both processes emphasise the importance of pre-testing with the target audience. Weinrich (2010, p. 23) states, “The pre-testing phase involves various methods to test messages and materials with the target audience members to determine what works best to accomplish the program’s objectives”. Note, the idea of *co-creation* of these materials and messages *with* the target audience is absent from both processes.

Absent from Weinreich’s (2010) process is the follow-up phase. This stage is important because without it, it is not possible to establish whether behaviour change has been sustained post-intervention.

It is interesting to note the similarities between the two social marketing processes outlined above and the five-stage community based social marketing process advocated by Mckenzie-Mohr et al. (2011):

- 1 - Selecting which behaviour to target;
- 2 - Identifying the barriers and benefits to the selected behaviour;
- 3 - Developing a strategy that reduces barriers to the behaviour to be promoted, while simultaneously increasing the behaviour’s perceived benefits;
- 4 - Piloting the strategy;
- 5 - Evaluating broad scale implementation and ongoing evaluation once the strategy has been broadly implemented.

McKenzie-Mohr et al.'s (2011) process appears to place greater emphasis on the identification of barriers than Weinreich's (2010) and the NSMC's processes. The process also suggests undertaking a pilot of the intended strategy, which is not advocated in the other processes considered. Again, the idea of a follow-up evaluation of behaviour change is absent from the CBSM model.

Having discussed the main contributions to the idea of a social marketing process, the literature review now discusses a further framework that may aid the development and implementation of a social marketing intervention. This framework is referred to as the benchmark criteria.

4.1.7 The Benchmark Criteria

The UK's National Social Marketing Centre (NSMC) use a benchmark criteria – which is derived from the work of Alan Andreasen (2002) - as a way to differentiate social marketing approaches from other behaviour change tools. 'Social Marketing Quarterly' and the 'Journal of Social Marketing' also use the criterion as a framework for defining social marketing practice. The NSMC provide a list of case studies which have successfully applied social marketing tools and practices, including interventions relating to healthy eating, travel mode shift, road safety, graffiti vandalism, smoking, exercise and dental care.

The NSMC's six benchmark criteria are:

- **Behavior change** (specific behaviour goals);

- **Consumer research** (based on formative research to understand values and needs as well as pretesting);
- **Segmentation** (identifying those with similar needs);
- **Exchange** (consideration of the 'cost' and 'benefits');
- **Competition** (internal such as psychological factors and external such as outside influences);
- **Marketing mix** (to include product, price, place and promotion plus partnerships and policy where appropriate). The principal of exchange still remains part of the uniqueness of social marketing (NSMC, 2011).

The benchmark criteria outlined above in considered relevant to the present study in that it provides a means to describing the use of social marketing tools in the development of the conceptual model. Later chapters of this thesis will use the above criteria to assess the degree to which social marketing tool prove useful in achieving the aims of the intervention and will be used in the development of a theoretical model.

Next, the marketing mix and the social marketing mix concepts are considered, again, for the purposes of consideration of its use during the design of a social marketing intervention. The former is a well established and widely used theoretical framework to guide and evaluate marketing activities. The latter is a relatively new addition to the social marketing literature.

4.1.8 The Marketing Mix and The Social Marketing Mix

The marketing mix is widely credited to McCarthy (1960) who devised the 4 P's as a simple framework to guide marketing managers. Commonly known as the marketing mix, it includes considerations of product, price, place and promotion. Later incarnations were developed to account for the expansion of the service sector to include the components process, physical evidence and people. As a management tool, the 4P's are one of the principle constructs of marketing management. Management gurus such as Philip Kotler have espoused its benefits and, accordingly, social marketing has inherited a theoretical framework that to some is something of an over simplistic theoretical straightjacket (e.g., Grönroos, 1994). The social marketing mix is said to have an "uncomfortable relationship" with the marketing mix (Hastings, 2003, p. 7). The dominance of the 4P's in marketing was questioned by Peattie and Peattie (2003) who highlight the lack of theoretical development in the social marketing field over recent decades and argued that the future of social marketing may depend on a better understanding of the *differences* between social and commercial marketing theory. Peattie and Peattie (2003, p. 382) recommend a modified terminology that speaks of:

- *Interaction* rather than *exchange*;
- *Social propositions* instead of *products*;
- *Costs of involvement* instead of *price*;
- *Accessibility* instead of *place*;
- *Social communication* instead of *promotion*;

- *Competition* framed in terms of *competing ideas*, and the need to win *the battle for attention and acceptance to secure behaviour adoption*".

Other authors have expressed concerns about how the marketing mix variable *product* is conceptualised in social marketing (e.g., Smith, 2009) noting that the practice of defining product as *the behaviour we wish to change* is conceptually flawed and leads to overreliance on communication and educational approaches. Instead they suggested that *product* should be seen as a *tool* for behaviour change (Smith, 2009) or a bundle of benefits an individual receives in exchange for engaging in a behaviour or series of behaviours (Rothschild, 2009).

Lotenberg (2010) focused on the marketing mix variable of *place* that involves considering the behaviour *and* the environment in which it occurs. Place, the author asserted, helps social marketers to consider the *physical, social* and *cultural* environment in which behaviour takes place. Kotler and Lee (2008, p. 247) defined *place* as "...where and when the target market will perform the desired behaviour, acquire any related tangible objects, and receive any associated services". The *place* in the context of the study refers to the geographical location in which the participants reside.

The four P's are a significant component within Lefebvre's (2011) model of integrated social marketing. Lefebvre (2011) reported that an integrated social marketing model has four inter-related tasks that revolve around an identified benefit for a target market.

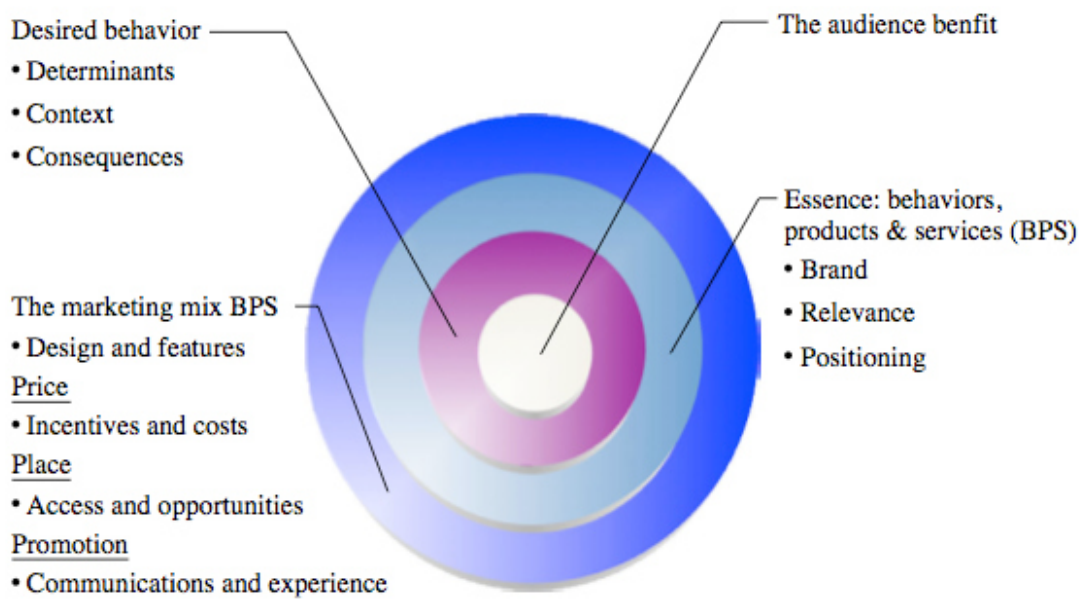


Figure 7: The Integrated Social Marketing Idea (Lefebvre, 2011, p. 10).

Although Lefebvre's (2011) model includes many of the main ideas from social marketing, the concept of exchange is not present. It could be argued that exchange is one of the fundamental principles of commercial and social marketing. It is for this reason that exchange is now considered within the context of social marketing.

4.1.9 Social Marketing and Exchange

Exchange is the basic principle that defines both commercial and social marketing activities. 'Formal' – in other words 'commercial' - marketing theory is developed around the idea of exchange and exchange relationships and places considerable emphasis on outcomes, experiences, and exchange relationships in relation to transactions (Bagozzi, 1979). The propagation of early commercial marketing techniques on which social marketing is based

was primarily dependent on relatively straightforward notions of exchange, namely the school of thought labelled 'neo-economics'. Commercial marketers during the era of Bagozzi's (1979) observation operated in conditions where consumers were rarely interested in long-term relationships. Instead they exhibited a propensity towards short-term satisfaction of needs and wants, and were willing to pay a monetary price for doing so. This era was characterised by simple notions of buyer – seller exchange. This form of mainstream marketing theory predominantly derived from experiences in the fast moving consumer goods (FMCG) sector where customer needs were satisfied through short-term transactions between buyers and sellers.

Bagozzi (1975), who is well cited in the commercial marketing literature, perceived exchange under three headings that include non-economic goods within social relationships:

- *Restricted* exchange involves two parties who engaged in reciprocal relationships;
- *Generalized* exchange denotes reciprocal relationships amongst at least three actors whereby can benefit indirectly from someone other than to whom he gave;
- *Complex* exchanges refer to systems of mutual relationships where each social actor is involved in at least one direct exchange whereby the entire system is organized by an interconnecting web of relationships.

Several scholars questioned the exchange paradigm and its ability to explain the growing phenomena of relationship engagements of firms (Grönroos, 1990; Sheth et al., 1988; Webster, 1992). Later developments in the commercial marketing field began to recognise that consumers exhibited preferences towards products or services that would result in repeat purchases and longer-term value on the part of the corporate entity. The result was a shift from value exchanges to value creation relationships where close, cooperative and interdependent relationships are seen to be of greater value than purely transaction-based relationships (Kalwani and Narayandas, 1995).

The previous sections outlined the main components of social marketing. Next, key theories in social marketing in relation to the research study are discussed. The list of models included is not intended to be exhaustive, rather the purpose is to identify the extent to which the most prominent theories used in social marketing have potential in the context of the research outlined so far. The section goes on to discuss relevant factors from the anti-social behaviour literature.

4.2.0 Social Marketing Theory

Lefebvre (2001) outlined the key theoretical models that have most relevance to social marketers. This list included the health belief model (HBM), the theory of reasoned action (TRA), the theory of planned behaviour (TPB), social learning/cognitive theory, the transtheoretical model of behaviour change (stages of change), and the diffusion of innovations theory. As

previously asserted, the range of theories in social marketing can be divided by 'individual' level theories and those that, for the purposes of this review, are called 'wider lens' theories. The theories included in the latter take into consideration *environmental* factors on behavioural choices. For the purpose of this review, only theories that emphasise the importance of social and environmental factors are considered in relation to the research study. This includes social learning theory (Bandura, 1986) and social cognitive theory (Maibach and Cotton, 1995). These theories demonstrate that environmental factors are as important as individual factors in determining behaviour. The researcher is particularly interested in theories and models used in social marketing that consider *external* factors that impact behaviour. It is for this reason that social learning theory is given particular attention.

4.2.1 Social Learning Theory

Social learning theory suggests that individual behaviour is determined by both the environment and a person's motivation to learn proactively from important social referents. Previous chapters of the literature review have strongly alluded to the potential of modifying the driving practices of Group A through some form of socialisation or exchange with Group B.

The theory has been identified as one of the five traditional theories of adult learning (Merriam and Caffarella, 1999). The theory recognises that portions of an individual's knowledge are directly related to observing others (Bandura, 1977). Gibson (2004, p. 193) saw the model as showing the "dynamic

interplay between the person, the environment, and behaviour". The theory is traditionally shown schematically as a triangle.

In 1961, and again in 1963, Albert Bandura conducted the most famous of experiments in relation to social learning theory. Bandura's most recognised studies are called the "Bobo doll studies" (Bandura conducted a number of variations of the same study). The focus of these studies were to examine aggressive patterns of behaviour. According to Evans (1989, p. 22) Bandura's interest in aggression could be distilled into three questions: "first, how aggressive patterns of behaviour are developed; second, what provokes people to behave aggressively, and third, what determines whether they are going to continue to resort to an aggressive behaviour pattern on future occasions". In such studies young children were shown footage of a young woman kicking and punching a soft toy. When the children were invited to play with the same toy after seeing the footage, it was observed they copied the behaviour and proceeded to also kick and punch the small toy. These studies were widely credited for shifting the focus in academic psychology from pure behaviourism to cognitive psychology. The experiment showed that not all behaviour is directed by reinforcement and rewards (in the original study young children were not rewarded), which is the central tenet of behaviourism.

Bandura (1977) is credited with the development of the observational learning concept (also known as modelling or imitation). He saw observational learning as being comprised of four components which included: attention, retention,

motor reproduction and motivation (Bandura, 1977). Attention relates to the ability of the subject to attend to the specifics of the modelled behaviour. In the case of the Bobo doll experiments, the children must attend to the actions of the observed behaviour in order to replicate it (i.e., what is the person saying or doing). Retention relates to the ability of the individual to retain the modelled behaviour through a process of coding and storing into long-term memory allowing the behaviour to be retrieved when appropriate. The motor reproduction process requires the observer to learn and possess the physical capabilities of the modelled behaviour, for example having the physical ability to kick and punch the toy in the previous example. The final component is Motivation and relates to the concepts of positive reinforcement and reward. Bandura (1977) proposed two types of individual learning: reinforcement learning and vicarious learning. Reinforcement learning involves an individual learning by the consequences of their actions. Thus, an individual increases the frequency of the behaviour that results in positive consequences and vice versa. The second type of learning outlined by Bandura (1977) was vicarious learning. This concept suggested individuals observed others before engaging in a particular activity so as to minimise the risk of error and negative consequences.

The concept of social learning theory is also known as social cognitive theory. Bandura was responsible for the re-naming of his approach as social cognitive theory (1986) in recognition that his theory extends beyond issues of learning. In relation to this he states, "Many readers construe learning theory as a conditioning model of response acquisition, where as within this

theoretical framework, learning is conceptualized mainly as knowledge acquisition through cognitive processing of information” (Bandura, 1986, p.xii). Bandura (1986, p. 23) later went on to include the concept of “reciprocal determinism” in which “behaviour, cognitive and other personal factors, and environment influences all operate interactively, as determinants of each other”.

Of the theories and models considered above, social learning theory has the greatest relevance to the present study. It is possible to infer that social capital and cultural capital are forms of behavioural influence that can be modified through direct human contact. Bandura’s (1986) research demonstrated the effect of enacting behaviour change through socialisation which, the theory suggests, results in reproduction of observed behaviour.

The next section examines the ways in which behaviour can be defined in the present case as anti-social.

4.2.2 Anti-social Behaviour

In legislative terms anti-social behaviour (ASB) is defined as behaviour that “causes or is likely to cause harassment, alarm or distress” to others (Crawford, 2009, p.5) and has been a central policy preoccupation of government for more than a decade (Donogue, 2012). Crawford (2009, p.5) states, “Policy domains as extensive as education, parenting, youth services, city centre management, environmental planning, social housing and traditional policing increasingly can be said to be governed through a

preoccupation with ‘anti-social behaviour’”. The main legislative framework behind anti-social behaviour policy is the Anti-social Behaviour Act (2003) for England and Wales and the analogous Anti-social Behaviour Act (2004) in Scotland. These frameworks give the Police powers to impose penalties (such as fines, Anti Social Behaviour Orders (ASBOs) and curfews) on those deemed to be engaged in ASB. Coupled with greater ASB legislation has been an emphasis on community engagement in various forms as a means to reducing ASB. This approach started under New Labour and is now also being emphasised by the Coalition Government (Donoghue, 2012).

It is useful to point out that policy makers recognise that what constitutes ASB is “determined by a series of factors including context, location, community tolerance and quality of life expectations” and “...what may be considered anti-social behaviour to one person can be seen as acceptable behaviour to another” (Home Office, 2004, p.3). Or as Mille (2008, p. 2) states, “Rather than everybody knowing what it is, ASB is seen as a contested concept; that one person’s ASB may be another’s criminality”. Similarly, what to one person might be anti-social may be tolerable to another or even celebrated as a valued contribution to contemporary life.

Millie (2009, p. 384) highlighted the subjectivity and context specificity of anti-social behaviour claiming that, “It is the contested nature of different people’s ‘everyday’ activities within urban spaces that can lead to certain groups’ behaviours being labelled as anti-social”. This is particularly the case with the ‘boy racer’ whose origins are typically working class and urban (see Bengry

and Griffin, 2007). But ASB appears in the main to be coupled with social deprivation and more urban environments. In relation to the geographical context for the research, a Bristol City Council published document states, “Anti-social has a significant impact on the lives of a minority of people in Bristol, particularly in areas of social deprivation and inner cities, but it has little or not effect on the quality of life of the majority of the population” (State of the City, 2012, p. vii). Anti-social behaviour is now discussed in relation to driving.

4.2.3 Anti-social Behaviour and Driving

Earlier chapters of the literature review presented arguments that the act of driving is a series of practices, that when combined, constitute a person’s *driving style*. In some cases the driving practices adopted by young drivers are labelled as anti-social. This definition is often applied to the ‘boy racers’ fraternity. While not illegal per se (e.g., loud music and wheel spins) these practices attract considerable attention from the media (Lumsden, 2009a). These types of practices have resulted in changes to how driving and other offenses of this nature are dealt with through legislation. In the UK, both anti-social behaviour acts cover these activities as do the so called ‘hoon legislation’ in Australia (Hoon Laws, 2013).

There is a wide spectrum of behaviours that could be considered anti-social in relation to driving. For example, Woodisde (2008) position aggressive driving as anti-social. However, a distinction must be made between anti-social and criminal driving practices. The definition of ASB excludes, for example, the

criminal activity of 'joyriding' (cf. Kellet and Gross, 2006), which involves the theft of a vehicle for a range of purposes including for recreation (e.g., to drive dangerously for enjoyment), short-term transportation (e.g., to commit other crime) and money making (e.g., to sell the vehicle as spares) (Dawes, 2010). However, anti-social in a driving context can easily result in criminal practices being undertaken (e.g., speeding, driving without due care and attention). Lumsden (2013) outlined behaviours considered *anti-social* that are typically associated with the youth driving scene. These include speeding, street racing and modifying vehicles (which raises concerns about noise levels). These car cultures (Best, 2006) are often the target of moral panics (Lumsden, 2009). Lumsden (2013) highlighted the re-framing of car cultures from that of *deviant driving* to that of *anti-social behaviour*.

The availability of specific *theories* to explain ASB are limited. However, there are many theories that explain the causes of *deviant* behaviour including biological, psychological and social. Leading on from sociological considerations in previous chapters (social and cultural capital) the next section focuses on sociological explanations for deviant behaviour. In particular two sociological theories of deviance are explored: differential association and labelling.

4.2.4 Differential Association

Differential association theory proposes that through interaction with others (which may vary in frequency, duration and intensity) individuals learn the values, attitudes, techniques and motives for deviant and criminal behaviour

(Sutherland and Cressy, 1960). They suggest that criminal behaviour is learned through interaction with other persons in a process of communication within intimate personal groups. Furthermore, they argue that when criminal behavior is learned, the learning includes techniques of committing the crime (which are sometimes very complicated, sometimes simple) and the specific direction of motives, drives, rationalisations, and attitudes. The direction of these motives and drives is learned from definitions of the legal codes as favourable or unfavourable. They argue that a person becomes delinquent because of an excess of definitions favourable to violation of law over definitions unfavourable to violation of the law. In summary, differential association, specifically the learning of criminal behaviour, involves all of the mechanisms that are involved in any other learning (Sutherland and Cressy, 1960). The theory places considerable emphasis on interaction as a means through which this learning takes place.

4.2.5 Labeling Theory

Labelling theory has relevance in the present context in relation to the labels (e.g., 'boy racer') attached to young male drivers who exhibit certain tastes and preferences in terms of vehicle choice and driving style. Labelling theory is the theory of how the self-identity and behaviour of individuals may be determined by the terms used to classify them. In other words, if a person is labelled as "deviant", they are more likely to engage in deviant behaviour. Howard Becker is widely considered to be the lead proponent of his labelling theory (see, Becker, 1963). Becker (1963, p. 9) pointed out: "the person with deviant behaviour is a person to whom this label has been successfully

applied; deviant behaviour is behaviour that has been labelled as such by others”. According to the theory, the social audience is more significant than the individual person. In other words it is not the act of the individual but the reaction of society in terms of rules and sanctions that is important (Becker, 1963). For example, some who drink heavily are labelled alcoholics while others are not.

4.3.0 Chapter Four Summary

Chapter four begins with a discussion of the evolution of social marketing theory. CBSM is noted as a framework that is considered further during later chapters of the thesis. The combination of ideas from the CBSM and the value-creation literatures highlight the potential value of a practice-sharing framework in the context of social marketing. The idea of value co-creation is also shown to relate to *practices* and the idea that individuals (and communities) are ‘carriers of value’. The core principles of relationship marketing are outlined and can be summarised as broadly involving establishing, developing and maintaining successful relationships. The idea of developing relationships as a means to facilitating behaviour change is a theme that runs throughout the literature review.

In practical terms, this will involve ‘bridging’ the two groups of drivers using social marketing. Two social marketing criterion are discussed with this in mind, the benchmark criteria and the social marketing mix. Key components of both are outlined and are discussed in later chapters as part of proposition 3. Chapter four then examines social learning theory as an overarching body

of literature to support the idea of relationship building. The use of this theory relies heavily on the observational learning concept (and modelling / imitation), which suggests a target group would imitate certain practices under the right conditions. This would be the result of a social exchange taking place. Using the social marketing principles outlined earlier in the chapter, a mechanism for socialising the groups could be created and these conditions created.

The chapter outlines ideas from the deviance literature that support the *socialisation* component of behaviour e.g., criminal behaviour is learned through interactions in a process of communication. Again, this idea is complementary to the goals of the research process where a target audience interacts with those performing the *desired* practices. Labelling theory is shown to be relevant in the present case and its effects might hinder efforts to socialise the groups.

CHAPTER FIVE

Literature Review - Communities of Practice (CoP)

5.0 Introduction

Chapter five begins with a discussion of the community concept. The chapter then goes on to discuss the CoP concept as it relates to the present study. This includes a discussion of the key theoretical constructs in the CoP literature.

5.1.0 Communities Defined

The practical component of this research will seek to engage a group of young male drivers in an intervention with the intention of changing their behaviour. One way of defining this group is through the idea of 'community' which is discussed in the context of the study.

The concept of community has been noted in a range of academic fields including sociology, ecology and psychology. In distinguishing between types of communities, researchers tend to separate *geographical* and *relational* forms of community (Gusfield, 1975, Obst et al., 2002). *Geographical* community refers to a sense of belonging to a particular area, neighbourhood, town, city or region, whereas *relational* community refers to a sense of community that develops between individuals without reference to a specific location (Gusfield, 1975). Fowler and Krush (2008, p. 851) state: "Community is a structured and inter-related network between groups of people where

each individual group as well as the collective network of groups is bound together by relations that may include affect, loyalty, common values, personal concerns, common activities, and/or beliefs and where the strength of relationships within groups is relatively greater than the tie strength that exists between groups”.

In the social marketing literature, Andreasen (2006) defines communities as any group that shares common interests who can be identified (at least in theory) as a specific group by outside observers (for example by social marketers) for potential intervention. According to Andreasen (2006), communities have a taxonomy that can be defined using three sub-headings: 1) Externally defined communities; 2) membership communities; and 3) personally defined communities. Externally defined communities are those who exhibit similar qualities in terms of geographic location, demographic groups and geo-demographic groups (such as mosaic profiles based on postcode data). The label ‘externally defined community’ most accurately describes the definition of community applied in the CBSM approach. Membership communities can be formal or informal, paid or unpaid. In contrast to externally defined communities, they involve some degree of choice and commitment. Examples include ‘mutual interest communities’ such as bridge clubs, reading clubs, driving clubs, or electronic discussion groups. The third community definition includes ‘lifestyle communities’ (such as golfers, motorcyclists, and opera lovers), ‘values communities’ (such as environmentalists) and ‘opinion communities’ (such as ‘pro-choice’). Andreasen (2006) sees communities as playing one of six kinds of role in

bringing about social change: 1) implementers or catalysts, 2) intermediaries, 3) targets, 4) allies, 5), social influencers, 6) competitors. It is however important to note that not all aspects of community exert positive influences. As Popple and Stepney (2008) highlight, communities can provide care and support, but they can also be the site of poverty, ideological conflict, oppression and discrimination.

From this brief discussion of community in conjunction with material from chapter two (Road Safety) we can draw some tentative conclusions regarding the notion of community in the two groups under discussion. Group A (young male drivers) conform to the definition of an externally defined community due to their residency in areas of high social deprivation. However, they may also belong to other forms of community beyond geographical definition. For example, they may belong to informal 'membership' communities (in relation to a specific brand of car) and/or lifestyle community (belonging to informal groups of likeminded drivers who meet the cultural stereotype of 'boy racers'). In terms of Group B (advanced drivers), we can assume they are not concentrated in one geographical location. They are however, likely to belong to membership clubs (such as the Institute of Advanced Motorists, RoSPA, or similar), lifestyle communities (as a way to demonstrate driving skill and engage in continual driver development) and 'opinion' communities (as a means to expressing opinions in relation to road safety matters). This discussion of the two groups is by no means exhaustive but it highlights the range of ways in which the community concept can be applied in the present study. It also highlights the inadequacy of strict adherence to the CBSM

approach. Although CBSM emphasises the importance of *people* and *participation*, the notion of community in the CBSM approach is *singular* and has limitations in the context of the study in which the goal of the intervention is to engage with *two* communities.

Given this weakness of the CBSM approach, a theoretical framework is sought which recognises the inherent value of bringing together two groups with the intention of creating knowledge sharing opportunities. One mechanism that could be applied in this case is the idea of a community of practice which is now considered.

5.1.1 Communities of Practice

Communities of practice (CoP) are models of situational learning, based on collaboration among peers, where individuals work to a common purpose, defined by knowledge rather than task (Wenger, 1998 cited in Andrew et al. 2008). The definition offered by Wenger (2002) highlights a number of characteristics that could be applicable to the present study which are discussed in this section.

The CoP framework has been applied in a range of practical settings including social services (Gabbay, 2003) nursing (Andrew et al., 2008), management education (Monaghan, 2011), community policing (Henry and MacKenzie, 2012), and community safety (Henry, 2012). The use of the CoP term is very diverse, according to Cox (2005), sometimes it is a conceptual lens through which to examine the situated social construction of meaning, and at other

times, it refers to a virtual community or informal group sponsored by an organisation to facilitate knowledge sharing or learning.

Handly et al. (2006) presented the conceptual model in Figure 8 that represents *individual learning* through participation in communities of practice. The model includes three communities which in the context of this research could be defined as: Community A – Young Drivers, Community B – Advanced Drivers and Community C – Social Marketers (or in other words, the change agent). This model is considered in more detail later in this section.

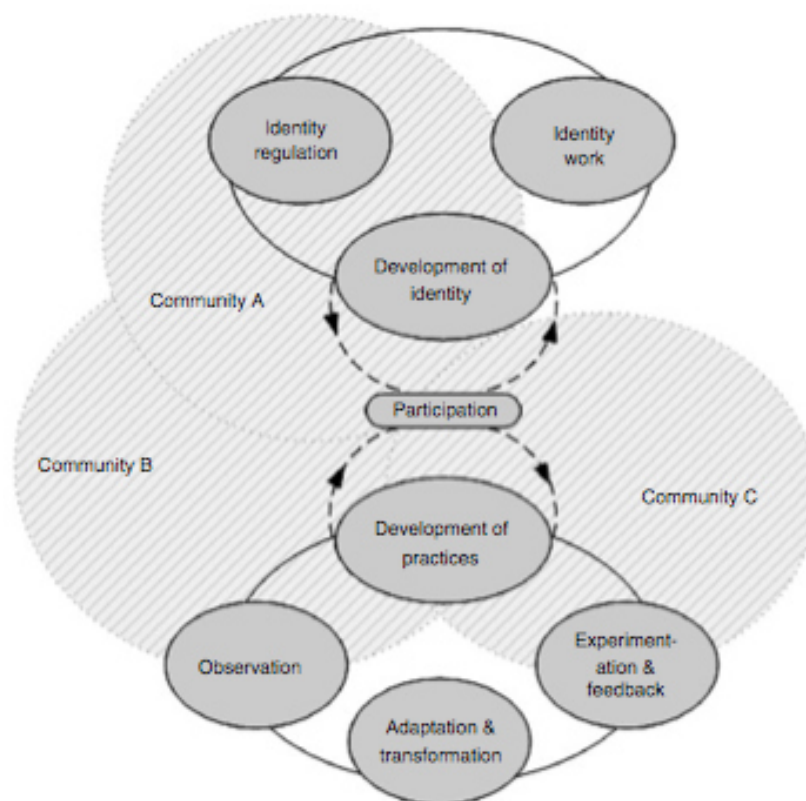


Figure 8: Individual Learning through Participation in Communities of Practice (Handly et al., 2006, p. 646)

Cox (2005) provides a comparative review of four seminal works in the CoP literature including: Lave and Wenger (1991), Brown and Duguid (1991), Wenger (1998) and Wenger et al. (2002). He argues that the ambiguities of the terms *practice* and *community* present in these works are a source of the CoP concepts re-useability in both academic and practical situations but states, “it is potentially confusing that the works differ so markedly in their conceptualizations of community, learning, power and change, diversity and informality” (Cox, 2005, p. 527). Cox (2005) provides a brief overview of these works:

- Situated learning: legitimate peripheral participation by Lave and Wenger (1991), a theory of newcomer learning stressing it as a continuous, active, engaged, situated and identity-forming process – in contrast to the then dominant cognitive view.

- Organisational learning and communities of practice: toward a unified view of working, learning and innovation by Brown and Duguid (1991), which takes the concept more directly into the organisational setting, stressing communities of practice’s role in the improvisation of new understanding where canonical accounts of work prove inadequate to ‘get the job done’ and stressing the importance of narrative.

- Communities of practice: learning, meaning and identity by Wenger (1998) which focuses on social identity, trajectories of participation and the stresses to individuals arising from their multi-membership of different communities.

- Cultivating communities of practice by Wenger et al. (2002) which is a guide for practitioners to forming and managing informal groups composed of members drawn from across functional boundaries to enhance organisational performance.

The focus on social identity and trajectories of participation in Wenger's (1998) work has some resonance with the consideration of the CoP framework during this research. With this in mind, Wenger et al. (2002, p. 4) state that CoPs are "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in the area by interacting on an ongoing basis". Cox (2005) goes on to cite Wenger's indicators of community of practice (Wenger, 1998, pp. 125 – 6):

- “(1) Sustained mutual relationships – harmonious or conflictual;
- (2) Shared ways of engaging in doing things together;
- (3) The rapid flow of information and propagation of innovation;
- (4) Absence of introductory preambles, as if conversations and interactions were merely the continuation of an ongoing process;
- (5) Very quick setup of a problem to be discussed;
- (6) Substantial overlap in participants' descriptions of who belongs;
- (7) Knowing what others know, what they can do, and how they can contribute to an enterprise;
- (8) Mutually defining identities;
- (9) The ability to assess the appropriateness of actions and products;

- (10) Specific tools, representations, and other artefacts;
- (11) Local lore, shared stories, inside jokes, knowing laughter;
- (12) Jargon and shortcuts to communication as well as the ease of producing new ones;
- (13) Certain styles recognized as displaying membership;
- (14) A shared discourse reflecting a certain perspective on the world”.

Cox (2005, p. 531) adds: “Other likely but not necessary features are that all participants will interact intensely with each other, that they held accountable by all other members of the group, and that much of the repertoire has been invented locally”.

According to Monaghan (2010, p. 430) there are six characteristics of a community of practice: “1) self-forming and self-governing, 2) members share a common interest or passion for a particular topic, 3) members are involved in the creation of new knowledge, 4) learning occurs in a real-time context, 5) communities of practice can occur in any area of an individual’s life, 6) a community of practice facilitates the development of shared meaning and identity formation for professionals”.

The notion of bringing together two groups of individuals with divergent sets of knowledge (in this case driving knowledge) may lead to conflicts of opinion and identity. This is discussed by Handley et al. (2006, p. 642) who state, “Individuals bring to a community a personal history of involvement with workplace, social and familial groups whose norms may complement or

conflict with one another. These conflicts need to be negotiated and reconciled at least in part if the individual is to achieve a coherent sense of self. An analysis of (individual) situated learning and knowledge transfer (across communities) thus requires not only a conceptualisation of community of practice, but also an understanding of what happens within and beyond such communities". With this in mind the consideration of the CoP framework must factor in degrees of conflict between the groups enlisted into the CoP and the application of measures to overcome these conflicts of identity.

The CoP concept has had limited use in the context of social marketing. The following excerpt from Handy et al. (2006, p. 645) has resonance with the concept of cultural capital discussed in chapter three (relevant phrases are italicised). The authors state, "By participating in a community (CoP), a newcomer develops an awareness of that community's practice and thus comes to understand and engage with (or adapt and transform) *various tools, language, role-definitions* and other *explicit artefacts* as well as various implicit relations, *tacit conventions*, and underlying assumptions and *values...* thus it is through participation in communities that individuals develop and possibly adapt and thereby reconstruct their identities and practice". Similarly, we might regard participation in a CoP as a form of social capital, which involves individuals interacting with others outside of their existing social network (bridging social capital).

5.1.2 Situated Learning and Communities of Practice

The centrepiece of communities of practice is the notion of *situated learning* that offers a radical critique of cognitivist theories of learning (Handly et al., 2006). The cognitivist idealisation of learning is founded on the positivist assessment of abstract knowledge: that such knowledge is valuable because it reflects an objective reality and can be manipulated using rationalist and symbolic logic (see Gardner, 1987). In relation to this argument Handley et al. (2006, p. 642) state, “situated learning theory, however, argues that the cognitivist focus on abstract knowledge is misleading because it overlooks the largely tacit dimension of workplace (and other) practice. Instead, the suggestion is that individual learning should be thought of as emergent, involving opportunities to participate in the practices of the community as well as the development of an identity which provides a sense of belonging and commitment”. Davenport (2002, p. 173) highlights that seminal texts by Lave (1988, 1991) and Lave and Wenger (1991) support the idea that “learning is grounded in context and artifacts, and that context, in most situations, is a community in which participants must learn how to handle the tasks and artifacts that are handed to them”. Learning in this context is focused on participating in settings where the activity is being undertaken.

Given the discussions in previous chapters of the literature review, the following statement by Handly et al. (2006, p. 642) highlights the relevance of situational learning theory and the CoP framework; “Situational learning theory positions the ‘community of practice’ as the context in which an individual develops the practices (including values, norms and relationships) and

identities appropriate to that community”. They go on to highlight the idea that situational learning theory embraces the possibility of variation and intra-community conflict.

In the context of electronic communities of practice Wasko and Faraj (2000) outline three perspectives of knowledge: 1) knowledge as object; 2) knowledge embedded in individuals; and 3) knowledge embedded in a community. The first of these perspectives assumes a positivist stance in that knowledge can exist independently of human action and perception (Townsend, 1993). This perspective involves the conversion of knowledge that resides in the minds of people into structural knowledge, which is regarded as an asset to the firm. (It is proposed that the nature of knowledge held by members of the IAM is a good example of this type of knowledge). The notion of *knowledge embedded in individuals* differs from this stance in that it believes that knowledge is held at an individual level.

5.1.3 Participation, Identity and Practice

Handly et al. (2006) identify three key concepts that are present through evolving forms of participation in CoPs: participation, identity, and practice.

Participation

Participation, firstly, is considered central to situated learning since it is through participation that identity and practices develop (Handly et al., 2006). As Wenger (1998, p. 4) states, participation refers “not just to local events of engagement in certain activities with certain people, but a more

encompassing process of being active participants in the *practices* of social communities and constructing *identities* in relation to these communities” (emphasis in original). Therefore participation is not just a physical action or event; it involves both action as well as connection (Wenger, 1998). The level at which an individual chooses to connect with a community through participation is the subject of debate in the CoP literature. Earlier work (Lave and Wenger, 1991) presented an “apprenticeship” (Handly, 2006, p. 643) model of learning in which ‘novices’ initially participate in the community at the periphery, are then allowed limited participation as they adopt the practices of other practitioners, and finally become ‘masters’ enjoying full participation. However, Lave (2004) and others later modified this strict dichotomy of ‘periphery’ and ‘full’ participation suggesting that participation may involve learning trajectories that do not lead to ‘full’ participation. Wenger (1998) called this ‘marginal’ participation in cases where individuals do not (or cannot) aspire to achieve full participation status. The next section considers the second of Handly et al.’s (2006) concepts, identity.

Identity

According to the CoP literature, participation in communities of practice allows for new identities to be forged and reshaped. As stated by Handly et al., (1996, p. 644), “Situated learning theory brings a renewed or alternative focus on issues of identity. Learning is not simply about developing one’s knowledge and practice, it also involves a process of understanding who we are and in which communities of practice we belong and are accepted”. This,

according to Alvesson and Wilmott (2002), involves two main processes of identity construction: identity regulation and identity work (see Figure 8).

Handy (2006) provides the following example in an organisational context. The first, 'identity regulation', refers to regulation originating from or mediated through the organisation (e.g., policies) as well as individuals' responses, which could be enactment and/or resistance. The second process, 'identity work' refers to the individuals' continuous efforts to repair, maintain or revise their perceptions of self in light of the organisation's efforts at identity regulation. In this regard, Handy et al. (2006, p. 644) state,

"This identity-work involves a negotiation between the organization's efforts at identity-regulation (which the employee may or may not internalize) and the employees' sense of self derived from current work as well as other (work and non-work) identities. Through these processes, individuals come to embrace or reject opportunities to participate more fully in their community of practice, depending on the 'fit' or resonance of those opportunities with their current senses of self'. Finally, and of particular importance to the present investigation, the idea of practice in the context of CoPs is discussed.

Practice

Of the three components of CoPs, this is perhaps the most pertinent in the present research. If driving style is made up of a series of practices then the use of a CoP framework may lead to a modification of the driving practices in the target group. Brown and Duguid (1991, p. 45) state that by practice they

mean, “undertaking or engaging fully in a task, job or profession”. For the purpose of this discussion, the practices under investigation are those exhibited in a driving context in both groups. The concepts of practice and identity overlap in ways that allow individuals to experiment with their provisional selves (Ibarra, 1999). This allows individuals to develop new practices (by observing others, imitating them), and then adapting and developing their own particular practices in ways which match not only the wider community’s norms, but also their own individual sense of integrity and self (Ibarra, 1999).

