

WORKPLACE ASSAULTS IN BRITAIN

Understanding the Influence of Individual and Workplace Characteristics

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Studies based on British Crime Survey (BCS) data suggest that the overall incidence of workplace assault is relatively low. However, these data have a number of limitations. They include only assaults carried out by clients or the public, provide limited information about the individuals involved and their workplaces, and tell us little about perceived causes of violence at work. The 2008 Workplace Behaviour Survey (WBS) presents a more detailed picture than has hitherto been available about the extent and nature of interpersonal assaults at work. This paper discusses in detail the WBS findings regarding the prevalence, frequency and patterns of workplace assaults in Britain.

Keywords: workplace violence, levels, patterns, workplace behaviour survey, harassment, victims, perpetrators

Introduction

This paper examines levels and patterns of interpersonal workplace violence experienced by British employees. It arises from a major study of bullying and harassment (and related negative behaviours) in British workplaces that began in 2007, comprising a nationally representative quantitative survey of employees—the Workplace Behaviour Survey (WBS)—and qualitative research in several contrasting organizational settings. The data revealed that surprisingly high proportions of employees—at least compared with studies based on the British Crime Survey (BCS)—experienced ‘actual physical violence’ at work. In particular, the WBS estimated an overall prevalence rate over five times higher than the most recent analysis of the BCS data (Upson 2004).

The main aim of the paper is to examine in detail this new statistical evidence about interpersonal violence at work. We should be clear from the outset that the paper’s focus is upon a particular subset of violent behaviours related to work—interpersonal physical assaults—and we do not claim that this is a sufficient measure of the broader concept of ‘workplace violence’. However, the WBS data do provide more empirical detail about the pattern and context of interpersonal assaults at work than has been available previously. The WBS collected data about violence perpetrated by co-workers and managers (as well as by clients/general public), enable more detailed demographic analysis than do other available data (e.g. analyses by respondents’ sexual orientation, disability and religious affiliation) and also include information about respondents’ perceptions about possible causes of violent incidents.

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Researching Workplace Violence

Official measures of workplace violence are generally based upon conventional notions of violence as intentional physical assaults between individuals (Levi *et al.* 2007). In Health and Safety Executive (HSE) definitions, threats and intimidation in the workplace are also included along with actual assaults in discussions of workplace violence (www.hse.gov.uk/violence). BCS studies define workplace violence as ‘all assaults or threats, which occurred while the victim was working, that were perpetrated by members of the public’ (Upson 2004: 3).¹ These analyses provide only a partial picture of workplace violence. They exclude organizational and institutional violence, such as harms arising from health and safety violations, corporate policies that place workers and the general public at risk because of corner-cutting in the pursuit of profit and broader systemic harms arising from the employment relationship and the nature of capitalist production (Tombs 2007; Tombs and Whyte 2007). Measures such as those used in the BCS help to construct ‘workplace violence’ as primarily a problem for state-employed officials such as the police and social workers, and disguise the fact that harms to workers (and the general public) are much more widespread and emerge from the structures and processes of employment relations and capitalist production (Tombs 2010). A more general limitation of quantitative measures of workplace violence concerns the highly subjective nature of the subject matter and variations between different individuals and contexts about what is defined as ‘violent’ (Stanko 2003). Qualitative studies of workplace violence permit a more in-depth account of the subjective meanings of ‘violent’ incidents from the perspectives of those directly involved (Waddington *et al.* 2005*a*; 2005*b*).

It is thus important to acknowledge that there are very distinct forms of violence in the workplace. For example, Catley and Jones (2002: 25–8) distinguish between acts of physical interpersonal violence (physical assaults), violent speech acts (threats and verbal abuse), structural physical violence (the institutional forms of violence referred to above) and structural ‘symbolic’ violence. Estrada *et al.* (2010) identify four separate categories of work-related violence. ‘Intruder violence’ includes crimes of violence against, for example, bank employees or check-out staff. ‘Client-related’ violence involves acts of violent aggression perpetrated by customers, patients and clients, and is a particular feature of the health and social care sector. ‘Relational violence’ is the term used for violence and harassment between workers in the same workplace. ‘Structural violence’ in their terms includes both the broader systemic aspects of workplace harm outlined above, but also more specific aspects of organizational structures and cultures that expose workers to violent situations. The term ‘workplace violence’ therefore incorporates contrasting forms of behaviour with various complex causes and impacts. The focus of governmental research and that of much of the management literature is client-based interpersonal violence. However, our survey data revealed that a substantial minority of assaults at work could be described as ‘relational’ violence.

The research literature on workplace violence presents a contrast between studies based on crime victimization surveys such as the BCS and those that arise from broader studies of workplace relations (Budd 1999; Fevre *et al.* 2009). The most recent BCS

¹However, BCS studies do separate out assaults from threats within the analysis, which allows for some comparison with the findings of the WBS.

analysis of workplace violence estimates that the overall risk of workplace assault in England and Wales is low, finding that in 2002/03, the proportion of working adults who experienced an actual physical assault at work was 0.9 per cent. This represents a substantial fall in overall prevalence since previous studies, with a 35 per cent fall in 'violent incidents' (assaults and threats) since 1995. By contrast, research literature from other disciplines, notably management studies, suggests that workplace violence in many countries has been growing in its frequency and severity (Flannery 1996; Chappell and Di Martino 2006; Serantes and Suárez 2006). There is now a substantial professional and management literature regarding the growing 'problem' of workplace violence and how to deal with it (see Estrada *et al.* 2010). We consider below the factors that might help to explain the contrast between levels of workplace violence estimated by crime surveys on one hand and workplace behaviour studies on another. But one factor that does seem to be important is that the workplace management literature on workplace violence forms part of a broader shift in attention to issues of problematic workplace relations, in which a similar message is presented about increasing rates of workplace stress, 'bullying' and associated negative behaviours (see, e.g. the works collected in Einarson *et al.* 2003; EFILWC 2007). Whilst much of the research on workplace 'violence' per se has focused on patterns and trends in quantitative measures of violence, the workplace bullying research has explored ways in which a wider category of negative behaviours emerge and take form within particular working contexts (Raynor and Cooper 2006). For the most part, this literature has focused upon behaviours that are of a psychological rather than a physical nature, but physical abuse remains an important part of a spectrum of abusive workplace behaviours (Einarson *et al.* 2003; Di Martino *et al.* 2003).

