



Kent Academic Repository

Dick, Gavin P.M. (2008) *The influence of managerial factors on bullying in the Police*. Kent Business School Working Paper Series No. 179 . ISSN 1748-7595.

Downloaded from

<https://kar.kent.ac.uk/23476/> The University of Kent's Academic Repository KAR

The version of record is available from

<http://www.kent.ac.uk/kbs/documents/research/working-papers/2008/179-managerial-factors-and-bullying>

This document version

UNSPECIFIED

DOI for this version

Licence for this version

UNSPECIFIED

Additional information

Kent Business School Working Paper No.179

Versions of research works

Versions of Record

If this version is the version of record, it is the same as the published version available on the publisher's web site. Cite as the published version.

Author Accepted Manuscripts

If this document is identified as the Author Accepted Manuscript it is the version after peer review but before type setting, copy editing or publisher branding. Cite as Surname, Initial. (Year) 'Title of article'. To be published in *Title of Journal* , Volume and issue numbers [peer-reviewed accepted version]. Available at: DOI or URL (Accessed: date).

Enquiries

If you have questions about this document contact ResearchSupport@kent.ac.uk. Please include the URL of the record in KAR. If you believe that your, or a third party's rights have been compromised through this document please see our [Take Down policy](https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies) (available from <https://www.kent.ac.uk/guides/kar-the-kent-academic-repository#policies>).

Working Paper Series

The Influence of Managerial Factors on Bullying in the Police

Gavin Dick
Kent Business School

Working Paper No.179

December 2008

The influence of managerial factors on bullying in the police

Authors:

Gavin Dick

Kent Business School, University of Kent

Keywords:

Police, Workplace bullying, Management.

Abstract

Recently there has been a growing trend to recognise the damaging nature of workplace bullying in organisations' Dignity at Work policies (CIPD, 2004). In this article the author explores negative behaviours experienced by police officers and how their managerial environment influences the extent of these bullying behaviours. Quantitative methods are used to analysis a whole force survey to explore the nature of bullying behaviour in the police and its antecedents. The findings indicate that negative behaviour is widespread amongst officers and a minority experience it at intense levels. However, the nature of bullying experienced is predominantly indirect and discreet. Senior ranks experience a different mix of behaviours but overall experience higher levels of bullying than junior ranks. The managerial environment was found to be an important predictor of the degree of bullying experienced. The findings suggest that bullying research may be advanced when it is considered in a broader frame, where managerial and organisational factors that create an environment in which bullying is possible and is precipitated are considered. The author suggests that the consequences of poor interpersonal management and communication skills go beyond the expected negative consequences for weak commitment and low involvement because they create an environment in which bullying is more likely. Also suggested is monitoring the level of workplace bullying to allow early intervention to prevent serious consequences for employees' well being, and consequential organisational costs. In addition to being one of the few published studies to capture the total police population, the study appears to be the first academic study that explores bullying in the police. The research highlights the importance of the managerial environment and how it might act as a gateway that enables or discourages bullying behaviours.

Introduction

This article focuses on negative behaviour at work, what is known as workplace bullying in the UK or mobbing in Europe. Research has shown severe consequences for the organisation with higher rates of absenteeism, higher turnover and reduced commitment and productivity (Hoel et al., 2004; Keashly & Jagatic, 2003; Leymann, 1996; Lutgen-Sandvik, 2006). In addition the literature reports bullying victims have reduced job satisfaction, emotional distress and illness (Hoel et al., 2003; Keashly and Jagatic, 2003). Therefore, bullying is costly for the organisations and for wider society and this is recognised in the growing trend to acknowledge the damaging nature of workplace bullying in organisations' Dignity at Work policies (CIPD, 2004).

Although there has been much research attempting to define the concept of bullying, its prevalence and personality traits of perpetrators and victims (e.g. Rayner, 1997; Hodson, 1997; Harlos and Pinder, 1999; Einarsen, 1999; Zapf & Gross, 2001; Keashly & Jagatic, 2003;) there has been little systematic study of how differences in the victim's managerial environment can influence the prevalence of bullying behaviours.

Since the goals of "New Police Management" (Lieshman et. al., 1995; Cope et. al., 1997) focus on cost effective police delivery, and the restructuring of administrative systems, it is surprising that organisation scholars have largely ignored the new managerial experiences of police officers and how this may impact on workplace bullying. Thus, the aim of this paper is to examine bullying behaviours in the context of variations in the managerial environment of a police force. To do this we use a negative behaviour measurement index rather than dichotomous categories, a measurement approach similar to that used by Lutgen-Sandvik et al., (2007).

The paper begins with an attempt to define workplace bullying before reviewing research on bullying behaviours' antecedents and the possible influence of managerial variables. Thereafter, follows an explanation of the study's methods findings and conclusions.

Workplace bullying

For readers new to this topic, 'bullying' might be associated with children in a playground, but a growing body of literature has found similar facets of interpersonal humiliation, aggression and destructive psychological manipulation in the workplace (Hoel, et al., 1999; O'Leary-Kelly et al., 1996; Duffy et al., 2002; Rayner and Keashly, 2005). Workplace bullying is about negative interpersonal behaviours perpetuated by colleagues or managers on a 'victim' that are repeated and persistent (Einarsen, 1996; Hoel and Cooper, 2000; Zapf et al., 1996). It is not about isolated incidents between strangers, but is placed in the context of a relationship where the players have a past and a future together in the workplace (Heames et al., 2006).

In terms of content bullying consists of a range of different negative behaviours such as excessive criticism, or work monitoring, withholding information or responsibility, attacking the victim's attitudes or private life, social isolation or the silent treatment (Adams, 1992; Einarsen, 1996; Zapf et al., 1996; 1998; Rayner and Keashly, 2005). Thus, bullying is interpersonal in nature and is a narrower construct than anti-social or deviant workplace behaviour because it does not include acts directed at the organisation.

Early studies by pioneering researchers of bullying at work established two main approaches to measurement both of which rely on respondents' perceptions of recent

negative workplace behaviours directed at them. The first, Heinz Leymann, identified a set of negative behaviours using critical incident technique with severely affected targets of bullying. He calculated incidence by asking respondents whether negative behaviours had been experienced weekly and also if they had occurred for at least six months. He did not ask people either to label themselves as bullied or not (e.g. Leymann, 1990). The second, developed by Einarsen et al (1994) extended Leymann's frequency to include 'now and then' as well as the daily/weekly measures of Leymann. The key difference introduced by Einarsen was that of labelling, he only counted those who experienced negative behaviours and also labelled themselves as bullied. The research community has broadly adopted Einarsen's introduction of labelling. Frequency centres on weekly behaviours, although the time period over which measurement is taken varies from six months to two years (see Hoel, Rayner & Cooper, 1999, for a review).