5.2.0 Chapter Five Summary

Chapter five begins with a discussion of the community concept which is extended to include a discussion of the CoP concept. The main components of a CoP approach are outlined and Handly et al.’s (2006) model of individual learning is discussed. The CoP discussion, which includes an overview of the key indicators of a CoP approach, highlights the potential of its application in the present study. In doing so, situational learning is taken forward as a key construct in the creation of a behaviour change mechanism. The CoP framework is shown to be appropriate given the need to engage with two groups during the practical component of the study.

Chapter Six: Literature Review Summary and Objectives

6.1.0 Literature Review Summary

The literature review highlights some of the causation factors behind the overrepresentation of young male drivers in road traffic accidents, especially those from areas of high social deprivation. As well as highlighting the range of measures deployed to counter young driver risk, one technique is identified as warranting further attention: advanced driving. This leads to a discussion that supports the idea that driving style is comprised of a series of practices and the means to changing behaviour in a cohort of young drivers could build on this idea. The main components of advanced driving are outlined which are supported by examples from the social marketing literature whereby participation in structured behaviour change activities are used as a catalyst for change. IVDR is discussed as a way to influence behaviour through normative feedback in combination with appropriate incentives. Throughout the chapter social marketing is discussed as the means through which a target audience would be encouraged to engage in advanced driving practices. A connection is made between the process of advanced driver training and the concepts of social and cultural capital. Relationship marketing is discussed as a way to frame discussions relating to ongoing *interactions* with a target audience. A finally, the idea of communities of practice is discussed as an overarching framework to accommodate the observations and assertions made during the literature review.

6.2.0 Research Objectives:

The research objectives of this thesis are:

Research Objective 1 - To explore the concept of cultural capital and social capital in the context of social marketing theory.

Research Objective 2 – To investigate how social marketing tools and techniques can be used to create a bridge between divergent levels of cultural and social capital.

Research Objective 3 – To investigate the potential of communities of practice in social marketing.

6.3.0 Research Propositions

Propositions differ from hypotheses in a number of ways. For example, hypotheses are used as a way of testing an expected causal relationship, based on theory. For results of hypotheses to be considered valid, they must make a prediction between variables that can be tested using a repeatable experiment. The relationship between these variables is stated at the beginning of the process and research methods are used to gather data that support or reject one or more hypotheses. Propositions on the other hand are still drawn from theory, but state a relationship between two or more concepts without the need to put this relationship under empirical scrutiny. Propositions are often used in research contexts where little prior research has been conducted. Propositions are used in this research to explore relationships

between concepts, which, through further research, could be used to develop empirically testable hypotheses.

In the context of the above research objectives, the following propositions are presented:

- **Proposition 1** – Group ‘A’ (young male drivers) can be described as exhibiting lowbrow cultural preferences in the field of driving.
- **Proposition 2** – Group ‘B’ (advanced drivers) can be described as exhibiting highbrow cultural preferences in the field of driving.
- **Proposition 3** – Social Marketing tools and techniques can be used to bridge the taste of those exhibiting highbrow and lowbrow cultural capital.
- **Proposition 4** – A community of practice framework can be applied in a ‘live’ social marketing case.

The next chapter is devoted to outlining the methodology that will be undertaken in order to satisfy the research objectives and to examine the research propositions. This includes a discussion of the research methodology and philosophy.

CHAPTER SEVEN

Research Methodology and Philosophy

7.0 Introduction

Chapter seven begins with a discussion of the research philosophy which informed the research strategies and approaches used to investigate the research propositions. This is followed by an overview of the methodology applied during the research process. In light of this discussion, the chapter then considers the strengths and weaknesses of an action research approach. An overview of the research context is outlined which delineates the relationship between the 'Safer Roads Using Social Marketing' (SRUSM) investigation and the 'Wheels, Skills and Thrills' (WST) intervention. This is followed by an overview of the target community (Lawrence Weston) and the sampling methods used for groups A and B. The qualitative and quantitative research methods used during the study are then briefly outlined.

7.1.0 Research Philosophy

Research philosophies are collections of assumptions and beliefs that guide the way in which research is conducted and interpreted (Koshy, 2010). The term *research philosophy* has been described as a "worldview" by Creswell (2009, p.6), defined as "a general orientation about the world and the nature of the research the researcher holds". Discussions relating to research philosophy are fundamentally concerned with the relationship between data and theory which guide the type of evidence that is required, how it is

gathered and interpreted, and how it provides answers to the research questions being investigated. These theoretical perspectives inform the methodology and thus provide a context for the research process and ground its logic and criteria (Crotty, 2005) influenced by the nature of our beliefs (ontology) and knowledge (epistemology) which underpin the way data is collected, analysed and reported (Crotty, 2005).

Blakie (1993, p. 6) defines ontology as “the claim or assumptions that a particular approach to social enquiry makes about the nature of social reality – claims about what exists, what it looks like, what units make it up and how these units interact with each other”; and epistemology: “An epistemology is a theory of knowledge; it presents a view and a justification for what can be regarded as knowledge – what can be known, and what criteria such knowledge must satisfy in order to be called knowledge rather than beliefs”.

The philosophical stance that guided the research process takes into consideration the context and goals of the research. A significant part of the research process entailed the development of a behaviour change intervention. The research methods used were based on the consensus of the steering group and, due to the necessity to instigate and measure behaviour change in the cohort of young drivers, the methods used to achieve these aims were evaluated on practical merits according to the target audience in question and were therefore highly context specific.

The researcher also used the research context as a means to examine a number of propositions and, therefore, a research philosophy was adopted to reflect the limitations of influence in this case. Similarly, due to the unpredictability of the research context (e.g., success or failure of intervention would have resulted in a different research environment) a high degree of flexibility was required in terms of what constituted meaningful data meaning that research opportunities needed to be evaluated on their merits in each case.

The means by which data was collected was varied and was evaluated based on its anticipated contribution to the overall aims of the research investigation and knowledge generation in the research context. This led to a consideration of the use of both qualitative and quantitative approaches at different points in the research process.

The debate about quantitative and qualitative research paradigms has sometimes led to a view that qualitative and quantitative researchers are in competition with each other whilst Onwuegbuzie and Leech (2005, p. 375) argue that “mono-method research is the biggest threat to the advancement of the social sciences”. They advocate the learning of quantitative and qualitative research methods so as to produce *pragmatic researchers* versed in both techniques. Rossman and Wilson (1985) suggest that pragmatists exist on a spectrum that includes *purists* and *situationalists*. Pragmatists, unlike purists and situationalists, advocate integrating methods within a single study (Creswell, 1995); purists believe that methods cannot and should not be

mixed (Smith, 1983; Smith and Heshusius, 1986); situationalists advocate the mono-method study (Onwuegbuzie and Leech, 2005).

A review of articles published in the social marketing field between 1998 and 2012 reveals that social marketing research is dominated by qualitative methods whilst perhaps quantitative and mixed methods are gaining prominence (Truong, 2014). As a result of the range of measurements required during the study, a mixed methods approach was used. The mixed methods approach emerges as a third paradigm for social research (Denscombe, 2008). Collins et al., (2006, pp. 78-79) identify four broad rationales for using mixed methods research:

- i) “to improve the accuracy of their data;
- ii) to produce a more complete picture by combining information from complementary kinds of data or sources;
- iii) as a means of avoiding biases intrinsic to single-method approaches (i.e., as a way of compensating specific strengths and weaknesses associated with particular methods; and
- iv) as a way of developing the analysis and building upon initial findings using contrasting kinds of data or methods”.

Given the emphasis on a mixed methods approach and the high levels of unpredictability of the research context, a pragmatic research philosophy is discussed. This research philosophy offers a high level of ontological and epistemological flexibility with Reason (1999, p. 208) stating, “The characteristic idea of philosophical pragmatism is that ideas and practices

should be judged in terms of their usefulness, workability and practicality and that these are the criteria of their truth, rightness and value". Grbrich (2013, p. 9) believes in relation to mixed / multiple methods, "the ensuing paradigm [to accompany mixed methods] has often become termed 'pragmatism' – a mix of post positivism and social constructivism, a leaning toward postmodernism, and an emphasis on empirical knowledge, action, triangulation and the changing interaction between the organism and its environments". However, a *pragmatic* research philosophy is not simply limited to the methods used to understand a particular phenomenon and pragmatists and scientific realists agree that scientific research occurs in a social historical, political and other contexts (Cherryholmes, 1992). Although pragmatists agree there is an external world independent of ourselves, they argue that we can never be sure whether we are reading the world or reading ourselves (Cherryholmes, 1992). One of the key questions addressed by pragmatism is how do we know when we are closer or further from the truth and Rorty (1991, p. 31) poses the question: "How would we know that we were at the end of inquiry, as opposed to merely having gotten tired or unimaginative?"

Pragmatism was considered a valid philosophical approach to this research as it is commonly regarded as the philosophical partner for a mixed methods philosophy (Denscombe 2008). Denscombe (2008, p. 271) believes, "It [pragmatism] provides a set of assumptions about knowledge and enquiry that underpins the mixed methods approach and which distinguishes the approach from purely quantitative approaches that are based on a philosophy of (post)positivism and purely qualitative approaches that are based on a

philosophy of interpretivism or constructivism”. According to Onwuegbuzie and Leech (2005, p. 383), “by having a positive attitude towards both techniques [qualitative and quantitative methods], pragmatic researchers are in better position to use qualitative research to inform the quantitative portion of research studies, and vice versa”. This notion of a comparative ability suited the research context in that quantitative measures were used to objectively measure behaviour change with qualitative methods supplementing these outputs.

The combination of both qualitative and quantitative methods helped to build a picture of behaviour change in the research context and the potential reasons for the occurrence of that change. In light of these assertions, the next section considers action research as a research approach in combination with a pragmatic philosophy.

7.1.1 Action Research Approach

“We cannot regard truth as a goal of inquiry. The purpose of inquiry is to achieve agreement among human beings about what to do, to bring consensus on the end to be achieved and the means to be used to achieve those ends. Inquiry that does not achieve coordination of behaviour is not inquiry but simply wordplay” (Rorty, 1999, p. xxv).

The previous section concludes with a description and selection of a pragmatic research approach for the purpose of conducting the research process and the study was conducted within the context of an intervention whereby *action* was initiated in the form of a behaviour change intervention. Action research is considered in this context.

Kemmis and McTaggart (1988, p. 5) define action research as “a form of collective, self-reflective inquiry that participants in social situations undertake to improve:

- (1) the rationality and justice of the their own social or educational practices;
- (2) the participants’ understanding of practices and the situation in which they carry out these practices”.

This definition has resonance in the study with its emphasis on participants’ understanding of practices. According to Reason & Bradbury (2001a, p. 2), “a primary purpose of action research is to produce practical knowledge that is useful to people in the everyday conduct of their lives”. The goals of the intervention were focused on the generation of practical knowledge for Group A participants in the form of driving practices. Reason & Bradbury (2001a, p. 2) add that, “A wider purpose of action research is to contribute through this practical knowledge to the increased well-being – economic, political, psychological, and spiritual – of human persons and communities”. However, Altrichter et al. (2002) note that action research is a particular approach to particular kinds of problems, not some kind of social panacea for all problems of social practice.

The purpose of undertaking action research or 'problem centred research' (cf. Lewin, 1948) is to bring about change in specific contexts (Koshy, 2010). Hence the emphasis is upon scientists intervening in real life social situations so as to ameliorate the practical problems of actors over a period of time in a manner which emphasises gradual learning and incremental change (Gill and Johnson, 2005). The specific context for the present study was the geographical target community of Lawrence Weston (a description of the target area follows) but the human elements were young male drivers between the ages of 18 and 25 and a group of volunteer advanced drivers. Moustakis (1995, p. 1) draws attention to the need for "direct observations of the activities of the group being studied, communications and interactions with the people, and opportunities for informal and formal interviews". Koshy (2010, p. 13) states, "The essence of the type of enquiry conducted by an action researcher is that it involves an investigation of some component or aspect of a social system. Such a system is composed of humans engaged in interaction, using gestures and language, resulting in the creation of impressions and the transmission of information". The social *system* that would become the focus of this research was centred around the intervention that supported the transmission of information.

Reason and Bradbury (2006) have suggested that action research is a particular orientation and purpose of enquiry rather than a research methodology. Action research has been described as a systematic collection and analysis of data leading to change selection and tries to parallel the scientific method (Shani and Pasmore, 1985). This type of research can

combine the utility of participant research with experimental and causal methods of research. Action research design involves a planned intervention by a researcher into some natural social setting, the effects of that intervention are then monitored and evaluated with the aim of discerning whether or not that action has produced the expected consequences (Gill and Johnson, 2005). The *intervention* in the present study is the Wheels, Skills and Thrills intervention with effects measured using a range of techniques (a description of methods follows). Meyer (2000) maintains that action research's strength lies in its focus on generating solutions to practical problems and its ability to empower practitioners, by getting them to engage with research and the subsequent development or implementation activities. The *practical problem* that the intervention sought to generate solutions to was the undesirable driving practices demonstrated by the cohort of young men who were the target of the intervention. Koshy (2010, p .1) opines, "Action research is a method used for improving practice. It involves action, evaluation, and critical reflection and – based on the evidence gathered – changes in practice are then implemented" and outlines the following characteristics of action research:

- Action research is participative and collaborative; it is undertaken by individuals with a common purpose.
- It is situation-based and context specific.
- It develops reflection based on interpretations made by the participants.
- Knowledge is created through action and at the point of application.

- Action research can involve problem solving, if the solution to the problem leads to the improvement of practice.
- In action research findings will emerge as action develops, but these are not conclusive or absolute.

Furthermore, Reason and Bradbury (2008) highlight that action research:

- Is a set of practices that respond to people's desire to act creatively in the face of practical and often pressing issues in their lives in organizations and communities;
- Calls for an engagement with people in collaborative relationships, opening new 'communicative spaces' in which dialogue and development can flourish;
- Draws on many ways of knowing, both in the evidence that is generated in inquiry and its expression in diverse forms of presentation as we share our learning with wider audiences;
- Is value oriented, seeking to address issues of significance concerning the flourishing of human persons, their communities, and the wider ecology in which we participate;
- Is a living, emergent process that cannot be pre-determined but changes and develops as those engaged deepen their understanding of the issues to be addressed and develop their capacity as co-inquirers both individually and collectively.

Action research is a form of collective, self-reflective inquiry that participants in social situations undertake to improve: (1) the rationality and justice of their

own or educational practices; (2) the participants' understanding of these practices and the situations in which they carry out these practices (McTaggart, 1998). Groups of participants can be teachers, students, parents, workplace colleagues, social activists or any other community members – that is to say, any groups with a shared concern and the motivation and will to address their shared concern (Kemmis and McTaggart, 1998). The approach is action research only when it is collaborative and achieved through the critically examined action of individual group members (Kemmis and McTaggart, 1998).

In summary, the evidence presented throughout the preceding section suggests that action research is an appropriate research approach and orientation for the present study. The goal of the research was indeed to produce practical knowledge which was useful in people's everyday lives (to improve the driving practices of young drivers). Similarly the research sought to contribute to the well-being of individuals and bring about change in a specific geographical context or social system. Furthermore, behaviour change was monitored and the outcomes of the research were highly practical in nature. The next section discusses the context in which the research took place.

7.1.2 The Research Context

A study was designed to examine the research propositions within the context of a 'live' social marketing intervention. This intervention was the focus of the SRUSM investigation. This research context allowed the researcher to

participate, observe and influence the evolution of a social marketing intervention (WST) from inception to conclusion. This was achieved through involvement in all stages of the social marketing process e.g., analysis, pre-testing, implementation, evaluation and follow-up.

In *addition* to the SRUSM / WST investigation a range of research propositions were proposed to be investigated in parallel with the goals of this investigation. Theory was developed in conjunction with the outcomes of the WST intervention. The methodology therefore the needed to allow for insights to be generated that explained the cause of any behaviour change witnessed.

The scope of the research therefore included extensive involvement by the researcher in the WST intervention. The intervention was co-funded by the Department for Transport, Bristol Social Marketing Centre and the West of England Road Safety Partnership, the total cost was approximately £110,000. This investigation afforded the researcher access to a range of participants and research sources relevant to both Group A and B. Overall this involved a four-year investigation leading to a voluntary programme of driving-related activities – centred around the process of advanced driver tuition - aimed at 18-25 year old young men residing in Lawrence Weston, Bristol.

The main aims of the SRUSM investigation and subsequent WST intervention were to (Tapp et al., 2011; 2012):

- A) Establish links with influential local stakeholders in the Lawrence Weston area;
- B) Identify a target population for the subsequent intervention;
- C) Design, implement and evaluate a road safety intervention with the aim of reducing the crash likelihood of the target population; and
- D) Make recommendations for future interventions in similar areas across the UK.

With these aims in mind, it was decided that the practical intervention would incorporate the following elements (Tapp et al., 2011; 2012):

- A) A discreet geographical area;
- B) Research based insights and a possible segmentation of the target group;
- C) A manageable cohort;
- D) Specific behaviour change elements to address cognitive, emotive and habitual behavioural mechanisms;
- E) An incentive to attract and retain the cohort; and
- F) Multiple, objective measures of any behaviour change including evaluation through qualitative and quantitative measures.

Participation by the researcher in the SRUSM investigation included participation on the WST intervention steering group. The steering group was a small group of individuals from different professional backgrounds brought together to implement the aims of the SRUSM project and develop the WST intervention. Over the course of the intervention the researcher attended

approximately forty steering group meetings allowing strong working relationships and trust levels to be developed with the steering group members. These steering group meetings constitute a form of communicative space (Wicks and Reason, 2009) allowing members to engage in cycles of action and reflection as well as offering opportunities to build trust and understanding of different perspectives and opinions. Partners included a youth community worker (Mark Pepper – Local Youth Engagement Worker), a road safety practitioner (Mike Baugh – Bristol City Council), a technology company director (Alastair Fraiser – Alpha Micro Components), a volunteer Senior Observer with the Bristol IAM group (Tony Gilbert), an Approved Driving Instructor (ADI) (Martin Evans), a statistician (Dr. Paul White) and a Professor of Marketing (Professor Alan Tapp).

The roles and responsibilities of the steering group members were as follows. The SRUSM investigation was directed by Alan Tapp and Mike Baugh. Alan Tapp provided social marketing insights and ensured the academic integrity of the investigation. Mike Baugh brought over 20 years of road safety experience to the steering group. The development of all aspects of the IVDR unit (including data collection, protection and extraction) was the responsibility of Alastair Frasier. Tony Gilbert and Martin Evans were responsible for the design and implementation of the coaching syllabus with the latter taking responsibility for the recruitment of other advanced driver volunteers. Mark Pepper, in his role as project manager, recruited the young driver cohort, organised IVDR installations, coordinated karting and coaching events and assisted with the collection of data. Dr. Paul White was responsible for data

analysis. Furthermore, four team leaders were recruited (two of whom were related to Mark Pepper) to assist with the development of the intervention (see 'co-creation' activities in the following chapter), install IVDR units and recruit other Group A participants. Further information on the means through which data was gathered by the group is provided in chapter eight.

7.1.3 Longitudinal Research

A longitudinal approach was adopted for the purpose of this research. The WST intervention sought to engage the target audience for approximately twelve months. This period allowed sufficient time for a six session syllabus of advanced driver coaching to be delivered.

The high labour intensity of installing IVDR boxes into participant's vehicles and the need to measure behaviour change over the course of coaching (and other intervention activities) made a longitudinal research design an imperative. Similarly, pre- and post- behavioural measures (surveys and drive checks) were built into the research process which also relied on a longitudinal timescale. The application of the term longitudinal in this case is intended to mean 'for the duration of the intervention plus a follow-up' as opposed to 'over ten years', for example.

7.1.4 Overview of 'Wheels, Skills and Thrills'

The goal of the SRUSM investigation was to develop a road safety intervention targeted at young male drivers based on social marketing principles. The overall goal of the intervention was to modify the driving

practices of a cohort of young drivers through interaction with a group of advanced drivers.

The WST intervention 'model' consisted of the following: a bespoke designed course of advanced driver coaching provided by volunteer members of the Institute of Advanced Motorists (IAM), In Vehicle Data Recorders (IVDRs) used for data gathering and to provide in-car feedback of aggressive driving manoeuvres, and monthly karting sessions used to recruit and retain the cohort.

7.1.5 The Target Community

Prior to the involvement of the researcher an interrogation of the Department for Transport's 'STATS19' was undertaken by Bristol City Council. This database contained postcode-specific data on reported road accidents, the vehicles involved and consequential casualties. This resulted in the identification of Lawrence Weston as an area of high social deprivation where road casualty data showed a strong preponderance of young male drivers.

Lawrence Weston (which is comprised of Lawrence Weston South, Lawrence Weston Parade, Lawrence Weston West and Lawrence Weston East) is one of 32 "Lower Layer Super Output Areas" (LSOAs) in the area of Bristol. LSOAs, nationally speaking, are, "relatively small areas, each with an average population of 1,500 residents, which make the comparison of like sized areas across the country possible. This level of geography enables the identification of pockets of deprivation that are a feature of urban areas - pockets that can

be overlooked if only looking at data at ward level” (State of the City, 2012, p. 5).

Published data by Bristol City Council (State of the City, 2012, p. 9) lists rankings of deprivation using the Index of Multiple Deprivation (IMD, 2010). The IMD is made up of the following domains of deprivation (IMD, 2010, p. 9): income deprivation, employment deprivation, health deprivation and disability, education, skills and training deprivation, barriers to housing and services, crime and living environment deprivation. Figures 9 and 10 below show that a high proportion of the Lawrence Weston areas are in the top 10% of LSOAs in England according to this measurement.

LSOAs which fall within the most deprived 10% of all LSOAs in England are shaded dark blue

| SOA code | Super Output Area | Index of Multiple Deprivation top 10% | % people income deprived | % children income deprived | % older people income deprived | % working age employment deprived | Barriers to housing and services |
|-----------|------------------------|---------------------------------------|--------------------------|----------------------------|--------------------------------|-----------------------------------|----------------------------------|
| E01014639 | Lawrence Weston South | Yes | 35.7 | 50.3 | 27.0 | 22.1 | |
| E01014638 | Lawrence Weston Parade | Yes | 29.4 | 39.7 | 37.0 | 20.8 | |
| E01014497 | Lawrence Weston West | No | 24.8 | 44.4 | 26.0 | 18.0 | |
| E01014640 | Lawrence Weston East | No | 25.3 | 42.5 | 31.0 | 16.2 | |

Figure 9: Lawrence Weston LSOAs in Top 10% of Social Deprivation – A (State of the City, 2012, p. 9)

LSOAs which fall within the most deprived 10% of all LSOAs in England are shaded dark blue

| Ward | Super Output Area | Health deprivation and disability top 10% | Education skills and training top 10% | Crime and disorder top 10% | Children/young people sub-domain top 10% | Skills Sub-domain top 10% | Living environment |
|-------------|------------------------|---|---------------------------------------|----------------------------|--|---------------------------|--------------------|
| Kingsweston | Lawrence Weston South | | Yes | Yes | Yes | | |
| Kingsweston | Lawrence Weston Parade | Yes | Yes | Yes | Yes | | |
| Avonmouth | Lawrence Weston West | | Yes | Yes | Yes | | |
| Kingsweston | Lawrence Weston East | | Yes | Yes | Yes | Yes | |

Figure 10: Lawrence Weston LSOAs in top 10% of Social Deprivation – B (State of the City, 2012, p. 9)

Lawrence Weston (aka “El-Dub”) is a tightly knit, post-war housing estate on the northwest fringe of Bristol and is typical of a geodemographic group that describes edge-of-town deprived areas. It is an area with a strong local sense of identity, but many social problems such as unemployment and family breakdown. It has a predominantly white population with relatively low educational attainment. The area is geographically remote with open space and major roads separating the area from neighbouring communities. Residents, especially young people, are required to travel outside of the area as a result of the loss of community venues and services. Many in the area experience significant disadvantage, particularly in relation to education, employment, skills and training, and health (see Figures 9 and 10 above). The area has a reputation for anti-social behaviour in various forms.

The design of the Lawrence Weston estate does little to discourage speeding, with many wide roads dissecting the area. There is a history of antisocial use of vehicles, including unlicensed and uninsured driving, speeding, and nuisance from mopeds. During the 80's the area was one of a number of 'hotspots' in the UK for 'joyriding' which anecdotal evidence suggested was a nightly occurrence requiring considerable police intervention over a period of years. The area has its own local "El-Dub" identity which is considered distinct from other similar areas of high social deprivation in Bristol.

Considerable resources have been spent in the area in recent years on road engineering (such as traffic calming measures) and punitive measures (such as speed cameras and Automatic Number Plate Recognition (ANPR) devices) sporadically placed along the notorious Long Cross road, which dissects the area. There is also a historical tension between young people and the police and Police Community Support Officers (PCSOs).

7.2.0 Group 'A' Sampling Approach

Given the nature of the research context, the broad sample frame was the community under investigation – Lawrence Weston. Although the intervention offered numerous opportunities for observation of daily life in the community, the specific sample frame was closely related to those connected with the WST intervention. However, during the exploratory phase of the research, the sample frame was extended to include local stakeholders and members of the community (see chapter eight)

The primary target group (Group A) were young male drivers aged 17 – 25 from the Lawrence Weston area. A prerequisite of participation involved proving legal ownership of a vehicle, a valid insurance document and MOT certificate. The target group were those who would voluntarily agree to take part on the intervention and who were under 25 and living in the North 1 area of Bristol. The total number of young male drivers who engaged with the pilot was 42 and the total number of drivers who completed all elements of the intervention was 22. For each participant, the project trial consisted of a 1-2 month pre-trial blind period, a 6-month trial, and a 6-month post-trial monitor.

Group 'A' participants were recruited using a snowballing sampling procedure. This was a nonprobability-based form of sampling whereby the researcher / steering group had little control over who took part in the intervention. Four team leaders were tasked with inviting other young male drivers to take part on the intervention. The 'hard to reach' nature of the primary target group meant this was the most effective way of recruiting participants from the area.

7.2.1 Description of Group 'A'

42 young men (18-25) were initially signed up for the trial. Of those recruited, 34 were residents of the area, with an additional cohort of 8 trialists who exhibited the same profile as the Lawrence Weston residents but lived outside the area.

During the intervention the researcher was made aware of a significant amount of personal data related to the cohort:

- 9 drivers did not complete statutory mainstream education.
- 11 drivers had experienced police involvement with their lives.
- 4 drivers were subject to 'Youth Offending Team' (YOT) orders.
- 2 drivers were subject to probation orders.
- 2 drivers had previously received a custodial sentence.
- 31 drivers had license points.

7.2.2 Group 'B' Sampling Approach

The secondary group (Group 'B') were qualified advanced drivers from the Bristol, Bath and Weston Super Mare groups of the Institute of Advanced Motorists. This group were tasked with providing advanced driving coaching to Group 'A'.

The term *observer* is used to describe members of the IAM (or in some cases RoSPA) who agreed to participate in coaching activities. To achieve observer status, an individual must have completed the Skill for Life syllabus, Further Advanced Driver (FAD) Training and Observer Training. The total combined cost of these courses would be around £200, not including the cost of reading materials and fuel consumed during the observed drives.

The recruitment of Group 'B' was the responsibility of Martin Evans and Tony Gilbert (who were steering group members). After some initial reluctance and reticence on the part of Bristol Group members, the scope of recruitment was widened from just the Bristol group to include members of neighbouring

groups from Weston-Super-Mare and Bath. The total number IAM observers that volunteered to take part was 15.

7.2.3 Description of Group 'B'

Detailed demographic data on Group B was not collected as part of the research process. The following description is based therefore on the researcher's observations and informal conversations with members of the group. It is reasonable to describe the IAM cohort as belonging to a different generation to Group 'A'. The estimated average age of observers was between 45 - 50 years old. The oldest observer was in his 70's; the youngest by a considerable margin was in his mid thirties. Typically Group 'B' were either employed in a professional capacity (e.g., IT consultants, freelance photographers, business owners etc.) or were retired. It is quite reasonable to describe this group as being *middle class*.

7.3.0 Research Methods

Methods of research are the actual techniques or procedures used to gather and analyse data related to some research questions or hypothesis (Blaikie, 1993; Crotty, 2005). In line with the mixed methods approach discussions of the methods to be used are divided by quantitative and qualitative approaches.

In terms of quantitative data, three separate methods were used during the study; In Vehicle Data Recording (IVDR) (which included a 'blind profile' period), surveys and drive checks. Each of these three methods were used to

measure behaviour change in Group 'A' before, during and after the intervention activities.

Qualitative data was gathered from both Groups 'A' and 'B' before, during and after the intervention. A range of methods were used including one-to-one interviews (face-to-face), telephone interviews, focus groups and group co-creation sessions (involving Group 'A' and Group 'B' participants). Field notes were also gathered at intervention events. Further qualitative data was collected during completion of advanced driving qualifications by the researcher. Further details of the research methods employed during the study are outlined in chapter eight.

7.4.0 Chapter Seven Summary

Chapter seven discusses the research philosophy (pragmatism) and the methodological approach (action research) adopted during the research. The justification of a mixed methods (quantitative and qualitative) approach is also discussed and the specific means through which data was collected is outlined. The sampling strategy used for Groups 'A' and 'B' (snowballing) is discussed in combination with a description of the characteristics of both groups. The chapter includes an overview of the research context in which the research took place (Lawrence Weston), the aims of the WST intervention and the roles and responsibilities of the steering group members. The next chapter provides an overview of the fieldwork undertaken during the research process.

Chapter Eight: Fieldwork

8.0 Introduction

Chapter seven outlines the methodological approaches that were adopted during the research study. Chapter eight includes a discussion of data collection, data structuring and the analysis techniques undertaken for qualitative and quantitative research methods.

Discussions during the chapter in regard to data collection and analysis are divided into two categories: quantitative and qualitative. Quantitative data included: IVDR, surveys and drive checks. Qualitative data included: interviews, focus groups, co-creation sessions, participant observations (Group 'A' and 'B') and advanced driving participation. Two promotional videos are also discussed under the heading of qualitative research. The chapter also discusses how data was triangulated during the study. A summary of the ethical considerations of the research study follows.

8.1.0 Quantitative Research Methods

Quantitative research methods were used during the study primarily as a means of measuring behaviour change in Group 'A' during the *implementation* and *follow-up* phases of the WST intervention. These were typically referred to as *behaviour change data*.

Quantitative methods allowed behaviour to be quantified during the various stages of the WST intervention. Quantitative methods were selected over qualitative methods for this purpose due to the greater level of objectivity

exhibited by this approach. This entailed the design of a series of behavioural proxies that captured key information at various time intervals. By using quantitative methods in this way, direct comparisons (using the same criteria) could be made across a given time period. This approach contributed to an overall picture of whether the intervention had changed the behaviour of the target audience.

In addition to the benefits of quantitative research methods in terms of behaviour change tracking, the use of these methods had broader implications in the road safety field. As discussed on p. 24, the education and training aspect of the road safety industry suffers from a lack of credible evidence with regards to 'what works' (cf. Christie, 2001; Stradling et al., 2006 and McKenna, 2012). Quantitative research methods therefore were used as part of a determined effort to quantify the effect of the intervention using overlapping techniques that would stand up to external scrutiny and contribute to this ongoing debate.

The following sections outline the range of quantitative research methods used during the study.

8.1.1 IVDR Data Collection

The primary mechanism for objectively measuring behaviour change in Group A was achieved through the use of an In Vehicle Data Recoding (IVDR) device (see p. 31 for a discussion of IVDR). At the conclusion of the WST intervention, data from 23 drivers was available which was described as the

“main” group. The main data set comprised of participants who completed the entrance ‘blind profile’, the ‘*in*’ drive check, six coaching sessions, and the ‘*out*’ drive check.

This device was linked to a real-time in-car dashboard feedback mechanism. The IVDR device was designed by project partners Alpha Micro Components (AMC). It is important to note that the IVDR component of the project was experimental in nature. At the time of commencing this aspect of the project, IVDR-related research was in its infancy with few studies available to act as a comparison. Similarly there was limited information available publically regarding the technical aspects of IVDR devices. This meant the device was designed and produced ‘from scratch’ by project partners AMC with assistance from the Bristol Group of the IAM (Group B) and the researcher.

The use of IVDR technology played a number of roles during the WST intervention and research study. Firstly, from a behaviour change perspective it was anticipated that the dashboard in-car feedback of aggressive events – if appropriately incentivised – would modify the cohort’s driving. Secondly, the IVDR data was used as the primary objective measure of the success or otherwise of the intervention. Finally, it could be argued that the IVDR devices (aka ‘black boxes’) gave a technological credibility to the project, which enhanced its appeal to the target group.

The fieldwork undertaken in relation to IVDR involved the researcher undertaking a practical evaluation of the leading IVDR device. The device was

installed in the researchers' personal vehicle. Doing so allowed feedback to be provided to the steering group regarding some of the 'pros and cons' of the device. These insights were then fed into the development of a 'GG Kite model'. The 'GG' component of this term reflects the ability of the IVDR device to measure latitudinal (left and right) and longitudinal (forwards and backwards) g-force. The term 'kite' is used to describe the shape of the of the g-force parameters. The kite shape has a long 'tail' which denotes that acceleration (resulting in rearward g-force) in a straight line is deemed acceptable in certain conditions. In contrast, the level of g-force considered acceptable under braking is lower, resulting in a shorter distance to the 'boundary' level of g-force, hence the kite shape. Left and right g-force parameters are equal with the kite shape reflecting the idea that braking while cornering is not advisable, whereas accelerating *through* a corner is a valid driving practice. This model therefore dictated what were considered to be breaches of acceptable driving parameters. The final 'WST IVDR Model' was then installed in the researchers' vehicle for a period of testing. This led to some modifications before the final parameters were agreed after final calibration of the device by driving experts from the Bristol Group of the Institute of Advanced Motorists.

The WST IVDR unit was a cigarette-sized box that was installed in a participants' car. Contained within the box is a 2-axis accelerometer that measures g-forces acting on the box (see discussion of the 'GG Kite Model' above). The accelerometer in this case was used to detect excessive braking or swerving manoeuvres – in other words, unwise (from an advanced driving

perspective) – driving behaviour. This reflects the goal of the intervention which was to change the driving practices of the young drivers (Group 'A'). Such manoeuvres were categorised according to a pre-defined accelerometer algorithm. Participants were given real time feedback in the form of a dashboard mounted LED output. The default state of the output was green, with 'slight' breaches resulting in an amber display, and 'severe' breaches resulting in a red output. Participants were not given access to an online summary of their scores.

A 'mobile-to-mobile' SIM card transferred data from the vehicle to a server (managed by project partners AMC) that held the real-time data until extraction was initiated (see subsequent discussions on 'data structure' and 'data analysis' for more information on this process). The data output of this process was an 'events per hour of driving' (EPHOD) calculation for both red and amber events. The box recorded ignition 'on' and 'off' as a way of measuring the total minutes journey time. The number of miles travelled during each 'journey' was not recorded as it was beyond the capabilities of the system. Also included in the data transfer was a Global Positioning System (GPS) pin that marked a geographical map of where the event took place. GPS data was not analysed as part of the research project although future studies might consider further 'mining' of this data in order to note the location of such events. The IVDR box did not collect data on the speed travelled by the vehicle. Although it is technically possible to do it (as seen on most Satellite Navigation systems retailed by, for example, Road Angel), this would require the GPS to be combined with speed data. The only way to achieve

this would have been to subscribe to a database provided by the Highways Agency. This was deemed to be too costly and surplus to requirements for the study.

8.1.2 IVDR Data Structure

As part of the fieldwork the researcher maintained detailed records of each intervention activity (e.g., coaching and drive checks), its corresponding date, and a unique driver number. This quantitative data was collated by the researcher in an Excel spreadsheet (called the extract pro forma), resulting in nine consecutive intervention activities defined as Event 1 through to Event 9:

- Event 1 – Blind Profile Start;
- Event 2 - Drive check '*In*';
- Event 3 – Coaching 1;
- Event 4 – Coaching 2;
- Event 5 – Coaching 3;
- Event 6 – Coaching 4;
- Event 7 – Coaching 5;
- Event 8 – Coaching 6; and
- Event 9 – Drive check '*Out*'.

A bespoke extraction technique was designed by project partners Alpha Micro Systems to extract all IVDR data. This involved extracting the number of red and amber events from the database. Dr Paul White of the University of the

West of England then undertook analysis of the data to determine whether the events per hour rate had improved or worsened across this time series.

An additional analysis of live IDVR unit took place seven months after the conclusion of coaching. This same process was used to gather and analyse 'follow-up' data.

8.1.3 Blind Profiling

In order to assess whether behaviour change took place, a baseline of driver behaviour was sought via a blind trial. The idea of a blind profile period was derived from conversations with Staffordshire Council who used the same approach during a young driver project (cf. Fylan and Fylan, 2009). The time between installation of the IVDR unit and the installation of the LED loom in the vehicle represented the blind period. On average this technique resulted in the driver being 'recorded' without any form of electronic (in the form of LED feedback) or verbal feedback (in the form of advanced driver coaching) for between one and two months. This period was deemed appropriate to gain the necessary baseline driving style. The length of the blind profile period was dependent on the availability of the participant to attend a session (either karting or coaching) where participants were given the LED feedback loom to allow them to view the parameters on which they were judged. This signalled the end of blind period; the date was noted by the researcher for inclusion in the extract pro forma (see above). This process resulted in a blind profile score that became the benchmark on which improvements (or otherwise) in Group 'A' were compared over the course of intervention activities.

It is worth noting a decision was taken not to give participants access to the online data panel showing IVDR scores. In the case of the Staffordshire trial (cf. Fylan and Fylan, 2009), parents and young drivers were given access to this data. This decision was taken based on the opinions of the team leaders who felt there would have been minimal interest on the part of the cohort. It would have also required additional resource to set up individual panels and manage unique usernames and passwords for each cohort member. The data could, however, be accessed by the project manager and the researcher. IVDR scores were however presented to participants in league table form during karting events.