Various explanations for this perceived increase in negative workplace behaviours have been put forward. Some studies have focused upon individual psychological factors relating to the perpetrators and the victims (Zapf and Einarson 2003). Other writers have played down individual 'personality' factors, and argued instead for a focus upon organizational factors such as the way in which work is organized and the nature of management processes (Neuman and Baron 2003). A further set of explanatory factors relate to external pressures on working environments, and the impact on social relations of work of growing pressures from global competitive pressures, work intensification, etc. (Hoel and Salin 2003). Research on the sociology of organizations has explored the relationship between structural power inequalities and harassment and violence in the workplace. For example, Hearn and Parkin (2001) have argued that patriarchal power relations shape women's workplace experiences and suggest that women are at greater risk than men of abusive behaviours such as violence at work. Hodson (2001) provides a comprehensive review of the findings of workplace ethnographies about the ill-treatment of workers (including violence). He argues that a major cause of abusive behaviour is poor management and that 'direct physical or verbal abuse . . . occurs across a wide range of workplaces' (Hodson 2001: 94).

There are debates about the degree to which current concerns about bullying at work may be a function of enhanced sensitivity to long-standing workplace behaviours that are now more likely than in previous eras to be labelled as 'bullying'. These debates are mirrored in discussions of workplace violence. For example, Estrada *et al.* (2010) argue that apparent increases in workplace violence in a number of countries are related both to people's enhanced awareness and sensitivity to such issues *and* a 'real increase' due to changing working environments that expose more workers to risks of violence.

The Current Study

The WBS was based on face-to-face interviews with a representative sample of UK employees (or those with experience of employment in the previous two years) using the CAPI method during the winter months of 2007–08. The survey was included in the TNS Omnibus Survey, which is carried out using a quota sample, with sample points selected by a random location methodology. The total weighted numbers in the sample were 3,979 including 590 achieved from an ethnic minority/non-Christian boost. The survey collected a range of demographic information about individual respondents, along with their attitudes and experiences of work, and their responses to a version of the well known ‘negative acts questionnaire’ (NAQ) (Einarson and Raknes 1997). Our revised version of the NAQ is an inventory of 21 specific workplace behaviours and asks respondents to report whether and how often they have experienced such behaviours (for more details, see Fevre *et al.* 2010). Respondents were also given the opportunity to confirm or deny their choices on the 21 items before proceeding to the next section of the survey. The WBS also gathered information about the characteristics of those perpetrating ‘negative acts’, as well as the views of the individual employee about the possible cause(s) of such behaviour. Furthermore, a number of survey items were designed to gather information about respondents’ workplaces. The survey thus provides detailed information about frequencies and patterns of, and the key correlates with, negative behaviours in British workplaces.

For each element of the NAQ, respondents were asked: ‘Have you experienced any of the following in a negative way, this could be from people you work with or from clients or customers?’ The two NAQ items of interest here are ‘actual physical violence at work’ and ‘injury in some way as a result of violence or aggression at work’. We should note that the form of this question does not actually use the term ‘interpersonal assaults’ and we must be explicit about this limitation. This was a study of a spectrum of negative behaviours, not just workplace violence, and it was not feasible to include several questions about different forms of violence at work and keep the questionnaire to manageable size. However, the NAQ questions were subject to a significant amount of development work including 60 ‘cognitive testing’ interviews with employees in different parts of Britain. These found that the question about physical violence was interpreted in a straightforward way as intentional interpersonal assaults. No respondents reported confusion about this question and none interpreted the question as being about other forms of workplace violence, such as workplace injuries due to health and safety violations (or other institutional forms of violence). This is consistent with the arguments of Tombs (2007) about dominant social and cultural conceptions of what constitutes ‘violence’. Therefore, we feel confident that the respondents to the WBS questions about physical violence at work were referring to interpersonal physical assaults rather than any other form of ‘violence’.²

*Findings**The extent and frequency of workplace assaults in Britain*

The WBS data show that in the two years prior to the survey, physical violence at work was experienced by 4.9 per cent of employees. The WBS figure is substantially higher than

²This point is further supported by the fact that we were using ‘confirmed’ answers, after respondents had been given the chance to assign the experience to another category of ill-treatment.

the 0.9 per cent of working adults who reported experience of physical violence during the past year in the 2002/03 BCS (Upson 2004), although it is comparable to estimates of physical assault in other surveys of workplace behaviours. For example, the WBS estimates are similar to those of the 2008 Fair Treatment at Work Survey (Fevre *et al.* 2009), which was based on a random sample of the working population of Great Britain. This found that 4 per cent of employees reported experience of actual physical violence during the past two years (see Table 1). It is also comparable to the 2005 European Working Conditions Survey (EWCS) estimate for the United Kingdom that 3.6 per cent of the working population had been subjected to physical assault from people at work (presumably colleagues) and a further 7.3 per cent reporting that they had personally been subjected at work to physical violence from other people.

The WBS data further suggest that the frequency with which physical assault is experienced at work is much higher than previously suggested. Just 27 per cent of those reporting violence stated that it only happened once. This contrasts with the most recent BCS study, which found that 58 per cent of those who reported physical violence at work were referring to a single incident (Upson 2004). A substantial proportion of WBS respondents (41 per cent) stated that it happened ‘now and then’, 13 per cent reported violence as a monthly occurrence, 7 per cent reported it as a weekly occurrence and 13 per cent of respondents stated that violence happened on a *daily* basis.

We considered a number of possible explanations for this contrast with the BCS. One possible factor concerns the time period covered by the question—the WBS asks about experiences in the previous two years, whereas the BCS asks only about the previous year. However, this alone is unlikely to have inflated the WBS incidence by more than five times. Another issue is that the BCS studies pre-date the WBS by about five years and so we should take account of the possibility that there was an overall increase in workplace assaults during this time. However, once again, a five-fold increase would

TABLE 1 *Comparison of prevalence estimates of workplace violence*

Survey	Workplace Behaviour Survey 2008	Fair Treatment at Work Survey 2008	British Crime Survey 2002/03
Definition	Thinking about your current/most recent employer over the last two years, how often, if at all, have you experienced any of the following in a negative way, this could be from people you work with or from clients or customer: actual physical violence	As WBS	All assaults which occurred while the victim was working, that were perpetrated by members of the public
Time period	Within the past 2 years	As WBS	Within the past year
Perpetrators included	Clients/customers, co-workers, subordinates, supervisors/line managers, senior managers	As WBS	Clients/members of the public
Rate of violence	5%	4%	1%
Rate of injury	57%	NA	42%
Proportion reporting ‘one-off’ incident	27%	25%	58%

Note: All percentages are rounded.