However, more recently considerable debate has focused on how to 'count' those who are bullied (e.g. Einarsen et al, 2003; Rayner et al, 2002) and is summarised here. As bullying is thought to be about repeated actions, some persistency of experience of negative behaviour over the last six months (at least) has been used by researchers. However, there is an ongoing debate as to whether only those who label themselves as bullied should be counted, as only half those who have experienced weekly negative behaviour during the last six months also label themselves as bullied (Rayner, 1999). Her comparison of the different bullying measures produced different levels of incidences; but more fundamentally it showed that different measures included quite different sets of people. Thus any subsequent analysis of 'the bullied' would draw on different sub-populations, depending on which measurement definition is used. A by-product of this methodological comparison was the discovery of a large number of people who reported experiencing negative behaviour at work on a frequent basis, but who did not label themselves as bullied. This finding is similar to other studies that use different lists of behaviours (e.g. Hoel & Cooper, 2000; Cowie & Jennifer, 2000). Thus we appear to have a fairly stable phenomenon in UK studies that shows that as many as half of those who experience weekly negative behaviours do not label themselves as 'bullied' yet most research has ignored them by focusing only on the self-labelled bullied. A recent US study has highlighted only one-third of US participants self-label (Lutgen-Sandvik et al., 2007).

So is negative behaviour a problem other than for those who label themselves as victims of bullying? What is clear from the literature is that when negative behaviour is experienced persistently, the victim has negative health outcomes whether they label themselves as bullying victim or not (Hoel, Faragher, & Cooper, 2004). This strongly indicates that workplace negative behaviour can have serious consequences for the individual's well being (Adams, 1992), but also consequential organisational costs due to sickness, lower than average staff performance and eventually staff turnover as the 'victim' leaves the organisation to escape the negative behaviour (Rayner, 1998; Lutgen-Sandvik, 2007).

Antecedents of workplace bullying

A growing number of researchers acknowledge that bullying and other types of workplace aggression are often the outcome of interaction between situational and individual factors, (O'Leary-Kelly et al., 1996; Aquino et al., 1999; Zapf, 1999) where the individual and the organisation exert bi-directional influences. Thus an individual may acquire bullying tendencies in a certain organisational environment and an

organisation's managerial environment can be influenced by the bullying behaviour of role models (Pearson et al., 2000).

Salin's (2003) insightful exploration of enabling structures and processes that make bullying possible, or more likely, provides a useful structure to explain likely antecedents and how they may influence one another.

She suggests there are factors that are a gateway that enables or disables bullying occurrence. The first of these is power imbalance which is an emphasised feature of total organisations such as the police or fire service (Archer, 1999). The second is the low risk of adverse consequences for the perpetrator. Large and bureaucratic paramilitary organisations where bullying is tolerated as a means of getting things done or where being 'a tough manager' is seen as an efficient way of motivating the tardy provide this requirement (Archer, 1999). In these circumstances the modelling of younger officers on their senior officers can perpetuate this by the 'powerful character of the police socialisation process' (Van Maanen, 1975: 207). More recent research by Beck and Wilson (1997, 2000) noted the significance of socialisation processes operating within police culture whereby new recruits were exposed to older, experienced, and more cynical officers, whose views had a long-lasting destructive effect on work attitudes.

Finally, frustration due to lack of clear goals, role ambiguity, organisational constraints or poor communication have been found to be associated with increases in bullying behaviours (Einarsen, et al., 1994; Vartia 1996). This may be particularly relevant since Beck and Wilson (2000: 132) conclude that police agencies may have unique 'organisational characteristics' and 'managerial practices' that 'flag a lack of support, justice and value', as they build on an 'inventory of bad experiences'. These touch on the managerial variables that are also associated with affective organisational commitment so could it be that the managerial-support and organisational-support variables that have been found to be a strong positive influence on organisational commitment when absent provide the gateway conditions that make bullying behaviours more prevalent? We will return to examine these managerial influences in more detail later.

Salin (2003) suggests that there are other factors that can motivate and other that precipitate bullying. These then have to be enabled by the factors we have discussed in the gateway before bullying manifests itself. In the context of the police an example of the motivate factor would be the use of bullying to 'get rid' of a low-performing officer who is seen as a liability, or similar behaviour to make a rival officer request a transfer or leave. Finally, we come to what Salin (2003) describes as participating-processes which are additional mechanisms that can act as a trigger for escalating levels of bullying behaviour. Of particular salience to the police is the impact of New Public Management (NPM) and performance improvement measures because research indicates that restructuring and re-engineering organisations can increase stress and lower the threshold for aggression that precipitates bullying (Hoel and Cooper, 2000).

Thus, it appears that conditions in the police provide the motivation and the participating conditions for bullying; in addition the enabling gateway is likely to be open to allow it to flourish. To gain additional insights into the managerial variables that may influence bullying we now look at studies of related phenomena.

Managerial influences

Work involves significant interaction with others whether colleagues, bosses or subordinates and these relationships can be a major source of stress and support (French et al., 1982). Relationships that are poor, that lack trust, offer little support, or

where there is no interest in listening (Arnold et al., 1998; LaRocco et al., 1980) typify social system relationships that are stressful that can lower the threshold for abusive supervision (Frone, 2000) and bullying (Hoel and Cooper, 2000). Quick and Quick (1984) concur and identify that interpersonal stressors such as leadership style are associated with bullying behaviour. Mayhew and Chappell's (2003) findings suggest that 40 per cent of the bullied do not turn to anyone at all for support, but as the bullying continues they reduce their commitment, and then leave the organization. Despite this general acknowledgement of the influence that managerial relationships might have on stress and how this might influence bullying there appears to be a lack of research that informs us of the features of managerial support that impact on bullying. Therefore, we turn to look briefly at research on the positive outcomes of managerial support on the supposition that when managerial-support and organisational-support are absent this is likely to lead to social system relationships that are stressful which can participate bullying.

Research examining managerial/supervisor behaviour suggests that weak managerial support is associated with lower levels of job satisfaction and organisational commitment so understanding the managerial elements that are linked to these can inform us of likely managerial variables that when absent will encourage an environment suitable for bullying. Many studies have revealed that the level of organisational and managerial support an employee feels, their involvement in decision making (Porter et. al., 1974; Mowday et. al., 1982; Beck and Wilson, 1997), and satisfaction with supervisor-employee communication processes (Mathieu and Zajac, 1990; Brunetto and Farr-Wharton, 2003) influence whether a person has high or low organisation commitment. The relationship between leadership style and commitment has been examined by Blau (1985) and Williams and Hazer (1986). A consideration leadership style was found to have a greater influence than a concern for structure leadership style (or task-oriented style) on commitment. Insights on managerial influences can be found in research that examines the influence on commitment of the quality of the relationship between supervisors and employees. Research using the Leader Management Exchange (LMX) construct indicates that job satisfaction and commitment is increased when employees experience good relationships with their supervisor which involves information sharing, participation and feedback opportunities (Epitropaki and Martin, 1999).

In summary, the literature suggests that generic organisational characteristics of police forces are likely to enable bullying. Also the literature suggests that a lack of managerial/organisational-support may be a facet of the enabling gateway which makes bullying more likely.

With this in mind our study will analyse the extent and nature of bullying behaviours and explore to what extent managerial variables have an influence on bullying. We now go on to discuss the methodology that we used to survey the total uniform police population of a county police force and detail our measurement models for the managerial and bullying factors.

Research Methodology

The analysis in this paper is based on data from a large police force in the United Kingdom. It follows on from earlier research by the author that investigated managerial and organisational factors associated with organisational commitment in the Police (Metcalf and Dick, 2000; Dick and Metcalfe, 2001) and bullying of civilians in the police (Dick and Rayner, 2004).

Our research in this police force is extended to consider the negative behaviours experienced by officers and whether the managerial and organisational variables that have been previously been found to have a strong influence on organisational commitment also effect the propensity for workplace bullying.

The Survey Populations

The questionnaire was administered by the police force concerned to all uniform officers with official encouragement to respond anonymously via the post. The police force had a total population of approximately 1500 police officers and a return rate of 48% was achieved. This is significantly higher than most police force surveys that typically achieve a return of only 25-30% (Brodeur 1998). Details of the respondents' profile are provided in Table I. Because of the agreements to keep details that could identify the forces concerned confidential, further contextual information on geography, policing demands and specific HR issues cannot be provided here. However it can be said that the force had typical county policing demands and included city populations and large rural areas.

Insert Table 1 around here

The survey data was tested for evidence of respondent fatigue (i.e. inconsistent responses to similar questions in different parts of the questionnaire). It was concluded that a bias of this kind was not present. In addition, a number of awareness tests were applied (i.e. where certain questions had a different tone or measurement scale to surrounding questions). Coefficients were calculated to test the hypothesis that respondents failed to pay attention to the change with the conclusion that there was little or no evidence of bias of this kind.

The Bullying Behaviours Variable

The police force rejected two existing survey tools, the Negative Acts Questionnaire (NAQ), (Einarsen & Skogstad, 1996) and the Leymann Inventory of Personal Terrorization (LIPT), (Leymann, 1996) due to the large number of items used. Instead Rayner's (2000) fourteen item survey tool based on the behaviours identified by Adams (1992) was selected as this instrument had previously been used on police civilian employees where it showed excellent construct validity (Dick and Rayner, 2004). In the questionnaire respondents were asked if they had experienced any of the fourteen behaviours listed in the last six months, following the style of Einarsen's NAQ (ibid). They were given a frequency response choice for each of the negative behaviours of, every day, every week, every month, less than once a month and never; labels that we considered less ambiguous than those found in the NAQ.

Exploratory factor analysis using a principal component analysis with a Varimax rotation produced a three-factor bullying model and a two factor managerial model. Overall, sixty per cent of the variance can be explained by the five factors in the survey.

The bullying factors identified were, task-attack, personal-attack and intimidation. A listing of the questionnaire items used to measure the bullying factors can be found in Appendix Table 1b along with their factor scale reliability statistics. The factors are similar to Einarsen's et al (1994) bullying phases and Zapf's et al. (1996) typology of bullying. In this research we are also interested in bullying as a whole so we composite the individual observed variables to form a Negative Behaviour Index, which has a satisfactory Cronbach's scale reliability coefficient of 0.86. We use the term index since we are not suggesting that it is a unidimensional measurement model

because it is clear from the following correlations that the three bullying factors represent an oblique measurement model (correlation of 0.51 between task-attack and personal-attack, 0.42 between task-attack and Intimidation and 0.62 between intimidation and personal-attack).

So the bullying factors can be seen to combine intensity (the number of negative behaviours experienced) with frequency (how often the negative behaviours are experienced). Clearly, a weakness in such a composite measure is the assumption that all negative behaviours are equal in impact. However, in the absence of a sound theoretical base to allow weighting of individual behaviours this problem is unavoidable.

The Managerial Variables

The independent variables pool is based in Metcalfe and Dicks' scales (2001) which were influenced by previous studies which have assessed the level of organisational and managerial-support, the feedback given about role requirements and job performance (Mathieu and Zajak, 1990; Meyer and Allen, 1997), and the level of participation in decision making (Porter et al, 1974; Mowday et al 1982; Beck and Wilson, 1997). The Metcalfe and Dick scales were formulated after extensive semi-structured interviews with police operational and executive staff that allowed the identification of managerial and organisational themes considered to be important to effective management. In this respect the research instrument has good content validity as it reflects the real life concerns of supervisors and managers in a changing policing context (see Baruch, 1998 for a discussion). In previous research the instrument has been found to have good construct validity when used on uniform and civilian police employees in the UK (Metcalfe and Dick, 2000; Dick and Metcalfe, 2001; Dick and Metcalfe, 2007).

The questionnaire posed sixteen questions on supervisor/manager and organisational behaviour, on a five point Likert scale. In the factor analysis twelve of these loaded on a factor described as managerial-support with another four loading on a factor described as organisational-support¹. The factor managerial-support is heavily influenced by the effectiveness of the respondent's supervisor or line managers listening and communication skills, and absence of a blame culture while the factor organisational-support is strongly influenced by whether there is good contact and openness and honesty with higher ranks. In the factor analysis a few items migrated from the original organisational-support scale to the managerial-support factor but overall the results from the factor analysis and reliability statistics confirm the stability of the measurement model and factors. A listing of the questionnaire items used to measure the variables can be found in Appendix Table 1b along with their scale reliability statistics.

Findings

Bullying behaviour

To examine the pattern of workplace bullying in the police we tabulate the frequency of the individual bullying behaviours for each bullying factor in Table 2. Officers were asked 'Have colleagues or managers used any of the behaviours outlined below

¹ Please note that although the titles used here are similar to Eisenberger et al's (1986) 'perceived organisational support' and Rhoades and Eisenberger's (2002) 'perceived supervisor support' this study's questionnaire items are very different in focus.

towards you in the past six months?’ Respondents were offered the choice of every day, every week etc. If we look at the ‘Never per cent’ column it is clear that negative incidents to do with an officer’s work are the most common forms of bullying behaviour followed by incidences of behaviours designed to isolate and further undermine the individual’s personal standing. What is interesting is that the least common behaviours shown in the table are verbal abuse and physical threats that are associated with the common stereotype of bullying at work where open and direct bullying acts are expected. What clearly stands out is the discreet and indirect nature of the more frequent bullying behaviours found here where an officer’s work and personal standing are undermined to the point that they are isolated and not treated as part of the ‘team’.

Take in Table 2 around here.

It is clear from the table that a large number of officers (49%) experienced some form of negative behaviour in the last six months. Moreover, a sizeable minority do experience bullying on a more frequent basis (13% report incidence frequencies of weekly or more). Overall, the statistics indicate the widespread occurrence of the experience of workplace bullying behaviour with around one in ten constables being exposed to very persistent negative acts.

To explore whether differences exist in the experiences of negative behaviours between lower and higher ranks we analysed the means of the individual observed variables for constable and higher ranks and tested for statistical differences. The results are presented in Table 3 with the behaviours ranked by means within each factor.

Take in Table 3 around here.

When we look at the difference between the experiences of constable and higher ranks it is clear that higher ranks experience more negative behaviour. There are statistically significant differences on five behaviours which indicate that senior ranks are set more unrealistic targets, are kept in the dark more (withholding information), experience more malicious rumours and are humiliated/intimidated more.

Bullying factors

So far, we have examined the bullying items as if the behaviours are experienced individually. However, this is unrepresentative of the experience of those being bullied since most respondents’ report multiple bullying acts, so using individual negative behaviour items provides no information on the patterns of bullying that are experienced therefore we calculated the mean for each bullying factor and then standardised the means to the same scale as that used for the individual bullying items. When we look at the factor means in Table 3 we can see that task-attack can be seen as the most common bullying factor (mean all officers, 1.76) followed by personal-attack (mean 1.44) with intimidation being the least common factor (mean, 1.15). The rank order of frequency of bullying factor experience is broadly similar to that found in civilian workers in the police (Dick and Rayner, 2004) but the frequency of the bullying behaviours is very much higher with a standardised bullying-index mean of 1.39 compared to the 0.47 found in police civilians.

The pattern of factors and incidences found in Table 2 and 3 appears to reflect the sequence of phases suggested by Einarsen (1999) of subtle aggression (task-attack and personal-attack) being followed by open aggression (intimidation). It is also very similar to that found in civilians working in the police by Dick and Rayner (2004), who reported that most bullying involved attacking the individual’s work and personal

standing, with a smaller number of cases showing bullying being extended to include stigmatising the individual and intimidating them.

Demographic effects

To assess whether bullying and its factors were associated with demographic differences between respondents, we examined the correlation of gender, age, years worked for the organization and rank with the all bullying-index and each of the bullying factors. As one would expect for a phenomena such as bullying the frequency distribution is skewed. The log normal of the data was used to normalise the distribution so that the data met the parametric assumptions required for correlation and regression tests.

Take in Table 4 around here

No significant association with bullying was found for gender, age or tenure. The only significant association for the bullying-index was a weak one with rank (0.11), which is mainly explained by rank's correlations with task-attack (0.11) and intimidation (0.13).

Overall, it would seem that these respondents' gender age or years worked for an organization have very little influence on whether they experience bullying at work. This contrasts with Einarsen and Raknes (1997) who found significantly more older workers reported bullying, while British surveys have indicated the opposite where older respondents are slightly less likely to experience bullying behaviour than younger ones (Dick and Rayner, 2004)..

Next we look at the strength of the relationships between the managerial variables derived from the factor analysis and the bullying factors. It is clear from Table 4 that there is a strong association between the level of the bullying-index, the degree of managerial-support (0.57) and organisational-support experienced (0.34). Task-attack, personal-attack and intimidation appear to be influenced equally by the two managerial factors which indicate that little information will be lost by using only the bullying-index rather than the individual factors in future analysis. Demographic results show that gender and age have no bearing on the managerial factors. However, tenure (0.11) does have a modest influence on managerial-support while rank is associated (0.11) with organisational-support. Overall it would appear from the correlations that management variables are by far the dominant influence on officers' experience of workplace bullying.

To separate the direct influences on bullying levels from the indirect influences, we now examine the significant demographic variables along with the managerial environment factors through multiple regressions.

Antecedents of Bullying

To investigate if there are differences between ranks in how the managerial environment factors affect the level of bullying, we undertook separate regression analyses for constables and higher ranks (sergeants, inspectors, chief inspectors and above). In these regressions, we have included rank and tenure which are the only demographic variables that have significant correlations with the bullying-index or the managerial variables.

After removing a small number of outlier cases, tests for assumption of linearity and homogeneity of the regression equation were satisfactory and the overall test for goodness of fit for the regression equations is highly significant for all groups

(significance $F = 0.00$) indicating that the regression equation is most unlikely to have occurred by chance.

The analysis in Table 5 shows that the regression equation accounts for over thirty-five per cent of the variance in the bullying-index for all officers, constables and senior ranks. Overall, these are strong findings given that sixty per cent of the data (i.e. residing in the five factors) was incorporated into the regression equation.

Take in Table 5 around here

The findings in Table 5 show the beta weights in different columns for all constables, senior staff and all officers. The beta weights signify the relative contribution of each of the factors to the overall change in the bullying-index found in these police officers. We can see that for both constables and senior staff the dominant factors affecting bullying behaviours are lack of managerial-support (constable and higher ranks' beta -0.52) followed by lack of organisation-support (constables' beta -0.16; higher ranks' beta -0.15). The beta weights indicate that lack of managerial-support is the dominant influence on levels of bullying experienced which conversely suggests that where management is seen to be supportive there is likely to be less opportunity for bullying behaviour by colleagues or other managers. Earlier in Table 3 we noted that there are more bullying behaviours in higher ranks and this is confirmed by the beta weight for senior officers of 0.23 that shows that experiences of bullying behaviour escalates with seniority in the higher ranks. Finally, we note that tenure does mitigate bullying with officers with longer service experiencing less bullying (constables' beta -0.10; higher ranks' beta -0.15).

The regression shows that the managerial environment factors have a powerful effect on bullying experiences. Together these factors' beta weights for all officers indicate that a change of nearly sixty-six per cent of one deviation in the bullying-index is predicted for each standard deviation reduction in the managerial factor scores. Although there are slight differences in the importance of each managerial factor between constables and higher ranks overall the findings demonstrate that lack of these managerial and organisational-support factors is an important antecedent of bullying behaviour regardless of hierarchical position. This important finding demonstrates that experiences of bullying behaviours for all grades are influenced by lack of the same managerial and organisational-support factors. The preceding analysis provides support for the limited literature on managerial antecedents of bullying, since a lack of supportive management echoes Einarsen et al. (1994) and Vartias' (1996) lack of clear goals, role ambiguity and poor communication behaviours affecting bullying experiences.

The managerial-support scores that are reported in Table 5 are slightly above the midpoint of the scale (constables 41.4, midpoint 36) while organisation-support is below midpoint of the scale (constables 10.39, midpoint 12), which indicate that the majority of constables feel they experience just about adequate levels of managerial support and organisational-support. However, the standard deviations of the managerial factors for constables (managerial-support SD 8.1; organisation-support, SD 3.1) indicate that there are significant differences in the means of organisational-support and managerial support experienced by constables. Taken with the regression equation this implies that areas of poor overall human resource management exist where bullying behaviour thrives. However, in tandem there exists islands of good practice where supportive management mitigates bullying behaviours.

Finally, we report that organisational factors such as type of division or division size were found to have no statistically significant influence on the bullying-index compared to the managerial factors and demographic variables we have reported. This suggests that these managerial factors are universal in their impact on bullying behaviour.

Conclusions

The results show that bullying behaviour is widespread and is intense for a significant number of police officers. However, it consists predominantly of discreet and indirect acts rather than intimidating behaviours. It has been found that senior ranks experience a different mix of negative behaviours but at a higher level than constables. If we view bullying as a process of escalating conflict (Einarsen, 1999) with progressive increases in the frequency/intensity of negative behaviours, we would postulate that intervention at an early stage would be more likely to succeed than intervention at a later point after the working relationship(s) has broken beyond repair (Rayner, 1997; Rayner and Mclvor, 2006). Thus we suggest that it is important to regularly monitor at the team level an index of negative behaviour so that signs of escalating levels of workplace negative behaviour - that are still below those that are currently viewed as constituting bullying - can be a signal to mobilise Personnel, or HRM to defuse the situation early and quickly (Rayner, Hoel & Cooper, 2002). This is important as not controlling persistent workplace negative behaviour is potentially serious not only for employees' well being, but also consequential organisational costs due to sickness, lower than average staff performance and eventually staff turnover as the 'victims' leave the organisation to escape the negative behaviour.

It has also been found that the level of bullying experienced is significantly affected by the way the force's employees are managed, and this has ramifications for personnel and management systems. The same managerial behaviour, that when strong encourages organisational commitment, has also been found to reduce the degree of bullying behaviour experienced. Conversely when these managerial behaviours are perceived to be weak our findings show that bullying behaviours are more prevalent. These point to the importance of good management training to avoid abusive supervision practices, encourage good interpersonal relationships and so reduce the stress that can precipitate bullying behaviours.

The findings indicate that officers rate their managerial-support at just above the midpoint of the scale which suggests that there is room for considerable improvement. This weakness of indifferent managerial skills are not surprising since forces across the UK have been criticised in the past for their failure to develop appropriate management competencies to cope with changing police structures and accountabilities (Merrick 1997). Loveday's (1999) review of the HMIC reports of Gwent, Gloucestershire, Kent and North Yorkshire constabularies found that many lower level staff felt disgruntled about the lack of 'consultation' (Gwent, Kent) 'not being listened to' (North Yorkshire) and raised concerns about 'management style' and the 'limitations' of human resource policies.

Clearly, our finding showing weak management associated with more bullying highlights the importance of the current Police Leadership Development Board's agenda to improve workforce management skills to encourage transformational leadership styles (see Dobby, Anscombe and Tuffin, 2004). Moreover, there clearly remains much to be done to make HRM policies more effective in avoiding promoting officers whose managerial behaviours adversely influence bullying.

In addition to being one of the few published studies to capture the total police population, the study appears to be the first academic study that explores bullying in the police. Although our findings are derived from only one police organisation they echo the findings in earlier whole police force analyses of managerial and organisational factors (Metcalf and Dick, 2001; Dick and Metcalf, 2001) which suggests that our finding on the managerial environment are not unique to one particular force. We accept that survey methods such as ours do not capture the entirety of employee feelings and working experiences. However, survey methods do have the advantage that it is possible to generalise from results and thus this study can be viewed as providing insights to other UK police forces in particular, and to the broader field of the antecedents of bullying in general. We are not suggesting that the antecedents of bullying identified in our research are exhaustive; indeed only thirty-five per cent of the variation in bullying that we have observed is explained by the antecedents we have examined. However, our research highlights the importance of the managerial environment and how it might act as gateway that enables or discourages bullying behaviours. We suggest that bullying research could be advanced if it is considered in a broader frame where managerial and organisational factors that may create an environment in which bullying is possible and precipitated are considered.

To conclude, our findings strongly support the proposition that consequences of poor interpersonal management go beyond the normally expected consequences of weak employee commitment and involvement because they create an environment in which bullying is more likely. Our results reveal that although there are a large number of officers who experience negative behaviours on a regular basis there is only a small proportion of officers who experience intense levels of bullying and this is predominantly indirect and discreet negative acts that make perpetrators difficult to detect. To avoid this problem we suggest monitoring negative behaviours to pre-empt bullying escalation. To create an environment that discourages bullying behaviours we suggest that HR efforts should focus on policies directed at interpersonal skills training, breaking down barriers between ranks and encouraging a work culture that fosters open communication. However, we would argue that the implementation of leadership and interpersonal skills training is only a starting point since what is required are direct challenges to police cultures that have evolved to support the importance of command and control, and rank authority (see Leigh et al, 1998; Loveday 1999).

References

- Adams, A. (1992). *Bullying at Work - How to Confront and Overcome It*. London: Virago.
- Aquino, K. Grover, S., Bradford, M., and Allen, D., (1999). The effects of negative affectivity, hierarchical status and self-determination on workplace victimization, *Academy of Management Journal*, Vol. 42: 260-272.
- Archer, D., (1999). 'Bullying' culture in the para-military organisation, *International Journal of Manpower*, Vol. 20, No. 1/2: 94-105.
- Arnold, J., Cooper, CL., & Robertson, IT., (1998). *Work Psychology: Understanding Human Behaviour in the Workplace*, Financial Times/Pitman Publishing, London
- Baruch, Y. (1998). The rise and fall of organisation commitment, *Human Systems Management*, Vol. 17, No. 2: 135-144.
- Beck, K. Wilson, C. (1997). Police officers views on cultivating organisational commitment: Implications for police managers, *Policing: An International Journal of Police Strategies and Management*, Vol. 20 No. 1: 175-195.