It is important to note that the EPHOD (Events per Hour of Driving) figure was driver specific as the box behaved differently according to the dynamics of a vehicle. For example, a vehicle with firm suspension behaved in a different way (dynamically speaking) to a vehicle with softer suspension. This could have been overcome by setting vehicle-specific parameters through plugging in a laptop into the IVDR unit. However, this was considered too resource intensive. Therefore event rates could not necessarily be directly compared between vehicles but comparisons could be made across the cohort according to per vehicle improvements.

8.1.4 IVDR Data Analysis

Dr. Paul White of the University of the West of England undertook the data analysis of IVDR data (which included the follow-up data). The researcher

structured the data to account for the longitudinal nature of the outputs in order to allow analysis to take place.

After the nine consecutive time intervals were defined, a spreadsheet containing each data input (e.g., dates of blind profiles, coaching etc.) was provided to Dr. Paul White. The following data analysis description is taken directly from a journal article published in *Accident Analysis & Prevention* (Tapp et al., 2013). This describes the data analysis undertaken in some detail:

“An ‘event window’ was defined as the elapsed time between an event and the subsequent event. The IVDR device measured total driving time for each window, and recorded all amber and red driving incidents therein. Hence, within each event window there is a record of the total number of amber incidents and number of red incidents along with drive duration. The amber incident rate is the number of amber incidents divided by drive duration. The red incident rate is the number of red incidents divided by the drive duration.

Amber/red incident rates for two event intervals indicate whether a participant has improved or worsened when viewed longitudinally (essentially producing binary data) but cannot be used to directly compare two different drivers driving different cars. For this reason the relative amber drive rate calculated for each driver-car combination is defined as:

$$\frac{\textit{Amber rate}[\textit{Event } j]}{\textit{Amber rate}[\textit{Event } 1]}$$

with a similar definition for the relative red rate. This index is essentially a performance measure relative to baseline and is similar to a percentage change. In the absence of an intervention effect the expected value of the relative incident rate would be unity” (Tapp et al., 2013, pp. 8 - 9).

It is important to note that the data is subject to a number of processing procedures and assumptions, listed below (Tapp et al., 2011):

1. Journeys of less than one minute were removed from the processed data set. These journeys represented zero movement where the car engine was turned on but the car was stationary; or very short movement – a few yards – for example to move cars from a garage to the side of the road; or short movements possibly based on groups ‘hanging out’.
2. Events that were recorded while the vehicle was stationary where the engine was turned on were removed. Removing this data avoided the problem of non-movement skewing the red events/hour and yellow events/hour stats.
3. Technological limitations of the installed IVDRs meant that distances travelled were not calculated. Hence statistics are based on events/hour driven.

4. The GG model has a long tail to account for the IAM's judgment that acceleration (in a straight line) is less of a problem than severe braking. Lateral acceleration (harsh braking) was however seen as an undesirable driving practice.

8.1.5 Control Group

The statistical power and reliability of the IVDR data stream could have been improved through the use of a control group who were not involved in any way with the intervention. However, the nature of tight knit communities such as Lawrence Weston meant that control and test groups would inevitably interact leading to 'contamination' problems. An alternative could have been to create a control group from a similar cohort in a different geographical area. To do so would have required a considerable level of resource and possibly a separate management structure. This was considered beyond the resource possibilities of the project. In addition to this factor, the level of trust required to install an IVDR box in a non-participant was considered unreasonable given the amount of management time needed to undertake these installations.

However, a handful of participants enrolled on the intervention but later disengaged (or were asked to leave the intervention for various behavioural reasons). These individuals agreed to continual measurement of their driving behaviour for the duration of the intervention, which functioned as a part-control group. These boxes were used as a control group in the sense that comparisons could be made between 'part' and 'full' engagement levels. Data of this kind was available from 13 drivers.

8.1.6 IVDR Confidentiality

Each time a red or amber event was triggered, a GPS 'pin' was placed on a virtual map (e.g., Google Maps) showing the location of the breach. This information was considered highly sensitive by the project management team as it clearly showed some of the social patterns of the driving cohort. An imaginary wall was designed to protect participant's identity. Each IVDR unit was given a numerical value corresponding to the SMEI number of the SIM card installed in the unit. The only member of the steering group who could cross-reference SMEI numbers and participants' names was the project manager. This was an important part of building trust between the participants and the project as participants' trusted a known insider in the area to protect their identity.

8.1.7 Survey Instrument

A literature review of the most widely used driver behaviour measures was undertaken by Alan Tapp, Mike Baugh (project directors) and the researcher. This process uncovered two widely used survey instruments: the Driver Attitudes Survey (DAS (Parker et al., 1995)) and the Driver Behaviour Questionnaire (DBQ (Parker et al., 1996)). After a review of the constructs contained in both measures (totalling 40 statements), an instrument was designed combining the most salient questions for: a) the objectives of the intervention; b) the literacy level of the target audience; and c) the attention span of the target audience. The participants of the project (Group A) were not involved in this aspect of the research. Members of Group B played a strong role in selecting statements and a consensus was achieved based on

the judgment of the steering group. It was decided that 19 statements were suitable for the target audience in question (see Appendix A). It was hoped that by using statements from an existing survey instrument that results could be compared to other published intervention outcomes.

Survey responses were collected pre- and post- intervention at various project activities by the project manager and the researcher. Responses were entered into an Excel spreadsheet for analysis to be undertaken by Dr Paul White.

8.1.8 Survey Instrument Data Structure

The survey instrument was divided into two sections: the first (Section A) explored attitudes towards close following, overtaking, speeding and style of driving. These statements attempted to reflect the various goals of the WST intervention activities. Respondents were asked, “To what extent do you agree with each of the following statements?” The question was followed by five options, “I strongly disagree”, “I disagree”, “I neither agree nor disagree”, “I agree” and “I strongly agree”. The merged statements are listed below.

Section A:

1. Some people can drive safety even though they only leave a small gap behind the vehicle in front.
2. I get wound up if someone over takes me.
3. Even overtaking in a slightly risky situation makes you less safe as a driver.

4. Sometimes I drive aggressively for the fun of it.
5. Sometimes you have to drive in excess of the speed limit in order to keep up with the flow of traffic.
6. I think I am an above average driver.
7. I think it is okay to overtake in risky circumstances as long as you drive in your own capabilities.
8. My style of driving changes depending on who is in my car.
9. It annoys me when other drivers make mistakes.
10. On the whole people aren't aware of the dangers involved in close following.

The second section (Section B) explored a range of driving behaviours such as braking, racing, driving techniques. Each of the driving behaviours was accompanied by the question, "For each driving behaviour described in the table below, please indicate how often the behaviour happened to you in the last three months". The options presented were "never", "hardly ever", "occasionally", "quite often", "frequently", and "nearly all the time". The statements are listed below.

Section B:

11. Drive especially close to the car in front as a signal to the driver to go faster or get out of the way.
12. Realise that you have no clear recollection of the road along which you have just been travelling.

13. Cross a junction knowing that the traffic lights have already turned against you.
14. On turning left, nearly hit a cyclist who has come up on your inside.
15. Underestimate the speed of an oncoming vehicle when overtaking.
16. Fail to check your rear view mirror before pulling out, changing lanes, etc.
17. Get involved in unofficial “races” with other drivers.
18. Get into the wrong lane when approaching a roundabout or junction.
19. Brake too quickly on a slippery road, or steer the wrong way into a skid.

Respondents were asked to complete surveys at a range of intervention activities for convenience (i.e., karting or coaching sessions or times where IVDR devices were installed). This approach was necessary due to the difficulty of meeting participants outside of intervention activities. As a result of this, surveys could have been completed, for example, on the bonnet of the participants' vehicle or in-car depending on the situation that presented itself.

8.1.9 Survey Instrument Data Analysis

Dr. Paul White undertook the analysis of the survey instrument. Responses to the survey instrument were analysed using the Wilcoxon test and repeated using the Sign test. It is important to note that the researcher did not influence the data analysis techniques undertaken for the survey instrument.

8.1.10 Drive checks

In order to assess any change in the practical skills of participants, a driver score sheet or *drive check* sheet was developed (see Appendix B). Each of the eleven aspects of the WST driver syllabus were scored 1 (excellent) – 5 (poor). As with survey responses, drive check scores were collected from IAM observers by the researcher and the project manager at coaching events. These scores were entered in the pre- post- Excel spreadsheet.

8.1.11 Drive check Data Structure

In line with the longitudinal ambitions of the research process, initial drive checks commenced at the end of June 2010 with exit drive checks conducted at the end of April 2011. This demonstrates the longitudinal nature of the intervention and the length of time members of Group 'A' and Group 'B' were involved in WST.

Group 'A' members were reimbursed £5 for each observed drive completed to overcome the financial barrier for non-participation in this aspect of data collection. The £5 'fuel allowance' (provided by the SRUSM budget) was a small but useful 'carrot' in cases of apathy or indifference.

The drive check score sheet was designed by Martin Evans and Tony Gilbert of the Bristol IAM group. The score sheet was closely related to the WST syllabus content which, in essence, was a stripped down version of the IAM's Skill for Life course. The quality of the score sheet benefited from two familiarisation drives undertaken by Evans and Gilbert with the team leaders

of the intervention. Evans is an experienced ADI (Approved Driving Instructor), Gilbert an active member of the Advanced Driving network. The drive check was in a similar format to score sheets used by observers in their duties as volunteer Advanced Driver Observers for the IAM.

The coaching syllabus was designed to ensure emphasis was placed on observation and hazard perception skills prior to more dynamic aspects such as vehicle positioning and cornering. This ensured that drivers had developed the necessary level of situational awareness before moving onto advanced techniques which could put observers in situations where speeds might be higher and roads more technical (such as long sweeping corners or sharp hair-pin bends). Each of the eleven aspects of the WST syllabus were scored 1 (excellent) – 5 (poor) and were as follows:

- **Vehicle knowledge** (engine size and type, front wheel drive/rear wheel drive?, anti-lock brakes, electronic stability control, driving position, petrol oil water damage electrics rubber (POWER), belt/head restraint position);
- **Observation** (ahead, behind, mirrors (3), cross views, scanning);
- **Anticipation** (can't see, can see, expect to happen, blind spots, dead ground, worst that can happen);
- **Planning** (plan for worst, arrive at hazards as they clear, early position, hold back);
- **Vehicle sympathy** (smooth progressive inputs, braking feel - firm - feather, rev-Matching, rev-range);

- **Positioning** (safety bubble, safety, vision, stability, tyres-on-tarmac, following position 2 secs +, left hand/right hand bends);
- **Cornering** (stop in distance you can see to be clear, limit point, speed, position, gear before corner, slow in fast out, add power in bend);
- **Overtaking** (when and when not to, hazards, view around vehicle ahead, position, don't surprise, place to 'land', half the distance, don't commit);
- **Mind-Set** (restraint/progress balance, keep cool, courteous/empathy, learn from mistakes, progress in built-up areas);
- **Driving Rules** (Highway Code, dual-carriageway limit, hatched areas, road signs); and
- **Motorway Driving** (joining/leaving, extended vision, space, others blind spots, concentration).

In addition to driver scores, dates of assessments were collected which were fed into the analysis tool as events. After completion of the assessment, scores were collected into an Excel spreadsheet in preparation for analysis.

8.1.12 Drive check Test Route

A test route was designed by members of the Bristol IAM based on their extensive knowledge of the local road network and experience of teaching members of the public who enrol on the SFL course. This route encompassed a range of road types and speeds in order to provide the basis for pre- and post- driver assessment. The route also allowed observers to develop an expanding set of 'hints and tips' that demonstrated the mind-set of an advanced driver on a given road type.

8.1.13 Drive check Data Analysis

Each of the eleven aspects of the WST syllabus were scored 1 = excellent and 5 = poor. The researcher compiled this data into a pre- and post- table for those who completed both assessments scores. This data was linked to assessment date, unique driver ID and observer name. In terms of data analysis, an averaging approach was used to compare per person scores and total / average scores for Group A. Where possible, pre and post drive checks were conducted by the same observer to reduce bias. This raised some practical limitations due to the availability of observers on any given coaching day.

The next section outlines the qualitative fieldwork undertaken during the research process. Following on from discussions in the literature review, qualitative fieldwork is summarised using headings that best describe the point at which the research took place and the goals of the research activity.

8.2.0 Qualitative Research Methods

Qualitative data was gathered using a range of qualitative techniques throughout the stages of the research (i.e., one-to-one interviews, focus groups, telephone interviews, in-car interviews and observations, which were recorded as field notes). Where appropriate, and subject to the approval of the respondent, these activities were recorded and later transcribed. Transcripts were labelled according to the point at which they took place in relation to the progress of the project (i.e., exploratory, implementation, evaluation). Qualitative data was used as a triangulation tool to support the

quantitative component of the research design (see section 10.5.0 for a discussion of data triangulation).

(Gephardt, 2004, p. 455) states, “Qualitative research starts from and returns to words, talk, and texts as meaningful representations of concepts”. Relating this statement to how qualitative research can be used, Pratt (2009, p. 856) states, “Qualitative research is great for “how” questions – rather than “how many”; for understanding the world from perspective of those studied (i.e., informants); and for examining and articulating process”. With this in mind, the qualitative element of the research sought to understand *how* behaviour change was influenced by certain theoretical constructs (i.e., social capital, cultural capital, social marketing and CoPs). Qualitative research was used in this case for two purposes; 1) to gather evidence to support quantitative observations in relation to behaviour change and, 2) to gather evidence to explain how the theoretical constructs were relevant to this change. By including both groups within the qualitative sample frame, different perspectives could be garnered from the two groups under investigation.

The goal of the research was to elaborate on existing theory rather than build new theory (Pratt, 2009). The concepts considered during the research were well established in the literature but had received minimal attention in a social marketing context. Qualitative research was therefore used to provide evidence that these concepts could be credibly employed within the context of this research. The goal was not to provide a detailed story of the *evolution* of these concepts over time, but sought to provide a snapshot of how concepts

were relevant at different points in the research process, which in turn fed into the development of a theoretical framework. Given this objective, the use of qualitative methods throughout the different stages of the intervention process was appropriate. However, such was the variety of data gathering opportunities and the breadth of topics discussed during these situations, quantifying this data would have been problematic. Doing so may have caused the “worst of both worlds”; not enough of a sample frame for a statistical test, and too anaemic a representation to adequately represent rich data (Pratt, 2008). The way in which data is presented reflects this goal: qualitative data outputs are paired with specific discussions of theoretical concepts with raw data from transcribed interviews presented alongside interpretations. The qualitative research undertaken is now discussed using a chronological approach.

8.2.1 Exploratory Research

The first phase of qualitative enquiry was defined as exploratory research.

The aims of the exploratory phase were:

- (1) To initiate contact with a member of the local community who could assist with recruitment of research subjects for this phase.
- (2) To meet young drivers in the area and to understand the types of driving behaviour that occurred in the area (e.g., whether there were unofficial ‘clubs’, regular ‘meets’, groups of drivers, illegal driving, preferences of types of cars).

- (3) To understand the motivations (e.g., social, rebellion, recklessness behind respondents' driving behaviour.
- (4) To understand what types of interventions might work based on tentative discussions with the respondents.
- (5) To develop a tentative segmentation tool to describe drivers (illegal and legal) between the ages of 17 – 25.

Contact was successfully initiated with a local young engagement worker whose details were provided to the researcher by a member of the social services department from Bristol City Council. This individual would later become the project manager for the WST project. This individual was briefed by the researcher on the scope of the research, its aims and objectives prior to the commencement of the research.

Exploratory research (ER1 – ER15) activities involved 10 interviews with 9 males and 1 female. It also involved interviews with 5 local stakeholders including:

- (1) A local beat officer responsible for Lawrence Weston and Avonmouth.
- (2) The parent of a young male driver involved in a serious car accident on *Long Cross* (the road which dissects the area) in Lawrence Weston.
- (3) A 'lollipop lady' who worked on *Long Cross*.
- (4) A locally based youth worker.
- (5) A community support officer working out of Lawrence Weston Youth Club.

Of the five male drivers who held a full drivers license, all five had at least 3 penalty points on their license. Of those male drivers interviewed, three had driving-related convictions. Four of the male participants would later become team leaders for the project and would participate fully on the intervention. The female interviewee had a license and no penalty points.

A £10 incentive was paid to each participant on completion of the interview (regardless of the length of time the interview took). A £10 (per respondent) recruitment fee was also paid to the local contact. Interviews were conducted in a local youth centre in the area (Lawrence Weston Youth Centre).

A moderator's guide was developed to guide interviews. Dictaphone recordings of interviews were sent for transcription. After transcripts had been collated, the results and implications of this phase were disseminated to the steering group members (see ad-hoc research activities section).

The *data generated* from this phase was fifteen interview transcripts which were labelled as '*Exploratory Research (ER1 – ER15)*'. A segmentation tool was also developed. The descriptions from this exercise can be found in the findings and results chapter.

8.2.2 Co-creation / Pre-testing

The next phase of qualitative enquiry involved a period of pre-testing with four team leaders who had also taken part in the exploratory research phase. Four co-creation sessions were organised and attended by the researcher. The

data generated from these sessions were four transcripts which were labelled as follows:

- *Co-creation Session 1* – “Advanced Driving 1” (AD1).
- *Co-creation Session 2* – “Advanced Driving 2” (AD2).
- *Co-creation Session 3* – “In Vehicle Data Recording” (IVDR1).
- *Co-creation Session 4* – “Leaflet Development Session” (LDS).

Sessions 1, 2 and 3 (AD1, AD2 and IVDR1) were held at a karting track near the target community for convenience. Participants were rewarded with a session of karting after the session had concluded. Session 4 was held at Lawrence Weston Youth Club. The objectives of the four co-creation sessions are detailed below.

Co-creation Session 1 – “Advanced Driving 1” (AD1)

The objectives of ‘AD1’ were to:

- Provide an overview of advanced driving techniques and practices for the benefit of team leaders and other steering group members in attendance.
- Identify aspects of the participant’s driving that could be improved (to encourage self-reflection of their own driving style).
- Identify aspects of typical young male driving practices that would inform the development of the WST driving syllabus.
- Introduce *Martin Evans* (from the IAM) to the team leaders.

Co-creation Session 2 – “Advanced Driving 2” (AD2)

The objectives of ‘AD2’ were to:

- Continue previously initiated discussions about driving styles and techniques.
- To further narrow the WST syllabus into definable sections and sessions.
- To introduce a second IAM observer (Tony Gilbert) to the team leaders.
- To expose the team leaders to different observers (and thus different perspectives) from the IAM.

Co-creation Session 3 – “In Vehicle Data Recording” (IVDR1)

The objectives of ‘IVDR1’ were to:

- ‘Uncover’ the technical aspects of the IVDR device so the team leaders understood how this aspect of the intervention would work.
- Encourage team leaders to identify potential barriers (social, practical, technical etc.) which might hinder the box being installed in other - not yet recruited - participant’s vehicles.
- Explain how, when and what data would be collected from the IVDR unit.
- Demonstrate the technology in a live setting.
- Introduce Alastair Fraiser (from Alpha Micro Components) to the team leaders.

Co-creation Session 4 – “Leaflet Development Session” (LDS)

The objectives of ‘LDS’ were to:

- Co-create a promotional leaflet to attract other participants.
- Introduce the team leaders to a graphic designer who would incorporate their ideas into a leaflet (see Appendix C).
- Co-ordinate the attendance of a designer to test prototypes ideas.
- To establish a *look and feel* for the promotion aspect of WST.

The LDS session was held at Lawrence Weston Youth Centre. Participants were not rewarded specifically for this element of the intervention design. Involving the team leaders in the intervention design was one of the key aims of the intervention as a whole and served as a useful qualitative data collection tool.

Following the exploratory and co-creation phases, a period of intervention design took place, which primarily involved the steering group members. However, ideas were communicated to the team leaders via the local contact, who at this point had been appointed the project manager for the intervention. The next phase of qualitative data generation was during the implementation phase of the intervention. This data is outlined for both Groups 'A' and 'B'.

8.2.3 Implementation Phase – Group 'A' and 'B'

During this phase, the main opportunities for data collection were during karting and coaching activities. In total the researcher attended 20 karting events and 15 coaching events.

One-to-one *interviews* were conducted in-car with project participants and observers during these occasions. These were often conducted in an ad-hoc manner as and when the opportunity presented itself. The researcher needed to balance the usefulness of recorded interviews with the need for members of both groups cohort to feel comfortable at these events and to make progress with the coaching activities of the intervention. Similarly, karting events were seen as an incentive for participants, so a pragmatic approach was taken to data gathering at these events.

During the implementation phase the intervention activities (e.g., karting and coaching events) functioned as opportunities for *participant observations* to be undertaken (both groups). The data resulting from these activities were a series of field notes.

After the implementation of the intervention phase had been completed (participants had completed the six sessions and final drive check), a process of qualitative evaluation was undertaken. These activities are divided by Group A and B below.

8.2.4 Evaluation Phase – Group ‘A’

Two exit *focus groups* were conducted with Group ‘A’ participants during this phase. One with 6 participants in Lawrence Weston Youth Club; a second with 6 participants at a different venue near Lawrence Weston.

The objectives of ‘EFG1/EFG2’ were to:

- Obtain feedback in relation to the 'pros and cons' of participating on the intervention.
- Ask participants to reflect on the changes to their own driving style.
- Discuss participants' perceptions of members of Group 'B' and the activities of the IAM.
- Discuss reasons why young male drivers might not undertake post L-Test training with the IAM (or similar organisations).
- Discuss any changes on the respondent's driving style.

Some members of both groups opted to stay almost silent throughout, most likely deterred by the presence of a Dictaphone. The outcome of these focus groups were two interview transcripts labelled as 'Exit Focus Group 1 (EFG1)' and 'Exit Focus Group 2 (EFG2)'. A similar process was undertaken for Group 'B'.

Although these focus groups signalled the end of the official qualitative phase for Group 'A', a paintballing day was organised as a way of thanking Group 'A' participants for their involvement. This event functioned as an occasion where certificates of participation were presented. The researcher attended and participated in the paintballing activity, and attended a post-paintballing social at a local pub. Data related to these events were recorded as field notes.

8.2.5 Evaluation Phase – Group ‘B’

Ten *telephone interviews* with IAM members who had taken part in coaching activities were undertaken, including two IAM members who were also part of the steering group.

The objectives of ‘IAMEXT’ were to:

- Discuss the experiences of the observers over the course of their involvement.
- Discuss the main social differences between the WST cohort and *typical* IAM participants.
- Understand the motivations and character of a *typical* observer.
- Understand more about the role of the observer.
- Understand more about the nature of being involved with the IAM as a volunteer and how this fits into the everyday lives of the observers.
- To obtain feedback from observers on how the intervention could have been improved.

The conclusion of Group B exit interviews signalled the end of the qualitative evaluation phase. The next section details a further component of participant observation of Group B, that of *advanced driving participation*. This process ran in parallel to the activities outlined above.

8.3.0 Advanced Driving Participation

As a way of gaining a first hand understanding of the practices taught by the IAM (Group ‘B’), the researcher participated in advanced driver training. This involved completion of the Advanced Driving Test (*Skill for Life*) and the

Further Advanced Driving Test. This required the researcher to register as an Associate Member of the Bristol Group of Advanced Motorists. Membership benefits included a subscription to The Link magazine (the Bristol Group's newsletter) and Advanced Driving (the magazine of the Institute of Advanced Motorists). As part of this membership the researcher also attended a day of skid-pan training. Specific activities in relation to advanced driver training are outlined below:

1) Skill for Life (SFL)

Completion of the SFL course entailed attending three classroom sessions of approximately 2 ½ hours each. Following completion of the theory component of the course, nine 'practical' observed drives were undertaken of approximately 1 ½ hours each. This culminated in an assessed drive with an ex-class 1 police driver, which lasted approximately 2 hours.

2) Further Advanced Driving (FAD)

Completion of the FAD course followed a similar process to the SFL course, albeit at a more in-depth level. The course learnt heavily on the principles and practices of the police driver handbook, known as Roadcraft. Three theory sessions lasted approximately 2 ½ hours each and followed a similar format to the SFL course. The assessment component of the FAD course involved a multiple choice exam (2 hours) which required an in-depth knowledge of the Highway Code and Roadcraft. The practical assessment involved the completion of six observed drives of approximately 2 hours each. It was expected that an advanced standard of driving could be maintained

throughout these drives. These drives were overseen by an IAM qualified senior observer. Finally, a different senior observer then certified that the FAD standard of driving had been achieved.

Completion of these qualifications gave first hand experience of becoming an *advanced driver*. It entailed a commitment to weekend and evening activities that enabled the required advanced driving standard to be met. This was important for a number of reasons: (1) the researcher had an informational advantage over the cohort (Group 'A'); (2) the researcher was able to communicate with IAM observers knowing the techniques and practices (such as IPSSGA, for example); and (3) the researcher was able to communicate with both groups using this knowledge.

The researcher also attended 3 SFL evening sessions as a chaperone for WST participants (2 ½ hours each). Some WST participants completed the WST syllabus and were able to enrol onto the IAM's SFL course. The researcher attended these sessions as a way of observing Group 'A' within the traditional classroom environment of Group 'B'. Field notes were taken at these events.

A range of materials that are associated with advanced driver training are considered during the findings and results chapter as a means to articulating some of the advanced driving practices. The IAM's "How to be a better driver" text, for example, is required reading for anyone wishing to pass the assessment (as well as the Highway Code and Roadcraft). Material of this kind includes but is not limited to:

1. How to be a Better Driving – Institute of Advanced Motorists.
2. Roadcraft – The Police Drivers Instructional Handbook.
3. Know your Traffic Signs.
4. The Highway Code.

Other data gathered included information relating to emails, DVDs, advanced driving forums, conversations with advanced and non-advanced drivers. Data in relation to participation in this activity was recorded in the form of field notes.

The next section outlines the objectives of two *promotional videos* that were produced during the WST intervention.

8.4.0 Promotional Video Design

The first video designed was a *recruitment video*, the second was a post-intervention promotional tool. No data was gathered during the production of these videos per se, but the researcher played a key role in their design and production (e.g., writing the creative briefs, attending footage gathering sessions).

The objectives of 'PV1' (see WST, 2009) were to:

- Encourage other young drivers in the area to volunteer to participate.
- Show the first wave of recruits in a video to reassure others the intervention was safe.
- Continue the branding that was initiated by the promotional leaflet.

The objectives of 'PV2' (see WST, 2012) were to:

- Create a video that outlined the main components of the intervention.
- Visually demonstrate the target audience who took part in the project.
- Thank the numerous people who contributed to the interventions' success.

Having discussed the qualitative components of the research, the next section details how data was triangulated during the study.

8.5.0 Data Triangulation

Denzin (1984) identified four types of triangulation: data source triangulation, involving homogeneity of data across different research contexts; investigator triangulation, when several researchers examine the same phenomenon; theory triangulation, when researchers with different viewpoints interpret to the same data results; and methodological triangulation, when one approach is followed and/or complemented by another, to increase confidence in the interpretation. The type of triangulation approach used in the study involved methodological triangulation.

A methodological triangulation research approach was considered appropriate given the range of research opportunities available to the researcher. The use of triangulated research methods reduced the emphasis on one single research technique. It was therefore anticipated that a range of data methods would not have shared the same biases. Data triangulation is also a research approach that is appropriate during mixed methods research. In applying this

approach the research avoided methodological individualism but raised questions about overlapping epistemological and ontological traditions and perspectives. The rationale was that, neither qualitative nor quantitative research methods were sufficient in isolation to develop a full and holistic understanding of the research context under investigation.

Specifically, the research design was conducive to three complementary forms of data collection: surveys, in-depth interviews and IVDRs. These were used as a way to triangulate responses and monitor behaviour change on an ongoing basis using different methods. It was anticipated that the strengths of each method employed would overlap, providing a fertile ground on which to base assumptions about the nature of reality observed and the deductions that were made.

Elements of the triangulation approach relied on quantitative data collection methods. The use of IVDR data, surveys and drive checks enabled the researcher to obtain data about practices, views or opinions at a particular point in time. The IVDR unit provides quantifiable measurements of driving practices over a long period of time. In the case of the surveys, it allowed a range of variables to be explored using one instrument (for example, attitudes to speeding, drink driving or close following). Similarly, the drive check measure allowed driving practices to be quantified and changes over time to be observed.

8.6.0 Qualitative Analysis Approach

Qualitative data in the form of transcripts and field notes were subjected to a form of textual analysis. All of the transcripts that were available from these activities were considered within the sample frame. This included data from the exploratory research phase through to attendance at the final paintballing activity. Video outputs were also coded as part of this process which is specifically discussed below. Qualitative data was used to support data gathered by quantitative methods, therefore the depth of analysis undertaken reflected the division of time allocation between these methods. According to Bernard and Ryan (2010, p. 54), analysing text involves five complex tasks: “(1) discovering themes and subthemes; (2) describing the core and peripheral elements of themes; (3) building hierarchies of themes or codebooks; (4) applying themes – that is, attaching them to chunks of actual text; and (5) linking themes into theoretical models”.

With the above guidance in mind, the analysis technique involved the identification and colour coding of themes that related to the research questions. Poignant statements and narratives were highlighted that were considered relevant to the theoretical areas of interest and the research propositions. Examples of these statements were selected for use as supporting evidence in the findings and results chapter.

Two videos (PV1 and PV2) are used in the findings and results chapter to provide a visual representation of the themes discussed. This allowed media to be used alongside more conventional written interpretation (Dicks et al.,

2006). The videos have considerable value as they show subtle aspects of the intervention that can be difficult to articulate. This could include, for example, 2 – 3 seconds of footage that more accurately shows a particular phenomenon. For example, discussions related to body language, car choice and clothing are more easily demonstrated through the use of imagery or footage allowing the viewer to witness first hand the points being made. The analysis technique used for PV1 / PV2 involved highlighting relevant passages of footage from the videos (i.e., 0.13 – 0.15 seconds) to demonstrate a given theme (see WST, 2009 and WST, 2012 for links to the videos).

8.7.0 Ethics

From a general ethical stance, Oliver (2010, p. 22) states, “the kinds of ethical issues raised by the research process involving human beings are no different from the ethical issues by any interactive situation with human beings. All such situations demand that other human beings should be treated with respect, should not be harmed in any way, and should be fully informed about what is being done with them”. These are useful guiding principles that are reflected by Clifford (2000, pp. 143-145) who earlier emphasised the importance of four guidelines of ethical qualitative research: “(1) Informed consent: The research subjects have the right to be informed about the nature and consequences of experiments in which they are involved. The participant must also agree voluntarily to participate in the experiment based on full and open information. (2) Deception: The research should be designed without deception and with moral principles. (3) Privacy and confidentiality:

Participants' identities should be protected as well as research locations to safeguard against unwanted exposure. (4) Accuracy: The accuracy of the data is a cardinal principle. Fabrication, omissions, fraudulent materials, omissions and contrivances are both unethical and non-scientific”.

Clifford's (2000) principles are relevant to the present study in the following ways. In terms of the specific components of the WST intervention, the three co-creation sessions (AD1, AD2, IVDR1) functioned as a way to outline the goals and components of the intervention to participants without deception. Although these sessions only included team leaders, other participants were briefed in a similar way upon joining the intervention and every effort was made by the project manager and the researcher on the ground to answer any questions or concerns that participants might have. The project manager played a pivotal role in translating this information to ensure transparency. The use of experts (Group B), who had experience of delivering driver coaching (albeit with a different target group), meant the potential for harm, in terms of giving feedback in a sensitive way, reduced the potential for discomfort during coaching sessions. In terms of privacy and confidentiality, the main consideration was the use of IVDR as a research tool. Such was the high-risk nature of the target audience (and the possibility of them engaging in vehicle-related anti-social or illegal behaviour) great emphasis was placed on maintaining the privacy and protecting the identities of participants. IVDR data was anonymised in such a way that only the project manager and the researcher could identify *individual* data.

In terms of advanced driving participation, the variety and range of situations that this entailed meant it would have been challenging to gain ethical approval from each individual to whom the researcher came into contact. For example, attendance on the SFL course placed the researcher in classroom environments with other members of the public who had enrolled on the course. Some insights were gained from observing interactions during such sessions, but specific ethical approval was not always obtained from those observed in every situation.

Ethical considerations also extend to the protection of the researcher during data gathering activities. The ethics procedure taken (discussed in more detail below) relied heavily upon the project manager agreeing to chaperone the researcher when in the target community. A pragmatic approach was taken to the project manager sitting in on interviews / focus groups according to the respondent/s in question. This was particularly important during the exploratory phase which included a number of respondents who had a history of aggressive and unpredictable behaviour, and as such it was agreed the project manager would be present in these cases according to his judgement. This also ensured the well-being of the respondent by avoiding putting them in potentially uncomfortable situations.

Furthermore, the research needed to be ethically sensitive to respondents during interviews and focus group as some participants had been involved (or knew someone involved) in a serious road traffic accident. In the event of this

scenario, it was the researcher's responsibility to assess whether the interview should continue along this theme.

Two separate but overlapping ethics procedures were undertaken, the first through the University of the West of England's ethics committee, the second through a comparable committee at Cardiff University. The first ensured that broad ethical procedures were followed in relation to the SRUSM investigation as a whole. The second specifically related to the activities of the researcher as a participant and observer during the various stages of the exploratory research, intervention design, implementation, evaluation and follow-up stages of the WST intervention. Material submitted to Cardiff University's Ethics Committee can be found in Appendix D, E, F and G.

8.8.0 Reflexivity about the Research Process

The etymological root of the word reflexive means to 'to bend back upon oneself', which in research terms can be translated as thoughtful, self-aware analysis of the intersubjective dynamics between researcher and the researched (Finlay and Gough, 2008). The concept assumes that in carrying out research it is impossible to remain 'outside' the subject matter, the presence of the researcher, in whatever form, will have some effect. Reflexivity therefore entails the researcher being aware of this effect on the process and outcomes of research based on the premise that "knowledge cannot be separated from the knower" (Steedman, 1991, p. 53). For Alvesson and Sköldberg (2000, p. 6), reflexivity is the "interpretation of interpretation" - another layer of analysis after data have been interpreted. Specific limitations

of the research tools are discussed within the research limitations section (p. 286) but other factors are discussed hence.

At a broad level the use of an action research approach, in a context which involved an attempt to encourage behaviour change, was highly suitable. Similarly a pragmatic research orientation was useful in a research setting that was relatively unpredictable in terms of the target audience and the varied opportunities for data collection.

The shape of the final intervention reflected an ethos that could be described as 'pro-driving' and 'pro-car'. The researcher had an extensive and credible knowledge of car mechanics, car modifications etc. meaning it was possible to communicate with Group 'A' '*on equal terms*' which probably endeared the researcher to the group. Similarly, the commitment of the researcher to attend intervention events meant Group 'A' were probably more comfortable expressing their views which had a positive impact on the insights generated.

This factor is also relevant to research gathered from Group 'B'. As the researchers' knowledge of advanced driving progressed to a high level, members of Group 'B' may have felt as though was '*one of them*' which may have led to respondents feeling able to discuss advanced driving with someone who '*knew the score*'. In terms of the overall intervention design, it is also likely that the researchers' own enthusiasm and knowledge of the automobile sector played a part in designing an intervention that capitalised on the enthusiasm of both groups in this regard.

The choice to use experts from the IAM as the influencing group dictated the content of the WST syllabus and more specifically the nature of the target behaviour - the adoption of advanced driving practices by Group 'A'. It is also likely that participation of the researcher in advanced driving contributed a supporting voice for the driving practices advocated by Group 'B' in the context of participation in the WST steering group.

8.9.0 Chapter Eight Summary

Chapter eight outlines the specific quantitative and qualitative fieldwork that was undertaken as part of the research study. This includes a justification of quantitative and qualitative research methods and a discussion of how these data types were triangulated. Quantitative data methods are discussed in terms of behaviour change data followed by a discussion of qualitative data collection methods. Validity and reliability factors are discussed in relation to the mixed methods approach. Reflections regarding the overall research process are discussed in addition to ethical factors. The next chapter of the thesis is devoted to outlining the findings and results of the study.

Chapter Nine: Findings and Results

WST - The art of driving; the science of measurement.

“The young lad I took out last time - he looked at me and I looked at him - I thought ‘you might be giving me a bit of trouble’, but once he got to know the way I was speaking to him he was a very nice lad”.

IAM Interview

9.0 Introduction

Chapter nine begins with the presentation of quantitative data from IVDRs, surveys and drive checks. The effect of feedback in the context of the study is then discussed. An overview of the driving practices associated with advanced driving is provided, followed by an in-depth discussion of the demonstration drive component of the intervention. Each of the four research propositions (see p. 119 for an overview) are then examined in turn with extracts from qualitative research activities used as supporting evidence.

Propositions 1 and 2 are examined using Bourdieu’s taxonomy of cultural capital which focuses on the examination of three types of cultural capital; Embodied, Objectified and Institutionalised (cf. Bourdieu, 2001). This asserts that Bourdieu’s taste zones (see Bourdieu, 1984) accurately reflect the contrasting behavioural preferences of groups A and B. Holt’s (1998) high / low cultural capital dichotomy is used in conjunction with the above forms of cultural capital as a way to describe the two groups observed during the research process.

Proposition 3 evaluates the use of social marketing tools as a means of creating a 'bridge' between high and low forms of cultural capital. This proposition is examined using two social marketing criterion: 1) the social marketing benchmark criteria (Andreasen, 2002) which includes the concepts of behaviour, customer orientation, theory, insight, exchange, competition and segmentation and 2) the modified social marketing mix (Peattie and Peattie, 2003) which includes the following:

- *Interaction* rather than *exchange*;
- *Social propositions* instead of *products*;
- *Costs of involvement* instead of *price*;
- *Accessibility* instead of *place*;
- *Social communication* instead of *promotion*; and
- *Competition* framed in terms of *competing ideas, and the need to win the battle for attention and acceptance to secure behaviour adoption.*

Proposition 4 is examined using the concept of communities of practice. This involves the evaluation of the WST intervention using this as the overarching theoretical framework, the three main concepts being; (1) practice, (2) identity and (3) participation. A theoretical framework is then presented which combines the literature streams examined during the study.

9.1.0 Behaviour Change Results

The behaviour change observed in Group 'A' is now discussed. Evidence is presented herein in order of robustness according to an evidence base

hierarchy. The primary objective measure was the IVDR data, the next measure was the pre-post drive checks. The drive checks provide an observed measure of pre- post- driving skill and the successful application of a range of driving practices (a discussion of these practices follows). Finally survey results are used as supporting evidence of improved attitudes towards skilful driving.