be unlikely and go firmly against the findings of trend data from the BCS, which has shown declining rates of workplace assaults. Another possibility is that WBS respondents were using a broader notion of what constitutes ‘physical violence’ than those responding to the BCS. This relates to the nature of the two surveys and the types of questions asked. Respondents to the BCS know that they are taking part in a ‘crime survey’ and are asked a series of questions the nature of which focuses their minds on formal legal categories in general and criminal offences in particular. In addition to the standard demographic questions, they are asked questions about experience of a range of widely understood categories of crime (such as burglary, sexual assault and theft), about whether or not they reported these incidents to the police and about how fearful they are about becoming a victim of specified kinds of crime (Bolling *et al.* 2003). It is reasonable to argue that this form of questioning predisposes respondents to think about aspects of harmful behaviour that would be commonly defined as ‘criminal’. Furthermore, interviewers are required to code the responses according to formal legal categories, which might involve screening out incidents perceived as minor and unworthy of official attention (e.g. where the perpetrator of an assault was a school pupil). By contrast, respondents to the WBS knew that they were participating in a general survey of workplace behaviour, in which perceptions of what counts as physical violence might be less tied to formal legal categories. This would be consistent with other research that has found that people who have experienced some quite serious physical assaults at work, for example from patients or distressed relatives in social care settings, are reluctant to categorize these as ‘criminal’ (see Estrada *et al.* 2010). Thus, by its very nature, a ‘crime victimisation survey’ is likely to filter out a range of incidents and focus respondents’ minds onto forms of physical violence that can be categorized clearly as ‘criminal’ (although as we will discuss below, this does not necessarily mean the same thing as more ‘serious’ forms of assault). The similarity of workplace violence estimates between the WBS and other surveys of workplace behaviours such as the Fair Treatment at Work Survey provides some support for such a hypothesis.

We do not suggest that the contrast is simply down to WBS respondents including a range of minor behaviours (although this may be part of the story). As noted above, it is clear that in some contexts, for example in educational or social care settings, there may be a reluctance to define even quite serious acts of violence as ‘criminal’ by involving the police and criminal justice system. Whilst the WBS may well have picked up reports of more ‘minor’ assaults such as pushing, our findings on injury rates indicate that more serious forms of assault were included, too. The rates of injury in the WBS were actually higher than those in the BCS. Of the WBS respondents reporting assault at work, 57 per cent reported that they received some type of injury as a direct result of the incident. In the most recent BCS study, only 42 per cent of workplace assaults resulted in injury. Unfortunately, the WBS did not collect details about the level and nature of the injury sustained, or even whether it was a physical injury or some type of mental distress or injury. The figures would suggest that respondents are using a broad definition of ‘injury’ and perhaps also one that includes longer-term negative effects from experiencing violence or aggression at work.

With regard to the small but significant group of respondents who reported ‘daily’ experience of workplace assault, we at first considered whether this was a ‘rogue finding’. In particular, we explored the possibility that some respondents—possibly including these 25—who felt generally aggrieved about their work but wished to complete the

survey quickly may have reported 'daily' for all the negative acts presented to them without considering them individually. However, respondents were all given the opportunity to confirm their responses, making this explanation unlikely. Furthermore, additional analyses found that these respondents did not just respond 'daily' to all 21 items, as they used a range of answers in response to questions about frequency. As a group, they shared similar characteristics overall to the other respondents who reported violence. It is also worth noting that out of the 25 respondents reporting daily experience of physical violence, all but one reported that they had suffered injuries as a result, and 17 of the 25 said they were injured on a daily basis!

All of those who reported violence at work were asked a series of follow-up questions regarding who perpetrated the violence. Of those reporting violence at work, 48 per cent reported that the perpetrator(s) was/were male, 23 per cent reported that the perpetrator(s) was/were female and 25 per cent reported that they had been victimized by both male and female perpetrators. The majority of perpetrators were white (76 per cent), with 6 per cent black, 3 per cent Asian, 2 per cent mixed race and 7 per cent reported that the violence had been carried out by a number of perpetrators of different ethnic backgrounds. Whilst the majority of victims in our study reported that the assaults had been carried out by clients (78 per cent), a substantial minority identified employers (9 per cent), co-workers (9 per cent) and subordinates (3 per cent) as perpetrators.

In common with other forms of violence, the experience of workplace assault is closely associated with experience of other types of 'negative behaviours'. The WBS analysis found that each of the other NAQ items was significantly associated with violence ($p < 0.001$). On average, less than 5 per cent of those not reporting violence experienced each of the other items, whereas the rates for those reporting violence were at least twice and often three or four times as high. The most striking differences were for 'being insulted or having offensive remarks made about you' (2 per cent compared to 23 per cent), 'intimidating behaviour from people at work' (2 per cent compared to 23 per cent) and 'feeling threatened in any way while at work' (2 per cent compared to 31 per cent). Smaller, although still significant, differences were observed for other forms of negative treatment such as 'being given an unmanageable workload or impossible deadlines' (2 per cent compared to 11 per cent), 'someone continually checking up on you or your work when it is not necessary' (3 per cent compared to 12 per cent) and 'your employer not following proper procedures' (3 per cent compared to 13 per cent). Thus, workplace assaults—like some other forms of violence such as racial attacks and domestic violence—appear to be part of a broader pattern of harassment and threatening behaviour. This finding points us towards more 'structural' explanations of violence, although our survey data do not permit a detailed analysis of this.

Research on domestic violence shows that patterns of abuse often develop and escalate over time and are best understood as a process of abusive behaviour rather than as isolated incidents of violence (Walby 2005; Hanmer and Itzin 2000; Robinson 2010). Similarly, research on racist victimization has shown that it is better understood as a 'process' rather than a series of discrete events, 'with both "minor" abuse and incidents of physical violence interwoven in a pattern of harassment and intimidation' (Bowling 1999; Phillips and Bowling 2007: 425). Within our findings, then, it might be expected that the links between assault and other forms of abusive behaviour might be particularly marked for 'relational' forms of violence between work colleagues. Unfortunately, sample sizes do not allow a statistically meaningful analysis of this type of workplace

violence on its own. Furthermore, the WBS is a cross-sectional survey and thus cannot measure the temporal aspects of workplace assaults. But it would be reasonable to speculate that relational workplace violence follows a similar pattern of escalation—a suggestion that is supported by other research on workplace bullying and harassment (Zapf and Gross 2001).

The distribution of violence across different types of workers

We explored the extent to which physical violence at work was experienced disproportionately by different demographic groups (see Table 2). To take gender first,