- Beck, K., Wilson, C (2000). Development of affective commitment: A cross functional sequential change with tenure, *Journal of Vocational Behaviour*, Vol. 56: 114-136.
- Blau, G. (1985). The measurement and prediction of career commitment, *Journal of Occupational Psychology*, Vol. 58: 277-88.
- Brodeur, P., (1998). The Assessment of police performance, in Brodeur (eds.) *How to Recognise Good Policing*, Police Executive Research Forum, Sage, Thousand Oaks California.
- Brunetto, Y. and Farr-Wharton, R., (2003). Commitment and satisfaction of lower-ranked police officers, *Policing: An International Journal of Police Strategies and Management*, Vol. 264, No. 1: 43-63.
- CIPD Chartered Institute of Personal and Development (2004) *Managing conflict at work: a survey of the UK and Ireland*. London: CIPD.
- Cope, S., Lieshman, F. and Starie, P. (1997), Globalisation, new public management, and the enabling futures of police management, *International Journal of Public Sector Management*, Vol. 10, No. 6, pp. 444-460.
- Cowie, H. and Jennifer, D., (2000). Comparing the nature of workplace bullying in two European countries: Portugal and UK. In M. Sheehan, S. Ramsey & J. Patrick (Eds) *Transcending Boundaries: Integrating People, Processes and Systems*. Proceedings of the 2000 Conference, Griffith University, Australia.
- Dick, G. and Metcalfe, B., (2001). Managerial factors and organisational commitment: a comparative study of police officers and civilian staff, *International Journal of Public Sector Management*, Vol. 14, No. 2: 112-128.
- Dick, G. and Metcalfe, B., (2007), The progress of female police officers? An empirical analysis of organisational commitment and tenure explanations in two UK police forces, *International Journal of Public Sector Management*, Vol. 20, No. 2 and 3: 81-100.
- Dick, G. and Rayner, C., (2004). Exploring the Workplace Bullying Construct: An evidence based approach, *KBS working paper* No. 51.
- Dobby, J., Anscombe, J. and Tuffin, R. (2004). *Police leadership: expectations and impact*, Home Office online report 20/04. Research Development and Statistics Office, London.
- Duffy, MK., Ganster, DC and Pagon, M., (2002) Social undermining in the workplace, *Academy of Management Journal*, Vol. 45: 331-352.
- Einarsen, S., & Skogstad, A. (1996). Bullying at Work: Epidemiological Findings in Public and Private Organizations. *European Journal of Work & Organizational Psychology*, 5(2): 185-197.
- Einarsen, S., (1999). The nature and causes of bullying at work *International Journal of Manpower*, 20 (1/2): 16-27.
- Einarsen, S., (2000). Harassment and Bullying at Work: A Review of the Scandinavian Approach. *Aggression and Violent Behavior*, 5(4): 379-401.
- Einarsen, S., Hoel, H., Zapf, D., & Cooper, C., (2003). The concept of bullying at work Chapter in S. Einarsen, H. Hoel, D. Zapf., & C. Cooper. *Bullying and emotional abuse in the workplace: International research and practice perspectives* London, UK: Taylor Francis pp. 3-30.

- Einarsen, S., Raknes, B.I., Matthiesen, S.B. and Hellelsoy, O.H., (1994). Bullying and harassment work and their relationship to work environment quality - and exploratory study, *European Work and Organizational Psychology*, 4:381-401.
- Eisenberger, E. and Huntington, R., (1986). Perceived organisational support, *Journal of Applied Psychology*, Vol. 71 No. 3: 500-507.
- Eisenberger, R., Stinglhamber, F., Vandenberghe, C., Sucharski, IL. and Rhoades, L., (1986). Perceived supervisor support: Contributions to perceived organisational support and employee retention, *Journal of Applied Psychology*, Vol. 87 No. 3, p565-576.
- Epitropaki, O. and Martin, R. (1999), The impact of relational demography on the quality of leader-member exchanges and employees' work attitudes and well being. *Journal of Occupational and Organisational Psychology*, Vol. 72 No. 2: 237-240.
- French, JRP., Caplan, RD., and Van Harrison, R.,(1982). *The Mechanisms of Job Stress and Strain* . John Wiley New York.
- Frone, MR., (2000). Interpersonal conflict at work and psychological outcomes: Testing a model among young workers, *Journal of Occupational Health Psychology*, Vol. 5: 246-255.
- Harlos, K.P. & Pinder, (1999). Patterns of Organizational Injustice: A Taxonomy of what employees regard as unjust. *Advances in Qualitative Organizational Research*, 2: 97-125.
- Heames, J. T., Harvey, M. G., & Treadway, D. (2006). Status inconsistency: an antecedent to bullying behaviour in groups. *International Journal of Human Resource Management*, 17(2): 348-361.
- Hodson, R., (1997). Group relationships at work: Solidarity, conflict, and relations with management, *Work and Occupations*, Vol. 24, No. 4: 426-452.
- Hoel, H., & Cooper C.L., (2000). 'Destructive conflict and bullying at work' November 2000' Unpublished report, University of Manchester Institute of Science and Technology.
- Hoel, H., Faragher, B., & Cooper, C.L., (2004). Bullying is detrimental to health, but all bullying behaviours and non-necessarily equally damaging. *British Journal of Guidance and Counselling*, 32(3): 367-387.
- Hoel, H., Rayner, C., & Cooper, C.L., (1999). Workplace Bullying *International Review of Industrial and Organizational Psychology*, 14: 189-230.
- Howard, G., Howard-Donofrio, H. and Boles, J. (2004), Inter-domain work-family and family-work conflict and police satisfaction. *Policing: An International Journal of Police Strategies and Management*, Vol. 27 No. 3: 80-395.
- Keashly, L. & Jagatic, K., (2003). By any other name: American perspectives on workplace bullying. Chapter in S. Einarsen, H. Hoel, D. Zapf & C. Cooper. *Bullying and emotional abuse in the workplace: International research and practice perspectives*. London, UK: Taylor Francis.
- LaRocco JM, House, JS. and French, JRP., (1980). Social support, occupational stress and health, *Journal of Health and Social Behaviour*, Vol. 21: 202-218.
- Leigh, A., Reid, T. and Tilley, N., (1998), Brit POP II: Problem orientated Policing in Practice. Police Research Series Paper 93, Reducing Crime Unit, Home Office, London.

- Leishman, F., Cope, S., Starie, P. (1995), Reforming the police in Britain, new public management, policy networks and the tough 'Old Bill' *International Journal of Public Sector Management*, Vol. 8, No. 4, :
- Leymann, H. (1996). The content and development of mobbing at work. *European Journal of Work & Organizational Psychology*, 5(2): 165-184.
- Leymann, H., (1990). Mobbing and Psychological Terror at Workplaces *Violence and Victims*, 5: 119-125.
- Loveday, B. (1999), The impact of performance cultures on criminal justice agencies in England and Wales, *International Journal of the Sociology of Law*, Vol. 27 : 351-377.
- Lutgen-Sandvik, P. (2006). Take this job and ... : Quitting and other forms of resistance to workplace bullying. *Communication Monographs*, 73(4): 406-433.
- Lutgen-Sandvik, P., Tracy, S. J., & Alberts, J. K. (2007). Burned by bullying in the american workplace: Prevalence, perception, degree and impact. *Journal of Management Studies*, 44(6): 837-862.
- Mathieu, J., E. Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates and consequences of organisational commitment, *Psychological Bulletin*, Vol. 108, No. 2: 171-194.
- Merrick, N. (1997), Strong HRM of the Law, *People Management*, Vol. 3, No. 14, : 32-35.
- Metcalf. B., Dick, G (2000). Can you feel the force? Exploring organisation commitment in the police, *Journal of Managerial Psychology*, Vol. 15, No. 8: 71-85.
- Metcalf. B., Dick, G (2001). Exploring organisational commitment in the police: implications for human resource strategy, *Policing: An International Journal of Police Strategies and Management*, Vol. 24, No. 3: 399-419.
- Meyer, J., P. Allen, N., J. (1997). *Commitment in the Workplace*, Sage, Thousand Oaks, California.
- Mowday, R., Porter, L. and Steers, R. (1982). *Organizational Linkage: the Psychology of Commitment, Absenteeism and Turnover*, Academic Press, New York, NY.
- O'Leary-Kelly, AM., Griffen, RW. and Glew, DJ., (1996). Organisation-motivated aggression: A research framework, *Academy of Management Review*, Vol. 21: 225-253.
- Pearson, CM., Andersson, LM. And Porath, CL., (2000). Assessing and attacking workplace incivility, *Organisational Dynamics*, Vol. 29, No. 2:123-137.
- Porter, L., W. Steers, R., M., Mowday, R. T., Boulian, P. V., (1974). Organisational commitment, job satisfaction and turnover among psychiatric technicians, *Journal of Applied Psychology*, Vol. 59, No. 5: 603-609.
- Quick, JC. And Quick, JD., (1984). *Organisational Stress and Preventative Management*. McGraw-Hill, New York.
- Rayner C, Mclvor K., (2006). Report to the dignity at work project steering committee, research findings. Portsmouth University Business School.
- Rayner, C. & Hoel, H., (1997). A Summary Review of Literature Relating to Workplace Bullying. *Journal of Community and Applied Social Psychology*, 7 (3): 181-191.
- Rayner, C. & Hoel, H., and Cooper, C.L. (2002). *Bullying at work: what we know, who is to blame and what can we do?* London, Taylor Francis.

- Rayner, C. (1998). Workplace bullying: do something! *The Journal of Occupational Health and Safety - Australia and New Zealand* 14(6): 581-585.
- Rayner, C. and Keashly, I., (2005). Bullying at work: a perspective from Britain and North America in Fox, S. and Spector, P. (Eds), *Counterproductive Work Behaviours*. Washington D.C.: American Psychological Association, 271-96.
- Rayner, C., (1997). The UNISON bullying survey. London, UNISON.
- Rayner, C., (1999). A comparison of two methods for identifying targets of workplace bullying. *Abstracts for the Ninth European Congress on Work and Organizational Psychology*, p88 Finnish Institute of Occupational Health, Helsinki.
- Rayner, C., (2000) Bullying at work in the Police Section membership of UNISON. London, UNISON.
- Salin, D., (2003). Ways of explaining workplace bullying: A review of enabling, motivating and precipitating structures and processes in the work environment, *Human Relations*, Vol. 56, No. 10: 1213-1232.
- Van Maanen (1975). Police socialisation: A longitudinal examination of job attitudes in an urban police department, *Administrative Science Quarterly*, Vol. 20: 220-228.
- Vartia, M., (1996). The sources of bullying with respect to the well-being of its targets and the observers of bullying, *European Journal of Work and Organisational Psychology*, Vol. 5, No. 2:203-214.
- Williams, L.J. and Hazer, J.T. (1986). Antecedents and consequences of satisfaction and commitment in turnover models: a re-analysis using latent variable structural equation methods, *Journal of Applied Psychology*, Vol. 72 No. 1: 219-31.
- Zapf, D., & Gross, C., (2001). Conflict escalation and coping with workplace bullying: A replication and extension, *European Journal of Work and Organizational Psychology*, 10(4):497-522.
- Zapf, D., (1999). Organisational, work group related and personal causes of mobbing/bullying at work. *International Journal of Manpower*, Vol. 20, No. 1/2: 70-85.
- Zapf, D., Knorz, C. and Kulla, M., (1996). On the Relationship between Mobbing Factors, and Job Content, Social Work Environment, and Health Outcomes, *European Journal of Work & Organizational Psychology*, 5(2): 215-237.

The influence of managerial factors on bullying in the police

Figures and Tables

Figure 1
Workplace bullying model

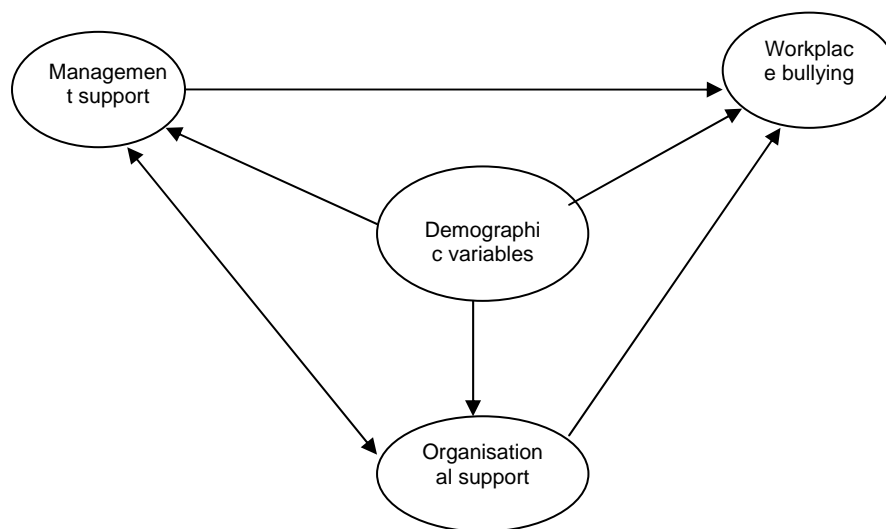


Table 1
Sample Characteristics

Rank	In Service	Return s	Demographic data
Constable	78%	501	Gender
Sergeant	15%	100	Female 121 19%
Inspector	5%	34	Male 526 81%
Chief Inspector	1.3%	9	Tenure
Superintendent or above	1.1%	3	< 2 years 85 13%
Unspecified		23	2-5 years 124 19%
Officers Total	1500	670	6-9 years 89 14%
			10-14 years 113 17%
			15-19 years 101 16%
			20 or more 138 21%

Table 2
Incidences of bullying behaviour

Bullying behaviours per cent	Every day	Every week	Every month	Less than monthly	Never
Task-attack					
Given meaningless tasks	2.9	10.1	10.3	25.8	50.8
Set unrealistic tasks	4.0	6.1	11.7	24.4	53.8
Excessive work monitoring	3.8	5.1	8.4	16.4	66.2
Personal-attack					
Belittling remarks	1.4	7.1	6.5	27.3	57.8
Withholding information	2.3	4.6	7.7	26.1	59.3
Cut off from others	1.5	4.1	3.4	13.7	77.3
Persistent criticism	0.3	2.9	3.1	15.1	78.6
Ignored by others	1.4	1.5	4.1	11.4	81.6
Intimidation					
Malicious rumours	0.6	3.8	4.8	16.6	74.2
Being intimidated	0.2	0.9	1.8	9.7	87.4
Public humiliation	0	0.5	0.9	11.8	86.8
Being shouted at	0	0.8	1.2	8.8	89.2
Verbal abuse or threats	0.2	1.2	0.9	7.2	90.5
Physical threats	0	0.2	0	1.2	98.6

Table 3
Means of behaviours for bullying factors and index

Factors and behaviour items	All officers		Constables		Higher ranks	
	Mean	SD	Mean	SD	Mean	SD
Task-attack [0.72]	1.76	0.90	1.73	0.91	1.88	0.83
Given meaningless tasks	1.87	1.15	1.91	1.21	1.78	0.93
Set unrealistic tasks	1.80	1.13	1.70	1.09	2.18*	1.16
Excessive work monitoring	1.62	1.10	1.59	1.08	1.68	1.10
Personal-attack [0.81]	1.44	0.66	1.42	0.64	1.54	0.71
Belittling remarks	1.65	0.99	1.65	1.01	1.65	0.89
Withholding information	1.62	1.00	1.56	0.95	1.83*	1.07
Cut off from others	1.37	0.88	1.36	0.88	1.45	0.90
Persistent criticism	1.30	0.72	1.27	0.70	1.36	0.66
Ignored by others	1.28	0.76	1.26	0.71	1.42	0.91

Intimidation [0.78]	1.15	0.36	1.13	0.32	1.22	0.38
Malicious rumours	1.38	0.82	1.34	0.80	1.52*	0.86
Being intimidated	1.14	0.53	1.11	0.46	1.25*	0.62
Public humiliation	1.13	0.44	1.12	0.41	1.21*	0.45
Being shouted at	1.12	0.46	1.11	0.43	1.15	0.45
Verbal abuse or threats	1.11	0.50	1.10	0.49	1.17	0.48
Physical threats	1.00	0.21	1.00	0.21	1.02	0.15
Bullying-Index [0.86]	1.39	0.49	1.36	0.47	1.48	0.49

[] Cronbach's scale reliability coefficient for factors and index

* t-test of differences between means of constable and higher ranks significant at >0.05 level

Table 4**Correlations of demographic variables with bullying and managerial environment factors.**

	Gender	Age	Tenure	Rank	M.S.	O.S.	
Gender	1.00						* Correlations significant at the 0.01 level.
Age	-0.20*	1.00					
Tenure	-0.07	0.72*	1.00				
Rank	-0.10*	0.34*	0.36*	1.00			
Managerial-support	0.03	-0.03	-0.11*	-0.03	1.00		
Organisational-support	-0.01	0.05	0.03	0.11*	0.41*	1.00	
Bullying Index	-0.05	-0.03	-0.01	0.11*	-0.57*	-0.34*	
Task-attack	-0.05	-0.07	-0.04	0.11*	-0.52*	-0.26*	
Personal-attack	-0.05	-0.02	-0.00	0.07	-0.43*	-0.28*	
Intimidation	-0.01	0.01	0.03	0.13*	-0.33*	-0.28*	

Table 5
Regression analysis: factors linked to bullying index

Independent variables	Constables		Higher ranks		All Officers	
	Mean [SD]	Beta	Mean [SD]	Beta	Mean [SD]	Beta
Managerial-support	41.44 [8.08]	-0.52**	39.86 [8.53]	-0.52**	41.08 [8.21]	-0.51**
Organisation-support	10.39 [3.12]	-0.16**	11.08 [3.09]	-0.15*	10.54 [3.12]	-0.15**
Rank		<i>na</i>		0.23**		0.14**
Tenure		-0.10*		-0.15*		-0.12**
<i>Per cent explained</i>		35%		35%		35%

** t-tests are significant at < 0.001 level. * t-tests are significant at the < 0.05 level.

Appendix 1a

Factor analysis of questionnaire items relating to bullying-index

Item	Factor loading
Task-attack factor	
<i>Scale reliability 0.72</i>	
Set unrealistic targets	0.78
Excessive work monitoring	0.66
Given meaningless tasks	0.59
Personal-attack factor	
<i>Scale reliability 0.81</i>	
Ignored by others	0.73
Persistent criticism	0.73
Cut of from others	0.66
Belittling remarks	0.60
Withholding information	0.52
Intimidation factor	
<i>Scale reliability 0.78</i>	
Verbal abuse or threats	0.74
Being intimidated	0.65
Being shouted at	0.65
Public humiliation	0.64
Physical threats	0.60
Malicious rumours	0.57
Bullying-index <i>combined Task, Personal and Intimidation factors</i>	
<i>Scale reliability 0.86. 60% of variance extracted</i>	

Appendix 1b

Factor analysis of questionnaire items relating to the managerial environment

Item	Factor loading
Managerial-support factor	
<i>Scale reliability 0.92</i>	
My supervisor/manager does a good job of negotiating clear objectives	0.80
My supervisor/manager is good at encouraging teamwork	0.81
My supervisor/manager provides the right information for me to do my job properly	0.78
My supervisor/manager does an effective job in keeping me informed about matters affecting me.	0.81

Personal development is encouraged by my supervisor/manager	0.76
My supervisor/manager holds back information on things I should know about *	0.76
My supervisor/manager is usually receptive to suggestions for change	0.71
In my division/dept the supervisor/manager is very interested in listening to what I have to say	0.62
The management style I experience is good	0.70
If I make a mistake it would be treated as a learning opportunity	0.57
In my division/dept there is not enough opportunity to let supervisor/manager know how you feel about things that effect you *	0.44
Most of the time I can say what I think without it being held against me	0.48

Organisational-support factor

Scale reliability 0.75

I have confidence in the decisions made by the executive team of the force	0.67
There is openness and honesty between different grades	0.64
There is sufficient contact between chief officers and lower ranks	0.78
The contact between senior managers and the staff of my division/dept is adequate	0.66

*Reverse coded items

University of Kent

<http://www.kent.ac.uk/kbs/research-information/index.htm>