9.1.1 IVDR Data

Figures 11 and 12 below represent aggregated output data from event 2 through to event 9. Events are consecutive time intervals that denote key intervention activities (e.g., event 1 – blind profile start, event 2 - drive check 'in', event 3 – coaching 1, event 4 – coaching 2, event 5 – coaching 3, event 6 – coaching 4, event 7 – coaching 5, event 8 – coaching 6, event 9 – drive check 'out').

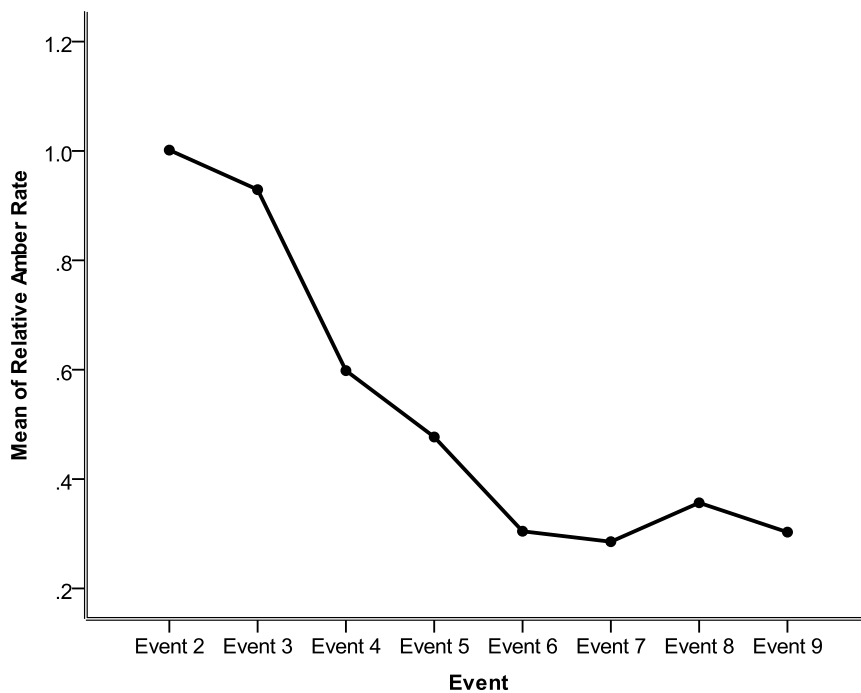


Figure 11: Mean of Relative Amber Rate (Tapp et al., 2013)

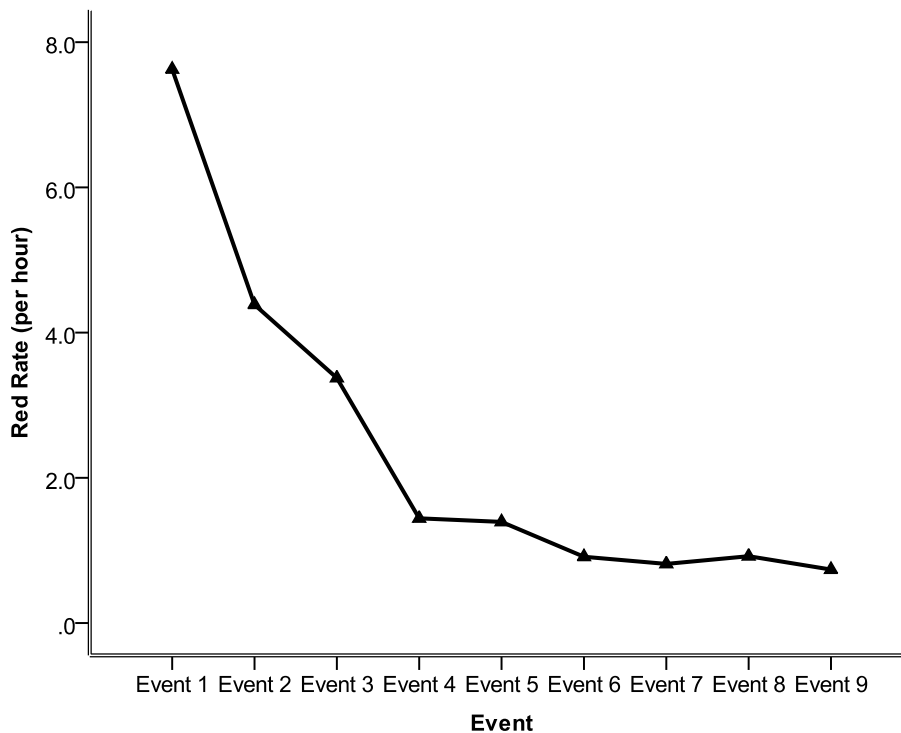


Figure 12: Mean of Relative Red Rate (Tapp et al., 2013)

Figures 11 and 12 demonstrate a sharp and sustained decline in both red and amber events during the intervention period. The initial sharp drop in red events in particular precedes the start of coaching and suggests that engagement in the intervention in itself had an immediate effect. Specifically, the figures show that the greatest degree of ‘improvement’ occurred during the ‘blind profile’ phase leading up to the ‘in’ drive check. It is important to note that no coaching or feedback had been given to the cohort during this time interval.

This implies that without any feedback being given to participants via LEDs, in-car coaching or the presentation of IVDR scores at karting events, the installation of the IVDR device resulted in positive changes in driver behaviour. It is probable that the cohort, knowing they were being monitored,

drove in a more conservative style than normal and was able to modify their own behaviour before coaching and feedback was provided. It is feasible that in the absence of the incentive structure, feedback and coaching elements, the style of driving may have reverted back to previous levels. The idea that a change in behaviour could be attributed to the effect of *being measured* is normally referred to as the Hawthorne effect. This effect suggests a change in behaviour of an observed group could be due to the effect of the participants knowing they are being studied (Gillespie, 1991).

The implication of the Hawthorne effect for social marketers is that the behaviour of a target audience could change as a result of *being studied* rather than being directly attributable to the intervention components. Furthermore, the behaviour change witnessed in such a scenario is unlikely to be sustained once the effect of being studied has worn off. However, follow-up data suggests that the behaviour change was sustained beyond the conclusion of the intervention activities (see section 9.1.2).

The figures also suggest that IVDR feedback in combination with coaching led to further improvements beyond this initial drop in red and amber events. It is important to note that results of the pre- post- drive check measure (see section 9.1.4) supports the idea that behaviour change was in part due to a change in driving practices rather than being solely attributable to the effect of the cohort being studied. Similarly, the post intervention performance by some of the drivers on the SFL course suggests that Group 'A' absorbed the driving practices of Group 'B'.

IVDR feedback broadly functioned as a form of normative feedback. McKenzie-Mohr and Schultz (2014) have suggested this type of feedback can produce durable changes in behaviour providing the feedback is meaningful. Due to differences in the way IVDR measured dynamics according to the vehicle, feedback in IVDR terms was limited to a broad expectation of the cohort to *reduce* the number of events triggered by the driver as the intervention progressed. IVDR results were given to participants during monthly karting sessions, but the value of this measure was limited in comparison to real feedback from observers. However, IVDR feedback in the form of in-car LED feedback played an important role, ensuring respondents were more dynamically aware of their driving style in-between coaching sessions. A discussion in relation to feedback provided during coaching sessions and the demonstration drive follows.

9.1.2 IVDR Data - Follow-up Analysis

In following graphic (Figure 13) time zero represents the end of the first data collection period. The mean monthly relative amber rate and the mean monthly relative red rate for the remaining participants is calculated for each of the seven months. The black line ($Y = 1$) represents no change in either the relative amber rate or relative red rate and a position of no change would occur if there is random deviation around this line. An amber rate warning line and a red rate warning line is superimposed on the graphic. A breach of the amber rate warning line for amber or a breach of the red rate warning line indicates that previously obtained benefits had not been maintained and that there was evidence of a worsening mean behaviour. No such breaches are

observed. In fact, the number of participants changes over time and both the red rate warning line and amber rate warning lines should be changing step functions; this would make the graphic a lot more complex and harder to explain, but would not change conclusions. For simplicity of exposition two simple warning lines are shown on the graphic.

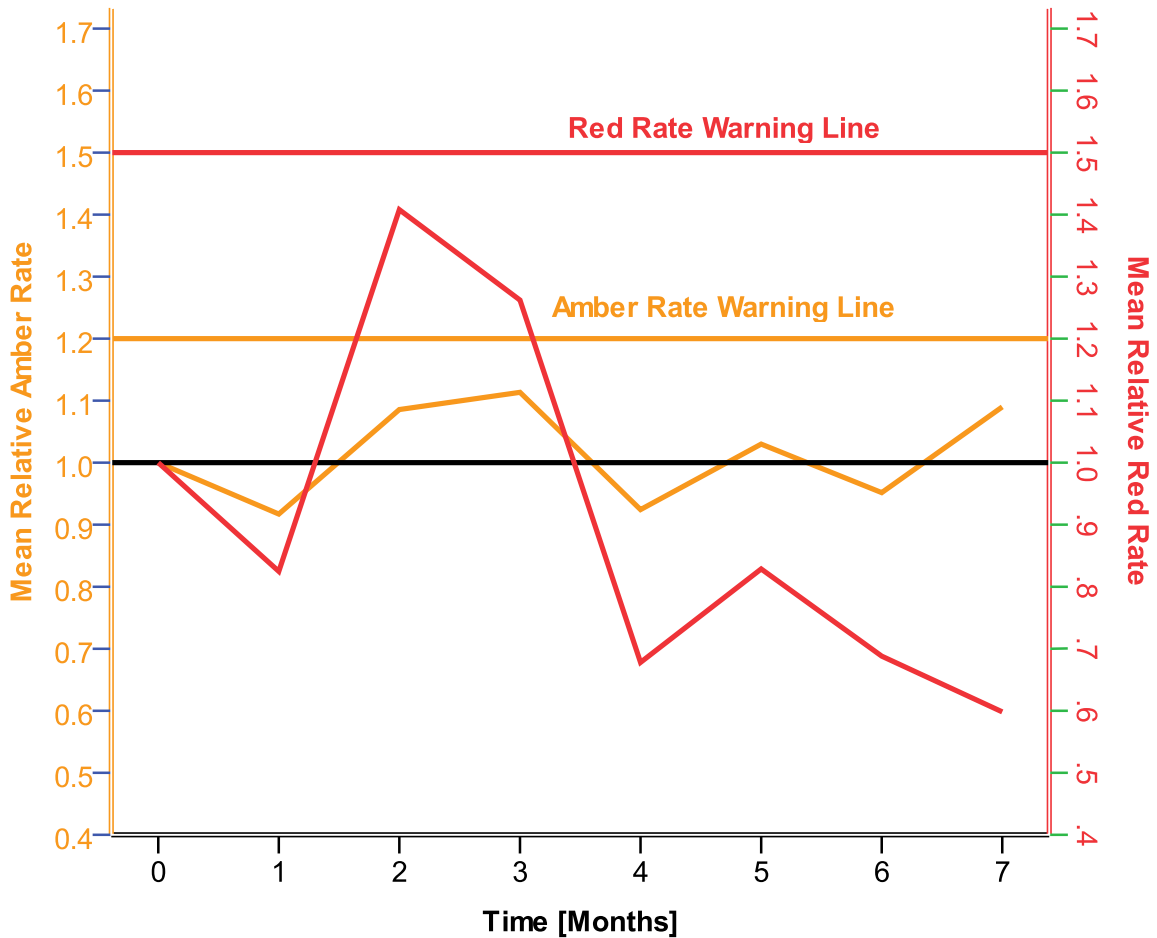


Figure 13: Follow-up Analysis Red and Amber vs. Time (Tapp et al., 2013)

While it appears that the red rate has decreased; this is true in the sample but the red rate change does not achieve significance over this time frame and this is partly due to the relatively small sample sizes seven months after the conclusion of the intervention.

In summary, the results from IVDR strongly suggests that a change in behaviour took place in Group A over the course of the intervention and furthermore, this behaviour change was maintained seven months after the conclusion of the intervention.

9.1.3 Survey Data

The survey instrument used was a merged and reduced version of the Driver Behaviour Survey (DBS) and Driver Attitude Questionnaires (DAQ). Surveys were administered at the entrance and exit phases of the project. Section A of the survey relates to attitudes (see table 1), section B (see table 2) of the survey relates to aspects of behaviour (see Appendix A).

Table 1: Attitudes to driving (p-value from the sign test for change)

| Item | | p-value |
|------|---|-------------|
| 1 | Some people can drive safely even though they only leave a small gap behind the vehicle in front | .022 |
| 2 | I get wound up if someone overtakes me | 1.000 |
| 3 | Even overtaking in a slightly risky situation makes you less safe as a driver | .210 |
| 4 | Sometimes I drive aggressively for the fun of it | .302 |
| 5 | Sometimes you have to drive in excess of the speed limit in order to keep up with the flow of traffic | .302 |
| 6 | I think I am an above average driver | .581 |
| 7 | I think it is okay to overtake in risky circumstances as long as you drive within your own capabilities | 1.000 |
| 8 | My style of driving changes depending on who is in my car | .146 |
| 9 | It annoys me when other drivers make mistakes | .774 |
| 10 | On the whole people aren't aware of the dangers involved in close following | .012 |

Significant at $p < 0.05$

Source: Tapp et al., 2013

Significances are observed on items 1 and 10, which measure attitudes towards 'close following' but not on other items (table 1). In a similar way, section B of the survey relates to aspects of behaviour. Significances are observed on item 17 (races) and item 19 (braking) but not on other items (table 2).

Table 2: Driver claimed behaviours

| Item | | p-value |
|------|---|-------------|
| 1 | Drive especially close to the car in front as a signal to the driver to go faster or get out of the way | .227 |
| 2 | Realise that you have no clear recollection of the road along which you have been travelling | 1.000 |
| 3 | Cross a junction knowing that the traffic lights have already turned against you | .388 |
| 4 | On turning left, nearly hit a cyclist who has come up on your inside | .375 |
| 5 | Underestimate the speed of an oncoming vehicle when overtaking | .754 |
| 6 | Fail to check your rear view mirror before pulling out, changing lanes, etc | .581 |
| 7 | Get involved in unofficial "races" with other drivers | .003 |
| 8 | Get into the wrong lane when approaching a roundabout or junction | .549 |
| 9 | Brake too quickly on a slippery road, or steer the wrong way into a skid | .004 |

Significant at $p < 0.05$

Source: Tapp et al., 2013

It would appear from Tables 1 and 2 that the greatest reported behaviour change relates to 'close following', 'unofficial racing' and 'inappropriate braking'.

9.1.4 Drive check Data

Driver assessments were conducted by IAM observers at the beginning and end of the coaching period. These were based on the standard form and

criteria used by members of the IAM to conduct driver assessments and therefore provided a useful benchmark for this cohort.

In total 22 drivers completed both entrance and exit drive checks. All but 2 drivers achieved an improvement in their scores, with the average score changing from 34 per driver before coaching to 21 per driver after (lower scores reflect improved driving). The potential for observer bias was recognised and hence, where possible, the same observers conducted both drive checks.

Table 3 below shows the pre- and post- drive check scores for 22 drivers who completed the six coaching sessions and both pre- and post- checks.

Table 3: Pre-post drive check scores for 22 drivers

| Drive-check results | | |
|----------------------------|-------------|-------------|
| | Pre | Post |
| Driver 1 | 33 | 15 |
| Driver 2 | 25 | 17 |
| Driver 3 | 33 | 36 |
| Driver 4 | 40 | 18 |
| Driver 5 | 36 | 17 |
| Driver 6 | 30 | 31 |
| Driver 7 | 33 | 14 |
| Driver 8 | 41 | 17 |
| Driver 9 | 35 | 17 |
| Driver 10 | 32 | 25 |
| Driver 11 | 33 | 27 |
| Driver 12 | 39 | 14 |
| Driver 13 | 37 | 23 |
| Driver 14 | 42 | 28 |
| Driver 15 | 31 | 15 |
| Driver 16 | 28 | 25 |
| Driver 17 | 36 | 17 |
| Driver 18 | 30 | 19 |
| Driver 19 | 32 | 26 |
| Driver 20 | 25 | 21 |
| Driver 21 | 35 | 16 |
| Driver 22 | 40 | 18 |
| Average Score | 33.9 | 21 |

Source: Tapp et al., 2013

The drive check assessment data above indicates a clear improvement across the group as a whole and lends greater confidence to the interpretation of IVDR data. It is asserted that improvements in drive checks scores represent a snapshot of field-specific cultural capital. The scores observed during the 'pre' phase of the research highlights the lack of cultural capital in the cohort. The improvements observed in the drive check scores demonstrate that the cohort, through participation on the intervention and

socialisation with members of Group 'B', have resulted in a shift in the portfolio of cultural capital which was specific to Group 'B'. This is discussed in more detail in later sections of this chapter.

9.1.5 Behaviour Change Results Summary

IVDR data provides the strongest evidence that reductions in red and amber events took place over the course of the intervention. Follow-up data points to the continuation of the 'new' driving practices after the conclusion of intervention activities. Survey scores showed a less marked change in attitudes towards certain aspects of driving. However, drive check scores showed significant improvements across the cohort in the majority of cases. The combination of these measures suggests positive behaviour change has occurred in Group 'A' and furthermore this change can be attributed to participation on the WST intervention.

Before discussing the four research propositions, the next section discusses specific advanced driving practices that contributed to the IVDR results. This is followed by a discussion of the demonstration drive.

9.1.6 Discussion of Behaviour Change Practices

The purpose of this section is to highlight the main practices taught by Group 'B' and the likely effect on the IVDR measure (used as a proxy for driving style). The IVDR model, from which data above was derived, was based on two main dynamic algorithms, *cornering* and *braking*. Practices that were part of the WST syllabus are discussed using extracts from qualitative research

and participation in advanced driving as supporting evidence. These practices are discussed in the context of other research propositions later in the chapter.

The following quote highlights the overall driving style that can be achieved through the application of the practices advocated by members of Group 'B'. The author would argue that the quote below encapsulates the underlying ethos of advanced driving, and thus highlights the type of driving style that is considered to be desirable (and appropriate) by Group 'B'. The notion of making "fairly rapid progress" would have been attractive to members of Group 'A', but it is also important to note that great emphasis was placed on a driver exhibiting a high level of control. This would typically involve the application of certain practices, applied in a systematic way.

"And then you look down, I mean you look at how quick you have covered the ground and you think, so we were making fairly rapid progress but it was effortless. The driver never seemed to rush for anything, never rushing to react, it was always planned, and it was always very measured so as a passenger you felt mentally comfortable".

IAM Interview

One component of this systematic approach is the mantra, "Feel, Firm, and Feather". This is a braking technique taught by the IAM as a way to 'smooth out' speed reduction. It is normally coupled during coaching with "TNT". The acronym "Tyres and Tarmac" ensures a sufficient gap is left between the stationary vehicle in front. As stated in Roadcraft (2007, p. 100), "If you had left a "tyres and tarmac" gap, at least you wouldn't be shunted into the vehicle in front. You would also have started to brake earlier, and more gently, and so

have reduced the chances of rear end damage too". In IVDR terms, this would have reduced the likeliness of *triggering* an event caused by excessive forward g-force.

As important as the technique itself is the narrative that accompanied and justified the use of this technique. For example Group 'B' might have said, "it gives you space to manoeuvre if an emergency service needs to pass" or "it reduces the wear on your brakes, saving you money". These are examples of the lived experiences that are used to justify and support use of the technical aspects of advanced driving.

Another practice relates to the phrase, "eyes on full beam", which encapsulates a core principle of advanced driving by "looking further up the road" (Field Notes). Doing so allows a driver more time to apply the various procedures advocated by Group B (for example, see IPSGA below). In broad terms, it reduces the 'element of surprise' that is often assumed to be inherent in driving. From a practical driving perspective it involves '*taking in information beyond the rear bumper of the car in front*' (Field Notes). Again, the impact would be positive in IVDR terms as it reduced the likelihood of reactive braking. Instead of reacting to situations, participants were taught to recognise developing situations and hazards that posed a potential threat, giving the driver more time to develop a plan for dealing with the situation.

The quote below highlights how this 'full beam' narrative was discussed by a WST participant. The phrasing of the comment is interesting, the respondents

use of the phrases, “*eyes at high beam*” and “*and all that*”, implies certain elements (in this case relating to planning ahead) of the WST syllabus were absorbed into the narratives of Group ‘A’.

“You can read people better now I find. You see someone is going to do something a long way, before I would just follow the car in front of me, I didn’t even see the brakes lights or anything. But with this keep your eyes at high beam and all that, you can see stuff so far away”.

WST Participant Interview

The practice that is most likely to increase the overall speed of a driver is called “limit point analysis”. This is a key principle of advanced driving defined as “...the farthest point to which you have an uninterrupted view of the road surface” (Roadcraft, 2007, p. 122). According to Roadcraft (2007, p. 23), “Limit point analysis is the technique of appraising the limit point during your approach to bends in such a way that you can place your vehicle in the most appropriate position before getting the correct speed and selecting the optimum gear (in that order) to deal with the particular bend whilst always making sure you can stop on your own side of the road in the distance you can see to be clear”. In other words, it is the point along the road ahead of you where both sides of the carriageway appear to meet and form in a point, i.e., the limit point. Again, the use of this practice would have smoothed out the dynamic forces exerted on the vehicle and reduced the number of events triggered. Seen as a form of cultural capital, this approach is an advanced driving practice that was of value to Group A. In the opinion of the author, it is where the tastes of the two groups converged around the enjoyment of smooth but progressive cornering. The quotes below highlight how the

technique was discussed during focus groups with WST participants. The author argues that this highlights more of an *IAM-centric* narrative in the way cornering was discussed.

“What’s that view thing called, limit point, when you get to a corner and you can only see 10 metres, you slow right down and as it opens up you put your foot down to suit it”.

“I thought the cornering session was quite good. The positioning on the corners, like if you were on the corner just going left, you would stick further out to the right so you could see further round the corner. Things like that, like I didn’t really think about things like that before I did that coaching lesson”.

“I think the cornering is the big one really, a lot of people crash on corners”.

“Rather than taking sharp corners and thinking well “F*** it”, y’know, be more cautious”.

WST Focus Group

The practice that best exemplifies the *systematic* mind-set in advanced driver training is “IPSGA”. This technique is also called “the system of car control” (or “the system”). IPSGA is a mental ‘hook’ comprised of: Information, Position, Speed, Gear, and Acceleration. Roadcraft (2007, p. 30) states, “The purpose of the system of car control is to prevent accidents by providing a way of approaching and negotiating hazards that is methodical, safe, and leaves nothing to chance. It promotes careful observation, early anticipation and planning, and a systematic use of the controls to maintain your vehicle’s stability in all situations”. The system of car control is the ‘product’ the IAM and other advanced driving charities offer. Although IPSGA wasn’t taught explicitly, its principles (i.e., a planned approach to driving) were encouraged during the coaching sessions, which would have had a positive effect on IVDR scores.

Below are a series of quotes taken from interviews with the participants of the intervention that support the assumption that the coaching component of the intervention contributed to behaviour change. The first quote shows how the practice of planning ahead had a practical impact on a participants' driving. This represents a significant change in the types of narratives used by Group 'A'. But importantly, it shows how practices taught by Group 'B' were absorbed into practical scenarios (in this case overtaking a cyclist). It also highlights the importance of *demonstrating* the desired behaviour to an individual through participation in the activity (see p. 205 for a discussion of the *demonstration drive*).

"I tend to plan more. They [The IAM observers] taught us, when you see a cyclist, instead of just hurtling past, try and plan it so that as you get to the cyclist, he is in-between, I do plan, instead of ploughing up behind him and slamming the brakes on and then waiting to somehow overtake".

WST Focus Group

The statements below are also poignant as they demonstrate a subtle change in mind-set (and the resulting narrative) by Group 'A'. The first two quotes highlight comments by Group B regarding the steering practices of Group 'A'. The second set of quotes show how Group 'A' became conscious of this particular practice and modified their behaviour accordingly. It is assumed that these drivers had been influenced by the justifications given by Group 'B'.

From Group B:

"I wouldn't say they were a danger to me but they were very fast, they disregarded the speed limit, they certainly didn't have control of their cars because they were driving with one hand".

IAM Interview

“Of the lads that I have been out with, none have been what I would classify as dangerous, we haven’t got into any dangerous situations, I certainly haven’t wanted to stop the car and say ‘drop me here and I will arrange a lift home’ sort of thing. The one trait that I have come across with everyone I have been out with so far is that they tend to steer single handed”.

IAM Interview

From Group A:

“One handed steering - don’t do it anymore. Don’t know why! Just, like, always two hands on the steering wheel. Even my uncle went, ‘why have you got two hands on the wheel?’”

WST Focus Group

“I used to use one [hand] on the motorway, put the chair back as far as you can. I use two hands now”.

WST Focus Group

But also at a more general level, the practices taught by Group ‘B’ appeared to encourage a more attentive style of driving by Group ‘A’. For example, one respondent stated, “It just makes you more alert to everyone around you rather than you just drive along in your own little world”.

WST Focus Group

Furthermore, respondents described situations that occurred during the accompanied drive. The quote below highlights how discussions took place *in-car* regarding *other drivers’* behaviour on the road and how this differed from the advanced driving approach.

“When I went out for a drive, we pulled up at a set of traffic lights and another car, young kiddie in I think it was a Saxo pulled up next to me and X [a Group ‘B’ observer] said, ‘watch this bloke, he will go speeding off at the traffic lights’ and I have gone off normally, drove on normally, he said, ‘I guarantee you he will be stuck at the next set of traffic lights, pull up behind him’. Pulled up

behind him stuck at the traffic lights so what is the point of speeding all the time? You don't get anywhere fast, you just end up stuck at the next traffic lights!"

WST Exit Interview

In terms of speed, the next quote represents an interesting aspect of advanced driving. Drivers who are trained in the techniques of advanced driving tend to feel comfortable driving at higher speeds on faster roads where conditions permit. One of Group 'B's unspoken rules involves 'driving at an appropriate speed for the conditions' (Field Notes). By equipping drivers with the skills necessary to spot potential hazards, it is expected that skilled drivers would select an appropriate speed to deal with them. The effect of this is a more tolerant view of exceeding the speed limit on rural roads but not in built up areas.

"I used to go 40 in the 30 all the time but that has come down" and, "You do enjoy it [driving] more, you don't mind slowing down a bit in the 30 because you have already had a bit of fun [on faster roads] and you don't mind slowing down".

WST Focus Group

Finally it's worth noting that the practices advocated by Group B extended beyond car handling. The acronym "POWERDY" relates to vehicle maintenance. The constituent parts of the POWDERY acronym are Petrol, Oil, Water, Damage, Electrics, Rubber and You (i.e., the driver – is the driving feeling good/unwell/fatigued etc). This is a pre-drive check designed to encourage a driver to evaluate all relevant information that may cause problems during a journey. As with much of the advanced driving syllabus, the technique derives from police driver education whereby in their day-to-day driving they may drive a range of vehicles. The process ensures a driver is

aware of any defect that might have been caused by a previous driver but has been translated to suit recreational driving. The implications of this technique (which is used at the beginning of each observed drive) meant participants were aware of more technical aspects of the vehicle. This aspect of advanced driving has implications for improved awareness of the road-worthiness of a vehicle.

The above section highlighted some of the key practices taught by Group 'A'. The next section discusses one of the components of the intervention used to *demonstrate* these practices to the cohort normally referred to as the demonstration drive.

9.1.7 Demonstration Drive

Of the various intervention components, the demonstration drive was believed to have had a considerable behaviour change impact on Group 'A' participants. Participants accompanied an observer (as a passenger in the observers' vehicle) along a pre-defined test route (which included a range of road types). The demonstration drive typically included a commentary whereby the observer described their actions in relation to information (e.g., pedestrians, signs, corners). The observers were often accompanied by more than one of the cohort with anecdotal evidence suggesting that group discussions took place during and after these events. It demonstrated to the participants (in a highly practical way) the style of driving resulting from a combination of a series of driving practices to which participants could aspire.

It also likely functioned as a way to show that goal of the intervention was to help participants drive in a safe but *progressive* manner.

A member of Group 'B' described how the demonstration drive was useful from a practical perspective. It is interesting to note the use of the term "role models" in the quote.

"Without any clarity of what you are going to get out of it [advanced driving], or role models of advanced driving, it's quite hard to sell them on what the benefits are. Whereas if you get them in a car and go for a drive you can sort of compare and contrast, 'well you drive like this, how about you try it this way and see how it feels and what the difference is'".

IAM Interview

Further to the discussion of feedback in relation to IVDR, it is highly probable that the demonstration drive played a further - but potentially more potent - role as a "meaningful referent" (McKenzie-Mohr and Schultz, 2014, p. 41). Because practices were demonstrated in a live setting, participants could see first-hand the expected ideal standard or normative referent against which their current behaviour could be compared. Similarly, control theory (cf. Carver and Scheier, 1982; Michie, 2008) relies on a 'comparator' (see p. 32 in the literature review for a discussion of control theory). The main idea behind control theory is that behaviour change can occur if there is a discrepancy between the current behaviour and the normative standard. This behaviour is communicated via feedback in relation to a set standard or others' performance (Michie, 2008), i.e., "*this is how advanced drivers drive, this is how you drive, do this and you'll get better at advanced driving*". In this case, the *performance* of the Group 'B' member during the demonstration drive (and

the ensuing post-drive discussions) served this purpose. Another way of seeing the demonstration drive relates to the perception of the target behaviour by the target audience (see Smith, 2009, Figure 4), e.g., “I believe it”, “I can do it”, “My friends want me to” and “I will try it”. In the opinion of the author, the demonstration drive had the potential to positively influence these components of Smith’s (2009) model.

The typical response by participants to the demonstration drive is reflected in the quote below. The quote also shows how the respondent described the *style* of driving practiced by Group ‘B’.

Researcher: “Tell me about that. If you were to describe that demonstration driver to one of your mates, what would you say?”

Respondent: Immense. It was fun.

Researcher: Why was it fun?

Respondent: I just didn’t know you could go that fast down a country lane!

Researcher: Did you feel in danger?

Respondent: No I felt really safe actually. *I felt like we were going fast, then when we hit the corners I felt safe because we were going round them smoothly rather than all over the road. We just stuck to the road and moved round them”.*

WST Participant Interview

Similarly the project manager was enthusiastic about the importance of the demonstration drive. The terminology is interesting as it describes the demonstration drive as a *selling point* for the intervention. At a broad level the quote highlights the importance *demonstrating* the desired behaviour in an engaging way in the context of social marketing.

“...the biggest selling point of the whole course, they were all a bit down in the dumps, doing the coaching, as soon as they came back from the demonstration drive, they were raving... “that’s brilliant”. It was the single biggest selling point of the whole course I think. They were just raving about it. They thought they were going out for a Sunday drive, indicate, mirror,

manoeuvre and then when they got in the car and X has put his foot down, they are pinned back to the chair like that! Straight away it gives them a different impression, this isn't boring, this isn't stuffy, this is fun and they have all come back and said, when he was taking corners and stuff, he was going a lot faster than they would but they still felt safe and if you bear in mind most are anxious when they are passengers, but they have all come back and said they felt really safe, the car was stuck to the road lovely”.

Project Manger Interview

Given the potential impact of the demonstration drive it is useful to briefly discuss the potential of *experiential marketing* from the commercial marketing field. Experiential marketing typically involves a live event or experience that gives the target audience the opportunity to see a product and experience it for themselves (Schmitt, 1999; Heitzler et al., 2008). It has been argued that experiential marketing exemplifies a shift in the commercial marketing sector from traditional forms of advertising (e.g., television, print etc.) toward innovative forms of marketing and advertising to reach and connect with consumers, especially young consumers (Schmitt, 1999). It is reasonable to describe the demonstration drive as a form experiential marketing albeit in a social marketing context.

Experiential marketing has been used as part of the VERB campaign, the goal of which was to increase participation in physical exercise in children (see Wong et al., 2004). Research conducted by Moore and Lutz (2000) found that adolescents who experience and try new products or services have more positive beliefs and attitudes about those products than do adolescents exposed to the product only through traditional advertising. Wong et al. (2004) recognised that experiential marketing (in the case of VERB: event sponsorship, mobile marketing, guerrilla marketing, and promotions in schools

and communities) is difficult to implement on a large scale, however they advocate its use as part of an overall marketing strategy, e.g., in combination with paid and unpaid advertising, websites, PR and corporate partnerships. Given the importance placed on *practices* in the present study, experiential marketing is particularly relevant as a way of demonstrating these practices in a live setting.

Having discussed the behaviour change results, and the specific practices and intervention components that are likely to have contributed to this change, the next section discusses the first of the research propositions.

9.2.0 Proposition 1 (Group 'A' – Lowbrow Cultural Capital)

- **Proposition 1** – Group 'A' (young male drivers) can be described as exhibiting lowbrow cultural preferences in the field of driving.

The starting point for the discussion of Proposition 1 is related to research conducted by Lumsden (2009a). The author examined moral panics in relation to the cultural stereotype of boy racers. It is proposed that the target audience conformed to the stereotype of boy racers, which for the purpose of this discussion is treated as a low-brow activity relative to the conditions of the autonomous field. Boy racers are typically young male drivers who engage in activities such as meets in car parks, car modifications and street racing. The boy racer fraternity has a number of well-known publications that support the style of life (cf. Weber, 1978). For example, "Max Power" is described as "The

UK's ultimate performance tuning magazine" (Max Power, 2004). Lumsden's (2009a) investigation outlined the role of media in demonising the activities of – predominantly – male drivers. The following extract taken from an interview with a WST participant provides some context behind the meaning of the term boy racer:

"I would say maybe I was a boy racer when I first started [driving], the first year when it was all like, "wow I have got a car, I am a bad boy and all this, in the crew, and all that, like", but I a grew out of it pretty quickly, it is not really my thing to go sitting in car parks and burning around, you just waste fuel and tyres and everything else, I can't really afford to be replacing them all the time so I am a bit more sensible now".

WST Participant Interview

The assumption behind this assertion is that participants of the boy racer fraternity belong to a certain "field" with its own rules and social patterns. Bourdieu defined these as "networks of social relations, structured systems of social positions, within which struggles or manoeuvres take place over resources, stakes and access" (Bourdieu, 1990, p. 40). In contrast to the rules and social patterns of Group B, the activities of Group A conform to the definition of popular culture typical of lowbrow cultural capital described by Bourdieu (1984).

Bourdieu (1984) used cultural capital as a means to describe the role that tastes, practices, dispositions, attitudes and goods play in the reproduction of social class and inequality. In the present study, Bourdieu's use of cultural capital is used to suggest that the cultural capital 'portfolio' exhibited by Group A represented the *dominated* group within the autonomous field under

investigation. This is important, as lowbrow forms of cultural capital are considered *illegitimate* according to the dominant culture of a given autonomous field. Bourdieu (1986) also saw lowbrow taste as belonging to those with a low level of education, who prioritise the practical over the aesthetic. An argument has been presented that Group A exhibited low levels of education, which contributed to their high risk demographic status (see section 2.4. educational attainment, social deprivation and crash risk). Group A are now discussed using Bourdieu's dichotomy of cultural capital: embodied, objectified and institutionalised (Bourdieu, 2001).

9.2.1 Proposition 1 - Embodied Cultural Capital (ECC)

Group A, who were targeted from an area of high social deprivation, were likely to be influenced by low parental expectations, low teacher expectations and lack of community opportunities (cf. Portes, 1998). It could be argued that individuals in such communities have their own range of 'in' language that creates feelings of inclusion and a form of bond between members in geographically bound communities. Embodied cultural capital is closely related to Bourdieu's notion of 'habitus' which suggests that certain dispositions are inherited through the family that leads an individual to be predisposed towards certain cultural activities (Bourdieu, 1984; Bourdieu, 1990).

Using Andreasen's (2002) description of different community forms, embodied cultural capital helped to create *externally defined communities*, which are defined in terms of geographic location, demographic groups and geo-

demographic groups. This language takes the form of narratives of socialisation (cf. Shankar et al., 2009), which spread within tight-knit communities. In relation to cars and driving, ECC in this regard relates to the way upbringing affects the use of language, such as certain types of narratives and stories, as a way of discussing this particular consumption activity (cars and driving). One such factor might be attitudes towards statutory agencies such as the police and narratives resulting from these entrenched feelings and opinions. Hence, a 'laddish' culture dominated Group 'A' with considerable importance placed on 'fitting in' or 'being one of the gang'. The car therefore played an important role in facilitating these types of relationships (for example, see Hewer and Brownlie, 2008). Observations made during ongoing interactions with Group A suggested that social status was in part derived by having a bank of stories relating to reckless driving and near-misses. Similarly, driving fast was seen as a sign of rebellion from those in authority. It also functioned as means to demonstrating a degree of invincibility with those who live to tell the tale of serious accidents being shifted up the hierarchy. Group 'A's driving attitudes and behaviour reflects some aspects of uniqueness to the community: driving styles are reflections of local identity and masculinity. For example, some (bad) habits are already quite deeply ingrained, such as a laid back style of steering that involved the use of one hand, while sitting back in an almost horizontal position.

9.2.2 Proposition 1 - Objectified Cultural Capital (OCC)

Objectified cultural capital includes material choices that are used to express identity through consumption choices. This type of cultural capital falls within

the remit of *tangible* cultural capital (cf. Throsby, 1999). The most obvious being the choice of car made by Group 'A'. In the main, those in Group 'A' were restricted by financial factors where car choice was concerned. A higher disposable income would have been likely to have lead to different choices being made. Similarly insurance costs are an industry-based barrier to young – especially male – drivers.

This form of cultural capital also relates to modifications being made to vehicles as a way of demonstrating individuality. The process of 'debadging' and 'modding' is an example of a specific form of OCC. Evidence of this can be seen during RV1 (0:13 – 0:16) where the typical types of cars that are driven by the cohort appear in the video (see WST, 2009). It is possible to note a host of vehicle modifications including alloy wheels, spoilers typical of young male drivers labelled as boy racers. Vehicles included an eclectic collection of popular cars for young male drivers including Vauxhall Corsa's, Renault Clio's, VW Golf's, MG ZF's, Ford Fiesta's and Ford Escort's. The phenomenon of 'modding' was examined in "Peeps, Beemers and Scooby-doods: Exploring Community Value amongst Scottish Car Cruisers" (Hewer and Brownlie, 2008), which explores the 'socialness' of cars through expressions of individuality.