TABLE 2 Demographic characteristics of respondents

Variable	Values and codes	Workplace violence		Total	
		No	Yes	N	%
Gender**	0 = Male	2,029	91 (4.3%)	2,120	53.3
	1 = Female	1,756	103 (5.5%)	1,859	46.7
Sexuality**	0 = Heterosexual	3,196	168 (5.0%)	3,364	84.5
	1 = Gay or bi-sexual	60	11 (15.5%)	71	1.8
	Missing			544	13.7
Age	Respondent's average age (years)	39	40	39	
Ethnicity*	0 = White	3,387	184 (5.2%)	3,571	89.8
	1 = Mixed	42	3 (6.1%)	45	1.1
	2 = Asian	205	2 (1.0%)	208	5.2
	3 = Black	116	3 (2.5%)	119	3.0
	4 = Other	25	1 (3.8%)	27	0.7
	Missing			10	0.2
Religion*	No religion	1,085	50 (4.4%)	1,135	28.5
	Christian	2,361	133 (5.3%)	2,494	62.7
	Non-Christian	235	5 (2.1%)	240	6.0
	Missing			110	2.8
Highest qualification	0 = Something else	2,238	132 (5.6%)	2,370	59.6
	1 = Undergraduate degree or higher	908	48 (5.0%)	956	24.0
	Missing			653	16.4
Disability**	0 = None	3,379	158 (4.5%)	3,537	88.9
	1 = Physical	107	10 (8.5%)	117	2.9
	2 = Learning, psychological	41	11 (21.2%)	52	1.3
	3 = Other	107	9 (7.8%)	115	2.9
	Missing			158	4.0
Income**	1 = Under £2,500	106	5 (4.5%)	111	2.8
	2 = £2,500–4,999	198	2 (1.0%)	201	5.0
	3 = £5,000–9,999	344	17 (4.7%)	361	9.1
	4 = £10,000–14,999	429	29 (6.3%)	458	11.5
	5 = £15,000–19,999	409	26 (6.0%)	435	10.9
	6 = £20,000–24,999	330	20 (5.7%)	349	8.8
	7 = £25,000–29,999	268	25 (8.5%)	293	7.4
	8 = £30,000–34,999	170	8 (4.5%)	178	4.5
	9 = £35,000–39,999	114	15 (11.6%)	129	3.2
	10 = £40,000–44,999	90	9 (9.1%)	99	2.5
	11 = £45,000–49,999	44	0 (0.0%)	44	1.1
	12 = £50,000–79,999	98	3 (3.0%)	101	2.5
	13 = £80,000 or more	50	1 (2.0%)	51	1.3
	Missing			1,168	29.3

N = 3,979.

Note: ** indicates significant chi-square value ($p < 0.05$); * indicates chi-square value ($p < 0.10$).

experiencing violence at work did significantly differ according to whether the respondent was male (4 per cent) or female (6 per cent) ($X^2 = 3.33$, $df = 1$, $p = 0.034$). The WBS found no significant differences by age of respondent. The average age of those reporting violence was 39 years and those not reporting violence were on average aged 40 years. The WBS analysis suggests that ethnicity does have some impact on workplace violence. Significantly fewer black or minority ethnic (BME) respondents experienced violence at work (3 per cent) compared to white respondents (5 per cent) ($X^2 = 5.76$, $df = 1$, $p = 0.007$). Furthermore, BME respondents were more likely to report violence at less frequent levels (e.g. 'now and then'). Although almost all minority ethnic groups were less likely to experience assaults than white respondents, taking the figure for BME people as a whole masks variation between ethnic groups. The overall incidence of violence amongst the particular ethnic groups was as follows: 6 per cent of 'mixed' respondents, 3 per cent of black respondents, 4 per cent of 'other' and 1 per cent of Asians ($X^2 = 9.23$, $df = 4$, $p = 0.056$).

The WBS allows for analysis by variables that are not used in the BCS, including religious affiliation, sexuality and disability. The analysis showed that fewer non-Christian respondents (2 per cent) reported being assaulted at work, compared to 5 per cent of Christians, and 4 per cent of those with no religious affiliation ($X^2 = 5.72$, $df = 2$, $p = 0.057$). This trend held even when we looked at the specific frequency categories. Significant differences were observed according to sexuality—more than twice as many (16 per cent) gay or bisexual respondents reported violence at work compared to heterosexual respondents (5 per cent) ($X^2 = 15.52$, $df = 1$, $p = 0.001$). Finally, those respondents with a disability were significantly more likely to report violence at work: 21 per cent with a learning difficulty or psychological problem, 9 per cent of those with a physical disability (e.g. deaf, blind) and 8 per cent of those with 'any other' disability experienced violence compared to 5 per cent of those without disabilities ($X^2 = 36.14$, $df = 3$, $p = 0.000$). Those with learning/psychological disabilities were more likely to report relatively infrequent violence whereas those with physical disabilities had the highest rates in the 'weekly' and 'daily' categories. This finding is consistent with broader findings we discuss elsewhere, that employees with disabilities are significantly more likely to report nearly every type of negative workplace behaviour (Fevre *et al.* 2008). Finally, although education was not significantly related to the experience of workplace assault, respondents' level of income was ($X^2 = 30.40$, $df = 12$, $p = 0.002$), with those in the middle income ranges more likely to report experiencing this form of violence.

A second set of variables concern respondents' characteristics as employees (see Table 3), all of which were significantly associated with the likelihood of experiencing assault at work. For example, the risk of experiencing assault increased as time in their current jobs increased ($X^2 = 20.92$, $df = 7$, $p = 0.004$). Those respondents with managerial or supervisory duties were significantly more likely to report violence at work: 8 per cent compared to 3 per cent of respondents that did not have these duties ($X^2 = 33.83$, $df = 1$, $p = 0.000$). Following this trend of violence increasing along with exposure to more time or responsibilities at work, part-time workers were significantly less likely to report violence (3 per cent compared to 5 per cent of full-time staff, $X^2 = 5.82$, $df = 1$, $p = 0.008$). Respondents who reported membership in trade unions/staff associations were more likely to report violence (9 per cent compared to 4 per cent, $X^2 = 36.05$, $df = 1$, $p = 0.000$).

Exposure to risk of violent assault does *not* appear to be associated with other structural disadvantages experienced disproportionately by 'peripheral' workers. The risk of

TABLE 3 *Work-related characteristics of respondents*

Variable	Values and codes	Workplace violence		Total	
		No	Yes	N	%
Length of service in current job**	0 = <1 year	450	16 (3.4%)	466	11.7
	1 = 1–2 years	364	15 (4.0%)	379	9.5
	2 = 2–3 years	328	15 (4.4%)	342	8.6
	3 = 3–4 years	310	17 (5.2%)	327	8.2
	4 = 4–5 years	229	4 (1.7%)	233	5.9
	5 = 5–10 years	658	52 (7.3%)	711	17.9
	6 = 10–15 years	272	23 (7.8%)	294	7.4
	7 = 15 years +	512	30 (5.5%)	542	13.6
Managerial/supervisory duties**	Missing			685	17.2
	0 = No	2,434	84 (3.3%)	2,519	63.3
	1 = Yes	1,312	106 (7.5%)	1,418	35.6
Part-time worker**	Missing			42	1.1
	0 = No	2,945	166 (5.3%)	3,111	78.2
	1 = Yes	840	29 (3.3%)	868	21.8
Member of a trade union**	0 = No	2,505	95 (3.7%)	2,600	65.3
	1 = Yes	951	88 (8.5%)	1,039	26.1
	Missing			340	8.5
Occupation – Assoc./prof. and technical**	0 = No	3,212	132 (3.9%)	3,344	84.0
	1 = Yes	564	62 (9.9%)	627	15.7
	Missing			8	0.2
Occupation – Personal service**	0 = No	3,549	157 (4.2%)	3,706	93.1
	1 = Yes	227	37 (14.0%)	264	6.6
	Missing			8	0.2

N = 3,979.

Note: ** indicates significant chi-square value ($p < 0.05$); * indicates chi-square value ($p < 0.10$).

being physically assaulted at work actually appears to be much higher among ‘core’ workers in the labour market. In this, the findings of the WBS are consistent with other employment research that has increasingly questioned the notion that ‘peripheral’ workers are more likely to experience negative treatment at work than ‘core’ workers. The most recent Fair Treatment at Work Survey shows that both temporary workers and part-timers were no more likely to report a range of employment problems, including unfair treatment and bullying and harassment, than permanent workers and full-timers (Fevre *et al.* 2009).

Respondents were also asked about their particular occupations (based on Standard Occupational Classification (SOC) categories). This analysis showed that respondents in several types of occupations were significantly more (or less) likely to report assault at work in the past two years. No significant difference was found for managers, but ‘associate/professional and technical occupations’ were significantly more likely to report assaults (10 per cent versus 4 per cent of all other occupational categories) ($X^2 = 40.26$, $df = 1$, $p = 0.000$), as were personal or service occupations (14 per cent versus 4 per cent) ($X^2 = 50.70$, $df = 1$, $p = 0.000$). It is the latter set of SOC categories that includes police officers, nurses and people working in social care environments (particular industry sectors that are discussed in the next section).

The survey asked a series of attitudinal questions about respondents’ working environments (see Table 4). All seven statements were significantly related to the likelihood of experiencing workplace violence. They indicate that the respondents who perceive their

TABLE 4 *Work-related attitudes of respondents*

Variable	Values and codes	Workplace violence		Total	
		No	Yes	N	%
<i>Where I work, the needs of the organization always come first**</i>	0 = No 1 = Yes	2,326 1,459	99 (4.1%) 95 (6.1%)	2,425 1,554	61.0 39.0
<i>Where I work, you have to compromise your principles**</i>	0 = No 1 = Yes	2,679 1,106	90 (3.3%) 104 (8.6%)	2,769 1,210	69.6 30.4
<i>Where I work, people are treated as individuals**</i>	0 = No 1 = Yes	728 3,057	57 (7.3%) 137 (4.3%)	786 3,193	19.7 80.3
<i>I have less control over my work now than I did one year ago**</i>	0 = No 1 = Yes	3,056 729	127 (4.0%) 67 (8.4%)	3,183 796	80.0 20.0
<i>The pace of work at my current job is too intense**</i>	0 = No 1 = Yes	2,912 873	109 (3.6%) 85 (8.9%)	3,021 958	75.9 24.1
<i>The nature of my work over the last year or so has changed**</i>	0 = No 1 = Yes	2,295 1,490	81 (3.4%) 113 (7.0%)	2,376 1,603	59.7 40.3
<i>The pace of work in my job has increased over the past year or so**</i>	0 = No 1 = Yes	1,799 1,986	60 (3.2%) 134 (6.3%)	1,859 2,120	46.7 53.3

N = 3,979.

Note: ** indicates significant chi-square value ($p < 0.05$); * indicates chi-square value ($p < 0.10$).

work as alienating, intense and impersonal are more likely to experience workplace assault. For example, those people who reported violence at work were significantly more likely to agree that 'the pace of work is too intense' and 'I have less control over my work now than I did one year ago'. Conversely, fewer respondents who reported 'where I work, people are treated as individuals' reported workplace assault (4 per cent compared to 7 per cent) ($X^2 = 12.00$, $df = 1$, $p = 0.000$). Across all sectors, those who felt the pace of work was too intense, or that people were not being treated as individuals, were more likely to report assault at work. It is possible that this reflects how respondents feel people are treated in their organization *after* the violence happens, rather than these attitudes reflecting risk factors associated with greater susceptibility to violence. However, past research does suggest that intense and heavy workloads, in combination with a lack of opportunities to exercise control over their work, increases risk of violence at work because the increased stress and pressure under which people are working lead to conflict (Estrada *et al.* 2010). Regardless, the WBS results show that we cannot reduce workplace violence to a simple analysis of interpersonal relations between individuals, without taking into account how employees perceive their working environment.

Distribution of violence across different types of workplaces

The WBS confirms that workplace assaults are not evenly distributed across different sectors of the economy (see Table 5). Those working in the public or third sector were significantly more likely to report assaults in the workplace (9 per cent each) compared to 3 per cent in the private sector ($X^2 = 75.10$, $df = 2$, $p = 0.000$). It is likely that the WBS findings reflect the fact that as has been highlighted in previous research, the risk of assault at work appears to be elevated in particular sectors of the workforce. Rates of workplace violence vary significantly across the 17 standard industry classifications ($X^2 = 1.67$, $df = 17$, $p = 0.000$) (full results not presented). We found relatively high levels of reported assaults by those working in health and social work (15 per cent,

TABLE 5 *Characteristics of respondents' workplaces*

Variable	Values and codes	Workplace violence		Total	
		No	Yes	N	%
Type of sector**	1 = Private	2,517	70 (2.7%)	2,587	65.0
	2 = Public	1,182	116 (8.9%)	1,298	32.6
	3 = Third	86	8 (8.5%)	94	2.4
Industry—	0 = No	3,497	164 (4.5%)	3,661	92.0
Public admin./defence**	1 = Yes	287	30 (9.5%)	318	8.0
Industry—	0 = No	3,339	118 (3.4%)	3,457	86.9
Health/social work**	1 = Yes	446	76 (14.6%)	522	13.1
Industry—	0 = No	3,437	172 (4.8%)	3,609	90.7
Education	1 = Yes	348	23 (6.2%)	370	9.3
Size of workplace	Less than 10	565	22 (3.7%)	587	14.8
	10–49	1,030	65 (5.9%)	1,095	27.5
	50–249	798	39 (4.7%)	838	21.1
	250 or more	1,052	50 (4.5%)	1,103	27.7
	Missing			356	9.0
Workplace composition— Ethnicity	0 = No BME	1,087	43 (3.8%)	1,129	28.4
	1 = About 5–10% BME	1,314	72 (5.2%)	1,386	34.8
	2 = About 25% BME	525	31 (5.6%)	556	14.0
	3 = About 50% BME	390	22 (5.3%)	412	10.3
	4 = About 60% BME	76	4 (5.0%)	80	2.0
	5 = About 75% BME	54	7 (11.5%)	61	1.5
	6 = About 85–90% BME	46	2 (4.2%)	49	1.2
	7 = All BME	18	1 (5.3%)	19	0.5
	Missing			288	7.2
	Workplace composition— Gender**	0 = No women	216	6 (2.7%)	222
1 = About 5–10% women		614	19 (3.0%)	634	15.9
2 = About 25% women		495	22 (4.3%)	517	13.0
3 = About 50% women		939	45 (4.6%)	985	24.7
4 = About 60% women		371	24 (6.1%)	394	9.9
5 = About 75% women		413	24 (5.5%)	437	11.0
6 = About 85–90% women		373	40 (9.7%)	412	10.4
7 = All women		170	10 (5.6%)	180	4.5
Missing				199	5.0
Workplace composition— Age	0 = No young people	425	16 (3.6%)	441	11.1
	1 = About 5–10% young	1,105	69 (5.9%)	1,173	29.5
	2 = About 25% young	901	52 (5.5%)	953	24.0
	3 = About 50% young	665	28 (4.0%)	693	17.4
	4 = About 60% young	192	9 (4.5%)	201	5.0
	5 = About 75% young	167	9 (5.1%)	177	4.4
	6 = About 85–90% young	56	2 (3.4%)	58	1.4
	7 = All women	18	1 (5.3%)	19	0.5
Missing			264	6.6	

N = 3,979.