The quote below demonstrates the tendency of some of the cohort to spend considerable sums of money modifying their vehicle:

"I had another one [a van] like it because it is handy for work, but then the ball joint went on the wheel and it fell apart so I bought this one. I am getting an

Astra van at Christmas, a nice one, do it up nice, lower it. Do a proper £800 stereo and spend about £5,000-£6,000 doing it up”.

WST Participant Interview

OCC also manifested itself in choices made relating to clothing and personal style. Certain styles of trainer, jogging bottoms and hoodies were all present during coaching activities that clearly demonstrated the difference between Group A and Group B. Evidence of this can be seen in RV1 (0:18) where three young males (two of whom are wearing hoodies) are stood prior to undertaking the familiarisation drive in a local car park.

9.2.3 Proposition 1 - Institutionalised Cultural Capital (ICC)

ICC was significant because of its limited presence due to the typically low educational attainment observed in Group A. Bourdieu (1977) states that institutional cultural capital in the form of academic credentials and qualifications create a “certificate of cultural competence which confers on its holder a conventional, constant, legally guaranteed value with respect to power” (Bourdieu, 1977, p. 248).

The low educational levels in Group ‘A’ meant they lived relatively unstructured lifestyles. Individuals in the cohort did not have diaries into which they would conscientiously book activities leading to some operational challenges in planning activities such as coaching and karting. However, following the completion of the intervention, participants would have been endowed with a certain amount of institutionalised cultural capital having received certification of their accomplishment during the intervention. Also,

common across the cohort was a lack of knowledge of the existence of the advanced training courses offered by institutions such as the IAM.

Interviewer: The IAM course, the full Skill for Life course, do you think you would be doing that if it wasn't for the course [WST] that you have done now, do you think you would have signed up and paid for it and all that stuff?

Respondent: No because I didn't know it existed until I came onto this [WST] course.

WST Participant Interview

Further ICC would have been acquired following the completion of the full SFL course. In addition, membership of the IAM affords members certain benefits such as cheaper insurance, discounts as well as access to motoring publications.

9.2.4 Proposition 1 Summary

Using sections of text from interview transcripts and supplementary evidence, the information presented above supports Proposition 1. Using Bourdieu's (2001) dichotomy of cultural capital, Group 'A' are shown to exhibit lowbrow tastes and preferences according to the dominant culture of the autonomous field. This form of taste is also called popular taste. Grenfell (2004, p. 96) discusses high and lowbrow taste and states, "Between 'highbrow' and 'lowbrow' we can associate the dominant, consecrated culture of the ruling class and its opposite working-class culture; for example, tennis as opposed to football, the restaurant to the pub, reading literature to reading magazines, going to the theatre to watching TV". Given the background of Group 'A' and the evidence above, it is possible to simply describe the tastes of Group 'A' as

“working class”. Importantly each form of the above capitals has value when deployed within its own cultural boundaries. For example, anecdotes relating to reckless behaviour produce positive results for a young man when deployed amongst like-minded young drivers. Relaying such stories at a meeting of advanced drivers would not yield the same results, in fact this could lead to an individual being ostracised from potentially positive reference groups.

9.3.0 Proposition 2 (Group ‘B’ – Highbrow Cultural Capital)

- **Proposition 2** – Group ‘B’ (advanced drivers) can be described as exhibiting highbrow cultural preferences in the field of driving.

It is suggested that the cultural capital ‘portfolio’ exhibited by Group ‘B’ represented the *dominant* group in this autonomous field. Before discussing the three types of cultural capital in relation to Group ‘B’, a brief discussion of Group ‘B’ is undertaken to frame later discussions.

Applying the same process used during Proposition 1, it is proposed that advanced driving organisations represent highbrow forms of consumption in the driving field where advanced qualifications are used as a tool for conveying status and power amongst like-minded individuals. With this in mind, highbrow cultural capital is used to describe a more elitist form of consumption.

Sections of the literature review highlighted the importance of age related factors on driving ability, attitude and risk propensity. It would be disingenuous to hide the age gap between Group 'A' and Group 'B'. Members of Group 'B' were typically older than the cohort and many are men who had retired from full time employment commitments. However, age in isolation is too simple a construct to explain the key differences between the Group 'A' and Group 'B'. To put the age difference between participants and observers in context, some of the observers have been members of the IAM for more years than the average age of Group 'A'. Nevertheless it would be possible for a young man of, say, 20 years old to engage in highbrow forms of consumption through advanced driving activities, regardless of his or her age.

Group 'B' members spoke of the difference between Group 'A' members and 'normal' advanced driving participants. The researcher noted that one of the reasons some observers took part was indeed because the cohort of young men were different to the traditional participant of the SFL course (see quotes below). It could be argued that the traditional, somewhat 'establishment' nature of the IAM has the unfortunate consequence of often alienating young people from low-income backgrounds.

"I don't want to stereotype but I think some of them, I don't think all of them are but I think some of them are certainly not what we normally take out [on a drive] and I think that is partly why I have gone for this [WST] as well. I am not being horrible but I think they are in more need than other people who normally take the course".

IAM Exit Interview

"I love it, it is fantastic when you think that some of them haven't had a very good background you know. I would never even mention their background or

anything like that, as far as I am concerned they are lads that want to learn and that is it”.

IAM Exit Interview

It must be noted however that recruiting sufficient numbers of Group ‘B’ members proved difficult. One respondent briefly speculated as to why this might be the case:

“I guess maybe they are too busy, maybe they feel that they can’t identify with the young people or maybe feel that they won’t be the right person for those young people”.

IAM Exit Interview

Discussion of Proposition 2 begins with an email from the Bristol Group (received as part of participation in advanced driver coaching), which shows the type of *activities* that Group B members are involved in as part of driving-related activities. The intention is to demonstrate the type of *legitimate* social interactions that occur as part of membership to an advanced driving group. It is also possible to see structured systems of social positions through the titles bestowed upon different levels of advanced driving participation, for example, the terms Full Members, Associates and Team Leaders in the email below. Full members are those who have completed the IAM’s advanced driving qualification (which functions as an entry mechanism to the club) and pay an annual subscription fee to the organisation. Associates are drivers who have not yet completed the IAM test but are undergoing coaching by volunteer observers with the goal of completing the full test.

The content of the email is shown below “Three in a Car: Saturday 16th June – From Chief Observer – Received 9th June 2012):

“Even if you’ve never been on a TiC (three in a car) you’ll be welcome and you’ll also be in for a real treat because not only are they free, they’re an ideal way of **'keeping in touch' with advanced driving**. The sessions are designed for both **Full Members** and **Associates** and their purpose is to assist you in maintaining your high standards. So when you arrive at the venue, a **Team Leader** will assign you into a group of three (or two - or even four). One of you elects to be first to drive (very brave!) and you all drive off in that car for 30 minutes or so on a course of your choice or, if you are not sure of the area, a course dictated to you en-route. There is usually a good deal of **helpful banter** during TiC sessions so most points will be covered as you go round, but at the end of each drive there will be an opportunity for you all to enjoy a short and sometimes entertaining **de-brief!** Someone else then elects to go next in their own car - and so on until you’ve all had a turn. The whole thing is done and dusted in around 2 hours, it’s completely free of charge and good fun. No records are made of the drives - but there’s usually plenty of **advice** available!!”

The email highlights some of the narratives of socialisation (cf. Shankar, 2009) that take place during the sessions. Terms such as “helpful banter”, “de-brief” and “advice” demonstrate the ways the car is used to facilitate positive social interactions in Group ‘B’.

The second point of evidence relating to Group ‘B’s consumption practices, and specifically relating to the existence of an objective social structure, is taken from the IAM Bristol Link Magazine. The section from the magazine again highlights the existence of an objective hierarchy in the advanced driving field. Similarly the mention of an Annual General Meeting of a driving related organisation supports the notion of highbrow tastes and practices.

The content of the newsletter is shown below (IAM Bristol Link Magazine, May 2012):

“The 54th AGM [Annual General Meeting] of Bristol Advanced Motorists was held on Tuesday 24th April...she [the **Vice Chairman**] said that a big success for the group was the Wheels, Skills and Thrills project and she commended those involved”...“Moving on to the presentation of the Group Awards, the Bristol Group Cup...Marlene read out his [the **Chairman**] statement: Although this year the **Chairman’s** Award goes to two people, it is intended to recognise the team of people involved in the WST programme, who made it a great success for the Group. A big thank you goes to both Tony Gilbert and Martin Evans for seeing the project through from start to finish. Thanks also goes to all the other **observers** involved for their extra efforts on top of their normal **observer** commitments to help mentor the WST drivers. 22 of the WST lads signed-up to the Skills for Life package, with some already passed (3 with F1RST Register passes) and other progressing towards their tests. The **Chairman** added, this project has been about much more than driving standards, with many of the lads benefiting in other ways and now seeing a clear way forward in their lives”.

This passage of text again demonstrates a hierarchy within the advanced driving field. Bourdieu saw society as being differentiated by a number of semi-autonomous fields, governed by their own ‘rules of the game’ and offering their own particular economy of exchange and reward (Benson, 1999). From the evidence shown above it is reasonable to articulate the activities of Group ‘B’ as a ‘semi-autonomous field’ with an assumption being made that the presence of a hierarchy in this case leads to a ‘micro-economy’ of exchange and reward for participants.

Another point of evidence is highlighted from interviews conducted with Group ‘B’. Members identified a range of social benefits that accrue beyond improvements in driving skill. An example is monthly ‘socials’ when guest speakers are invited to address members. Other examples include car-based

treasure hunts, three in car events (see above), trips to motor museums and skidpan training events. The quote below supports this (IAM Exit Interview).

“As a group we have a meeting every month and that involves having talks from people that are involved with motoring in some way or the other”.

Discussions In relation to Group ‘B’ are now focused specifically on Embodied, Objectified and Institutionalised cultural capital as per Proposition 2.

9.3.1 Proposition 2 - Embodied Cultural Capital (ECC)

Members of Group ‘B’ had self-selected themselves for advanced driver training. Doing so is a form of self-improvement that requires a certain disposition toward education and ongoing learning and the acquisition of a new skill. It requires the participant to dedicate time to learn a range of techniques and procedures through materials including books, DVD’s, websites and other resources. An individual needs to exhibit a certain mind-set in order to undertake such training, which involves recognition that there is something positive to learn from other experts or individuals of ‘refinement’ in this field. As discussed, those belonging to Group ‘B’ tended to be older in years and exhibited a maturity towards cars and driving that differed from Group ‘A’. The mind-set of an advanced driver is based on the adage: “there is always something I can do to minimize risk to myself and others” (Field Notes). A phrase often used during training is that “things don’t just happen, situations develop” (Field Notes). Advanced driving is about developing the necessary skills to spot *potential* hazards and develop a plan to respond to

them. These are examples of driving ‘mantras’ that circulate the advanced driving fraternity. The quote below reflects this attitude:

“Well the perfect driver hasn’t yet been found, I understand there is a glass case somewhere where there is going to be stuff to mount to show everybody when they find them. We are all human”.

IAM Exit Interview

It is the view of the researcher that this mind-set (which constitutes a form of Embodied Cultural Capital) is the single most important factor that an individual must exhibit in order to become an advanced driver.

“The vast majority of associates are older than the age group the lads fall into and I think associates that we have had through the group or certainly my experience of that age group have been very on the ball or of the mindset where hang on I have just passed my test but there is more to this, I want to learn more, I want to get more out of my driving, what can I do to improve my standards and look at it from that approach whereas the lads on the course from my experience, OK what can I get out of this, oh yeah OK I am going to get cheaper car insurance”.

IAM Exit Interview

Evidence of the high levels of knowledge and skills exhibited by an individual in Group ‘B’ is shown in the quote below. The quote is referring to the number of *Associates* the respondent has coached through the *Skill for Life course*. Needless to say the culmination of knowledge from this activity is considerable.

“I would say it’s sort of 50-60 people, because you have to remember it might take six months to get some of them through the test and in fact I had one chap that took two and a half years so you can’t really tie it down exactly but it must be 50-60 anyway”

IAM Exit Interview

The number of years some observers have been involved in advanced driving activities surprised the researcher. The quote below further supports the notion of an *objective structure* within the advanced driving field.

“Well in 1971 I took the actual test and then I was just a member of the IAM then in '83 when Western [Weston-Super-Mare] Group was formed, originally as an offshoot of Bristol, then in '83 they became a group in their own right and that is when I joined the group as a **Member** of the group and shortly after that became an **Observer** for the group helping others to get through the test and next step was a **Senior Observer** and last year I was elected **Chief Observer** for the group”.

IAM Exit Interview

Embodied social capital is shown to be related to advanced driving specifically in terms of the mind-set required to undertake this type of training or self-improvement. The section also highlighted the existence of hierarchies and social structures that permeate the activities of Group 'B'. The chapter now considers objectified cultural capital in the same context.

9.3.2 Proposition 2 - Objectified Cultural Capital (OCC)

OCC in this cohort manifested itself in a number of symbolic goods that functioned as signifiers for belonging to the IAM. These included a host of IAM branded goods and materials such as stickers on cars, clipboards, polo-shirts, key-rings and ties.

“I've also got a sticker in the back so anybody coming up behind me, they will know that I am an advanced driver. One advantage is they should, well the general public and general drivers should know that I will keep to the speed limit and if they get up behind me, if they think I am going to do 35/40 MPH in a 30 MPH speed limit then they are mistaken, so to me I feel proud to have those badges on the car because I have worked for it and it has cost over the years it has cost me hundreds of pounds really”.

IAM Exit Interview

One observer commented:

“I always feel that some people just want the trophy to put on their car I am an advanced motorist but all that does it just reflects what they did for an hour and a half on a certain day of the week on a certain occasion, for that hour and a half I was an advanced driver, I have got the badge, I have done it, what more is there?”

IAM Exit Interview

The significance of the comment above is that advanced driver training is more than just passing a test on a given day; it is about continual learning and improvement, hence the relationship with cultural capital.

It could be argued that these tangible items convey a sense of belonging and solidarity to a group of likeminded individuals but also, importantly, convey the type of group to which the individual *does not* belong. Of course, ownership of such items does not guarantee rewards, ownership must be combined with forms of social expression that conform to the expectations of other members of the same cohort. This results in forms of insider knowledge and the potential for social exclusion that can characterise such groups.

In the same way that car choice was discussed during Proposition 1, a person's choice of car functioned as a status symbol in Group 'B'. In this regard, Group 'B' individuals made entirely different choices. For example, in RV1 (0:18) a Ford Focus ST (ironically this car was labelled by Top Gear as “The Asbo”) can be seen in the background (owned by one of the observers – approximate value 25k). Other observers drove premium marques from manufacturers such as Jaguar, BMW, Lotus and Volvo (see WST, 2009).

One observer alluded to another benefit of membership to a club; the form of a tangible product that is provided to members. This product is a private map of the best roads in the UK for driving enthusiasts.

“I mean X [the name of the club has been omitted but is an exclusive ‘members only’ advanced driving club] have just put together an atlas using Google maps of good driving roads which is a private thing, you know, it is contained within the club. It is not going to be advertised because we don’t want too many people going and using them and spoiling them for us. I think generally I prefer more interesting roads, where the challenge isn’t the outright speed. You know, the political climate these days is very anti speed. These are more technical roads where it is a challenge to see how far you can look ahead, what to look for, bends and all the rest of it. And maintaining a ‘high-ish’ average speed but maybe no high peak speeds, you know, you get ‘Piston Heads’ [an online based high performance vehicle owners forum] and people who go off on driving days - I have done a couple, off on a dual carriage way and they are off at a tonne [100 miles an hour] and I am not interested”.

IAM Exit Interview

The next section considers the third of Bourdieu’s (2001) taxonomy of cultural capital.

9.3.3 Institutionalised Cultural Capital (ICC)

This form of cultural capital was most prominent in Group B. Members of the IAM were endowed with ICC through membership and participation in the activities and practices of advanced driving. The research study identified a field, which was replete with hierarchical appointments and structures designed to convey upon the owner a certain degree of cultural cache (referred to as symbolic capital in the cultural capital literature). Certificates and titles are bestowed on individuals who have mastered certain skills, abilities and competencies.

Members of Group 'A' benefited from the institutional cultural capital of Group 'B' by an association that could prove useful as an accreditation of ability which has a value in the jobs market. An IAM respondent commented on this specifically:

"You know when he [Mark Pepper] was talking about their employability as well, if they complete the course and maybe if some of them go on and do 'Skill for Life' how good that would look on their CVs which is interesting because that is not something that we would normally come across at all, people don't do skill for life because it looks good, the only acceptance actually are the paramedics, we do get some paramedics who are encouraged to do skill for life before they do medic training but that is the tiny minority, most people don't do it for that reason".

IAM Interview

With this in mind, progression within the structure of the IAM is dependent on completing a series of formal tests designed to assess driving ability and knowledge of certain texts. For example, the *further advanced certificate* requires that a driver repeatedly drives to the minimum standard required for membership of the group. In other words, has the driver absorbed the style of driving to such an extent that it is now natural rather than simulated for the purposes of an assessment? The FAD course also requires the participant to demonstrate an in-depth knowledge of Roadcraft and the Highway Code that goes far beyond general knowledge. The tests are a way to ensure the driver has learnt the material *verbatim*. The advanced driving process begins with *learning* evolving gradually into *teaching* (through *observer training*). Higher level driving skills and certification is gained through *learning how to teach*.

ICC in this case can increase over time relative to the number of years a person has been a member of the organisation. Its possession is a marker of cultural competence in a certain field – in this case advanced driving. While in theory institutional capital can be purchased, it requires a person to have the necessary ECC and OCC in order to complete the necessary procedures following which the certification is provided. Group B also benefited from an association with the police which, it could be argued, added legitimacy to the activities of its members:

“Well the IAM is basically a police way of driving and I know that the IAM and the police work closely together, a couple of our guys who are in the group, we have got a retired police officer, Fred White who is obviously the Examiner, he will take you out after the observer has put you through your paces and he will take you out and see if you are ready to become an advanced driver. And we have got an active Police Sergeant and he will take you out as well, so that is the connection that the Western Mendip group and I know nationwide the IAM and the Police do work close together so any tips that they have obviously they can share”.

IAM Exit Interview

“IAM members are encouraged, yes certainly, to participate in driving events, whether it is ‘three-in-a-car’ activities or in Bristol over the last couple of years we have held a members’ day where - I don’t know if you are familiar with that - but IAM staff and Police, Police that have achieved ‘Class One’ Police pass tend to have some IAM involvement, they come and talk to members and take members out for the day, so yes, IAM Bristol offers a number of options going forward”.

IAM Exit Interview

It could be argued that the association between the IAM and the Police provides a form of social legitimacy to the activity of advanced driving. In this sense, ex or serving police officers are essentially ‘gate keepers’ for membership to the club with the role of observers being to coach the Associate to a standard that is considered acceptable to the IAM Examiner. In other words, the observer endows the associate with the necessary cultural

capital in order to meet the minimum standard required for membership. The top tiers - or the upper echelons - of the advanced driving hierarchy is reserved for experts who have been employed in a professional capacity by the Police. To be considered eligible to be an examiner an individual must have completed the Class 1 training course at Henley Police Driving School. Becoming a volunteer observer therefore is the closest a civilian can get to become a driving instructor or a police driving instructor.

9.3.4 Proposition 2 Summary

Proposition 2 examines the notion that the practices of Group 'B' (members of the IAM) could be described as highbrow taste. Using a range of evidence types including interview transcripts, emails and other evidence the proposition is supported. Specifically the concept of institutional cultural capital is highly relevant to Group 'B'. It is likely this type of capital functions as a way to ensure consistency and comparability of behaviour throughout the advanced driving network as well as offering the opportunity for conveying status and association through tangible goods and intangible symbols.

The evidence presented shows the many layers of social interactions that occur as part of membership to the advanced driving fraternity. Subtle forms of 'snobbery' are demonstrated between those who have passed the test and those who are actively involved in continual improvement through ongoing engagement with advanced driving activities.

Having completed the discussion of low and highbrow cultural capital in the context of the two groups observed, the next section discusses Proposition 3.

9.4.0 Proposition 3 – Social Marketing Techniques

- **Proposition 3** – Social Marketing tools and techniques can be used to bridge the taste of those exhibiting highbrow and lowbrow cultural capital.

Proposition 3 examines the role of social marketing as a tool to bridge the practices of the two groups discussed during proposition 1 and 2. The section also reflects upon the extent to which social marketing principles were applied during the action research component of the study.

9.4.1 The Social Marketing Benchmark Criteria

The following section uses the social marketing benchmark criteria (Andreasen, 2002, NSMC, 2011) to articulate the social marketing-related observations made during the research study. A summary of the benchmark is provided before each discussion.

Behaviour (Benchmark 1)

This benchmark aims to change people's actual behaviour (NSMC, 2011):

- The intervention is focused on influencing specific behaviours, not just knowledge, attitudes and beliefs.
- Clear, specific, measurable and time-bound behavioural goals have been set, with baselines and key indicators established.

The behaviour component of the criteria was critical to the bridging orientation of social marketing. Specific behavioural goals were set in the form of advanced driving practices and social marketing techniques were deployed to this end. In terms of Shope's (2006) categorisation of driving behaviour (see Figure 2) the focus was on 'driving ability' comprised of 'knowledge, skill and ability, which was supported by the notion of "consciously taking skills to a higher level" (Haley, 2006, p. 45). However, during the development phase of the intervention, non-advanced driving steering group members had a limited understanding of the advanced driving syllabus that would be taught to the cohort. This meant specific behaviours (e.g., advanced driving practices) could not be specified per se at the very start of the intervention design stage. However, after the familiarisation drives with team leaders, observers reported the range of practices that could improve the skill level of the cohort. This resulted in the design of a 'slimmed down' version of the SfL course. This rested on the assumption that advanced driver practices were inherently *positive* (supported by the literature e.g., Haley, 2006; Stanton et. al., 2007; Walker et al., 2009 and Hopkin and Sykes, 2012) and the goal would be to *engage* the cohort in participation in this activity as a way of modifying specific driving practices. This led to the selection of certain driving behaviours (discussed above) that were absorbed into the WST syllabus.

The *behaviours* that were specified were two-fold: to engage the participant in an advanced driving coaching syllabus; and 2) to install the IVDR box into the participant's vehicle (which functioned as an entry requirement to participation on the intervention). However, it must be noted that at the start of the

intervention there was a great deal of uncertainty as to which of these components would have the greatest, if any, effect.

As the cohort progressed through the coaching sessions (1-6), it became clear that observers were focused on *specific behaviours* in terms of practical driving practices. However, the selection and coaching-focused modification of these practices relied mostly on the expertise of the observers and their ability to recognise areas of improvement and to effectively engage with the cohort during coaching activities. Therefore a certain amount of subjectivity was present in this regard. However each of the observers had completed the same syllabi during their training for the IAM so it was anticipated that there would be consistency across the practices taught.

The behavioural goals were indeed *time-bound* in the sense that participants were required to complete the six coaching sessions within a specific timeframe. Steering group members went to great lengths to meet this objective and it was only through this intense dedication, enthusiasm and commitment that this goal was achieved.

The strongest element of this particular benchmark was the measurement of *baseline behaviours*, achieved through the use of a blind profile period (in the case of IVDR) and pre- and post- intervention drive checks (in the case of coaching). However, the potency of the survey instrument as a third indicator was reduced due to the decision to use existing statements from the DAQ and DBQ instruments (see research limitations, p. 286). The statements chosen

measured more general attitudes and beliefs rather than relating to the specific driving practices or behaviours that would become the focus of the intervention.

Such was the experimental nature of the IVDR device, it was highly challenging to specify behavioural goals for this component. It was however anticipated that a reduction in 'events' would occur relative to the baseline indicator. A reduction of 10% in events was unofficially used as a means to constitute success.

In summary, the behaviour component of the benchmark criteria is highly applicable to a bridging orientation of social marketing. Without specific behavioural goals the success of a bridging approach in behavioural terms is difficult to evidence. The way in which the intervention was designed and evaluated, in addition to the identification of specific practices that would have a positive impact on behaviour, was consistently and credibly employed. However, it is worth noting that the collective knowledge around the *desired* behaviour evolved as the intervention progressed and those involved gradually gained a better understanding of the practical techniques that were taught by the IAM.

Customer Orientation (Benchmark 2)

This benchmark focuses on the audience, understands their lives, the behaviour and the issue, using a mix of data sources and research methods (NSMC, 2011):

- Goes beyond interviews and focus groups to use ethnographic techniques as well.
- Uses a range of research analyses and combines data from different sources (qualitative and quantitative).
- Gains key stakeholder understanding and feeds it into methods mix (Benchmark 8) development.
- Interventions are pre-tested with the audience.
- Involves the target audience and local community, rather than treating them as research subjects.

The main consideration under this benchmark is the inclusion of an IVDR device as one of the intervention components. During the intervention design stage a decision was taken that IVDR would be an effective and robust means of objectively measuring behaviour change based also on examples from the literature (e.g., Fylan and Fylan, 2009; Bolderdijk et al., 2011). This reflected the current trend in the road safety field, but the extent to which this was *customer orientated* is questionable. In light of this decision (the installation of the IVDR unit would become a pre-requisite of participation), the concept of customer orientation was highly relevant in the sense that barriers to the installation of the device were identified and *customer orientated* means to overcoming these barriers were deployed. For example, the *customers* in the main were technically and mechanically minded and exhibited a propensity for undertaking mechanical improvements and modifications to their vehicle. Feedback from team leaders indicated that members of the cohort were likely to be uncomfortable with a stranger installing the box. To overcome this

barrier, two participants were trained to install the IVDR unit, a process that was overseen by the project manager. Every effort was taken to minimise the physical impact of the unit (e.g., through the use of non-permanent adhesives) and the inconvenience to the participant (e.g., by visiting participants at home or place of work).

Karting was identified as an attractive activity for the cohort (it was also geographically convenient) and as such was used as a counterbalance to the inconvenience of having a 'tracker' installed. The principle of customer orientation was relevant in relation to the organisation of these events in that karting sessions were scheduled at the end of the month (when participants had less disposable income before pay-day and would therefore be more likely to attend instead of doing something else) and were organised so as not to conflict with sporting fixtures. Similarly, meeting points for coaching activities were designed to be geographically convenient for participants (the karting centre car park and a local shopping centre).

With the exception of the use of IVDR, the intervention as a whole was highly customer orientated with considerable effort deployed to design the intervention in such a way to be attractive to the cohort. The decision to focus on advanced driving practices (as opposed to fear appeals, for example) as the target behaviour is the strongest example of the intervention being designed with the 'customer' in mind. It should also be noted that a customer orientation towards Group B was necessary to attract and retain members of Group 'B'. This was an important consideration in the bridging approach used.

Theory (Benchmark 3)

This benchmark uses behavioural theories to understand behaviour and inform the intervention (NSMC, 2011):

- The theory, or theories used, are identified after conducting the customer orientation research.
- Appropriate behavioural theory is clearly used to inform and guide the methods mix (Benchmark 8).
- Theoretical assumptions are tested as part of the intervention pre-testing.

The main theoretical areas of interest centred on the concepts of cultural and social capital which took into consideration social and environment influences on behaviour. The concept of CoP would later become a useful framework by which to describe the mechanism of practice transfer between Group 'A' and 'B'. However, the latter took place as part of the post-intervention reflexive period.

In relation to cultural capital, the focus was on the three types of cultural capital that were observed in the two groups. Cultural capital was found to relate closely to the notion of participation in cultural activities, the activity in question being advanced driver training. In turn, cultural capital was found to be closely related to the notion of taste and preference and more importantly, the idea that driving style was defined as a series of conscious practices.

However, the extent to which these and other behavioural theories informed and guided the methods mix and the bridging approach used is questionable. The use of expert opinion (e.g., members of the IAM and the project manager) played a stronger role in the development of the methods mix and the intervention as whole.

Insight (Benchmark 4)

Customer research identifies 'actionable insights' – pieces of understanding that will lead intervention development (NSMC, 2011):

- A deep understanding of what moves and motivates the target audience, including who and what influence the targeted behaviour.
- Insight is generated from customer orientation work (Benchmark 2).
- Identifies emotional barriers (such as fear of testing positive for a disease) as well as physical barriers (such as service opening hours).
- Uses insight to develop an attractive exchange and suitable methods mix (Benchmarks 5 and 8).

In terms of *barriers* to participation, a key insight was that engaging in driver coaching was a socially risky activity for a target group for whom driving was a core aspect of their personality and identity. The demonstration drive was crucial in allaying the fears that the IAM style of driving was slow and boring.

One of the key insights generated during the exploratory research phase was the idea that the target audience for the intervention lacked positive role models in terms of driving. Such was the tight-knit nature of the target

community, narratives around driving were focused on recklessness and risk taking as opposed to the exchange of positive 'hints and tips' that would ultimately become the *raison d'être* of the intervention.

A challenge in terms of generating insights into the target audience was the lack of reflexivity on the part of the young drivers. For them, the way they drove was 'normal' according to their perception of how a young man *should* drive. Insights were more likely to be generated vicariously using the opinions of the project manager who had many years' experience in the area in various youth engagement roles. For example, he acted as a 'barometer' for expected standards of behaviour, levels of engagement at any one time, and so on. Often this insight led to the steering group 'letting the little things go' in favour of maintaining a degree of harmony between the cohort and the management structure. Similarly, experts from the IAM provided unique insights into the driving practices of the target audience and the way in which these could be modified.

It is questionable as to whether a *deep* understanding of the target audience could have been achieved without the involvement of the project manager. Therefore a key insight is that the link provided by the project manager (with whom many of the participants had a pre-existing relationship) was crucial and would probably be the most difficult component to replicate.

Furthermore, the project benefited from the somewhat paternalistic dynamic between the project manager and young people in the area. This meant the

intervention had to be designed in such a way that the project manager had 'bought in' to every aspect. Without this buy-in he would not have risked his well-established reputation in the area. For example, processes were established that unequivocally preserved the anonymity of driver in regards to IVDR data not only to protect the drivers but also to the project manager from any negative outcomes relating to this aspect of the intervention. This individual was adamant that the use of authority figures such as the Police and Fire services (which are closely linked to the use of fear appeals to change behaviour) would be unlikely to yield a positive reaction from the cohort.

Similarly this individual offered continual guidance of when to 'let things go' (...they arrive with music blaring and do a wheel spin in the car park...) and when not to (aggressive behaviour with karting staff was deemed not acceptable). The project manager had a great deal of experience of working with young men such as these, and this, allied with the pre-intervention research enabled day to day decisions to be based on an understanding of the mentalities of the audience.

Another insight, again derived mostly from the expertise of the project manager, was that dissemination of road safety advice through leaflets, posters or media advertising, were unlikely to work with the cohort. A hands on approach was regarded as the only real means of getting through to the cohort. In a practical sense this meant the intervention design needed to

engineer ways to get into the participants' car and *show* them how to *do* the desired behaviour.

A number of project components were co-created, ranging from recruitment leaflets to course redesign to competition design. The initial engagement through these activities with the team leaders was important in maximising the attractiveness of the project and the degree to which the social and financial risks of joining the trial were minimised in this initial group of participants. These co-creation activities, while useful in their own right, also had the effect of building up trust and helped to develop an ethos of co-operation between the team leaders and the management structure. These activities helped to create the foundations for ongoing relationships that paid back later in the project through improved levels of engagement. These activities helped set a tone (e.g., the 'look and feel' of the recruitment leaflet and video) that played to the self-image/social image of the participants (see WST, 2009 and Appendix C).

At a broad level an insight was the importance of being 'socially careful' to ensure the project fitted with both individual self- identities (e.g., respecting the participant's car as their own personal space) and the collective identity (e.g., not placing too much emphasis on the idea of safety) of the cohort. These social considerations extended to the risk of bringing together the IAM (Group 'B') and the young men (Group 'A'): two very different social groups who would not normally easily connect.

Similarly the re-design of the IAM's SFL course was focused on the expert opinions of Group 'B' members who were part of the steering groups. Elements of the full advanced driving syllabus were selected that were attractive to the cohort and yet were productive in the sense of changing behaviour through the communication of new practices.

In summary, the insight component of the criteria was less important than other factors (e.g., 'behaviour'). However, this is not due to a lack of insight generated or the importance of these insights, but the source of these insights tended to come from experts on the steering group. Specifically, the project manager and Group B members exchanged insights between each other in order to find ways to bridge the characteristics of each of the groups.

Exchange (Benchmark 5)

This benchmark considers the benefits and costs of adopting and maintaining a new behaviour; maximises the benefits and minimises the costs to create an attractive offer (NSMC, 2011):

- Clear and comprehensive analyses of the perceived/actual costs versus perceived/actual benefits.
- Considers what the target audience values: offers incentives and rewards, based on customer orientation and insight (Benchmarks 2 and 4) findings.
- Replaces benefits the audience derives from the problem behaviour and competition (Benchmark 6).

- The exchange offered is clearly linked to 'price' in the methods mix (Benchmark 8).

The principle of exchange ensured the initial and ongoing engagement of the cohort through attractive incentives, for example karting. However, a delicate balance needed to be found between offering rewards, and expecting commitment in return. The notion of exchange is also relevant in that the project manager encouraged eligible individuals in the area to participate based on him having helped these individuals during various phases of their lives (e.g., careers advice, housing support).

The exchange function (i.e. a consideration of the 'costs' and 'benefits') took place over a long period of time for example through the coaching activities and karting sessions that were built into the intervention's design. The principle of exchange recognised that there were social and personal rewards for Group 'A' engaging in the types of driving practices (considered by some as anti-social) that the intervention sought to change. Therefore compensatory elements were incorporated into the intervention design to balance the sacrifices (in terms of time, commitment, IVDR installation, social risk) and created an attractive exchange mechanism to encourage ongoing participation. The notion of exchange during the intervention was multi-faceted and complex but it is perhaps the clearest example of commercial marketing practices in action.

During the leaflet design phase, emphasis was placed on the word 'free' in communication materials to reduce the perceived barriers of taking part (e.g., free karting, free advanced driver training, and a free g-force monitor). Furthermore the term 'tracking device' was not used to describe the IVDR unit. Monthly karting sessions were provided as an incentive for participation, but also act a focal point to give some structure, and a social element to the project.

The exchange centrepiece of the intervention were those exchanges that were explicitly *human* and *social* in nature. These exchange relationships might be termed "restricted exchange relationships" involving two parties who engaged in reciprocal relationships (see Bagozzi, 1975). The nature of exchange between Group 'A' and Group 'B' is an interesting aspect of the intervention. Clearly Group A benefited from the knowledge *offered* by Group 'B', but what Group 'B' *received*, in terms of reciprocity, was less clear-cut. These benefits were more subtle such as, personal satisfaction, enjoyment, improvements in coaching ability, social opportunities with other observers, and the social kudos of being involved with 'bad boys' not typical of IAM associates.

Exchange therefore was an essential component of the intervention design, not least because it allowed for incentives to be used as a way to overcome barriers to participation. Also, the notion of exchange is important given the idea that the goal of the bridging approach was to create a mechanism whereby driving practices could be exchanged between the groups.

Competition (Benchmark 6)

This benchmark seeks to understand what competes for the audience's time, attention, and inclination to behave in a particular way (NSMC, 2011):

- Addresses direct and external factors that compete for the audience's time and attention.
- Develops strategies to minimise the impact of competition, clearly linked to the exchange offered (Benchmark 5).
- Forms alliances with or learns from the competing factors to develop the methods mix (Benchmark 8).

Competition was relevant to the intervention for a number of reasons. Firstly, the intervention competed for the attention of the cohort against other non-intervention related social activities (e.g., sporting events, family commitments, social opportunities). Coaching was often undertaken at weekends, therefore the cohort were free to choose other ways to spend their time; such was the voluntary nature of involvement. The intervention attempted to overcome a financial barrier by reimbursing the cost of fuel for each coaching drive undertaken (£5 per drive).

Undertaking driver training could be construed as accepting ones driving skills need improvement – something most people, let alone young males drivers, are typically unwilling to accept. It was also recognised from the outset that road safety was not perceived as being 'cool' by the cohort. This could have been a potential barrier because of the social risk of engaging with a project that ran counter to their social and cultural norms.

The project was sensitive to the social meanings around driving and car ownership in the sense that driving and car modifications were a hobby. Seen in this way, aspects of this cultural activity were infused into the design of the intervention. It was this overall ethos that helped to attract and retain the cohort.

Segmentation (Benchmark 7)

This benchmark avoids a 'one size fits all' approach: identifies audience 'segments', which have common characteristics, then tailors interventions appropriately (NSMC, 2011):

- Segmentation is drawn from the customer orientation and insight work (Benchmarks 2 and 4).
- Does not only rely on traditional demographic, geographic or epidemiological targeting.
- Draws on behavioural and psychographic data.
- Identify the size of your segment or segments.
- Segments are prioritised and selected based on clear criteria, such as size and readiness to change.
- Interventions in the methods mix (Benchmark 8) are directly tailored to specific audience segments.

A segmentation exercise was undertaken following the exploratory phase. This resulted in the identification of five segments: (1) Accers, (2) Pay As You Go'ers, (3) Maxers, (4) Petrol Hedonists, and (5) Settle Downers. The themes used to describe each of these segments were: lifestyle, income, car choice and support. A summary of this exercise is presented below.

Segment 1) Accers. Lifestyle: reckless driving is symptomatic of a reckless lifestyle, involved in a range of substance abuses, and anti-social behaviours. Income: minimal, possibly from small scale criminal activities. Car choice: a range of cars, obtained illegally, driven illegally. Support: minimal parental support, peer groups provide reassurance and safety, probably assigned youth worker by social services.

Segment 2) Pay as You Go-ers. Lifestyle: less frequent reckless driving but high propensity to drive recklessly, occasional substance abuse, occasional anti-social behaviour. Income: may have a small income from an unskilled job. Car choice: very low cost vehicles, £100 - £250 frequently changed, the car is mainly used as means of mobility but also occasional thrill seeking, more likely to have Tax/MOT/Insurance/License, but not guaranteed. Support: similar to Accers but may be older, more mature, less likely to be involved with social services.