Note: ** indicates significant chi-square value ($p < 0.05$); * indicates chi-square value ($p < 0.10$).

or three times the sample average). Another industry sector with apparently elevated risk was public administration and defence (which includes police officers and some other emergency workers), at 10 per cent, or twice the sample average. Education was the third 'riskiest' industry, with 6 per cent of those respondents reporting violence. Substantiating these results are the industry classifications of those 25 respondents that reported experiencing violence on a daily basis: five were in public administration, six in education and 12 in health and social work. Indeed, looking at the industry and

occupational classifications (discussed earlier) together shows that most of the violence perpetrated in the three riskiest industries (health/social work, public administration/defence or education) was against those in the associate/professional/technical or personal/service occupations (90 or 70 per cent of 129 respondents).

Respondents also reported on the composition of their workplaces in terms of the estimated proportions of black or minority ethnic employees, female employees or young employees (none, a quarter, half, all, etc.). Workplace assault did have a statistical association with racial and gender composition. As the proportion of female employees increased so did the rate of assault (e.g. the highest level was 10 per cent for workplaces with 'nearly all—85 to 90%' women) ($X^2 = 29.02$, $df = 7$, $p = 0.000$). Likewise, in workplaces where there were more BME workers, there were higher rates of assaults (e.g. when three-quarters were BME, 12 per cent of respondents reported experiencing physical assault at work, compared to only 4 per cent when none was BME); however, this difference was only statistically significant when the groups were combined into 'some' versus 'no BME' (5 per cent compared to 4 per cent) ($X^2 = 4.39$, $df = 1$, $p = 0.036$). This should not, however, be interpreted as an indication of high levels of racial and/or gender-related conflict at work. It should be remembered that the majority of workplace assaults are carried out by members of the public or clients, rather than fellow members of the workforce. Findings on workplace composition probably reflect the gender and ethnic composition of particular kinds of workplaces, rather than higher rates of tension and inter-worker assaults in these workplaces. Public sector workplaces have higher rates of 'some BME' compared to 'no BME' ($X^2 = 36.20$, $df = 2$, $p = 0.000$) and public and third sector workplaces having higher rates of 'some women' compared to 'no women' ($X^2 = 41.45$, $df = 2$, $p = 0.000$). Overall, then, these findings probably reflect the characteristics of workplaces in particular sectors where the prevalence and frequency of physical assault are relatively high, such as health and social care settings (which employ relatively high proportions of women and ethnic minorities). This is supported by the WBS findings indicating that the more female and BME-dominated workplaces had higher rates of assaults from clients/customers than from co-workers, subordinates or managers.

Modelling the predictors of workplace violence

We modelled the impacts of the four groups of variables just described (demographic, work-related, attitudes and workplace characteristics) on the likelihood of experiencing workplace violence and injury resulting from workplace violence. Both models provided a robust fit to the data, with the majority of cases being classified correctly (93–95 per cent) and relatively high r-square values (0.25–0.28). Full results are presented in Table 6.

It is clear that characteristics of respondents as 'workers' and the types of places in which they work exert the most powerful influence on the likelihood of experiencing workplace violence and injury. Managers, full-time workers and trade union members³ had significantly higher likelihood of experiencing workplace violence. Those working in personal service occupations and in the industries of public administration/defence

³We should not assume that this suggests that workers are victimized because of their union membership. Indeed, recent research on workplace behaviour suggests that the association between union membership and negative workplace experiences (including violence) may be due in part to the fact that some workers join trade unions precisely because they have already experienced trouble at work and need the union's help (Fevre *et al.* 2009).