Segment 3) Maxers. Lifestyle: see driving and modifying cars as a hobby, the car is an expression of identity and creativity, anti-social behaviour is limited to car-related activities (wheel-spins, loud music), they belong to a consumption community based on 'Max Power'/'Fast Car' magazines, might attend official car cruises to show their vehicle. Income: income is low but the majority is spent running and modifying their car. Car choice: range from cheap vehicles with basic modifications to expensive vehicles with a wide range of advanced modifications, greater likelihood of legal driving but possibility that modifications have not been declared to the vehicle insurer.

Support: strong group influences within the modding/maxing community, involved in car-related online discussions/forums, more stable family life.

Segment 4) Petrol Hedonists. Lifestyle: similar to Maxers in that they see driving and modifying cars as a hobby and the car is an expression of identity/creativity, they might belong to brand specific consumption communities, might attend cruises but also organised events/track days with their vehicle. Income: higher income level but considerable amount of disposable income is still spent on modifying and running a car. Car choice: can be expensive imports such as 'Jap' imports, greater likelihood of legal driving and possibility that modifications have not been declared. Support: strong group influences within the modding/maxing community (but they 'look down' on Maxers).

4) Settle Downers. Lifestyle: see driving as a mode of transport, the car is an expression of being settled down, no anti-social behaviour due to change in lifestyle but occasional reckless driving when alone / frustrated, unlikely to be involved in any modding scene but may take a passing interest. Income: likely to have a full time job which supports a small family. Support: stronger direct family support (i.e., wife and girlfriend).

However, ultimately the targeting approach was dictated by three criterion: 1) were drivers between the ages of 17 – 25; 2) were drivers legal drivers, (e.g., tax, mot and insurance); and 3) did they reside in the target community. Therefore the segmentation component of the criteria was not essential to the

use of social marketing, an approach characterised by 'get who we can' was more appropriate in this case.

Methods Mix (Benchmark 8)

This benchmark uses a mix of methods to bring about behaviour change.

Does not rely solely on raising awareness (NSMC, 2011):

- Uses all elements of the marketing mix (product, price, place and promotion) and/or primary intervention methods (inform, educate, support, design and control).
- Promotion is used to 'sell' the product, price, place and benefits to the target audience, not just to communicate a message.
- Takes full account of existing interventions in order to avoid duplication.
- Creates a new brand, or leverages existing brands appropriate to the target audience.
- Methods and approaches are financially and practically sustainable.

At a broad level the intervention used the method mix components to bring about behaviour change in the cohort. Each of these components are critically discussed in more detail in the context of the *modified methods mix* section below. The WST intervention as a whole could be considered the 'product', as could each of its constituent parts (e.g., the IVDR unit, the modified coaching course, and the karting incentive). 'Price' was important in the sense that driver coaching was understood to be a socially risky activity for the cohort. 'Place' was also important given the emphasis on a geographically concentrated target audience and the importance placed on situating

intervention activities in places that were convenient to the target audience. In the case of promotion, this tool was used as a way to encourage participation on the *behaviour change mechanism* rather than to *communicate the message*. This included the recruitment video and leaflet as well as the use of the karting incentive to encourage word of mouth promotion at the recruitment stage.

9.4.2 Section Summary

Through a discussion of the social marketing benchmark criteria the extent to which social marketing principles were used to change behaviour and used as a bridge are critically evaluated. The most pertinent factors are behaviour, customer orientation, exchange and competition, and the less relevant components are theory, insight, segmentation and methods mix in this particular case. Social marketing is shown to have played an important role in bridging the gap between the tastes of Group A and Group B. Yet there were other aspects of the intervention that were equally important, such as the use of experts who made up the steering group. This exercise continues with a discussion of Peattie and Peattie's (2003) 7 P's framework.

9.4.3 Modified Methods Mix

The first of the modified methods mix suggests that social marketers should seek to create *social propositions instead of products*. From a review of the literature it is appropriate to suggest that WST differed from the conventional road safety interventions targeted at this cohort. These typically involve fear

appeals combined with presentations from authority figures such as the Police or Fire Brigade or involve the application of restrictions on driving.

Beyond the broad proposition of “better driving”, the *social* proposition of the intervention centred on the idea of, “we can help you improve your driving” or “we can help you to enjoy your driving by making you a more skilful driver”. These propositions were absorbed into the notion that the intervention focused on better driving. Better driving was encapsulated by the type of driving practices undertaken by Group ‘B’. What was being sold to the cohort was the idea that we were offering them access to a new set of skills that would enhance their existing skills set. This differs dramatically from the social proposition of “safer driving” which would probably have been less attractive to the cohort.

This social proposition of skilful driving required an overall ethos of ‘going with the grain’ of behaviour. In a practical sense this meant avoiding being disapproving or judgemental of the cohort’s enjoyment of driving, modifying vehicles, and driving in a certain style. This pro-driving ethos was reinforced by the observation that members of Group ‘B’ were also, in the main, car and driving enthusiasts, albeit in different ways.

However, the IVDR unit represented a tangible product in the sense that it electronically represented the expected behaviour in driving terms. Drivers knew that a red event was undesirable. The lights in their vehicle would

therefore be a constant reminder that they were involved in a scheme to improve their driving.

Costs of involvement instead of price

The idea that modification of behaviour involves some sort of *cost* is important in this case. The greatest consideration of social costs relates the participation of the young drivers in a syllabus of driving tuition, which for them was a socially risky activity. That said, driving was an important component of both groups' identity. This component is perhaps the most important in terms of the 'bridging' orientation of social marketing.

Engaging with the cohort of four "team leaders" at the earlier stages of the interventions design reduced the social risk for the first 'wave' of participants. It functioned as a way to fine tune the intervention to make the intervention attractive to their peers and give them confidence to recruit members of their social circle. This in part was achieved through co-creation activities which functioned in a subtle way to gradually socialise the two groups and expose each group to the ideas of the other.

The quote below highlights a consideration of terms of costs of involvement from the perspective of Group 'B':

"I was treading a line when I was describing the project to them (IAM observers) originally when they first showed an interest I was treading a line between being very honest with them about the background of the drivers but also not wanting to frighten them off so it was an awkward position really so I kept on saying things like they will have a dubious driving history, some of them have been involved with the police multiple times etc. but I didn't go into

any detail, I didn't even know it at that stage and I think it was quite an eye opener when Mark was talking about them in a bit more detail about exactly the history that they have been up to, especially the one where he said the point where he mentioned some of them have been involved in serious accidents in fact fatal accidents, that really brings it home".

Interview with Martin Evans

But more specifically, participation in advanced driving involves a range of costs (such as time and money) that are absorbed by the participant as a gateway to money saving, such as cheaper insurance. The implication for social marketers is that the types of psychological costs outlined above can be offset using incentives and rewards. In this case examples included karting and the IVDR which doubled as a security device for the vehicle.

Accessibility instead of place

Accessibility is another key component of the social marketing bridging orientation as it encourages social marketers to think about *how* and *where* human interactions and participation takes place. Ensuring that intervention activities were accessible to both groups was critical to creating the conditions where interaction could occur. All intervention activities were designed to be geographically convenient to both groups such as karting and coaching activities.

Extending the discussion of accessibility it was important that intervention activities were culturally appropriate for both groups. Meeting points were either at a local karting centre or an out of town shopping centre car park. Both places were accessible but more importantly they were within the cultural repertoire of the both groups – Group 'A' are known for meeting in car

parks, Group 'B' also use car park as meeting places for "Three in a car" activities. A significant change was made to the typical process of coaching. Normally SFL participants would meet the observer at their house. This proved to be a barrier for Group 'B' (given the reputation of Group 'A'). The role of the social marketer in this case was to mediate an accessible middle ground that was convenient and acceptable for both groups.

"Our lads, the vast majority of them are working, they are running a car so they have got transport, they have got other things to do, they have got other social aspects in their lives, obviously they haven't got as much time as [they need] because they are working so it just really surprised me that we are getting such a good retention rate. If they don't want to do something these no airs and graces, there is no fear of upsetting anyone, they will tell you straight, "f*** that, I ain't doing it".

Interview with Mark Pepper

Social communication instead of promotion

While some marketing materials were produced, word of mouth proved to be a far better method of recruitment of both groups. In hindsight, this is not surprising given the close-knit nature of communities like Lawrence Weston. Similarly the recruitment of Group 'B' was highly dependent on the strength of social relationships exhibited by Group 'B'. The quote below highlights a typical response to the question, "how did you hear about WST".

"I heard about it through a friend that was already doing it, I think he had done one session before and he mentioned it and it just went from there". / "Through X, he said about it and Y as well, do you know Y? He was saying about it and I came up when he was doing his drive, his first...what's it called?" / "One of my good friends is on his way down but an apprentice at his work is coming down as well so that's three of us." / "That's my mate there...he wants to get on the scheme as well" / "The worst driver that I know...I won't say who he is but I will give you a little hint, he is here tonight, he came here with me".

WST Participant Interview

Interaction instead of exchange

The use of social marketing tools and techniques to create opportunities for interaction between Group 'A' and Group 'B' was a critical component of the intervention. Interaction opportunities – which were socially constructed by the social marketer – facilitated the 'transfer' of hints and tips (defined as cultural capital) which resulted in the adoption of advanced driving practices by Group 'A'.

Although the idea of exchange featured highly in the discussion of the NSMC benchmark, exchange took place between Group 'A' and 'B' as a direct result of coordinated interactions. Simply communicating the ideas of Group 'B' to Group 'A' – via, for example, leaflets or videos - would have been unlikely to have a significant effect on Group 'A'. The interaction component of the intervention added a highly potent human element where both groups came together from geographically diffused area in one location in a compact timeframe. The idea of interaction was also critical for creating conditions for non-driving related behaviour change. Much emphasis has been placed on the idea that behaviour change can take place through observational learning (c.f. Bandura 1986). Interaction therefore is a key component of this goal. The telling of stories and anecdotes that justified why certain practices are necessary to a certain style of driving were combined with observation elements.

Coaching activities become opportunities for regular interactions (twice a month) to become part of both participants' *social* routines. These important

social interactions – which included non-driving related interactions – often took place while participants were waiting for an observer to finish coaching another participant. During these interactions it was possible to observe *real* relationships being formed which were suspended until the next intervention activity. It was interesting to note some members of Group ‘A’ attended the coaching events even after they had completed the WST syllabus.

The benefits that accrued as a result of interaction are related to the social capital concept. The quote below demonstrates one example the types of benefits beyond driving practices that can be acquired as a result of participation in advanced driving.

“Certainly you will get people talking and obviously some of them are good friends and know each other extremely well and so you get the normal social interaction and people asking advice about things that may have nothing to do at all with motoring, if I could just site an example, I am quite an expert photographer and a number of people know that so it is not unusual for me if I am attending a meeting for somebody to stop me and say Dave I am having a bit of a problem with my camera or whatever and hopefully I can solve it”.

IAM Exit Interview

Competition

This component of the modified methods mix suggests that competition should be framed in terms of competing ideas, and the need to win the battle for attention and acceptance to secure behaviour adoption. The competition in this case can be summarised by competition for an alternative *style* of driving. These competitive forces could come from social pressures to conform to the ‘normal’ behaviour and reject the newly acquired skill. The experiential component (the demonstration drive) of the intervention helped to overcome

potentially negative perceptions towards Group 'B'. Such is the voluntary nature of any social marketing intervention; social marketers in this case were also competing with alternative ways that the target audience could spend their time. This is especially the case where social marketers are looking to engage participants in periodic interactions (such as monthly coaching sessions). This is where incentives (e.g., karting and a £5 reimbursement for fuel used during coaching sessions) were used to 'compete' against these forces.

9.4.4 Proposition 3 Summary

In summary, the modified methods mix was found to be more useful than the benchmark criteria in this case. The ideas of costs of involvement, accessibility, social communication, interaction and competition are all highly relevant in the research context. In particular, *interaction* is highlighted as one of the fundamental principles of the model proposed. The idea of behaviour-change-through-interaction is discussed during Proposition 4.

9.5.0 Proposition 4 – Community of Practice (CoP)

Proposition 4 explores the idea that the CoP concept can be explored within the context of a live social marketing case. The overall goal of the WST intervention could conform to the definition of CoPs offered by Cox (2005) in that WST was *an informal group sponsored by an organisation to facilitate knowledge sharing or learning*. In relation to Handly's (2006) model of individual learning in CoPs (see Figure 8), the sponsoring organisations (or change agents) are defined as one of the communities that facilitate individual

learning. The sponsoring organisations in this case were the change agents that instigated and implemented the research investigation (BSMC, Bristol City Council and the DfT), the two other communities being defined as the target audience and advanced drivers. Using Andreasen's six 'roles' of communities (2006, p. 132, see p. 104), the sponsoring organisations played an "intermediary" role between the communities with the young drivers as the "target" and advanced drivers as "implementers or catalysts" and "social influencers". Furthermore, the definition of CoPs offered by Wenger et al. (2002, p. 4) has resonance with the outcome of the research, he defined CoPs as "Groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in the area by interacting on an ongoing basis". Perhaps the most important aspect of the CoP in the context of voluntary behaviour change is the idea that "Members share a common interest or passion for a particular topic" (Monaghan, 2010, p. 430). An interest in cars and driving was observed in both groups throughout the intervention activities. Two quotes are cited, the first made by an observer:

"For a lot of them, the car was actually the key to getting them to open up. You get in the car, some of them didn't actually say very much. But when I asked one driver how he had hidden the wires to his black box, we then talked about how to remove a dashboard. He obviously went through every nut and bolt, he did it himself and was obviously very proud of it".

IAM Exit Interview

Similarly, a WST participant described a car-related conversation that had taken place between the participant and an IAM examiner while on an assessed drive for the full SfL course.

“He liked the sound of my flat-six engine. We chatted about his old Astra VXR and how when you boot it in second it goes all over the place. He’s sold it now and bought a 250bhp Renault Megane, which he said handles the power better through the front wheels, less torque steer”.

WST Participant Interview

The potential use of CoPs in a social marketing context is an interesting outcome of the research investigation. The CoP approach could be applied in other social marketing contexts for example, in the fields of exercise (e.g., regular exercise classes) and nutrition / eating habits (e.g., cookery classes). The CoP approach might aid social marketers in creating the ‘middle ground’ between *potential* members of the CoP. The social marker can then use a CoP as an overarching framework for a behaviour change intervention. This represents a shift in the role of social marketer from that of *communicator* to one of *facilitator*, or a shift from the buyer-seller model of behaviour change.

According to the model (Figure 8), individual learning in CoPs takes place through *participation* in a given activity, in turn *practices* are learnt and new *identities* formed. These three ideas guide the discussion of the CoP concept in the context of social marketing. This idea of participation in this case involved participation in the constituent parts of the WST intervention but could broadly be defined as participation in advanced driver tuition. It was the role of the social marketer in this case to create the conditions whereby Group ‘A’ could *participate* in the activities of Group ‘B’ and thereby learn how to put them into practice in their everyday driving. It is here where the key components of the social marketing processes discussed during Proposition 3

can be applied. For example, *accessibility* in Peattie and Peattie's (2003) mix is relevant in identifying 'spaces' where the communities can interact. Again, *interaction* is a key component of the CoP approach. The model also speaks of 'development of practices', in this case the practices were driving-related but the principle could be applied to other behaviour change contexts. Social marketers should be able to identify specific practices that accurately capture the *adaptation & transformation* component of the model. In the case of WST, the use of pre- and post- intervention drive checks was a methodologically strong way of tracking a change in behaviour according to the practices that had been specified as part of the syllabus.

In relation to propositions 1 and 2, it is possible that the application of the CoP approach could consider cultural capital as a means to identify a suitable community to represent the *implementers, catalysts and social influencers*. For example, identifying the highbrow equivalent in other behaviour change settings might be a useful starting point in this process. Later stages could consider other factors such as objectified, institutionalised and embodied forms of capital.

Furthermore, Handy's (2006) model includes *observation* as one of the key components of individual learning. This is partly due to the emphasis of CoPs on situated learning theory, which uses direct observation as the main means through which change is achieved. One of Monaghan's (2010, p. 430) characteristics of CoPs is that "learning occurs in a real-time context". Earlier sections of this chapter discussed the demonstration drive component of

WST. If the CoP approach were to be applied in other social marketing contexts, the idea of *observation* could be coupled with experiential marketing techniques. These techniques could offer the target audience the opportunity to experience the behaviour first hand.

Elements of Wenger's (1998) indicators of community of practices are useful in discussing components of the intervention. For example, the regularity with which coaching and karting activities took place helped to create "sustained mutual relationships" (Wenger, 1998). The relationships were sustained in that they took place once or twice a month, and mutual in that both parties appeared to enjoy the coaching element as it became part of a social routine. Relationships were also developed around karting, which involved only members of Group A. The in-car approach to coaching (during which feedback was instant) helped with *the rapid flow of information* cited by Wenger (1998) as a key indicator. Furthermore he states "Absence of introductory preambles, as if conversations and interactions were merely the continuation of an ongoing process" (Wenger, 1998, p. 125). This has resonance with the approach taken to coaching whereby participants were randomly assigned an observer who continued with the syllabus (e.g., session 1, 2, 3...). The ongoing process 'behind the scenes' in this case was the social marketer-created 'process' along which participants progressed.

In relation to Handly et al.'s (2006) model, coaching activities were inherently focused on *experimentation and feedback*. Drivers were encouraged to try new ways of doing things and feedback was given as they 'tested' these ideas

in a live setting. As stated by a WST participant, “After you’ve ‘ballsed’ it right up, he (the observer) said, “now drive like this”, which was good.”

The components of the model that relate to identity are more difficult to evidence. However, cases were outlined above where members of Group ‘A’ appear to have adopted some of the narratives around advanced driving. Although not evidence of an identity shift, but an indication that changes have taken place and a respondent was comfortable expressing these views as their own. For example, the project manager recalled a discussion regarding two-handed steering:

“We had three lads on Tuesday night, all saying that they drove with both hands on the wheel, all the time. I can’t believe it! We were just sat there chatting away, quite openly. A statement like that, they would be reluctant to tell you something like that because they would be losing face, if that makes sense. To say, “No, I always drive with two hands now”, f***ing nerd, you know what I mean. So that is really positive”.

Project Manager Interview

Similarly, the project manager described a conversation that took place with a WST participant:

“X gave me an example of when he would have possibly been in a collision, if he hadn’t had the training. He said that he knew a van was pulling in, but he knew that he was going to pull straight back out again of a lay-by, or something like that. He said, “I was prepared for that”. He honestly felt that if it weren’t for the coaching he would have ploughed into that bloke. So it is not just the hands!”

Project Manager Interview

It is also worth returning to the drive check scores as supporting evidence of a significant shift in behaviour that appears to have been maintained after the conclusion of intervention activities. We might therefore deduce that a process of *identity regulation, identity work and development of identity* took place in Group 'A' over the course of the intervention activities (this is discussed in the further research section, p. 288).

The WST intervention was unique in that participants were able to move from the WST 'structure' into the local IAM group allowing participants the opportunity to complete the full SfL course. This encouraged the continuation of learning albeit in a separate structure. We might compare this aspect of the intervention in relation to 'levels of participation' from the CoP literature. It could be argued that the WST component was an "apprenticeship" (Lave and Wenger, 1991) in which 'novices' participate in "the periphery" (Handly, 2006). *Full participation* in this case was direct involvement with the IAM post-WST. This is interesting from a social marketing and an ethical standpoint. Interventions which are experimental in nature (which could include a semi-temporary CoP structure) should offer the means through which participants can continue the practices and activities without the support of the change agent and the CoP.

9.5.1 Proposition 4 Summary

Proposition 4 seeks to apply the ideas and concepts present in the CoP literature in the present context. The outcome of this exercise suggests that the overall approach of the intervention subscribed to many of the key

indicators of CoPs and that this approach could be used in other social marketing contexts, especially where the behaviour of a target audience could be modified by *participating* in the desired behaviour.

The next section presents a theoretical framework that combines the outcomes of the research propositions in a diagrammatical form. The theoretical framework includes salient components of the various literature streams examined during the study.

9.6.0 Theoretical Framework

The framework shown in Figure 14 sees the role of social marketing as a facilitator of interactions between two groups, one group who exhibits a series of desired practices, one group whose behaviour requires modification. These groups are defined in the model as exhibiting different levels of cultural capital (see propositions 1 and 2). Social capital is included in the model in two forms: bridging and bonding. Excessive bonding forms of capital prevent social relationships being developed leading to an 'inward' looking influence on behaviour (Putnam, 2000; Adler and Kwon, 2002; Brunie, 2009). However, through the 'bridging' function of social marketing (proposition 3), it could be argued that levels of bridging social capital have increased in both groups offering the potential for cultural capital to be transferred. The model goes on to position the application of a CoP framework (proposition 4) between the two groups working in combination with social marketing tools and techniques. The model suggests that a combination of social marketing

approaches and community of practice elements function as a bridging mechanism for the two groups.

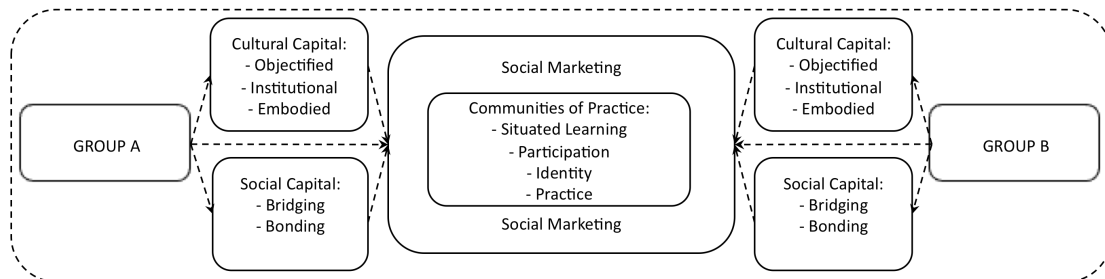


Figure 14: Theoretical Framework

From a practical social marketing perspective, this process involves the identification of a group or community who exhibit the desirable behaviour traits in terms of practice, participation and identity. Social marketers then create the *conditions* for a CoP framework to be used and it is through this framework that information flows between the groups. This information is then converted into capital, which is then deployed as either social or cultural capital in the participants' respective field.

9.7.0 Chapter Nine Summary

Chapter nine outlines the findings and results of the study. The chapter begins with an overview of the results, comprised of the tools used to measure behaviour change in Group 'A'. This includes data from three sources: IVDR units, surveys and drive checks. A range of data is presented (based on data from 23 drivers) which, overall, demonstrates an improvement in driver skill. A sharp and sustained decline in both red and amber events during the intervention period resulted. This is followed by a discussion of the follow-up data, which suggested the behaviour change witnessed in the cohort over the

course of the intervention was sustained after the intervention activities had concluded.

The results of the survey data (which related to a pre- and post- behaviour / attitude instrument) suggests improvements were noted in three components of the instrument: close following, unofficial racing and inappropriate braking. Finally, drive check data is presented for 22 drivers who completed six session of coaching. This data shows an improvement from an average score of 33.9 to 21 (where a lower score indicates better driving).

Following a summary the of behaviour change results, each proposition is then examined in turn. Propositions 1 (lowbrow cultural capital) and 2 (highbrow cultural capital) are examined using the same process, namely the application of Bourdieu's (2001). Evidence is presented in respect to each proposition that supports the notion that young male drivers (Group 'A') and advanced drivers (Group 'B') can be defined as exhibiting low and highbrow tastes respectively. Evidence is presented in relation to both propositions (in the form of quotes and observations) from qualitative research and advanced driving participation.

The chapter then explores the means through which social marketing tools and techniques were used to bridge the aforementioned groups. Proposition 3 applies two social marketing models for this purpose. Using the components of these models, social marketing tools are discussed and shown to play a key role in bridging the gap between the tastes of Group 'A' and Group 'B'.

Finally, the CoP framework is shown to be a useful mechanism through which to bridge two communities. The next chapter is devoted to the discussion, conclusions and implications. These are presented in relation to theory and practice in social marketing and road safety.

Chapter Ten: Discussion, Conclusions and Implications

“It was very interesting the other week at the meeting the idea of just having an adult male role model spending a couple of hours with these guys is going to have a positive effect, not necessarily in the car but actually giving somebody an idea of how to behave in adult society”.

IAM Interview

10.0 Introduction

Chapter ten is devoted to discussing the implications of the research and peripheral factors relevant to the research study and bringing the thesis to a conclusion. The four research propositions are considered throughout the chapter. The chapter also includes a discussion of research limitations and future research opportunities. The chapter begins with a broad discussion of the WST intervention.

10.1.1 Wheels, Skills and Thrills: a final commentary

Weibe's (1951) is often cited as asking, “*why can't you sell brotherhood like you sell soap?*”. It could be tentatively argued that the WST intervention represented a subtle form of brotherhood between the groups involved. The observers functioned as role models for the young men because the young men witnessed a level of skill and considered it worthy of admiration. There are a wide variety of benefits (beyond driving skills) that derive from socialising young men with positive role models and this is especially potent when a typical family structure in the target community tends not to include strong paternal figures. Young men become part of social groups that provide

support and stability. The focus of these relationships often centres on cars and driving (illegal and legal). The observations made over the course of the study support Møller's (2004) claim that those with lower levels of education are more likely to 'bond' through the use of the car as a tool of self-expression, showing-off, competing and entertaining with friends through risk taking behaviour. WST demonstrates that it is possible to use this enthusiasm for the motor car as a means to socialise a group of drivers with lower levels of education with positive driving role models. Perhaps in a subtle way, WST functioned as an initiation for young drivers who sought recognition of their driving skill. The observers – functioning as role models - validated their 'new' driving style. The young drivers' took pride in knowing their driving was considered to be of a high standard by a group of drivers whose skill they came to respect.

Creating these conditions required Group 'B' to achieve a level of behaviour change and flexibility to successfully engage with this group (given they were not the 'typical' IAM member). The development of productive relationships between this group and the young men was both the centrepiece and the most challenging element of the intervention. The challenges presented in bringing these two very different communities together cannot be overstated. The success of this relationship was attributed to a number of 'catalysts' (see Tapp et al., 2012):

- 1) The project's emphasis on skills rather than safety helped to bridge the potential cultural barrier between the cohort (Group 'A') and the observers (Group 'B') through a shared interest in cars and skilful driving;
- 2) The careful briefing of the observers, and their own work in redesigning the 'Skills for Life' (SFL) course means that the observers were able to act as role models despite the cultural and age gap and were perceived as possessors of valued forms of knowledge;
- 3) The demonstration drives were also catalytic in selling the project and bridging a gap between the values attached to driving by the group and those of the advanced drivers;
- 4) The initial engagement of the four team leaders in co-creation of elements of the project and their role in dissemination and recruitment probably helped to lend authenticity to the project.

Behind the IAM-cohort dynamic was another crucial relationship: that of the Project Manager. His credibility in the local area as part of the steering group was vital to the success of the scheme. His extensive knowledge and experience of working with young people gave valuable insight into the social dynamics of the area and the ways in which information was shared. This knowledge proved invaluable in recruiting members of the Group 'A' cohort, enabled continuous feedback about the project, and allowed adaptations to be made as the intervention developed. Initial attempts at promoting the project

through leaflets and a YouTube video were relatively unsuccessful, even though the four team leaders played a significant role in their production. The potency of word of mouth (snowballing) in conjunction with these promotional materials proved to be the most effective method.

Retention of Group 'A' was as challenging as recruitment. Securing ongoing commitment was understood to be challenging from the outset. Significant energy was spent in securing basic commitments and ensuring promises were kept. These difficulties required patience from observers who understood that the cohort led chaotic lifestyles and could not always be relied upon to show up for planned engagements. Those seeking to repeat this model need to clearly define and understand the behavioural traits of the working group and make adjustments and plan accordingly.

Backing up the human interactions were the technological and incentive components of the project: the IVDRs, and monthly karting sessions. These enabled 'exchanges' to take place – offering tangible rewards in return for participation. The karting component proved to be an effective recruitment tool, although its importance diminished as the project developed. The coaching and the casual socialisation associated with karting then became more important in maintaining commitment to the project.

10.1.2 Implications for Road Safety Practice

Although a small scale intervention, WST offers some useful insights into overcoming a significant challenge in the road safety field, namely that road

collisions are the leading cause of death for young adults between the ages of 15 – 24 in the UK (DfT, 2011a). The United Nations recognise the importance of road safety (especially in low and middle income countries) through its 'Decade of Action' (see United Nations, 2010a). The UN states, "...this major public health problem has a broad range of social and economic consequences which, if unaddressed, may affect the sustainable development of countries and hinder progress towards the Millennium Development Goals" (United Nations, 2010b, p.1).

The author contends that the ratio of studies that outline the *reasons* for the high crash likeliness of young drivers versus studies that provide a robust evaluation of *solutions* are disproportionately skewed towards the former. Interventions such as Staffordshire County Council's alliance with GreenRoad received much fanfare via mass media and awards, but it engaged with those with the lowest risk profile in this *age* demographic – those with supportive parent and stable home lives.

The 'young driver' challenge is complicated and multi-faceted (for example see Shope's (2006) categorisation of influences), with contributory factors deriving from a host of origins including lack of driving experience, overconfidence, poor hazard perception, feelings of invincibility, peer pressure, parental influence, age, gender, reckless tendencies and feelings of invincibility (ROSPA, 2002; Clarke and Robertson, 2005). The author believes that a pro-active approach to behaviour change is required instead of relying

on safety improvements that result from the gradual reduction in risk that results from maturity factors such as those cited by Waller et al. (2000).

Shope (2006) categorises influences on driving behaviour' into six factors: personality characteristics, developmental factors, driving ability, driving environment, perceived environment and demographic factors. In consideration of the above factors in relation to the intervention, the core ethos of the intervention and resulting behaviour change was achieved through a focus on driving ability, which includes knowledge, skill and experience (see Figure 2). This was primarily achieved through the transfer of driving practices or expert knowledge, from Group 'B' to Group 'A'. As a road safety approach this faces competition from interventions that rely on *limitations* being placed drivers through, for example, Graduated Driver Licensing (see Williams et al., 2012) and / or IVDR solutions delivered in partnership with insurance providers. These may have good returns for mainstream society, but may not provide levels of sophistication and engagement for hard-to-reach young males. Given the high risk nature of this group, there is a clear case for a bespoke multi-faceted model based on advanced driving principles of the type described in this thesis.

The study highlights the importance of feedback mechanisms in social marketing. Social marketers can create the *need* (through, for example, experiential approaches) and couple this need with meaningful referents of progress. Social marketers are also able to offer incentives in exchange for achieving certain targets based on the feedback these systems generate. But

feedback (from IVDR) in the study was found to have a greater impact when coupled with face-to-face interaction and coaching.

At the time of writing the insurance industry is extending the use of 'black box policies' based on IVDR monitoring of driving, linked to insurance discounts. Such schemes have mass-market appeal but direct coaching (in various forms, i.e., advanced driving, defensive driving and skid pan training) have a series of advantages for the cohort investigated. IVDR feedback in isolation of other *human interaction* activities has significant limitations containing no inherent coaching or cognitive component that enables reflective learning to take place and focuses narrowly on vehicle handling with no opportunity to up-skill in key areas of skilful driving: concentration, observation and anticipation of other traffic and road conditions, namely driver skills.

This discussion raises important questions about the nature of behaviour change. Should interventions achieve behaviour change by limiting the high-risk scenarios in which young drivers are placed or should young drivers be *trained* to cope with such scenarios? Or should it be a combination of the two approaches? On reflection of various approaches in the road safety literature, the research suggests the skills approach (which relies on a training ethos) offers the most promising means to achieving behaviour change in young drivers. However, significant cuts have been made to spending levels in road safety alongside other government departments. Interventions specifically aimed at young people may be heavily dependent on private funding as a result of these cuts, probably insurance industry based or through

sponsorship by large vehicle manufacturers. However, such models are likely to be based on simplistic models of driving improvement driven by IVDR technology.

WST is a useful case study in demonstrating how social marketers can engage with and involve a target community in order to achieve sustainable behaviour change. This approach seems to be gaining momentum in the road safety field. A 2011 strategy document released by the Department for Transport (Department for Transport, 2011) highlights the need for communities to take a greater role in identifying and solving local road safety challenges based on the experience and findings of this research.

10.1.3 Upstream Regulation

The intervention outlined is an example of a downstream intervention targeting individual behaviour change. An element of social marketing's behaviour change armory can involve applying behaviour change techniques to upstream factors (cf. Gordon, 2011). An example of this in the present case would involve influencing policy makers and regulators of road safety strategy. The most significant role in road safety in terms of policy in the UK is through the Driver Standards Agency (DSA) who oversees training and testing of drivers and riders.

The research identifies the presence of an advanced driver network - and the existence of objective social hierarchies - who operate under the umbrella of an oligopoly of road safety charities. The two most influential road safety

charities - RoSPA and the IAM – have separate corporate divisions which generate revenue through fleet training as a result of legally imposed requirements on employers. It could be argued that corporate success and social welfare are in conflict in this scenario. If we view the adoption of advanced driving practices as a market in which participants pursue individual profit maximising behaviour, the suppliers (advanced driving organisations) are failing the most at need customers. Thus, we could describe the landscape as being characterised by market failure (cf. Glenane-Antoniadia et al., 2003). The major negative externality caused by this market failure is the under-utilisation of advanced driving practices by those most in need, resulting in a higher social burden to society in the form of road traffic accidents. The role of social marketing in road safety supported by this research is to take a strategic approach to the dissemination of what is currently a scarce resource. Its role is to make the advanced driving message (and its associated practices) less scarce and part of the everyday narrative that surrounds driving.

The CEO of the IAM recently stated, “We are clear about our vision: through our expertise in driving and riding we will be the largest provider of post-licence driver and rider training in the UK” (Institute of Advanced Motorists, 2014, p. 11). This quote highlights the corporate background to organisations that mediate the relationship between the public and higher level driving skills.

The strategic alliance between these organisations and the Police has created a road safety oligopoly that hold the knowledge drivers need to drive at a

higher level. In essence, the Police have handed over their knowledge of advanced driving practices to the charity sector, which they now regard as their intellectual property. This knowledge is bundled together by these charities with a range of other benefits (e.g., cheaper insurance) and sold as a 'membership club'. For instance, the terminology associated with advanced driver training is not "to take" but "to join" and it might be argued that information might be more freely available to the public *without* these structures in place.

However, this research identifies that the advanced driver network appears to share common features in terms of rules, structures and engagements. This, it is argued, supports standardised practices and established norms of behaviour across these geographically dispersed structures. This research suggests that the IAM model may be a suitable *blueprint* for engaging with young drivers on a larger scale despite the challenges. However, and importantly, this research leads to the conclusion that a stand-alone brand working in parallel to activities of the IAM is required in the UK focusing specifically on young drivers. Executing a large-scale roll-out of a WST-style model would entail the use of the IAM model as *blueprint*, but with substantial modification to suit a younger target audience. Long-term investment would be required in the recruitment of young drivers onto the 'first rung of the ladder' to enable ongoing progression through the various levels of training offered by the scheme. However, one limitation would be the number of qualified observers in the volunteering network. A national model would more than likely need to engage with Approved Driving Instructors (ADI) which adds

a further cost implication. A further upstream factor would be a change in the law relating to who can receive remuneration for providing driver coaching. Current laws prevent anyone other than Approved Driving Instructors (ADI's) to be paid for driving tuition.

Behaviour change in the road safety field, within the parameters of driver training, is based on finding ways to encourage the target audience to access the types of higher level driving practices described in this study. Currently, young drivers are disincentivised from improving their driving because of the financial burden this imposes on that driver. Government might consider a 'free at the point of use' approach for advanced driver tuition and targeting drivers from more challenging backgrounds.

The next section examines the implications for social marketing in relation to the other research streams examined during the research: cultural capital, social capital and communities of practice.

10.1.4 Implications for Social Marketing: High and Lowbrow

The first contribution and point of discussion relates to the use of social marketing tools and techniques as a means to bridge the taste of divergent groups (in this case, in terms of driving practices). One of the practical implications of this finding for social marketers relates to the categorisation and segmentation of target audiences. Evidence from the research supports the idea that this can be achieved via the concepts of low and highbrow cultural capital. The study demonstrates an original approach to behaviour

change through participation in highbrow activities by those exhibiting lowbrow tastes and preferences. From a practical perspective, this involves the identification of two groups, those exhibiting 'undesirable' behaviour and those exhibiting 'desirable' behaviour (as defined by the change agent) and creating mechanisms whereby these groups participate in a process of social exchange. In the present study the mechanism that facilitates this exchange is the CoP framework (discussed in further detail later in the chapter).

The first part of this approach is closely related to – but is an extension of – segmentation processes typically undertaken by social marketers to define the target audience/s for a given intervention. The conceptual model presented in the previous chapter could allow social marketers to capitalise on the presence of high and lowbrow preferences in other cultural fields (see further research section, p. 288).

The basis for this contribution to knowledge relies on the contention that social marketing theory and practice adopts a buyer-seller approach involving a target audience and a change agent. Key to the contribution is the assertion that social marketing tools can be used to create a middle ground between levels of cultural capital in *two* groups – or communities.

10.1.5 Implications for Social Marketing: Cultural Capital

The second contribution of the study relates to the concept of cultural capital in social marketing and discusses cultural capital following a preceding section devoted to social capital. During the literature review, a gap was

identified in the social marketing literature in relation to the effect of cultural capital on behaviour. A key outcome of this research is the finding that cultural and social capital should be 'on the radar' of social marketers as two such social determinants of behaviour.

The simplest conceptualisation of cultural capital is a powerful divide between 'high' or 'popular' culture or in other words, a disposition towards learning the skills and abilities necessary to appreciating more elite forms of consumption. Bourdieu saw those who possessed cultural capital as having acquired competence in society's high status cultural forms (Mahar et al., 1990). The investigation of the cultural capital concept (and to a lesser extent social capital) during the study is compatible with Hastings and Donovan's (2002, p. 4) call for "a broader perspective that encompasses not just individual behavioural influence, but also the social and physical determinants of that behaviour". Propositions 1 and 2 result in the categorisation of Group 'A's behaviour as lowbrow and the activities of Group 'B' as highbrow, representing high status cultural forms in this field. This results in an objective that involved socialising these divergent groups with different portfolios of cultural capital.

In addition, a key part of the literature review demonstrates the relationship between two factors: educational attainment and crash risk. Low education attainment, in the study, is treated by-word for a lack of the specific forms of cultural capital that are valued in this cultural field. This absence of field-

specific cultural capital is represented by an increased likelihood of road collision involvement in Group 'A'.

The study supports the existence of social arenas – which Bourdieu describes as fields – in which players compete for positions of distinction and status (see Bourdieu, 1984; Webb et al., 2002). The two groups studied both exhibit tendencies towards participating in networks of social relations and structured systems of social positions. An important contribution is made to the cultural capital literature as a result of the successful socialisation of divergent groups of individuals each exhibiting different levels of cultural capital. The results of the study point towards a shift in behaviour, treated as a proxy for a change of position in the cultural field of advanced driving, or in other words, an endowment of field-specific cultural capital (which directly translates into improvements in driver skill). The drive checks, for instance, suggest a shift towards the cultural capital portfolio of Group 'B'. We may conclude therefore that Group 'B' exhibits a portfolio of valuable cultural capital that translates into reduced crash likelihood.

The research highlights the potentially positive ways that cultural capital can be harnessed as a force for good. This is different from the perception of cultural capital as a force that results in the reproduction of social class and inequality (see Bourdieu, 1984) or direct or indirect social and cultural exclusion (Lamont and Lareau, 1988). By embracing *differences* between players in a given behavioural field, cultural capital can be transferred, under the right conditions, to other players in the field. It could therefore be argued

that results of the study represent a shift of the 'rules of the game' of this particular autonomous field. The study shows that 'needs and wants' can be created in those with low cultural capital and, through an appropriate mechanism, this *value* can be transferred from those with high to those with low cultural capital. This comes in the form of a change in cultural knowledge, taste, practices, dispositions, attitudes, and goods (see Bourdieu, 1984).

The study contributes to another of the cultural capital research streams relating to participation and non-participation in certain cultural activities (see Scherger, 2009). By defining advanced driving as a highbrow cultural activity, the research demonstrates a range of approaches that are used to overcome barriers to participation. The lack of field-specific cultural capital pre-intervention acts as a restraining factor on those from less privileged backgrounds. Lareau and Weininger (2003, p. 599) argue that cultural capital is most relevant when "individuals' strategic use of knowledge, skills and competence come into contact with institutionalised standards of evaluation". Although cultural capital in the case discussed was field specific, observation during the study suggests that the skills and abilities developed during the intervention could be transferable into other aspects of a participants' life through a positive understanding and awareness of institutional standards of behaviour.

10.1.6 Implications for Social Marketing: Social Capital

With the exception of Glenane-Antoniadia et al. (2003), the social capital concept has received limited attention in the social marketing literature. The

proposed theoretical model uses the social capital concept to accompany the bridging orientation of social marketing and articulates a form of socialisation that occurs when individuals are connected with those outside their immediate social circle.

Lefebvre (2008, p. 19) highlights the influence of “social networks as determinants of behaviour” as one of the key challenges of social marketing. A connection has been made between health outcomes and disparities in accessing health information, so called “communication inequality” (Lefebvre, 2008). This research suggests a form of *social capital inequality* leading to a reduction in likeliness of *connecting* with members of society who could positively influence a person’s behaviour.

Observations made during the study suggest that Group ‘A’ possesses strong bonding capital (which provides the foundation for bringing individuals together) and weak bridging capital (which relates to intercommunity ties which provide access to new information and resources). Creating the conditions for bridging social capital in this case depend on a trusted source within the community being identified strongly with the project who could act as a social conduit or ‘bridge’ between community members and ‘outsiders’.

The social capital concept, and in particular the ‘bridging’ form of the concept, is useful for describing the social outcomes of the study. Returning to the definition offered above by Brunie (2009), we can reason that improvements in bridging social capital might result in the generation of value for members of

a given community or, as Putnam (2000, p. 22) observes, bridging social capital is better for “linkage to external assets and for informational diffusion”.

10.1.7 Implications for Social Marketing: Communities of Practice

A third contribution of the study relates to the application of a CoP framework in social marketing. The purpose of its inclusion derives from a need for a mechanism through which two groups can be socialised, the goal being to encourage and support the exchange of valuable information, in this case, advanced driving practices.

The CoP framework accurately reflects many of the practical aspects and overall ethos of the intervention. At its core, this involved the process of knowledge transfer from one party to another. The CoP framework emphasises the theory of situational learning as one of its core principles. Situational learning involves some form of observation component which allows the behaviour to be replicated. The application of CoP framework in the context of behaviour change should emphasise the importance of *demonstrating* the desired behaviour, potentially through a consideration of experiential marketing techniques.

Key to the application of the CoP framework is the presence of “social referents” (c.f. Bandura, 1977). In the study, social referents are defined as those with highbrow taste. It has been stated in previous chapters that it was through these *human exchanges* that behaviour change occurred. Although human exchange relationships have been questioned by authors such as

Foxall (1989), it is considered a source of value in the application of a CoP orientation. Without human exchanges between two groups - who exhibit divergent tastes and preferences – it could be argued the model reduces in term of its behaviour change potency. Although human exchanges are inherently complex and unpredictable, CoPs embrace this complexity and as such seek to incorporate various types of exchanges that occur as a result. Bagozzi's (1975) trio of exchange relationship can be encompassed by the CoP approach outlined where participants' involvement expands and contracts as individual preferences evolve and social marketers co-create new consumption experiences. Exchange took place between two parties (restricted exchange), between at least three actors whereby actors benefit indirectly from someone other than to whom he gave (generalised exchange) and through systems of mutual relationships where the entire system is organised by an interconnecting web of relationships (complex exchange). Importantly, the 'collective' should offer access to a range of consumption opportunities to suit varying levels of enthusiasm and engagement exhibited by both groups. It could be argued that too often social marketers rely on the messages and communications designed and implemented by the social marketer themselves. For the CoP framework to yield maximum benefits, social marketers should resist the temptation to micro manage the messages that are exchanged between the groups. To build and maintain a strong CoP, ongoing resources are needed to replenish members and reinvigorate the activities of the membership cohort. Metrics of success in a CoP are related to *attendance, participation and engagement* as behaviour change occurs

through *interaction* rather than just through sole consumption of social marketer generated *messages*.

10.1.8 Implications for Social Marketing: Beyond CBSM

A major contribution of the research study relates to a theoretical extension of the CBSM approach. The concept and practical approach of CBSM recognises the importance and influence of socio-demographic factors on behavioural choices through two factors, social norms and social influences (McKenzie-Mohr & Smith, 1999). The defining character of CBSM is the *community participation* of those whose behaviour is targeted (McKenzie-Mohr & Smith, 1999). These authors outline three broad approaches to CBSM that treat communities as 1) a segmentation variable, 2) a geopolitical designation, and as 3) interveners. The practical approach taken during the design and implementation of the WST intervention is comparable to a CBSM approach. However, the research study highlights the potential to extend the CBSM approach to include an additional community who function as *external interveners*. As a way to illustrate this point, an extension to the five steps (McKenzie-Mohr & Smith, 2011) of CBSM is proposed by the research. The existing five steps are:

1. Selecting which behaviour to target;
2. Identifying the barriers and benefits to the selected behaviour;
3. Developing a strategy that reduces barriers to the behaviour to be promoted, while simultaneously increasing the behaviour's perceived benefits;
4. Piloting the strategy; and

5. Evaluating broad scale implementation and ongoing evaluation once the strategy has been implemented.

If we label the approach advocated as 'the modified CBSM approach', this lends itself to the inclusion of an additional step (Step 3) and further consideration (in Step 4), which involves identifying a group (or community) that function as interveners, resulting in a six step 'modified CBSM approach':

1. Selecting which behaviour to target;
2. Identifying the barriers and benefits to the selected behaviour;
3. **Identifying a community or group who are performing the desired behaviour;**
4. Developing a strategy that reduces barriers to the behaviour (**defined in terms of "barriers to socialisation" with the intervening group**) to be promoted, while simultaneously increasing the behaviour's perceived benefits;
5. Piloting the strategy; and
6. Evaluating broad scale implementation and ongoing evaluation once the strategy has been implemented.

Furthermore we can overlap the modified CBSM approach with the 'social marketing process' as advocated by Weinreich (2010), defined as: step 1 – analysis, step 2 – strategy development, step 3 - program and communication design, step 4 – pretesting, step 5 – implementation and, step 6 – evaluation and feedback. The segmentation of desirable and undesirable behaviours

(low and highbrow cultural capital) could take place during the analysis phase with a 'bridging orientation' taking place throughout steps 2, 3, 4, 5 and 6.

Having discussed the four main contributions of the research, the next section considers the research limitations and further research opportunities.

10.2.1 Research Limitations: Theory

One of the obvious limitations of this research relates to its single-case design. As advised by Yin (2003), multiple-case designs are preferable to single-case design because they make the research less susceptible to criticisms of subjectivity in terms of research outcomes. However, such was the intensity of the action research endeavour, in combination with the nature of the target audience, a single case study is deemed to be defensible in this case. Furthermore, the sample size of the single case study could be deemed a research limitation, making the generalisability of the findings problematic.

In term of the overall research design, considerable emphasis was placed on establishing robust pre- and post- *quantitative* measures to determine the extent to which behaviour change occurred. Although a considerable amount of *qualitative* data was gathered throughout the research, this was collected in a more ad-hoc fashion. This meant that participant responses could not be directly compared in a pre- post- fashion. If the study were to be repeated, this component of the research could be improved through more explicit pre- and post- qualitative techniques. However, gaining access to participants in a structured and longitudinal manner would require a considerable resource

commitment which was impractical in the present study. For example, in relation to cultural capital, greater emphasis could have been placed on exploring how the perception of Group 'A' members about Group 'B' changed over time. Furthermore, the four research propositions are explored using only qualitative approaches. This means the findings and results presented were inevitably subject to a degree of researcher bias.

Specifically in relation to Proposition 4, the CoP framework is identified as a useful theoretical area after the main data collection period had ended. Consequently, the consideration of this concept occurs post-intervention and as such is subject to an element of retrospective interpretation.

10.2.2 Research Limitations: Practice

Although examples of road safety interventions targeting young drivers exist, the number of prior research studies that specifically engage with the target audience described herein are limited. This means the research typology includes an exploratory component in order to overcome this limitation. Furthermore, a body of literature is identified in relation to the impact of advanced driving tuition but there are no studies combining this and young driver behaviour.

There are a number of technical and research design limitations associated with the intervention. For example, the *follow-up* analysis of driver behaviour is confined to live IVDR units. By its very nature, this excludes drivers who change vehicles or choose to disconnect the unit. An assumption is made that

the data from live IVDR units can be generalised to the whole cohort. Surveys and drive check data are excluded from the follow-up analysis. This is mainly due to the labour intensity of contacting participants to arrange completion of these two post-intervention evaluation components.

In retrospect, another relevant limitation is the subjective nature of the survey statements that are selected for inclusion. These choices were agreed based on a consensus being achieved between steering group members. Because these were selected prior to the commencement of the intervention, they could not then be tailored to suit the specific content of the bespoke driving course. In hindsight the value of using existing measures as a way to compare against existing studies is lost due to the small sample size of the intervention. Similarly by merging statements from the two instruments (the DAS and the DBQ), the statistical credibility of this approach is perhaps reduced.

Previous chapters have noted that the IVDR units are car-specific. Such were the intricacies of the installation process, each box behaved slightly differently depending on a range of factors, such as suspension stiffness, vehicle performance and location of the installation. However, once fitted, the outputs in relation to that vehicle are consistent over time.

10.3.1 Further Research: Theory

In relation to the single case-study research limitation described above, a suggestion for further research is to conduct other similar action research

endeavours in other fields in which social marketers seek to influence behaviour. Specifically, in terms of the identification and socialisation of high and lowbrow consumers through the bridging orientation of social marketing, other research contexts could be identified whereby the approach could be replicated. This could include, for example, the explicit application of a CoP framework. This research focuses on cultural and social capital as the main focal points for theory generation. Further research in similar contexts might look at other capital concepts as positive outcomes from social marketing activities, for example, human and economic forms of capital.

Further research might involve the development of survey statements designed to capture factors in relation to cultural and social capital. These could be administered in a longitudinal study in order to measure changes in a respondents' perception of these variables. This could reduce the level of researcher bias associated with these constructs (as outlined above). Furthermore, measures could be developed which are field-specific (e.g., driving, cycling, alcohol consumption) which could quantify lowbrow / highbrow preferences in a given field.

From a CoP perspective (and specifically in relation to Proposition 4 and Figure 8), other behaviour contexts could be identified where by this approach could be replicated. The present research was found to be highly relevant in the following elements: development of practices, experimentation and feedback, adaption and transformation, and observation. However, the research design was such that aspects such as: development of identity,

identity work and identity regulation could not be investigated as fully. Further research could focus more on the changes of identity that take place in the context of CoPs.

10.3.2 Further Research: Practice

Further research might seek to replicate the WST intervention with a larger sample size. This has obvious implications in terms of the resource availability in the current political climate. However, it could be argued that having identified a viable architecture in terms of intervention design it would be possible to 'scale-up' the size of the intervention without the need for many of the exploratory elements of the present research.

In relation to the examination of driving practices, a series of survey statements could be developed that capture changes in the application of specific techniques (e.g., one handed steering, braking, cornering). Although a survey of this kind would be subject to a degree of self-reported bias, data of this kind could be compared against practical observations such as drive check assessments.

The use of IVDR as a research tool has the potential for a number of applications in the road safety field. A consensus was reached by steering group members that IVDR is a robust *measurement* and *feedback* tool. However, in this case, its use was magnified by the introduction of in-car one-to-one training. The future of advanced driving tuition could involve the coupling together of IVDR and advanced driving tuition. This could result in a

package of acceptable parameters developed by an observer, tailored to suit the driver. These parameters could be uploaded to the vehicle remotely and provide ongoing feedback via LEDs or online portals.

Four other potential research opportunities are considered viable in conjunction with IVDR: music vs. driving style; heart rate and advanced driver coaching; presence of passengers and driving style; and advanced driver training and gender.

Minimal attention has been paid to the role of music in affecting driving style in the road safety literature. This could be achieved using a combination of IVDR and a microphone that records the 'beats per minute' (BPM) of music played within the vehicle. A study could compare the role of contrasting styles of music i.e. drum and bass verses classical music on driver behaviour.

The researcher hypothesises that an improvement in driving skills through advanced driver tuition leads to a reduction in the stress levels experienced while driving. From a technical perspective, the driver would wear a heartbeat-detecting wristband each time he/she drives a vehicle. The hypothesis is that advanced driver training reduces heart rate.

Evidence suggests that young male drivers are particularly prone to peer-pressure while driving with other passengers in the vehicle. Driving behaviour could be contrasted to number of passengers in the vehicle. A switch under

each seat that recognises the number of passengers versus driving style would achieve this end.

The present study targeted only young male drivers. A further study could compare the results of advanced driver training in a cohort of young men and women.

Karting was used as the primary incentive for participation on the intervention. A range of lap times and scores were collected during karting sessions. It is predicted that a correlation between improvements in karting lap-times and other measures would have been observed had karting data been subjected to analysis. The hypothesis being that improvements in on-road scores (i.e. IVDR and drive check data) would be reflected in improvements in off-road karting ability. The rationale is that the ability to listen and absorb driving-related instruction is a transferable skill between on-road and off-road contexts. This has implications for road safety interventions considering using off-road driving as an intervention component.

10.4.0 Chapter Ten Summary

The chapter begins with an *intervention*-specific discussion focused on factors such as recruitment and retention of Group A, behaviour change in Group B, and other success factors associated with the WST intervention. Implications for road safety practice are then discussed with an emphasis on the nature of behaviour change in 'hard to reach' cohorts of drivers with a consideration of industry-based solutions deployed to overcome this challenge.

Recommendations are presented in terms of an 'upstream' development of the current intervention which is based on the IAM training model. Specifically, this involved a 'free at the point of use' agreement between training providers and young drivers.

The chapter then discusses the implications of the study to social marketing theory and practice. Four contributions to existing knowledge are presented. Contribution 1 asserts that social marketing tools and techniques can be used to bridge the taste of divergent groups. Contribution 2 focused on the concepts of cultural and social capital as appropriate considerations in the examination of social networks as determinants of behaviours. Contribution 3 related to a theoretical extension of the (CBSM) approach in order to account for the use of a second community. McKenzie-Mohr & Smith's (2011) CBSM steps are modified to illustrate this discussion. Contribution 4 related to the use of a CoP to describe the overarching framework applied during the research.

Research limitations and further research opportunities are presented in terms of theory and practice. Theoretical limitations are presented in relation to a single case study design and the means through which data is interpreted. Practice-based limitations are presented in relation to *intervention* design such as IVDR factors and survey instrument design. Similarly, further research opportunities are provided in relation to the contributions outlined above followed by opportunities for further research in the field of road safety.

The next section provides an overview of the thesis and brings the thesis to a close.

10.5.0 Thesis Summary

The research study within this thesis sought to make a contribution to the social marketing literature through a range of literatures. The literature review highlights the salient conceptual elements from these literature streams that allowed research objectives and research propositions to be outlined. This begins with a discussion of the road safety literature that represents the real world context in which the research study took place.

The early chapters of the literature review present evidence that demonstrate the relationship between age, social background, educational attainment and crash risk in the road safety field. This is superseded by a specific discussion of social marketing in the road safety field and the use of advanced driving as a means to changing behaviour in a 'high risk' demographic of road users. The concept of cultural capital is then discussed as a means to articulating the relationship between educational attainment and crash risk in the context of young drivers. Social marketing theory is then discussed from both a practical and theoretical perspective.

Methodological choices are then discussed to examine the research objectives and propositions in relation to the research context afforded to the researcher. These discussions focus on the use of a pragmatic research philosophy in combination with an action research approach. A detailed

overview of the research context is provided in conjunction with the sampling approach used and the data triangulation approach applied during the research. Specific fieldwork activities, data collection, data structuring and analysis techniques undertaken during the research study are then outlined.

Findings and results are presented in relation to the research objectives and research propositions. This involves the presentation of data from a mixed methods approach outlined during earlier chapters of the thesis. Finally, four contributions to existing knowledge are presented. These are presented in relation to road safety practice and social marketing theory. This is followed by a discussion of research limitations and further research opportunities which are presented in terms of theoretical and practical considerations.

Chapter Eleven: References and Appendix Information

11.1 List of References

Aaker J. L. et al. 2004. When good brands do bad. *Journal of Consumer Research* 31(June) pp. 1–16.

Abdalla, I. M. et al. 1997. An investigation into the relationships between area social characteristics and road accident casualties. *Accident Analysis and Prevention* 29(5), pp. 583 – 593.

Abraham, C. and Michie, S. 2008. A taxonomy of behaviour change techniques used in interventions. *Health Psychology* 27(3), pp. 379 - 387.

Adams, J. 2010. *Managing transport risks: what works* [Online]? University Collage London, UK. Available at: <http://john-adams.co.uk/wp-content/uploads/2010/12/Management-of-the-risks-of-transport2.pdf>
[Accessed 10th October 2012].

Adler, P. and Kwon, S. 2002. Social capital: prospects for a new concept. *Academy of Management Review* 27(1), pp. 17 – 40.

Allcott, H. and Rogers, T. 2012. *The short-run and long-run effects of behavioural interventions: experimental evidence from energy conservation* (Working paper). National Bureau of Economic Research, Cambridge, MA.

Alinski, S. 1971. *Rules for radicals: a pragmatic primer for realistic radicals*. London: Vintage.

Alvesson, M. and Sköldbberg, K. 2000. *Reflexive methodology*. London: Sage.

Alvesson, M. and Willmott, H. 2002. Identity regulation as organizational control: producing the appropriate individual. *Journal of Management Studies* 39(5), pp. 619 – 44.

Altrichter, H. et al. 2002. The concept of action research. *The Learning Organization*. 9(3), pp.125 – 131.

Andreasen, A.1995. *Marketing Social Change*. San Francisco: Jossey-Bass, Inc.

Andreasen, A. 2002. Marketing social marketing in the social change market place. *Journal of Public Policy and Marketing* 21(1), pp. 3 – 13.

Andreasen, A. 2006. *Social marketing in the 21st Century*. London: Sage.

Andrews, M. et al. 2008. *Doing Narrative Research*. London: Sage.

Arnold, M. and Fisher, J. 1996. Counterculture, criticisms and crisis: assessing the effect of the sixties on marketing thought. *Journal of Macromarketing* 16(1), pp. 118 - 132.

Arnould, E. J. 1998. Daring consumer-oriented ethnography. In: Stern, B. eds. *representing consumers: voices, views and visions*. London: Routledge, pp. 85 – 126.

Ayres, I. et al. 2009. *Evidence from two large field experiments that peer comparison feedback can reduce residential energy use* (Working Paper). National Bureau of Economic Research, Cambridge, MA.

Bagozzi, R. P. 1974. Marketing as an organized behavioural system of exchange. *Journal of Marketing* 38(October), pp. 32 – 39.

Bagozzi, R. P. 1975. Marketing as exchange. *Journal of Marketing* 39(October), pp. 32 - 39.

Bagozzi, R. P. 1979. Toward a formal theory of marketing exchanges. In: Ferrell, O. C. et al. eds. *Conceptual and theoretical developments in Marketing*. Chicago: American Marketing Association, pp. 431 – 447.

Bandura, A. 1977. *Social learning theory*. New York: General Learning Press.

Bandura, A. 1986. *Social foundations of thought and action: a social cognitive theory*. New Jersey: Prentice-Hall.

Begg, D. J. and Langley, J. D. 1999. Road traffic practices among a cohort of young adults in New Zealand. *New Zealand Medical Journal* 112(1080), pp. 9 – 12.

Belk, R. W. and Tumbat, G. 2005. The cult of Macintosh. *Consumption, Markets and Culture* 8(3), pp. 205–217.

Benbasat, I. et al. 1987. The case research strategy in studies of information systems. *MIS Quarterly* 11(3), pp. 369 - 386.

Bengry-Howell, A. and Griffin, C. 2007. Self-made motormen: the material construction of working-class masculine identities through car modification. *Journal of Youth Studies* 10(4), pp. 439 – 458.

Bennett, T. and Savage, M. 2004. Introduction: cultural capital and cultural policy. *Cultural Trends* 13(2), pp. 7 - 14.

Bennett, T. et al. 2009. *Culture, class, distinction*. London: Routledge.

Benson, R. 1999. Field theory in comparative context: A new paradigm for media studies. *Theory and Society* 29(3), pp. 463 – 498.

Berg H. Y. 2006. Reducing crashes and injuries among young drivers: what kind of prevention should we be focusing on? *Injury Prevention* 12(1), pp. 15 - 18.

Bernard, H. and Ryan G. 2010. *Analyzing qualitative data: systematic approaches*. London: Sage.

Bingham, C. R. and Shope, J. T. 2005. Adolescent predictors of traffic crash patterns from licensure to early young adulthood. Association for the Advancement of Automotive Medicine. 49th Annual Proceedings. Barrington, Ill., pp. 245 - 262.

Bird, S. and Tapp. A. 2008. Encouraging road safety amongst young drivers: how can social marketing help? [Online] Bristol Social Marketing Centre: The University of the West of England. http://www.westofengland.org/media/91073/transport_rsp_03_12_08_safe_driving_among_young_males_report.pdf [Accessed 30th March 2012].

Blaikie, N. 1993. *Approaches to social enquiry*. Cambridge: Polity Press.

Blaikie, N. 2000. *Designing social research*. Cambridge: Polity Press.

Bolderdijk, J. et al. 2011. Effects of pay-as-you-drive vehicle insurance on young drivers' speed choice: results of a Dutch field experiment. *Accident Analysis and Prevention* 43(3), pp. 1181 – 1186.

Boorstin, D. J. 1974. *The Americans, the democratic experience*. New York: Vintage Books.

Boyle, J. S. 1994. Styles of ethnography. In: Morse, J. M. eds. *Critical issues in qualitative research methods*. Thousand Oaks, CA: Sage. pp. 159 – 185.

Bourdieu, P. and Passeron, J. 1973. Cultural reproduction and social reproduction. In: Brown, R. eds. *Knowledge, Education, and Cultural Change*. London: Tavistock. pp. 71 – 112.

Bourdieu, P. 1976. Systems of education and systems of thought. In: Dale, R. et al. *Schooling and capitalism*. eds. London: Routledge & Kegan. pp. 98 - 204

Bourdieu, P. 1984. *Distinction: a social critique of the judgement of taste*. London: Routledge.

Bourdieu, P. 1986. The forms of capital. In: Richardson, J. G. eds. *Handbook of theory and research for the sociology of education*. New York: Greenwood Press. pp. 241 - 258.

Bourdieu, P. 1990. *The logic of practice*. California: Stanford University Press.

Bourdieu, P. 1993. *The field of cultural production: Essays on art and literature*. London: Polity Press.

Bourdieu, P. 2001. *Masculine domination*. Stanford: Stanford University Press.

Bradbury-Huang, H. 2010. What is good action research? Why the resurgent interest? *Action Research* 8(1), pp. 93 – 109.

Brakus, J. et al. 2009. Brand experience: what is it? How is it measured? Does It affect loyalty? *Journal of Marketing* 73(May), pp. 52 – 68.

Brown, I. D. et al. 1987. Is driver training contributing enough towards road safety? In: Rothengatter J. A. and de Bruin R. A. eds. *Road users and traffic safety*. Assen: Van Gorcum & Comp BV. pp. 135 – 156.

Brown, J. and Duguid, P. 1991. Organizational learning and communities of practice: toward a unified view of working, learning and innovation. *Organization Science* 2(1), pp. 40 – 57.

Brunie, A. 2009. Meaningful distinctions within a concept: relational, collective and generalized social capital. *Social Science Research* 38(2), pp. 251 - 265.

Brydon-Miller, M. et al. 2011. The changing landscape of arts and action research. *Action Research* 9(3), pp. 3 – 11.

Buchanan, D. R. et al. 1994. Social marketing: a critical appraisal. *Health Promotion International* 9(1), pp. 49 – 57.

Carlson, B. D. et al. 2008. Social versus psychological brand community: The role of psychological sense of brand community. *Journal of Business Research* 61(4), pp. 284 - 291.

Carver, C. and Scheier, M. 1982. Control theory: a useful conceptual framework for personality - social, clinical, and health psychology. *Psychological Bulletin* 92(1), pp. 111 – 135.

Cavallo, A. and Triggs, T. 1996. Directions for improving young driver safety within Victoria: A discussion paper [Online]. Melbourne, Vic: Monash University Accident Research Centre. <http://www.monash.edu.au/miri/research/reports/muarc085.html> [Assessed 30th March 2012]

Chichester, B. M. et al. 1998. Associations between road traffic accidents and socio-economic deprivation on Scotland's west coast. *Scottish Medical Journal* 43(5), pp. 135 – 138.

Christie, R. 2001. *The effectiveness of driver training as a road safety measure: An international review of the literature* (No. 01/03) [Online]. Royal Automobile Club of Victoria (RACV) Ltd. <http://arsrpe.acrs.org.au/pdf/RS010018.pdf> [Assessed 30th March 2012]

Christopher, M. et al. 1991. *Relationship Marketing: Bringing quality, customer service and Marketing together*. Oxford: Butterworth Heinemann.

Cherryholmes, C. 1992. Notes on pragmatism and scientific realism. *Educational Researcher* 21(6), pp. 13 – 17.

Clarke, D. D. et al. 2005. Voluntary risk taking and skill deficits in young driver accidents in the UK. *Accident Analysis and Prevention* 37(3), pp. 523 – 529.

Clarke, D. D. et al. 2008. A poor way to die: Social deprivation and road traffic fatalities. *Behavioural Research in Road Safety*. [Online]. Available at: http://www.psychology.nottingham.ac.uk/staff/ddc/c8cxpa/further/*%20Lecture%20materials/04%20&%2005%20Sequence%20lectures/poorwaytodie.pdf [Accessed 18th September 2012].

Clarke, S. and Robertson, I. 2005. A meta-analytic review of the Big Five personality factors and accident involvement in occupational and non-occupational settings. *Journal of Occupational and Organizational Psychology*, 78(3), pp. 355–376.

Clifford, G. C. 2000. Ethics and politics in qualitative research. In: Denzin, N. K. and Lincoln, Y. S. eds. *Handbook of qualitative research (2nd Edition)*, pp. 133 – 55. Thousand Oaks, CA: Sage.

Clifford, J. and Theobald, C. 2011. Institute of Advanced Motorists: Social impact evaluation using social return on investment. [Online]. Available at: <http://www.bakertilly.co.uk/SiteCollectionDocuments/Social%20housing/IAM%20SROI%20report.pdf> [Accessed 18th September 2012].

Constantinou, E. et al. 2011. Risky and aggressive driving in young adults: personality matters. *Accident Analysis and Prevention* 43(4), pp. 1323 – 1331.

Cox, A. 2005. What are communities of practice? A comparative review of four seminal works. *Journal of Information Science* 31(6), pp. 527 – 540.

Creswell, J. W. 1998. *Qualitative inquiry and research design: choosing among five traditions*. Thousand Oaks, CA: Sage Publications.

Crotty, M. 2005. *The foundations of social research: meaning and perspective in the research process*. London: Sage.

Dann, S. and Fry, M. L. 2009. Benchmarking road safety success: Issues to consider. *Australasian Marketing Journal* 17(4), pp. 226 – 231.

Davenport, E. and Hall, H. 2002. Organizational knowledge and communities of practice. *Annual Review of Information Science and Technology* 36(1), pp. 170 – 227.

Davis, A. 2010. Forms of capital and mobility in the political field: applying Bourdieu's conceptual framework to UK party politics. *British Politics* 5(2), pp. 202 - 223.

Denzin, N. K. and Lincoln, Y. S. 2003. *Handbook of qualitative research*. Thousand Oaks: Sage Publications.

Denscombe, M. 2008. Communities of practice: a research paradigm for the mixed methods approach. *Journal of Mixed Methods Research* 2(3), pp. 270 – 283.

Department for Transport, 2007. *Trends in fatal car-occupant accidents*. Road Safety Research Report No. 76. London: Department for Transport.

Department for Transport, 2011 (May). Strategic Framework for Road Safety. Available from: <http://www.dft.gov.uk/publications/strategic-framework-for-road-safety> [Accessed 11th May 2011].

Desai, D. 2009. Role of relationship management and value co-creation in social marketing. *Social Marketing Quarterly* 15(4), pp. 112 – 125.

Dick, B. 2009. Action research literature 2006 - 2008: themes and trends. *Action Research* 7(4), pp. 423 – 441.

Dick, B. 2011. Themes and trends: action research literature 2008. *Action Research* 9(2), pp. 122 – 143.

Dicks, B. et al. 2006. Multimodal ethnography. *Qualitative Research* 6(1), pp. 77 - 96.

Easterby-Smith, M. et al. 2002. *Management research*. London: Sage.

Elliott, R. and Wattanasuwan, K. 1998. Brands as symbolic resources for construction of identity. *International Journal of Advertising* 17(2), pp. 131 - 144.

Evans, R. I. 1989. *Albert Bandura: the man and his ideas - a dialogue*. New York: Praeger.

Finlay, L. and Gough, B. 2008. *Reflexivity: a practical guide for researchers in health and social sciences*. Oxford: Blackwell Publishing.

Flyvbjerg, B. 2006. Five misunderstandings about case study research. *Qualitative Inquiry* 12(2), pp. 219 - 245.

Fournier, S. 1998. Consumers and their brands: developing relationship theory in consumer research. *Journal of Consumer Research* 24(4), pp. 343 - 373.

Fournier, S. and Lee, L. 2009. Getting brand communities right. *Harvard Business Review* 87(4), pp. 105 – 107.

Fowler, A. and Krush, M. 2008. We happy few: redefining community in marketing. *Advances in Consumer Research* 35(35), pp. 851 - 853.

Fox, K. and Kotler, P. 1980. The marketing of social causes: the first 10 years. *Journal of Marketing* 44(Fall), pp. 24 – 33.

Foxall, G. 1989. Marketing's Domain. *European Journal of Marketing* 23(8), pp. 7 – 22.

Friedman, M. 1970. The social responsibility of business is to increase its profits. *The New York Times Magazine*, 13th September 1970, p. 8.

Füller, J. et al. 2008. Brand community members as a source of innovation. *Journal of Product Innovation Management* 25(6), pp. 608 – 619.

Fylan, B. and Fylan, F. 2009. Evaluation of the young driver pilot programme. Brainbox Research Limited. Unpublished evaluation.

Gardner, H. 1987. *The mind's new science: a history of the cognitive revolution*. New York: Basic Books.

Gibson, S, K. 2004. Social learning (cognitive) theory and implications for human resource development. *Advances in Developing Human Resources* Vol. 6(2), pp. 193 – 210.

Giddens, A. 1976. *New rules of sociological method*. New York: Hutchinson.

Gill, J. and Johnson, P. 2002. *Research methods for managers*. London: Sage Publications.

Gill, J. and Johnson, P. 2005. *Research methods for managers*. Fourth Edition. London: Sage Publications.

Gillespie, 1991. *Manufacturing knowledge: a history of the Hawthorne experiments*. Cambridge: Cambridge University Press.

Glenane-Antoniadia, A. et al. 2003. Extending the vision of social marketing through social capital theory. *Marketing Theory* 3(3), pp. 323 - 343.

Godfrey, P. C. and Hill, C. W. L. 1995. The problem of unobservables in strategic management research. *Strategic Management Journal* 16(7), pp. 519 – 533.

Godson, M. 2009. *Relationship marketing*. Oxford: Open University Press.

Gordon R, et al. 2010. Critical social marketing – the impact of alcohol marketing on youth drinking: qualitative findings. *International Journal of Nonprofit and Voluntary Sector Marketing* 15(3), pp. 265 - 275.

Gordon, R. 2011. Critical social marketing: definition, application and domain. *Journal of Social Marketing* 1(2), pp. 82 – 99.

Goulding, C. 2009. Grounded theory, ethnography and phenomenology: a comparative analysis of three qualitative strategies for marketing research. *European Journal of Marketing* 39(3/4), pp. 294 – 308.

Grbrich, C. 2013. *Qualitative data analysis*. Second edition. Sage: London.

Grenfell, M. 2004. *Pierre Bourdieu: key concepts*. Acumen Publishing: London

Grey, R. C. et al. 2008. Injury severity analysis of accidents involving young male drivers in Great Britain. *Journal of Safety Research* 39(5), pp. 483 – 495.

Grönroos, C. 1990. Relationship approach to the marketing function in service contexts: the marketing and organisational behaviour interface. *Journal of Business Research* 20(1), pp. 3 - 12.

Grönroos, C. 1994. From marketing mix to relationship marketing: towards a paradigm shift in marketing. *Management Decision* 32(2), pp. 4 - 20.

Grönroos, C. 2007. *Service management and marketing: customer management in service competition*. Third Edition. Chichester: John Wiley & Sons.

Guba, E. G. and Lincoln, Y. S. 1994. Competing paradigms in qualitative research. In: Denzin, N. K. and Lincoln, Y. S. eds. *Handbook of qualitative research*. Thousand Oaks: Sage Publications. pp. 105 – 117.

Gummesson, E. 1987. The new marketing - developing long term interactive relationships. *Long Range Planning* 20(4), pp. 10 – 20.

Gummesson, E. 1999. *Total relationship marketing. Rethinking marketing: from 4Ps to 30Rs*. First edition. Oxford: Butterworth-Heinemann.

Gummesson, E. 2002. *Total relationship marketing: rethinking marketing management: from 4Ps to 30Rs*. Second edition. Oxford: Butterworth Heinemann.

Gusfield, J. 1975. *Community: a critical response*. New York: Harper & Row.

Haley, S. 2006. *Mind driving: new skills for staying alive on the road*. London: DIA Publishing.

Handley, K. et al. 2006. Within and beyond communities of practice: making sense of learning through participation, identity and practice. *Journal of Management Studies* 43(3), pp. 641 – 653.

Harrington, D. M. 1972. The young driver follow-up study: an evaluation of the role human factors in the first four years of driving. *Accident Analysis and Prevention* 4(3), pp. 191 – 240.

Harker, M. J. 1999. Relationship marketing defined? An examination of current relationship marketing definitions. *Marketing Intelligence & Planning* 17(1), pp. 13 – 20.

Hartmann, B. et al. 2011. Practice consumption and value creation: advancing the practice theoretical ontology of consumption community. *Advances in Consumer Research* 39, pp. 519 – 520.

Hasselberg, M. et al. 2005. Socioeconomic aspects of the circumstances and consequences of car crashes among young adults. *Social Science and Medicine* 60(2), pp. 287 – 295.

Hatch, M. J. and Schultz, M. 2010. Toward a theory of brand co-creation with implications for brand governance. *Journal of Brand Management* 17(8), pp. 590 – 604.

Hastings, G. 2003. Relational paradigms in social marketing. *Journal of Macromarketing* 23(6), pp. 6 – 15.

Hastings, G. et al. 2000. Whose behavior is it anyway? The broader potential of social marketing. *Social Marketing Quarterly* 6(2), 46 – 58.

Hastings, G. and Donovan, R. 2002. International initiatives: introduction and overview. *Social Marketing Quarterly* 8(1), pp. 2 – 4.

Hastings, G. and Haywood, A. 1991. Social marketing and communication in health promotion. *Health Promotion International* 6(2), pp. 135 - 145.

Healy, M. and Perry, C. 2000. Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research – An International Journal* 3(3), pp. 118 - 126.

Heitzler, C. et al. 2008. Bringing “play” to life the use of experiential marketing in the VERB™ campaign. *American Journal of Preventative Medicine* 34(6), pp. 188 – 193.

Helman, S., 2012, Driver training testing and licensing, and the safety of new drivers [Online]. Transport Research Laboratory. Available at: <http://www.roadsafe.com/pool/files/events/youngdriversexpertmeeting/Roadsafe%20expert%20meeting%202012%20Shaun%20Helman.pdf> [Accessed 12th September 2012].

Henry, A. and Mackenzie, S. 2012. Brokering communities of practice: a model of knowledge exchange and academic – practitioner collaboration developed in the context of community policing. *Police Practice and Research* 13(4), pp. 315 – 328.

Hewer, P. and Brownlie, D. 2007. Cultures of consumption of car aficionados: aesthetics and consumption communities. *International Journal of Sociology and Social Policy* 27(3/4), pp. 106 - 119.

Hoon laws, 2013. *Victoria Police: Hoon laws* [Online]. Available at: https://www.police.vic.gov.au/content.asp?document_id=32184 [Accessed 8th April 2014].