TABLE 6 *Logistic regression results*

	Experienced physical violence at work:					Experienced injury from violence at work:				
	from anyone (n = 194)					from anyone (n = 151)				
	B	SE	Wald	Sig	Exp(B)	B	SE	Wald	Sig	Exp(B)
<i>Demographic characteristics</i>										
Female	0.03	0.30	0.01	0.91	1.04	-0.51	0.35	2.07	0.15	0.60
Gay or bi-sexual	0.87	0.61	2.00	0.16	2.38	0.50	0.68	0.54	0.46	1.65
Age	-0.01	0.01	0.97	0.32	0.99	-0.02	0.01	2.34	0.13	0.98
Ethnicity (white)			5.15	0.27				4.47	0.35	
Mixed	0.37	1.15	0.11	0.75	1.45	-0.25	1.42	0.03	0.86	0.78
Asian	-1.51	1.12	1.82	0.18	0.22	-1.85	1.09	2.89	0.09	0.16
Black	-2.24	1.29	3.00	0.08	0.11	-3.13	2.67	1.37	0.24	0.04
Other	0.38	1.14	0.11	0.74	1.47	-1.26	1.70	0.55	0.46	0.28
Religion (no religion)			1.04	0.59				0.86	0.65	
Christian	0.23	0.27	0.72	0.40	1.26	-0.18	0.29	0.36	0.55	0.84
Non-Christian	-0.34	0.92	0.14	0.71	0.71	0.43	0.81	0.29	0.59	1.54
University degree or higher	-0.25	0.29	0.76	0.38	0.78	-0.34	0.32	1.10	0.29	0.71
Disability (none)			8.07	0.04				6.14	0.11	
Any physical	0.27	0.60	0.20	0.65	1.31	0.86	0.59	2.13	0.14	2.36
Learning/psychological	1.94	0.69	7.91	0.00	6.96	-0.70	1.09	0.41	0.52	0.50
Any other type	-0.04	0.64	0.00	0.95	0.96	1.05	0.55	3.68	0.06	2.85
Income	0.00	0.06	0.01	0.94	1.00	0.00	0.06	0.01	0.94	1.00
<i>Work-related characteristics</i>										
Length of service in current job	0.03	0.06	0.28	0.60	1.03	0.06	0.07	0.78	0.38	1.06
Manager/supervisor	0.57	0.26	4.88	0.03	1.76	0.43	0.29	2.27	0.13	1.54
Part-time worker	-0.79	0.35	5.08	0.02	0.45	-0.06	0.38	0.02	0.88	0.95
Trade union member	0.52	0.25	4.18	0.04	1.68	0.59	0.29	4.10	0.04	1.80
Occ.—Asso./prof. and technical	0.20	0.29	0.47	0.49	1.22	0.29	0.33	0.80	0.37	1.34
Occ.—Personal service	1.09	0.36	8.89	0.00	2.96	1.27	0.39	10.30	0.00	3.54
<i>Work-related attitudes</i>										
Needs of org. come first	0.06	0.25	0.07	0.80	1.07	0.38	0.28	1.81	0.18	1.46
Compromise principles	0.19	0.26	0.55	0.46	1.21	0.28	0.28	0.97	0.33	1.32
People treated as individuals	-0.47	0.29	2.65	0.10	0.63	-0.70	0.31	5.22	0.02	0.50
Less control over work	-0.23	0.29	0.62	0.43	0.80	-0.80	0.35	5.34	0.02	0.45
Pace of work too intense	0.53	0.26	4.26	0.04	1.71	0.44	0.30	2.18	0.14	1.55
Nature of work has changed	0.31	0.25	1.58	0.21	1.37	0.63	0.28	4.86	0.03	1.87
Pace of work has increased	0.28	0.28	0.95	0.33	1.32	0.12	0.32	0.15	0.70	1.13
<i>Workplace characteristics</i>										
Sector (private)			7.75	0.02				0.11	0.95	
Public	0.92	0.37	6.38	0.01	2.52	-0.11	0.41	0.07	0.79	0.90
Third	1.14	0.57	3.95	0.05	3.11	0.07	0.74	0.01	0.92	1.08
Industry—Public admin. and defence	0.75	0.44	2.97	0.09	2.12	1.59	0.51	9.75	0.00	4.88
Industry—Health and social work	1.16	0.42	7.73	0.01	3.18	1.78	0.49	13.06	0.00	5.91
Industry—Education	0.55	0.48	1.29	0.26	1.73	1.08	0.59	3.32	0.07	2.96
Size of workplace (<10)			5.89	0.12				2.85	0.42	
10–49	-0.32	0.37	0.73	0.39	0.73	-0.36	0.42	0.76	0.38	0.69
50–249	-0.53	0.39	1.83	0.18	0.59	-0.69	0.45	2.30	0.13	0.50
250 or more	-0.91	0.40	5.12	0.02	0.40	-0.65	0.45	2.15	0.14	0.52
Workplace composition—Ethnicity	0.17	0.09	3.45	0.06	1.18	0.18	0.10	2.89	0.09	1.19
Workplace composition—Gender	0.10	0.08	1.40	0.24	1.10	0.12	0.09	1.76	0.18	1.13
Workplace composition—Age	0.09	0.09	0.98	0.32	1.10	-0.02	0.11	0.03	0.87	0.98
Constant	-4.39	0.77	32.14	0.00	0.01	-3.79	0.86	19.36	0.00	0.02
<i>Model statistics</i>										
Percent classified correctly	93.0					95.1				
Model chi-square significance	191.36					139.71				
-2 Log likelihood	628.22					513.98				
Nagelkerke R-square	0.280					0.248				

N = 1,370.

Note: Results $p \leq 0.05$ in boldface, results $p \leq 0.10$ in italics.

and health/social work also had significantly higher rates of both workplace violence and injury. Furthermore, these effects were substantial (three to four times higher than other occupations and industries). Experiencing violence was significantly more likely in the public and third sectors compared to the private sector, although there were no differences in the likelihood of experiencing injury across sectors. Smaller workplaces were also more violence-prone compared to larger ones. Those working in more ethnically diverse workplaces were marginally more likely to experience both workplace violence and injuries ($p < 0.10$).

Respondents' attitudes about their work also emerged as important predictors in the multivariate models. Controlling for all other variables, those who felt that 'the pace of work is too intense' reported experiencing more violence at work and those who believed that 'the nature of their work has changed' reported more injuries. Conversely, those who felt that 'people are treated as individuals' and those who felt they had 'less control over their work' also reported lower levels of injury than those who did not feel this way.

Given existing research, it was somewhat surprising that respondents' individual demographic characteristics were relatively unimportant in the models. The notable exception was disability, which was the strongest predictor of all. Those with learning/psychological disabilities reported workplace assault at seven times the average rate, while those with 'other' types of disabilities reported marginally more injuries. It is, of course, possible that this reflects (at least in part) a 'health effect' of experiencing workplace assault (rather than suggest a picture of disabled people being targeted disproportionately). That is, the psychological and/or physical problems experienced by workers are a result of physical assaults, rather than pre-dating them (see also Fevre *et al.* forthcoming). The only ethnicity effects were in the opposite direction to what was expected, with black respondents marginally less likely to report experience of assault, and Asian respondents slightly less likely to report injuries compared to whites.

Finally, we also considered whether the results might be impacted by our inclusion of all types of workplace violence in the same model. Recall that 78 per cent of incidents were committed by clients or customers, but the other incidents were perpetrated by those within the same workplaces (e.g. managers, colleagues, subordinates, etc.). As previous research has demonstrated, these can be considered distinctly different experiences and therefore we considered it instructive to model the predictors of violence that was only committed by clients or customers. This is a group large enough for multivariate modelling ($n = 146$); therefore, we tested the same models and in general the findings were remarkably similar to those in Table 6 (full results not presented). The only differences were that those who felt that they had 'less control over their work' reported less violence from clients. This is consistent with the finding reported above that this sentiment was linked to reduced rates of injury. This may seem counterintuitive until we consider that those workers that presumably have more control over their work, such as managers, have already been identified as more likely to experience workplace violence and injury. In addition, some kinds of routine work where autonomy may have been reduced—for example, in manufacturing or in call centres—are less likely to involve face-to-face meetings with clients or customers. Finally, the gender composition of the workplace became relevant in the 'client workplace violence' model as respondents working in more female-dominated workplaces reported experiencing more violence. Ethnic composition seems more relevant to workplace violence when all types are

considered, but gender is the key composition factor when only those incidents committed by clients or customers are considered. Recent research has found that working conditions that put employees at risk of violence have increased among women but not among men, and in female-dominated but not male-dominated occupations (Estrada *et al.* 2010). Thus, there is an emerging theme indicating that fully understanding the experience of violence at work requires a more subtle and sophisticated gendered analysis than we are able to provide from the WBS data.

Perceived motivations for workplace violence

The WBS explored respondents' perceptions of the reasons or motivations driving those people to use violence against them in the workplace and provided them with a list of possible factors from which to choose as many as they thought applied in their case. These factors included aspects of work itself, the characteristics of the perpetrator(s) and various demographic and other characteristics of the victim. Respondents could select as many motivating factors as they thought were applicable. Table 7 summarizes the responses.

These results provide support for the notion that for certain groups of workers at least, the experience of violence emerges from the structures of their working environment. Few respondents reported 'individual' explanations of violent incidents motivated by particular forms of prejudice and relatively few respondents identified the cause or

TABLE 7 *Perceived causes of violence at work*

Variable	Workplace violence		Total	
	No	Yes	N	%
<i>Characteristics of work itself</i>				
Your position in the organization	212	26 (10.9%)	238	16.7
It's just the way things are where you work	645	97 (13.1%)	742	52.1
Your performance at work	98	10 (9.3%)	108	7.6
<i>Characteristics of other employees</i>				
The attitude or personality of the other person(s)	525	78 (12.9%)	603	42.3
People's relationships at work (favouritism)**	145	12 (7.6%)	157	11.0
People have a group/ clique at work and exclude you*	78	6 (7.1%)	84	5.9
<i>Demographic characteristics of the respondent</i>				
Your age**	87	5 (5.4%)	92	6.5
Your gender	47	6 (11.3%)	53	3.7
Your nationality	23	3 (1.5%)	26	1.8
Your religion	8	3 (27.3%)	11	0.8
Your race, ethnic group and/or colour of skin	26	5 (16.1%)	31	2.2
Your sexual orientation	13	2 (13.3%)	15	1.1
Your disability	9	2 (18.2%)	11	0.8
Your long-term illness or other health problems	20	1 (4.8%)	21	1.5
<i>Other characteristics of the respondent</i>				
Your union membership	7	2 (22.2%)	9	0.6
Your physical appearance or the way you dress**	27	10 (27.0%)	37	2.6
You being pregnant/caring responsibilities/marital status	25	1 (3.8%)	26	1.8
Your accent or the way you speak	44	4 (8.3%)	48	3.4
Something else about you	59	7 (10.6%)	66	4.6
Something else not already specified**	87	34 (28.1%)	121	8.5

N = 3,979.

Note: ** indicates significant chi-square value ($p < 0.05$); * indicates chi-square value ($p < 0.10$).

motivation for violent incidents as something about themselves. Individual factors were, of course, seen as important, as was demonstrated by the second most frequently chosen perceived cause: ‘... the attitude or personality of the other person(s).’ This is not a surprising finding, given the individualized notion of interpersonal assault, which is, after all, carried out by individuals against other individuals. However, substantially larger proportions of the sample identified the causes or motivation for workplace violence to more general features of their working environments. In particular, ‘It’s just the way things are where you work’ was the most commonly chosen factor, selected by 64 per cent of respondents who had experienced violence as well as being the most frequent response for the sample as a whole.

An important objective was to explore how far respondents who reported violence perceived their own ethnic background, sexual orientation, gender, disability or social class as a motivating factor for the perpetrator(s). As the table shows, very low proportions of respondents reported that they believed such factors had motivated the assault(s) against them. Of course, this does not prove that racially motivated violence, for example, was not experienced by any of the WBS respondents. One of the features of discriminatory behaviour, including violence motivated by prejudice against particular social groups, is that the actual motivation for the behaviour is not always clear to the person being victimized. However, it is interesting to note that most victims of workplace violence are more likely to relate these incidents to the wider conditions of their work, or to the general personality dispositions or attitudes of the perpetrator(s), than to any of their own specific demographic characteristics.

Conclusions

In this paper, we have presented new statistical evidence about the prevalence, frequency and patterns of interpersonal workplace assault in Britain. Three key themes have emerged from the analysis.

First, it appears that the overall prevalence of workplace assaults in Britain is considerably higher than is suggested by crime victimization surveys such as the BCS. These higher estimates may relate to the fact that victimization surveys are less likely to capture the kinds of violence that are not conventionally categorized as ‘criminal’. This is likely to include a range of relatively minor assaults, but also may comprise more serious forms of violence that occur in settings that are not conducive to them being criminalized (e.g. in educational or social care settings where the assailant is a patient or child). This hypothesis is supported by the similar estimates of the prevalence of workplace assault provided by other surveys of workplace relations such as the Fair Treatment at Work survey. These studies of workplace behaviour suggest, therefore, that the overall incidence of workplace violence is not low and significantly greater numbers of workers are affected by assault at work than has been previously recognized.

Second, the WBS suggests that workplace assault is substantially more likely to be perpetrated by clients or members of the public than by managers, co-workers or other colleagues. It seems then that factors relating to the nature of social relations *within* the workforce have limited purchase in explaining the overall picture of assaults. In general, risk of interpersonal assault appears to be much more related to contact with the public than to the nature of relationships between workers. In this regard, assault is different from other forms of negative workplace behaviour that have been the focus of

much of the research literature on bullying and harassment at work. It is thus unsurprising that the WBS confirms other research suggesting that particular occupations and industry sectors are associated with a higher rate of workplace assault and that these are more likely to comprise client-facing jobs in the public sector. Nevertheless, 'relational' forms of violence do account for a substantial minority (almost a quarter) of assaults at work and it is these kinds of assaults that may have the most similarity to other forms of relational violence, such as domestic abuse. Further research is required to explore the relationship between these specific forms of relational violence and the nature of social relations in particular workplaces.

Third, our study suggests that explanations for workplace assault are more likely to be found in the nature of workplaces, rather than in the individual characteristics of victims or perpetrators. Although primed towards individualized explanations by the survey method, respondents rarely identified causal factors relating to their own particular characteristics such as their ethnicity, gender or age. Rather, they were most likely to explain incidents with reference to the general nature of their work. Our data indicate that violence at work is not (usually) a case of 'bad apples' or 'one-offs', but is better explained as structurally induced because people in these jobs—regardless of their individual socio-demographic characteristics—are at higher risk of violence. Even those victimized by violence at work do not tend to blame individuals—they see it as just the 'way things are'.

Although the WBS data provide a rich new source for improving our understanding of the prevalence, distribution and frequency of workplace assault and the characteristics of the individuals involved, they are inevitably limited in several ways in their ability to shed light on deeper explanations of workplace violence. As noted at the outset, cross-sectional surveys such as the WBS cannot capture structural or institutional forms of workplace violence or give any indication of longitudinal trends. There are many questions that cannot be addressed in detail via analysis of cross-sectional quantitative data such as these. Such questions include: how do patterns of negative workplace behaviours, including interpersonal assault, emerge over time, what is the meaning of these experiences for the people involved, how are such behaviours related to contextual features (such as contrasting workplace cultures), what causal mechanisms can be identified, what are the consequences for individuals and organizations of various kinds of negative workplace behaviours, and what are the most appropriate policy responses to such phenomena? We hope that the forthcoming qualitative stage of our research may begin to shed light on at least some of these questions.

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