Holt, D. 1998. Does cultural capital structure American consumption? *Journal of Consumer Research* 25(1), pp. 1 – 25.

Hopkin, J. and Sykes, W. 2012. Evaluation of preparation for the IAM advanced driving test [Online]. Jean Hopkin Research Services and Independent Social Research. http://www.iam.org.uk/images/stories/Policy_Research/skill-for-life-evaluating-advanced-driving.pdf [Accessed 26th June 2012].

Hunt, S. D. 1983. *Marketing theory: the philosophy of marketing science*. Irwin: Homewood.

Hurtado, P. 2009. On culture and strategic change: contrasting the orthodox view with Bourdieu's concept of habitus. *Competition Forum* 7(1), pp. 205 – 213.

Ikeda, S. 2008. The meaning of “social capital” as it relates to the market process. *The Review of Austrian Economics* 2(2), pp. 167 – 182.

IMD, 2010. *English indices of deprivation, 2010* [Online]. Available at: <https://www.gov.uk/government/publications/english-indices-of-deprivation-2010> [Accessed 26th January 2014].

Institute of Advanced Motorists, 2014. *2020 Vision: Simon Best CEO IAM*. Institute of Advanced Motorists Magazine. Spring Edition p. 11.

Jancovich, M. 2002. Cult fictions: cult movies, subcultural capital and the production of cultural distinctions. *Cultural Studies* 16(2), pp. 306 – 322.

Kalwani, M. and Narayandas, N. 1995. Long-term manufacturer-supplier relationships: do they pay? *Journal of Marketing* 59(Jan), pp. 1 - 16.

Kardamanidis, K. et al. 2010. Motorcycle rider training for the prevention of road traffic crashes. *Cochrane Database of Systematic Reviews*. Issue 10. John Wiley & Sons, Ltd.

Karnani, A. 2011. Doing well by doing good: the grand illusion. *California Management Review* 53(2), pp. 69 – 86.

Kemmis, S. and McTaggart, R. 1988. *The action research planner*. Third edition. Victoria: Deakin University Press.

Ker, K. et al. 2005. Post licence driver education for the prevention of road traffic crashes. *Accident Analysis and Prevention* 37(3), pp. 305 – 312.

Kotler, P. 1972. A generic concept of marketing. *Journal of Marketing* 36(2), pp. 46 - 54.

Koshy, E. et al. 2010. *Action research in healthcare*. London: Sage.

Kotler, P. 1990. Presentation at the trustees meeting of the marketing science institute (November, 1990). In: Morgan, R. M. and Hunt, S. D. 1994. The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58 (July), pp. 20 - 38.

Kotler, P. and Lee, N. R. 2004. Best of breed. *Stanford Social Innovation Review* 1(4), pp. 14 – 23.

Kotler, P and Lee, N. R. 2008. *Social marketing: influencing behaviours for good*. Third edition. Los Angeles: Sage Publications.

Kotler, P. and Levy, S. 1969. Broadening the concept of marketing. *Journal of Marketing* 33(Jan), pp. 10 -15.

Kotler, P. and Zaltman, G. 1971. Social marketing: an approach to planned social change. *Journal of Marketing* 35(July), pp. 3 - 12.

Keller, K. L. 2001. Building customer-based brand equity: a blueprint for creating strong brands. *Marketing Management* 10(2), pp. 15 – 19.

Keller, K. L. 2003. *Strategic brand management: building, measuring, and managing brand equity*. Second edition. Upper Saddle River, NJ: Prentice Hall.

Kellet, S and Gross, H. 2006. Addicted to joyriding? An exploration of young offenders accounts of their car crime. *Psychology, Crime & Law* Vol 12(1), pp. 39 – 59.

Laczniak G. R. et al. 1979. Social marketing: Its ethical dimensions. *Journal of Marketing* 43(Spring), pp. 29 - 36.

Lamont, M. and Lareau, A. 1988. Cultural capital: allusions, gaps and glissandos in recent theoretical development. *Sociological Theory* 2(6), pp. 153 – 168.

Lareau, A. 1987. Social class differences in family-school relationships: the importance of cultural capital. *Sociology of Education* 60(2), pp. 73 – 85.

Lareau, A. and Weininger, E. B. 2003. Cultural capital in educational research: a critical assessment. *Theory and Society* 32(5/6), pp. 567 – 606.

Lave, J. 1988. *Cognition in practice: mind, mathematics and culture in everyday life*. Cambridge: Cambridge University Press.

Lave, J. and Wenger, E. 1991. *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.

Lazer, W. and Kelley, E. J. 1973. *Social marketing: perspectives and viewpoints*. Homewood, IL: Richard D. Irwin.

Leathar, D. and Hastings, G. 1987. Social marketing and health education. *Journal of Services Marketing* 1(2), pp. 49 - 52.

Lefebvre, C. 2001. Theories and models in social marketing. In: Bloom, P. N. and Gundlach, G. T. eds. *Handbook of marketing and society*. Newbury Park, CA: Sage. pp. 506 - 18.

Lefebvre, C. 2007. The new technology: the consumer as participant rather than target audience. *Social Marketing Quarterly* 8(3), pp. 31 – 42.

Lefebvre, C. 2008. *Communication inequality, social determinants and health policy* [Online]. Available at: http://socialmarketing.blogs.com/r_craig_lefebvres_social/2008/09/communication-inequality-social-determinants-and-health-policy.html [Accessed 10th January 2010].

Lefebvre, C. 2011. An integrative model for social marketing. *Journal of Social Marketing* 1(1), pp. 54 – 72.

Leonard, M. 2004. Bonding and bridging social capital: reflections from Belfast. *Sociology* 38(5), pp. 927 – 944.

Lewin, K. 1948. *Resolving social conflicts; selected papers on group dynamics*. New York: Harper.

Lewis, I. M., et al. 2007. The role of fear appeals in improving driver safety: A review of the effectiveness of fear-arousing (threat) appeals in road safety advertising. *International Journal of Behavioural and Consultation Therapy* 3(2), pp. 203 - 222.

Locke, K. 1996. Rewriting the discovery of grounded theory after 25 years? *Journal of Management Inquiry* 5(3), pp. 239 - 245.

Lotenberg, L. D. 2010. Place: where the action is. *Social Marketing Quarterly* 16(1), pp. 130 – 135.

Lowry, R. et al. 2011. Using social marketing to improve breast-feeding rates in a low socioeconomic area. *Social Marketing Quarterly* 17(2), pp. 64 – 75.

Luck, D. J. 1974. Social marketing: confusion compounded. *Journal of Marketing* 38(October), pp. 70 - 72.

Lumsden, K. 2009a. Do we look like boy racers? The role of the folk devil in contemporary moral panics [Online]. <http://www.socresonline.org.uk/14/1/2.html> [Assessed 14 January 2011].

Lumsden, K. 2009b. Don't ask a woman to do another woman's job: Gendered interactions and the emotional ethnographer. *Sociology* 43(3), pp. 497 – 513.

MacIntosh, R. and Wilson, F. 2003. Publishing action research. In: 19th EGOS Colloquium, 3-5 July 2003, Copenhagen, Denmark.

Mahar, C. et al. 1990. The basic theoretical position. In: Harker, R. et al. eds. *An introduction to the work of Pierre Bourdieu: the practice of theory*. London: Macmillan. pp. 1 – 26.

Maibach E. W. and Cotton, D. 1995. Moving people to behaviour change: a staged social cognitive approach to message design. In: Maibach, E. W. and Parrott, R. eds. *Designing health messages*. Thousand Oaks, CA: Sage.

Mandelli, A. 2004, Ducati: collaborative value and communities of consumers. SDA Bocconi (November: Case No. 026/04).

Mathwick, C. et al. 2008. Social capital production in a virtual P3 community. *Journal of Consumer Research* 34(6), pp. 832 - 849.

Mayhew, D. R. et al. 1998. Effectiveness and role of driver education and training in a graduated licensing system. *Journal of Public Health Policy* 19(1), pp. 51 – 67.

Mayhew, D. R. 2007. Driver education and graduated licensing in North America: Past, present and future. *Journal of Safety Research* 38(2), pp. 229 - 235.

Mayhew, D. R. and Simpson, H. M., 2002. The safety value of driver education and training. *Injury Prevention* 8, pp. 3 – 8.

Mayhew, D. R. et al. 2003. Changes in collision rates among novice drivers during the first months of driving. *Accident Analysis and Prevention* 35(5), pp. 683 - 691.

Max Power, 2004. *Max driver: drive like a god. Essential advanced driving guide*. Peterborough: Emap Automotive.

Merriam, S. B. and Caffarella, R. S. 1999. *Learning in adulthood*. San Francisco: Jossey-Bass.

Merz, M. A. and Vargo, S. L. 2009. The evolving brand logic: a service-dominant logic perspective. *Journal of the Academy of Marketing Science* 37(3), pp. 328 – 344.

McAlexander, J. H. et al. 2002. Building brand community. *Journal of Marketing* 66(1), pp. 38 – 54.

McAlexander J. H. et al. 2003. Loyalty: contributions of satisfaction and community. *Journal of Marketing Theory and Practice* 11(Fall), pp. 1 – 11.

McCarthy, E. J. 1960. *Basic marketing: a managerial approach*. Homewood, IL: Richard D. Irwin.

McCartt, A. T. et al. 2003. Driving experience, crashes and traffic citations of teenage beginning drivers. *Accident Analysis and Prevention* 35(3), pp. 311 – 320.

McCracken, G. D. 2008. *Transformations: identity construction in contemporary culture*. Bloomington, IL: Indiana University Press.

McKenna, F. 2010 *Education in Road Safety - Are We Getting It Right?* [Online] Report for RAC Foundation. <http://www.pacts.org.uk/docs/pdf-bank/education%20in%20road%20safety%20-%20mckenna%20-%20080910%20-%20report.pdf> [Assessed 30th March 2012].

McKenna, F. 2012. Young driver challenges. *The Psychologist* 25(9), pp. 672 - 675.

McKenna, R. 1991. *Relationship marketing: successful strategies for the age of the customer*. Reading, MA: Addison-Wesley Publishing Co.

McKenzie-Mohr, D. and Schultz, W. 2014. Choosing effective behaviour change tools. *Social Marketing Quarterly* 20(1), pp. 35 – 46.

McKenzie-Mohr, D. and Smith, W. 1999. *Fostering behaviour: an introduction to community-based social marketing*. London: New Society Publishers.

McKenzie-Mohr, D. and Smith, W. 2011. *Fostering behaviour: an introduction to community-based social marketing*. Third edition. London: New Society Publishers.

Millie, A. 2009. *Anti-social behaviour*. Maidenhead: Open University Press.

Miles, B. et al. 2014. *Qualitative data analysis: a methods sourcebook*. Third edition. London: Sage.

Miles, B. and Huberman, M. 1994. *Qualitative data analysis: an expanded source book*. Second edition. London: Sage.

Mittal, B. et al. 2012. *Consumer behavior: human pursuit of happiness in the world of goods*. Third edition. Cincinnati, OH: Open Mentis.

Møller, M. 2004. An explorative study of the relationship between lifestyle and driving behaviour among young drivers. *Accident Analysis and Prevention* 36(6), pp. 1081 – 1088.

Moore, E and Lutz, R. 2000. Children, advertising, and product experiences: a multimethod inquiry. *Journal of Consumer Research* 27(1), pp. 31 – 48.

Morgan, R. M. and Hunt, S. D. 1994. The commitment-trust theory of relationship marketing. *Journal of Marketing* 58(July), pp. 20 – 38.

Morse, J. M. 1994. Emerging from the data: the cognitive process of analysis in qualitative enquiry. In: Morse, J. M. eds. *Critical issues in qualitative research methods*. Thousand Oaks, CA: Sage. pp. 23 – 43.

Moustakis, C. 1995. *Phenomenological research methods*. London: Sage.

Muniz, A. M. Jr. and O'Guinn, T. C. 2001. Brand community. *Journal of Consumer Research* 21(March), pp. 412 – 432.

Murray, A. 1998. The home and school background of young drivers involved in traffic accidents. *Accident Analysis and Prevention* 30(2), pp 169 – 182.

NSMC, 2011. Big pocket guide to using social marketing for behaviour change [Online]. Available at: http://www.thensmc.com/sites/default/files/Big_pocket_guide_2011.pdf [Accessed 12th April 2014].

NSMC, 2014. Showcase [Online]. Available at: <http://www.thensmc.com/resources/showcase> [Accessed 12th April 2014].

NSMC ShowCase, 2010. 'Road Crew' [Online]. Available at: www.thensmc.com/sites/default/files/Road%20Crew%20SUMMARY.pdf [Accessed 8th October 2013].

Novelli, W. D. 1990. Applying social marketing to health promotion and disease prevention. In: Glanz, K et al. eds. *Health behavior and health education*. San Francisco: Jossey-Bass Publishers, pp. 342 - 369.

Obst, P. L. et al. 2001. Sense of community in science fiction fandom, part 1: understanding sense of community in an international community of interest. *Journal of Community Psychology* 30(1), pp. 87 – 103.

OECD, 2006. *Young drivers: the road to safety*. Organisation for Economic Co-operation and Development (OECD), Paris.

Ogden K. W. 1996. *Safer roads, a guide to road safety engineering*. Cambridge: Avebuy Technical.

Oliver, P. 2010. *The student's guide to research ethics*. Second edition. Maidenhead: Open University Press.

O'Shaughnessy, N. 1996. Social propaganda and social marketing: a critical difference? *European Journal of Marketing* 30(10/11), pp. 62 – 75.

O'Sullivan, S. R. et al. 2011. How brand communities emerge: the Beamish conversion experience. *Journal of Marketing Management* 27(9-10), pp. 891 – 913.

Ouwensloot, H. and Odekerken-Schröder, G. 2008. Who's who in brand communities - and why? *European Journal of Marketing* 42(5/6), pp. 571 – 585.

Parker, D., et al. 1995. Driving errors, driving violations and accident involvement. *Ergonomics*, 38(5), pp. 1036 - 1048.

Parker, D., et al. 1996. Modifying beliefs and attitudes to exceeding the speed limit: An intervention study based on the theory of planned behaviour. *Journal of Applied Social Psychology* 26(1), pp. 1 - 19.

Peattie, S. and Peattie, K. 2003. Ready to fly solo? Reducing social marketing's dependence on commercial marketing theory. *Marketing Theory* 3(Sept), pp. 365 - 385.

Peñaloza, L. and Venkatesh, A. 2006. Further evolving the new dominant logic of marketing: from services to the social construction of markets. *Marketing Theory* 6(3), pp. 299 – 316.

Peppers, D. and Rogers, M. 1993. *The one-to-one future: building relationships one customer at a time*. New York: Currency / Doubleday.

Petridou, E. and Tursz, A. 2001. Socio-economic differentials in injury risk. *International Journal of Injury Control and Safety Promotion* 8(3), pp 139 - 142.

Piller, F. 2005. Innovation and value co-creation: integrating customers in the innovation process. Forthcoming.

Popple, K. and Stepney, P. 2008. *Social work and the community: a critical framework for practice*. London: Palgrave Macmillan.

Portes, A. 1998. Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology* 24(August), pp. 1 - 24.

Prahalad, C. K. and Ramaswamy, V. 2004. *The future of competition: co-creating unique value with customers*. Boston, MA: Harvard Business School Press.

Putnam, R. 1993. *Making democracy work: civic traditions in modern Italy*. Princeton, NJ: Princeton University Press.

Putnam, R. D. 2000. *Bowling alone: the collapse and revival of American community*. New York: Simon & Schuster.

Rapoport, R. 1970. Three dilemmas in action research. *Human Relations* 23(6), pp. 499 - 513.

Reason, P. 1999. Integrating action and reflection through cooperative inquiry. *Management Learning* 30(2), pp. 207 - 227.

Reason, P. and Bradbury, H. 2001. Introduction: inquiry and participation in search of a world worthy of human aspiration. In: Reason, P. and Bradbury, H. eds. *Handbook of action research*. London: Sage, pp. 1 – 14.

Reed-Danahay, D. 2005. *Locating Bourdieu*. Indiana: Indiana University Press.

Riessman, C. 1993. *Narrative analysis. Qualitative research methods*. Series, No. 30. CA: Sage.

Riessman, C. 2008. *Narrative methods for the human sciences*. CA: Sage.

Roadcraft, 2007. *Roadcraft: the essential Police driver's handbook*. London: Stationary Office.

RoadSafe, 2006. *A new pay as you drive insurance scheme for young drivers reduces crashes by 20 per cent* [Online]. Available at: <http://www.roadsafe.com/news/article.aspx?article=78> [Accessed 1st October 2012].

Roberts, I. and Kwan I. 2008. School-based driver education for the prevention of traffic crashes (Review). *Cochrane Database of Systematic Reviews*, Issue 4.

Robson, C. 2002. *Real world research. A resource for social scientists and practitioner-researchers*. Second edition. Malden: Blackwell.

Rorty, R. 1991. *Objectivity, relativism, and truth: philosophical papers (vol. 1)*. Cambridge: Cambridge University Press.

Rorty, R. 1999. *Philosophy and social hope*. London: Penguin.

Rossmann, G. B. and Wilson, B. L. 1985. Numbers and words: combining quantitative and qualitative methods in a single large-scale evaluation study. *Evaluation Review* 9(5), pp. 627 – 643.

Rothschild, M. 2009. Separating products and behaviors. *Social Marketing Quarterly* 15(1), pp. 107 – 110.

Rothschild, M. et al. 2006. Reducing alcohol-impaired driving crashes through the use of social marketing *Accident Analysis and Prevention* 38(6), pp. 1218 – 1230.

Royal Society for the Prevention of Accidents (RoSPA) 2002. *Young and novice drivers' education, training and licensing*. Birmingham: RoSPA.

Russell, K. et al. 2011. Graduated driver licensing for reducing motor vehicle crashes among young drivers. *Cochrane Database of Systematic Reviews*, Issue 10.

Schau, H. J. et al. 2009. How brand community practices create value. *Journal of Marketing* 73(September), pp. 30 - 51.

Scherger, S. 2009. Cultural practices, age and the life course. *Cultural Trends* 18(1), pp. 23 – 45.

Schmitt, B. 1999. *Experiential marketing: how to get customers to sense, feel, think, act, relate to your company and brands*. New York: Free Press.

Schultz, P. 2010. Making energy conservation the norm. In: Ehrhardt-Martinez, K. and Laitner, J. eds. *People-centred initiatives for increasing energy savings* [Online]. Available at: <http://www.aceee.org/peoplecentered-energy-savings> [Accessed 10th March 2014]

Schwandt, T. A. 1994. Constructivist, interpretivist approaches to human enquiry. In: Denzin, N. K. and Lincoln, Y. S. eds. *Handbook of qualitative research*. Thousand Oaks, CA: Sage. pp. 118 – 137.

Shani, D. and Chalasani, S. 1991. Exploiting niches using relationship marketing. *Journal of Business & Industrial Marketing* 8(4), pp. 33 - 42.

Shani, A. and Pasmore, W. 1985. Organization inquiry: towards a new model of the action research process. In: Warrick, D. eds. *Contemporary organization development: current thinking and applications*. Scott Foresman: Glenview, pp. 438 - 448.

Shankar, A. 2009. Identity, consumption and narratives of socialization. *Marketing Theory* 9(1), pp. 95 – 94.

Sheth, J. et al. 1988. *Marketing theory: evolution and evaluation*. New York: John Wiley.

Shope, J. T. 2006. Influences on youthful driving behaviour and their potential for guiding interventions to reduce crashes. *Injury Prevention* 12(1), pp. 9 - 14.

Silva, E. and Wright, D. 2008. Researching cultural capital: complexities in mixing methods [Online]. *Methodological Innovations Online*. Vol. 2, No. 3. http://erdt.plymouth.ac.uk/mionline/public_html/viewarticle.php?id=65&layout=html [Assessed 1st December 2010].

Smith, W. A. 2006. Social marketing: an overview of approach and effects. *Injury Prevention* 12(1), pp. 38 – 43.

Smith, B. 2009. The power of the product P, or why toothpaste is so important to behaviour change. *Social Marketing Quarterly* 15(1), pp. 98 – 106.

Squire, C. 2008. Experience-centred and culturally-oriented approaches to narrative. In: Andrews, M. et al. eds. *Doing Narrative Research*. pp. 47 - 67
London: Sage.

Stanton, N. et al. 2007. Changing drivers' minds: the evaluation of an advanced driver coaching system 50(8), pp. 1209 – 1234

State of the City, 2012. *Bristol: statistical update* [Online]. Available at:
http://www.bristol.gov.uk/sites/default/files/documents/council_and_democracy/statistics_and_census_information/State%20of%20the%20City%20August%202012%20v10.pdf [Accessed 13th November, 2013].

Steedman, P. 1991. On the relations between seeing, interpreting and knowing. In: Steier, F. eds. *Research and reflexivity*. London: Sage, pp. 53 – 61.

Steward, M. 2008. A fashionable reconsideration of cultural capital. *Journal of Politics & Society* 19(1), pp. 62 – 76.

Stradling, S. et al. 2006. *Evaluation of Brake young driver education scheme*. Report prepared for Brake.

Sutherland, E. and Cressey, D. 1960. A theory of differential association. In: Cullen, F and Agnew, R. eds. *Criminological theory: past to present*. Los Angeles: Roxbury Company, pp. 122 - 125.

Tapp, A. et al. 2011. *The use of social marketing to address aggressive driving amongst 'hard to reach' young men*. Interim Report to the Department for Transport. Unpublished.

Tapp, A. et al. 2012. *Using social marketing to improve driving skills for young adult males from areas of high social deprivation*. Final Report to the Department for Transport. Unpublished.

Tapp et al. 2013. Wheels, Skills and Thrills: a social marketing trial to reduce aggressive driving from young men in deprived areas. *Accident Analysis & Prevention* (58), pp. 148 – 157.

Tapp, A. and Warren, S. 2010. Field-capital theory and its implications for marketing. *European Journal of Marketing* 44(1/2), pp. 200 - 222.

Taubman-Ben-Ari, O. and Katz-Ben-Ami, L. 2012. The contribution of family climate for road safety and social environment to the reported driving behaviour of young drivers. *Accident Analysis and Prevention* 43(July), pp. 1 - 10.

The Economist, 2011. Global road safety; fighting road kill. May 12th 2011. Print Edition.

Thornton, S. 1995. *Club cultures: music, media and subcultural capital*. Cambridge: Polity Press.

Throsby, D. 1999. Cultural capital. *Journal of Cultural Economics* 23(1), pp. 3 – 12.

Townsley, B., 1993. Foucault, power/knowledge, and its relevance to human resource management. *Academy of Management Review* 18(3), pp. 518 - 545.

Truong, V. 2014. Social marketing: a systematic review of research 1998 – 2012. *Social Marketing Quarterly* 20(1), pp. 15 – 34.

Tsoukas, H. 1989. The validity of idiographic research explanations. *Academy of Management Review* 14(4), pp. 551 - 561.

United Nations, 2010a. Resolution adopted by the General Assembly: 64/255. Improving global road safety [Online]. http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/64/255 [Accessed 27th April 2012].

United Nations, 2010b. Time for action: decade of action for road safety 2011 – 2020 [Online]. <http://www.decadeofaction.org/> [Accessed 3rd January 2011].

Vaez M, and Laflamme L. 2005. Impaired driving and road traffic crashes among Swedish youth: an investigation into drivers' sociodemographic characteristics. *Accident Analysis and Prevention* 37(4), pp. 605 – 611.

Van de Van, A. H. 2007. *Engaged scholarship: a guide for organizational and social research*. US: Oxford University Press.

Vargo, S. and Lusch, R. 2004. Evolving to a new dominant logic for marketing. *Journal of Marketing* 68 (1), pp. 1 - 17.

Waller, P. F. et al. 2000. Changes in young adult offense and crash patterns over time. *Accident Analysis and Prevention* 33(2), pp. 117 - 128.

Walker, G. H. et al. 2009. Does advanced driver training improve situational awareness? *Applied Ergonomics* 40(4), pp. 678 – 687.

Wasko, M. and Faraj, S. 2000. It is what one does: why people participate and help others in electronic communities of practice. *Journal of Strategic Information Systems* 9(2/3), pp. 155 - 173.

Weinreich, N. 2010. Hands-on social marketing: a step-by-step guide to designing change for good. Second edition. CA: Sage.

Webb, J. et al. 2002. *Understanding Bourdieu*. London: Sage.

Weber, M. 1978. *Economy and society*. Berkeley: University of California Press.

Webster, F. E. Jr. 1992. The changing role of Marketing in the corporation. *Journal of Marketing* 56(4), pp. 1 - 17.

Wenger, E. 1998. *Communities of practice: learning, meaning and identity*. Cambridge: Cambridge University Press.

Wenger, E. et al. 2002. *Cultivating communities of practice*. Boston, MA: Harvard Business School Press.

Wiebe, G. D. 1951. Merchandising commodities and citizenship on television. *The Public Opinion Quarterly* 15, pp. 679 - 691.

White, M. et al. 2011. Young drivers' optimism bias for accident risk and driving skill: accountability and insight experience manipulations. *Accident Analysis and Prevention* 43(4), pp. 1309 - 1315.

Wicks, P. G. and Reason, P. 2009. Initiating action research: challenges and paradoxes of opening communicative space. *Action Research* 7(3), pp. 243 – 262.

Williams, A. 2006. Young driver risk factors. *Injury Prevention* 12(Issue sup. 1), pp. 4 – 8.

Williams, A. et al. 2012. Graduated licensing research, 2010-present. *Journal of Safety Research* 43(3), pp. 195 – 203.

Wong, F. et al. 2004. *VERB™: a social marketing campaign to increase physical activity among youth* [Online]. Available at: www.cdc.gov/pcd/issues/2004/jul/04_0043.htm [Accessed 20th May 2014].

Woodhouse, L. et al. 2012. Borstin Value: an intervention to increase fruit and vegetable consumption in a deprived neighborhood of Dudley, United Kingdom. *Social Marketing Quarterly* 18(3), pp. 221 – 233.

WST, 2009. Recruitment Video [Online]. Available at: <http://www.youtube.com/watch?v=c-8WofXiHWo> (search: YouTube: WST Drive) [Accessed 1st January 2013].

WST, 2012. Conference Video [Online]. Available at: http://www.youtube.com/watch?v=sG_pXGiRb2g (private video link) [Accessed 1st January 2013].

Yin, R. 1989. *Case study research: design and methods* (applied social research methods series, Vol. 5). Newbury Park, CA: Sage.

Yin, R. 1994. *Case study research: design and methods*. Second edition. Thousand Oaks, CA: Sage.

Yin, R. 2003. *Case study research, design and method*. Third edition. Newbury Park: Sage.

11.2 Appendix Information

Appendix A: WST Survey Instrument

Wheelskills and Thrills – Entrance Survey
June 2010

Thank you for taking the time to complete this survey. Please complete both sections using your first response to each of the 19 statements.

Section A:

To what extent do you agree with each of the following statements?

| | I strongly disagree | I disagree | I neither agree nor disagree | I agree | I strongly agree |
|--|---------------------|------------|------------------------------|---------|------------------|
| 1. Some people can drive safely even though they only leave a small gap behind the vehicle in front | 1 | 2 | 3 | 4 | 5 |
| 2. I get wound up if someone over takes me | 1 | 2 | 3 | 4 | 5 |
| 3. Even overtaking in a slightly risky situation makes you less safe as a driver | 1 | 2 | 3 | 4 | 5 |
| 4. Sometimes I drive aggressively for the fun of it | 1 | 2 | 3 | 4 | 5 |
| 5. Sometimes you have to drive in excess of the speed limit in order to keep up with the flow of traffic | 1 | 2 | 3 | 4 | 5 |
| 6. I think I am an above average driver | 1 | 2 | 3 | 4 | 5 |
| 7. I think it is okay to overtake in risky circumstances as long as you drive within your own capabilities | 1 | 2 | 3 | 4 | 5 |
| 8. My style of driving changes depending on who is in my car | 1 | 2 | 3 | 4 | 5 |
| 9. It annoys me when other drivers make mistakes | 1 | 2 | 3 | 4 | 5 |
| 10. On the whole people aren't aware of the dangers involved in close following | 1 | 2 | 3 | 4 | 5 |

Section B:

For each driving behaviour described in the table below, please indicate how often the behaviour happened to you in the last three months. Please indicate this by circling a number in each line.

| | Never | Hardly ever | Occasionally | Quite often | Frequently | Nearly all the time |
|---|-------|-------------|--------------|-------------|------------|---------------------|
| 11. Drive especially close to the car in front as a signal to the driver to go faster or get out of the way | 0 | 1 | 2 | 3 | 4 | 5 |
| 12. Realise that you have no clear recollection of the road along which you have just been travelling | 0 | 1 | 2 | 3 | 4 | 5 |
| 13. Cross a junction knowing that the traffic lights have already turned against you? | 0 | 1 | 2 | 3 | 4 | 5 |
| 14. On turning left, nearly hit a cyclist who has come up on your inside | 0 | 1 | 2 | 3 | 4 | 5 |
| 15. Underestimate the speed of an oncoming vehicle when overtaking | 0 | 1 | 2 | 3 | 4 | 5 |
| 16. Fail to check your rear view mirror before pulling out, changing lanes, etc | 0 | 1 | 2 | 3 | 4 | 5 |
| 17. Get involved in unofficial "races" with other drivers | 0 | 1 | 2 | 3 | 4 | 5 |
| 18. Get into the wrong lane when approaching a roundabout or junction | 0 | 1 | 2 | 3 | 4 | 5 |
| 19. Brake too quickly on a slippery road, or steer the wrong way into a skid | 0 | 1 | 2 | 3 | 4 | 5 |

Appendix B: WST 'Drive check' Sheet

| Wheels, Skills and Thrills - Check drive 1/2 | | | | | |
|--|---|--|--|--|--|
| Date Driver Name Car - make/model Observer | <table border="1"> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> <tr><td> </td></tr> </table> | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| 1 - 5 1=SfL test ready 3=average 5=needs development | | | | | |
| 1 Vehicle Knowledge <small>engine, fwd/rwd, abs, esp, driving position, POWDER, belt/head restraints</small> | | | | | |
| 2 Observation <small>ahead, behind, mirrors(3), cross-views, scanning</small> | | | | | |
| 3 Anticipation <small>can see, can't see, expect to happen, blind spots, dead-ground, worst that can happen?</small> | | | | | |
| 4 Planning <small>plan for worst, arrive at hazards as they clear, early posn, hold back</small> | | | | | |
| 5 Vehicle Sympathy <small>smooth progressive inputs, braking fff, rev-matching, rev-range</small> | | | | | |
| 6 Positioning <small>safety bubble, safety, vision, stability, t-on-t, following posn 2 secs+, LH/RH bends</small> | | | | | |
| 7 Cornering <small>stop in distance you can see to be clear, limit point, speed, posn, gear b4 corner, slow in fast out, add power in bend, lift-off oversteer</small> | | | | | |
| 8 Overtaking <small>when and when not to, hazards, view around vehicle ahead, position, don't surprise, place to 'land', half the distance, don't commit,</small> | | | | | |
| 9 Mind-Set <small>restraint/progress balance, keep cool, courteous/empathy, learn from mistakes, progress in built-up areas</small> | | | | | |
| 10 Motorways <small>joining/leaving, extended vision, space, others blind spots, concentration</small> | | | | | |
| 11 Driving Rules <small>HWC, dual-carriageway limit, hatched areas, signs</small> | | | | | |

Appendix C: WST Recruitment Leaflet

Check this out!

IF YOU ARE INTERESTED IN -

- FREE** GO-KARTING SESSIONS IN AVONMOUTH
- A **FREE** TRACKING DEVICE FOR YOUR CAR
- FREE** ADVANCED DRIVING SKILLS

then we need you and your driving skills to help develop a new electronic in-car gadget to improve the driving skills of other young men.

IS THIS YOU?

A male driver aged between 17-25 living in LAWRENCE WESTON, SEA MILLS, SHIRE or AVONMOUTH?!

CALL OR TEXT ^{Drive} TO MARK PEPPER FOR MORE INFO ON 07878 403840 OR DROP IN TO THE LAWRENCE WESTON YOUTH CENTRE

Project underground AS.indd 1 14/03/2010 19:35

Appendix D: Ethics Form – Exploratory Phase I

CARDIFF BUSINESS SCHOOL RESEARCH ETHICS

Consent Form - Anonymous data

I understand that my participation in this project will involve me describing my own experiences of driving in Lawrence Weston, either as driver, learner or pedestrian. I will also be asked to comment on other people's driving behaviour and the pressures and reasons why others may drive aggressively. Finally, I will be asked my opinion on a range of approaches that could be taken to improve the driver safety of young people in Lawrence Weston. This should require no more than one hour of my time.

I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that I am free to ask any questions at any time. If for any reason I experience discomfort during participation in this project, I am free to withdraw or discuss my concerns with Mark Pepper (mpepper@ConnexionsWest.org.uk), Tony Ellson (ellsontj@Cardiff.ac.uk) or Alan Tapp (alan.tapp@uwe.ac.uk).

I understand that the information provided by me will be held totally anonymously, so that it is impossible to trace this information back to me individually. I understand that, in accordance with the Data Protection Act, this information may be retained indefinitely.

I also understand that at the end of the study I may request some additional information and feedback about the purpose and results of the study by applying to the University

Signed:

Date:

Name of individual conducting the research: Ashley Pressley

Name/s of individual's supervisor: Dr. Tony Ellson & Prof. Alan Tapp

Appendix E: Ethics Form – Exploratory Phase II
CARDIFF BUSINESS SCHOOL
RESEARCH ETHICS

Consent Form - Confidential data

I understand that my participation in this project will involve me describing my own experiences of driving in Lawrence Weston, either as driver, learner or pedestrian. I will also be asked to comment on other people's driving behaviour and the pressures and reasons why others may drive aggressively. Finally, I will be asked my opinion on a range of approaches that could be taken to improve the driver safety of young people in Lawrence Weston. This should require no more than one hour of my time.

I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that I am free to ask any questions at any time. If for any reason I experience discomfort during participation in this project, I am free to withdraw or discuss my concerns with Mark Pepper (mpepper@ConnexionsWest.org.uk), Tony Ellson (ellsontj@Cardiff.ac.uk) or Alan Tapp (alan.tapp@uwe.ac.uk).

I understand that the information provided by me will be held confidentially, such that only the Interviewer and Mark Pepper can trace this information back to me individually. The information will be retained for up to four years and will then be deleted/destroyed. I understand that I can ask for the information I provide to be deleted/destroyed at any time and, in accordance with the Data Protection Act, I can have access to the information at any time. I also understand that at the end of the study I will be provided with additional information and feedback about the purpose of the study.

I, _____(NAME) *[Note: if your interviewee prefers to remain anonymous, he or she could use a false name here]* consent to participate in the study conducted by Ashley Pressley of Cardiff Business School, Cardiff University, under the supervision of Dr. Tony Ellson and Prof. Alan Tapp.

Signed:

Date:

Appendix F: Ethics Form – Main Intervention

RESEARCH ETHICS

Consent Form - Anonymous data

I understand that my participation in this project will involve the following:

In-vehicle-data-recording technology (IVDR) which will be fitted into my car. This IVDR will give instant feedback to the driver on excessive braking, acceleration and cornering, or a combination of these three forms of driving practice. Feedback comes in the form of an LED display (small in size) on the car dash which flashes red or amber to indicate excessive driving. Smooth driving gives a constant green light.

The data on red or amber 'events' is kept and fed back to myself in group formats. These are arranged around the second part of the project: a monthly karting event which acts as an incentive for me to get involved.

The next part of the project will be skills training. This will be delivered by the Institute for Advanced Motorists (IAM). This will comprise face-face, in car skills work with myself and the others in the project, in the company of a Class 1 driver from the IAM.

The final major part of the trial will be the Competition. I will be part of a group of 6 people, involved in a friendly competition with 4 other groups. We will be incentivised to keep our red and amber 'events' as few as possible, and the team with the lowest events will win an extra prize.

I will also be interviewed during the project. I will be asked to describe my own experiences of how this project has influenced my driving in Lawrence Weston..

I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that I am free to ask any questions at any time. If for any reason I experience discomfort during participation in this project, I am free to withdraw or discuss my concerns with Mark Pepper (mpepper@ConnexionsWest.org.uk) or Alan Tapp (alan.tapp@uwe.ac.uk).

I understand that the information provided by me will be held totally anonymously, so that it is impossible to trace this information back to me individually. I understand that, in accordance with the Data Protection Act, this information may be retained indefinitely.

I also understand that at the end of the study I may request some additional information and feedback about the purpose and results of the study by applying to the University

NAME

SIGNATURE

Appendix G: Ethics Form - Exit

CARDIFF BUSINESS SCHOOL - RESEARCH ETHICS Consent Form

I understand that my participation in this focus group will involve me discussing my thoughts and opinions on a driving-related pilot. This will involve discussions with project members who will also be present during the focus group. I am free to make any suggestions or recommendations of how the pilot under discussion could be improved. I understand that my opinion should be based on what I believe my 'team' would agree with as well as my own opinions.

I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason. I understand that the focus group will be video recorded to allow project members to review the comments made during the focus group. I can request that any recording device be switched off at any time during the interview in order to discuss any concerns I may have.

I understand that the information provided by me will be held confidentially and anonymously, such that only the project members present and Mike Baugh (from Bristol City Council) can trace this information back to me individually.

I understand that I can ask for any footage containing my voice/face to be deleted at any time and, in accordance with the Data Protection Act, I can have access to these files at any time. I understand that transcribed versions of the voice files may be held indefinitely however, all personal information will be removed during the transcription process.

I understand that should footage from the focus group be used for any other reasons than those outlined above I will be contacted by Mark Pepper to obtain my consent. If I choose not to agree, I can request that my comments be removed and/or my face be obscured during the editing process.

I understand that I am free to ask any questions at any time. If for any reason I experience discomfort during participation in this project, I am free to withdraw or discuss my concerns with Mark Pepper (mpepper@ConnexionsWest.org.uk), Alan Tapp (alan.tapp@uwe.ac.uk) or Tony Ellson (ellsontj@Cardiff.ac.uk).

I also understand that at the end of the focus group I can request additional information about the purpose of the study.

I, _____(NAME) consent to participate in the study conducted by Ashley Pressley of Cardiff Business School, Cardiff University, under the supervision of Dr. Tony Ellson and Prof. Alan Tapp.

Signed:

Date: