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Can the Organisation and Supervision Environment Influence Both Bullying and Organisational Commitment? Evidence from a Police Force Survey

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Can the organisation and supervision environment influence both bullying and organisational commitment? Evidence from a police force survey[1].

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Abstract

Recently there has been a growing trend to recognise the damaging nature of workplace bullying in organisations' Dignity at Work policies. In this article the author explores the negative behaviours experienced by police officers and how the managerial factors that are known to influence OC alter the extent of these bullying behaviours. Using structural equation modelling the findings indicate that negative behaviour is common but 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 supervision environment was found to be a substantial predictor of the degree of bullying experienced as well as a dominant influence on organisational commitment levels. The findings suggest that bullying research may be advanced when it is considered in a broader frame, where the 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. The study is believed to be the first academic study that shows that bullying and commitment behaviours are influenced by the same organisational and managerial factors. The research highlights the importance of the supervision environment and how it might act as a gateway that enables or discourages bullying behaviours.

Introduction

Research has shown workplace bullying has severe consequences for the organisation with higher rates of absenteeism, higher turnover and reduced commitment and productivity (Hoel et al., 2004; Keashly & Jagatic, 2003; Leymannn, 1996; Lutgen-Sandvik, 2006). In addition the literature reports bullying victims have reduced job satisfaction, emotional distress and illness (Hoel et al., 2004; Keashly and Jagatic, 2003). Therefore, bullying is costly for the organisation 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 the 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 may influence the prevalence of bullying behaviours. Given that there is considerable research that has studied the influence of managerial factors on employee's organisational commitment this paper seeks to illuminate whether these managerial factors also alter the degree of workplace bullying experienced.

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 perceptions and behaviours. Thus, the aim of this paper is to examine bullying behaviours and its antecedents in the context of New Police Management. To do this I use a negative behaviour measurement index rather than self-labelling, a measurement approach similar to that used by Lutgen-Sandvik et al., (2007).

To guide the reader through the paper the research model that will be discussed and tested is depicted in Figure 1. Previous research has shown that two overarching variables covering organisation factors and management/supervision factors have a direct influence on organisational commitment along with demographic variables such as age tenure and seniority. In this paper the author extends this model to explore whether the antecedents of organisational commitment might also have an influence on the level of workplace bullying experienced. Finally, the model explores what direct relationships may exist between organisational commitment and workplace bullying experiences. In the next section the paper examines the literature that supports the model's variables and their relationships before detailing the study's methods, findings and conclusions.

Take in Figure 1 here.

Supporting literature

Organisational commitment
In this study the focus is on the attitudinal approach to organisational commitment. Mowday et al., (1982), defined this type of organisational commitment as the 'relative strength of an individual's identification with, and involvement in, a particular organisation'. Thus organisational commitment can be considered as the extent to

which employees identify with their organisation and its goals, show a willingness to invest effort, participate in decision making and internalise managerial values (O'Reilly and Chatman, 1991). This can be a prime motivator since individuals who closely identify themselves with their employer's goals and values are more likely to take on a diverse range of challenging work activities, and are more responsive to change. They are also more motivated to direct their efforts towards organisational objectives (Siegal and Sisaye, 1997; Iverson and Buttigrieg, 1999). Thus committed employees are more likely to 'contribute to the organisation in more positive ways than less committed workers' (Aven et al., 1993: 63). In addition higher levels of commitment can bring cost benefits through lower absenteeism, and lower turnover rates (Meyer and Allen, 1997; Mowday et al., 1982; Steers, 1977).

Summarised next are the key antecedents of commitment. First, supervision and organisational factors are considered, which include the research linking commitment behaviours and attitudes to the way an individual is managed and supported in an organisation. Second, individual factors are examined which include an individual's hierarchical position in the organisation, gender and tenure.

Supervision and Organisational antecedents of organisational commitment

In the wider literature 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 organisational 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 that involves information sharing, participation and feedback opportunities (Epitropaki and Martin, 1999).

At the level of the organisation a review of 70 studies by Rhoades and Eisenberger (2002) provides substantial evidence that a supportive environment, where he organisation values employee contribution and cares about their well-being, is associated with stronger employee commitment, job satisfaction and lower levels of intention to change employer.

Although previous police studies have remarked on police forces having unique organisational characteristics and poor managerial practices that erode organisational commitment over time (Van Maanen, 1975; Beck and Wilson, 2000) there is little in the literature to inform us whether the managerial factors discussed above apply to police organisational commitment other than Dick and Metcalfe (2001) who observed that similar managerial factors influenced commitment in both police officers and civilian support staff. In summary there is evidence that the practices and behaviour of line managers will influence the level of organisational commitment. Generally, low commitment is indicated where individuals' view the managerial environment as unsupportive and having poor communication and little opportunity for participation.

<u>Demographic variables and organisational commitment</u>

Research on commitment associated with gender is inconclusive. Mathieu and Zajak's (1990) well cited Meta analysis suggested there is a link between gender and commitment but the variations across professional groups led them to conclude that there was no consistent relationship between gender and commitment. What little research that has explored this in the police finds that the actual organisational commitment of policewomen is very similar to that of their male colleagues (Dick and Metcalfe, 2007).

It would seem reasonable to expect organisational commitment to increase with hierarchical position in an organisation and there is some evidence for this. McCaul et al., (1995) found a relationship between organisational commitment and hierarchical level. Benkhoff also (1997a) found a similar relationship using alternative organisational measures. One would expect this to be replicated strongly in the uniform police with their rigid rank hierarchy, but there is little research available to confirm this apart from Metcalfe and Dick (2001).

There appears to be some evidence that tenure and years of experience are positively associated with commitment. Previous studies have indicated that position tenure (Gregersen and Black, 1992; Mottaz, 1988) and organisational tenure (Mathieu and Hamel, 1989; Mathieu and Zajac, 1990) have positive effects on commitment. This can be explained as a result of the organisation's socialisation process. The length of service in an organisation is positively related to the level of internalisation of organisational values, which results in greater commitment from the individual (Allen and Meyer, 1990; Hellriegel et. al., 1995; O'Reilly et. al., 1991). However, some studies for instance Lok and Crawford (1999) and Brewer (1996), do not support this relationship.

In contrast, studies of uniform police show a negative influence of tenure on organisational commitment. The earliest study of policing and commitment was conducted by Van Maanen in the USA who reported that organisational commitment decreased with tenure and experience (1975). Support for this negative influence of tenure is found in Beck and Wilson's Australian studies (1997; 2000).

Thus, the research on the influence of demographics on organisational commitment is ambiguous. In contrast, the evidence clearly indicates that the prevailing organisational and supervision environment in organisations serves to influence favourably or adversely employees' organisational commitment.

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 (hereafter referred to as 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; 1999; 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.

There has been considerable debate focused on the question of '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). This finding is similar to other studies that use different lists of behaviours (e.g. Hoel & Cooper, 2000; Cowie & Jennifer, 2000).

Thus it appears that there is a fairly stable phenomenon in UK studies showing that there are as many as half of those who experience weekly negative behaviours that do not label themselves as 'bullied', yet much 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 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 help explain likely antecedents and how they might influence one another.

She suggests there are factors that are a gateway that enable or disable bullying occurrence. The first of these is a lack of power balance that is typical 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 para-military 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).

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 were examined earlier as being associated with affective organisational commitment so could it be that the managerial factors that have been found to have a strong positive influence on organisational commitment when absent provide the gateway conditions that make bullying behaviours more prevalent? I will return to examine these managerial influences in more detail in the next section.

Salin (2003) suggests that there are other factors that can motivate and others that precipitate bullying. These then have to be activated by the factors I have discussed in the enabling 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, I 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, Salin's (2003) framework suggests that prevailing conditions in the police could 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 I now look at studies of related phenomena.

Managerial influences on bullying

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) typifies 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

systematic research that informs us of the features of the managerial and organisational environment that impact on bullying.

Since the research examined earlier showed positive outcomes for organisational commitment of a supportive organisational and supervision environment it seems reasonable to propose that an unsupportive environment is likely to lead to social system relationships that are stressful, which can participate bullying. So it is hypothesised that a lack of organisatonal/supervisor support may be a facet of the enabling gateway, which makes bullying more likely.

The relationship between bullying and organisational commitment.

There appears to be no empirical literature that examines the relationship between bullying and organisational commitment other than McCormack et al. (2009). Their study of teachers in China found that being bullied lead to feelings of lower (affective) commitment to the organisation as the victim feels 'let down' by their organisation for allowing bullying behaviour to go unpunished. There also exists the possibility that individuals who exhibit lower than average organisational commitment will be stigmatised and bullied by their colleagues or supervisor for not 'pulling their weight'. Thus, a circular relationship may exist leading to progressively lower commitment and escalating bullying.

So in summary Figure 1 shows the relationships that are indicated by the literature reviewed. The variables and their paths to organisational commitment have a firm foundation in the literature while the paths to bullying are more speculative, as these have not been tested fully in previous researcg. The next section outlines the methodology that was used to survey a police force and details the measurement models used for the organisational and supervision factors and bullying measurement.

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 another police force (Metcalfe and Dick, 2000; Dick and Metcalfe, 2001) and bullying of civilians in the police (Dick and Rayner, 2004). In this study that research model is extended to consider the negative behaviours experienced by officers and whether the managerial/supervision and organisational variables that have previously been found to have a strong influence on organisational commitment also affect the propensity for workplace bullying.

<u>The Survey Populations</u>

The questionnaire was administered by the police force1 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'

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[1] The author acknowledges the invaluable assistance of Christopher Williams, University College, Chester in arranging the administration of the survey.

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 human resource 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 and in performance terms is a middle ranking police force (Drake and Simper, 2004).

Take in 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.

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

The bullying factors identified were task-attack (negative behaviours directed at the individual's work), personal-attack (undermining the individual and stigmatism behaviours) and intimidation (threats humiliation and abuse behaviours). A listing of the questionnaire items used to measure the bullying factors can be found in Appendix Table 1 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 I am also interested in bullying as a whole so I have aggregated the observed variables to form a bullying-index, which has a satisfactory Cronbach's scale reliability coefficient of 0.86. Tests for normality showed, as was expected for phenomena such as bullying, that the frequency distribution is skewed. Therefore, 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. The term bullying-index is appropriate since the correlations between the three bullying factors show it is not a unidimensional measurement model but an oblique one (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).

Thus, the bullying factors and the bullying-index can be seen to combine intensity (the number of negative behaviours experienced) with frequency (how often the negative behaviours are experienced).

The Supervision and Organisational Environment Variables

The independent variables pool is based on Metcalfe and Dicks' scales (2001) which were influenced by previous studies which had assessed the level of organisational and supervision/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 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 that will be described as supervision-environment with another four loading on a factor that will be described as organisation-environment. The factor supervisor-environment is heavily influenced by the effectiveness of the supervisor or line manager's listening and communication skills, and absence of a blame culture while the factor organisation-environment is strongly influenced by whether there is good contact, and openness with higher ranks.

The factor structure is very similar to that found in prior studies with the exception of a few items that migrated from organisation-environment to supervisor-environment. 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 2 along with their scale reliability statistics.

The Commitment Measure

In this study the commitment measure of Metcalfe and Dick (2001) is used because their instrument has proven to be more relevant to the police than the more widely used Organisational Commitment Questionnaire (OCQ) based on the Porter et al. organisation commitment model (1974). Drawing on the methodological concerns raised by Benkhoff (1997a, 1997b) and Siegal and Sisaye (1997), Metcalfe and Dick (2001) formulated a pool of items to measure organisational commitment from extensive interviews with police staff aimed at identifying behaviours and attributes that police officers agreed exhibited commitment to the organisation. The instrument has subsequently been used in a number of police studies (Metcalfe and Dick, 2001; Dick and Metcalfe, 2001; Brunetto and Farr-Wharton, 2003; Dick and Metcalfe, 2007) and has proven to be a stable and reliable measurement model. The instrument poses questions designed to assess three dimensions of commitment, pride in the force, understanding of strategic direction (goals), and employee involvement in service and quality improvements. These three constructs form an oblique model of affective

commitment where extra involvement and effort is forthcoming from those employees who show an understanding, and commitment to corporate goals and objectives etc (Iverson and Buttigrieg, 1999; Meyer and Allen, 1997).

The survey posed fifteen questions on a five point Likert scale and the principal components analysis replicated the previous studys' oblique three-factor model of commitment with factors clearly identified for six items under a factor called Pride, four items under a factor called Goals and five items under a factor called Involvement. Overall, the results from the factor analysis and reliability statistics strongly confirm the stability of this measurement model and factors. A listing of the questionnaire items used to measure the variables can be found in Appendix Table 3 along with their scale reliability statistics.

Findings

Demographic effects

To assess whether bullying, organisational commitment and the organisation/supervision environment factors are associated with demographic differences between respondents, I examined their correlations with gender, age, tenure and rank seniority.

Take in Table 2 around here

No significant association with the bullying-index was found for gender, age or tenure. The only significant association with the bullying-index was a weak one with rank seniority (0.13) which indicates slightly more bullying in higher ranks. In contrast rank seniority has a greater influence on reported organisational commitment (0.25). 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. In contrast age, tenure and particularly rank do have bearing on organisational commitment.

Next I look at the strength of the relationships between the environmental variables derived from the factor analysis and the organisational commitment and bullying factors. It is clear from Table 2 that there is a strong association between the level of the bullying-index, the supervision-environment (0.51) and the organisation-environment experienced (0.32). Task-attack, personal-attack and intimidation appear to be influenced equally by the organisation-environment and this is also true for the supervisor-environment. Demographic results show that gender and age have no bearing on the environmental factors. However, tenure (0.12) does have a modest link to the supervision-environment while rank is associated (0.11) with the organisational-environment. Overall, it would appear from the correlations that environmental variables are by far the dominant influence on officers' experience of bullying and their organisational commitment levels.

Organisational Commitment and Time Served

Before looking at the managerial and job related variables and their effects, I examine the significance of tenure as a variable that influences organisational commitment. The findings in Table 3 reveal a shallow U shaped curve that shows organisational commitment declines with length of service but then hits a floor after ten years of service before rising again. The F-test significance of >0.001 shows that the difference in organisational commitment between groups is statistically significant. The finding for the first fourteen years is consistent with previous research (Van Maanen, 1975; Beck

and Wilson, 1997). The rise in later years is also consistent with Van Maanen's (1975) and Metcalf and Dick's (2001) observation of a higher level of commitment in 'veteran' officers, since it is found that constables with more than twenty years service demonstrate higher levels of organisational commitment than those between six to nineteen years of service. Overall these findings support Beck and Wilson's (2000) argument that the weak positive relationship found in most studies between affective organisational commitment and tenure may actually hide the decrease over the earlier years. A probable explanation for this increase in commitment in later years is that the leaving rate due to early retirement will be higher in those with low organisational commitment so leaving a pool of long serving constables with higher commitment.

Take in Table 3 around here

Overall, the level of organisational commitment for constables is close to the midpoint on the scale indicating scope for improvement. The standard deviation of the means clearly indicates that there is a substantial variation in the degree of organisational commitment that time served cannot explain.

Organisational Commitment and Rank

The results in Table 4 show that movement up the hierarchy leads to progressively higher levels of commitment being found, with the increase being greater with each hierarchical level. Findings that support those of Benkhoff (1997a) and McCaul (1995). It is also notable that the standard deviations of the mean decrease with each movement up the hierarchy, suggesting that there might be fewer variations in the factors that influence commitment for those in senior ranks. Overall, the analysis indicates that the differences in OC between the rank groups are statistically significant (F-test $p < 0.001$).

Take in Table 4 around here.

Bullying factors

Rank has an influence on organisational commitment but what is its influence on bullying experiences? As most respondents' who reported bullying behaviours reported multiple bullying acts the individual acts for each factor were combined to give a mean for each bullying factor. These means were then standardised to the same scale as that used for the individual bullying items.

When looking at the factor means in Table 5 it can be seen that task-attack is 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 civilian police employees.

Higher ranks show significantly higher means compared to constables on five negative acts, being set unrealistic tasks, withholding information and three intimidation acts, malicious rumours, humiliation, and being intimidated. This is of concern since some senior ranks clearly are not aware (or do not care) that these behaviours are unacceptable in the modern workplace.

Take in Table 5 around here.

The pattern of factors is very similar to that found in civilians working for 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.

Space does not permit a detailed examination of the incidences of bullying behaviours here but it needs to be noted that the means reported in Table 5 are for all officers, not just those who are bullied, so are deflated by the number who reported they experienced no bullying. To put this in context 51 per cent of respondents reported no bullying experiences.

To separate the direct influences on organisational commitment and the bullying-index from the indirect influences, the paper now examines the significant demographic variables tenure, rank and age along with the two managerial environment factors through structural equation modelling.

Regression path analysis

After removing a small number of outlier cases, tests for assumption of linearity and homogeneity for the variables in the model were satisfactory. The structural equation modelling used Amos 7 maximum likelihood estimation with a set of nested models. The models tested were:

(a) A full model that includes demographic variables in the model.

(b) A base model that excludes the demographic variables, which allows us to separate the influence on the model of demographic from environmental variables.

The criteria used for judging the model fit are based on Joreskog (1969) who considers a ratio of less than five for X2 / DF to be an indicator of model fit. While Bagozzi and Yi (1988) suggest models with scores of more than 0.90 for CFI and NFI are considered acceptable. For RMSEA Browne and Cudeck (1993) suggest values of 0.1 or more indicate an unacceptable error of approximation with scores of 0.08 or less suggest an acceptable error of approximation. Overall, the full model's tests comfortably meet these criteria indicating a good fit with an X2 / DF of 3.97; CFI, 0.934; NFI, 0.914; RMSEA, 0.068 .

The path regression weights for the full model are illustrated in Figure 2, which shows that the supervision-environment is influenced substantially by the organisation environment (regression weight -0.55, $p < 0.001$) while organisational commitment is strongly influenced by the supervision-environment (-0.68, $p < 0.001$) and to a lesser extent by the organisation-environment (0.33, $p < 0.001$). The equation shows that the bullying-index is substantially influenced by a negative supervision-environment (-0.60, $p < .001$) while it is not greatly influenced by the organisation-environment (-0.11, $.p < 0.05$). Interestingly there is no statistically significant influence of organisational commitment on the bullying-index (0.17, $p > 0.05$) or the bullying-index on organisational commitment (0.04, $p > 0.05$), a fact that will be discussed later.

Take in Figure 2 around here.

Looking at the influence of demographic factors it can be seen that perceptions are more positive for higher ranks for organisation-environment (0.13, $p = 0.007$) and organisational commitment (0.25, $p < 0.001$). Higher scores on the bullying-index are also related to rank (0.15, $p = 0.04$), which confirms the findings shown in Table 5 where bullying was shown to be more prevalent in higher ranks. Finally, it can be seen

that officers with longer tenure perceive a more negative supervision-environment (-.15, p = 0.008) but experience less bullying behaviours (-.12, p = 0.03) while age has a small additional positive influence on perceptions of organisational commitment (0.10, p = 0.05).

Take in Table 6 around here

Table 6 reports the regression weight results from the tests and shows the total per cent that is explained by each of the variables (R^2) by comparing the results from the full model with the base model. It can be seen that 31 per cent of changes in the supervision-environment are explained by the organisation-environment while one per cent is explained by demographic variables. The model shows that it explains 41 per cent of the variations in the bullying-index with 36 per cent explained by differences in the supervision-environment with an additional five per cent being due to demographic differences. Finally the model shows that it explains 78 per cent of organisational commitment, with 61 per cent being explained by the organisational/supervision environmental variables and 17 per cent by demographic differences.

Discussion of results

Overall the results show that organisation-environment and supervision-environment have a powerful effect on organisational commitment and a substantial influence on bullying experiences. Although there are some differences that can be explained by demographics it is clear that the antecedent of bullying behaviour and organisational commitment are the same regardless of hierarchical position, time-served or age. This important finding demonstrates that experiences of bullying behaviours and perceptions of organisational commitment for all grades are influenced by lack of the same managerial environment factors.

In the context of bullying the preceding analysis provides support for the limited literature on managerial antecedents of bullying, since a lack of supportive supervision echoes Einarsen et al. (1994) and Vartia's (1996) lack of clear goals, role ambiguity and poor communication behaviours affecting bullying experiences. In the context of the organisational commitment literature the preceding analysis provides support for the findings in the literature on a supportive supervision/management environment influencing organisational commitment (Porter et al., 1974; Mowday et al., 1982; Beck and Wilson, 1997; Mathieu and Zajac, 1990). Like them it was found having the opportunity to participate in decision making and receiving clear communication on goals and performance were strongly valued by both constables and senior ranks, and shaped their level of organisational commitment. The results also provide support for the findings in the literature on the link between management style, organisational support and organisational commitment (Brewer, 1993; Blau, 1985; Williams and Hazer, 1986; Benkhoff, 1997a).

Looking at the detailed measurements it was found that the supervision-environment scores were slightly above the midpoint of the scale (constables 41.4, midpoint 36) while organisation-environment was below midpoint of the scale (constables 10.39, midpoint 12), this indicates that overall constables feel their supervision-environment is adequate while their organisation-environment is less satisfactory. However, the standard deviations for constables (supervision-environment SD 8.1; organisation-environment, SD 3.1) indicate that there are significant differences in the experiences of constables. Taken with the regression weights linking supervison-environment with the bullying-index this implies that areas of poor overall supervision exist where bullying

behaviour thrives and organisational commitment is weakened. However, in tandem there exists islands of good practice where good supervision mitigates bullying behaviours and enhances organisational commitment.

In the literature review it was speculated that officers with below average levels of organisational commitment could be picked on and bullied by colleagues or supervisors for not 'fitting in' or 'pulling their weight'. Clearly the results in Figure 2 and Table 6 refute this idea, as the regression weight is low and statistically not significant (weight 0.04, p > 0.05). The proposition in the literature review that staff who are bullied would feel 'let down' by the organisation and as result demonstrate less organisational commitment than non-bullied colleagues is also found not to be true since it has been found that although there is a weak regression weight between the BI and organisational commitment it is not statistically significant (weight 0.17, p > 0.05). In summary the path regression weights prove that although table 2 showed an association between the bullying-index and organisational commitment (-0.26, p < 0.01) there is no a direct link between these factors except an indirect one though their common demographic and supervision- environment antecedents.

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

Conclusions

The results show that bullying behaviours are common but consist predominantly of discreet and indirect acts rather than intimidating behaviours. It has also been found that the level of bullying experienced is significantly affected by the force's organisational and supervision environment, and this has ramifications for personnel and management systems. The same supervisor behaviour, that when supportive encourages organisational commitment, has also been found to reduce the degree of bullying behaviour experienced. Conversely when these supervision behaviours are perceived to be weak the findings show that bullying behaviours are more prevalent and organisational commitment is weaker. 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. Clearly, the finding showing a weak supervision-environment linked to more bullying and lower organisational commitment 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). The finding that senior ranks experience higher levels of bullying than constables shows that there remains much to be done to make HRM policies more effective in avoiding promoting officers whose managerial behaviours adversely influence bullying and organisational commitment.

In addition to being one of the few published studies to capture the total police population, the study is believed to be the first academic study that explores simultaneously the antecedents of bullying and organisational commitment. Although the findings are derived from only one police organisation they echo the findings on organisational commitment in earlier whole police force analyses of managerial and organisational factors (Metcalf and Dick, 2001; Dick and Metcalf, 2001) this suggests

that the findings on the importance of the supervison-environment for organisational commitment and bullying are not unique to one particular force. The author accepts that survey methods such as those used here cannot 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 and organisational commitment in general. It is not claimed that the antecedents of bullying and organisational commitment identified in this research are exhaustive; however, they do explain 78 per cent of the variation in organisational commitment found and 41 per cent of the differences found in the degree of bullying experienced.

For practitioners what is clear is the importance of the supervision environment and how it acts to enable or discourage bullying behaviours as well as having a direct influence on organisational commitment. This indicates that HRM dignity at work strategies need to go hand-in-hand with supervision training that focuses on encouraging a more supportive supervision style. If bullying is viewed as a process of escalating conflict (Einarsen, 1999) with progressive increases in the frequency/intensity of negative behaviours, it is probable 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 McIvor, 2006). Thus, I 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 can be used as a signal to mobilise Personnel 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 (Adams, 1992; Rayner, 1998; Lutgen-Sandvik, 2007).

For bullying research the findings show that the managerial antecedents of organisational commitment are also predictors of the level of bullying experienced. This suggests 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, the 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. Therefore, to create an environment that discourages bullying behaviours and fosters organisational commitment the author suggests that HR efforts should focus on policies directed at interpersonal skills training, breaking down barriers between managerial levels and encouraging a work culture that fosters open communication. However, it should be noted that the implementation of leadership and interpersonal skills training is unlikely to produce improvements when it is at odds with 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.

Allen, N. and Meyer, J.P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization, *Journal of Occupational Psychology*, Vol. 63, No. 1, pp. 1-18.

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. ½: 94-105.

Arnold, J., Cooper, CL., & Robertson, IT., (1998). *Work Psychology: Understanding Human Behaviour in the Workplace*, Financial Times/Pitman Publishing, London

Aven, F., F. Parker, B. McEvoy, G. M. (1993). Gender and attitudinal commitment to organisations: A meta analysis, *Journal of Business Research*, Vol. 26: 63-73.

Bagozzi RP. And Yi, Y., (1988). On the evaluation of structural equation models, *Journal of the Academy of Marketing Science*, Vol. 16:74-94.

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 Beh*aviour, Vol. 56: 114-136.

Benkhoff, B. (1997a). Disentangling organisational commitment: The dangers of the OCQ for research and policy, *Personnel Review*, Vol. 26, No. 2: 114-131.

Benkhoff, B. (1997b). Ignoring commitment is costly: New approaches to establish the missing link between commitment and performance, *Human Relations*, Vol. 50, No. 6: 701-726.

Blau, G. (1985). The measurement and prediction of career commitment, *Journal of Occupational Psychology*, Vol. 58: 277-88.

Brewer, A. (1993). Managing for Employee Commitment, Longman, London.

Brewer, A. (1996). Developing commitment between managers and employees, *Journal of Managerial Psychology*, Vol. 11, No. 4: 24-34.

Brodeur. P, (1998). The Assessment of police performance, in Brodeur (eds.*) How to Recognise Good Policing*, Police Executive Research Forum, Sage, Thousand Oaks California.

Brown, J. (1997). European policewomen: A comparative research perspective, *International Journal of the Sociology of Law*, Vol. 25: 1-19.

Brown, J. (1998). Aspects of discriminatory treatment of women police officers serving in England and Wales, *British Journal of Criminology*, Vol. 38, No. 2: 265-282.

Brown, J. Heidenshohn, F. (2000). *Gender and Policing, Comparative Perspectives*, Macmillan, Basingstoke.

Brown, J., Maidment, A., Bull, R. (1993). Appropriate skill-task matching or gender bias in deployment of male and female officers, *Policing and Society*, Vol. 3: 121-136.

Browne, M. and Cudeck, R., (1993). Alternative ways of assessing model fit. In Bollen, K. and Long, J. (Eds.), *Testing structural equation models*, Sage, Newbury Park, 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: 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.

Dickens, L. (1998). What does HRM mean for gender equality, *Human Resource Management*, Vol. 8, No. 1: 23-42.

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.

Dodd-McCue, D. and Wright, G.B. (1996). Men, women, and attitudinal commitment: the effects of workplace experiences and socialisation, *Human Relations*, Vol. 49, No. 8: 1065-1092.

Drake, LM. And Simper, R., (2004). The economics of managerialism and the drive for efficiency in policing, *Managerial and Decision Economics*, Vol. 25: 509-523.

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*, Vol. 5, No. 2: 185-197.

Einarsen, S., (1999). The nature and causes of bullying at work *International Journal of Manpower*, Vol. 20, No. 1 & 2: 16-27.

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*, Vol. 4: 381-401.

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.

Gregersen, H.B. and Black, J.S. (1992). Antecedents to commitment to a parent company and a foreign operation, *Academy of Managerial Journal*, Vol. 35 No. 1, pp. 65-90.

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,* Vol. 17, No. 2: 348-361.

Hellriegel, D., Slocum, J. and Woodman, R. (1995). *Organisational Behavior*, West Publishing, St Paul, MN.

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*, Vol. 32, No. 3: 367-387.

Hoel, H., Rayner, C., & Cooper, C.L., (1999). Workplace Bullying *International Review of Industrial and Organizational Psychology,* Vol. 14: 189-230.

Iverson, R., D. Buttigieg, D., M. (1999). Affective, normative and continuance commitment, *Journal of Management Studies*, Vol. 36, No. 3: 307-333.

Joreskog, KG., (1969). A general approach to confirmatory maximum likelihood analyis, *Psychometrika*, Vol. 32: 443-482.

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: 27-37.

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,* Vol. 5: 119-125.

Lok, P. and Crawford, J. (1999). The relationship between commitment and organisational culture, subculture, leadership style and job satisfaction in organisational change and development, *Leadership & Organization Development Journal*, Vol. 20 No. 7: 365-73.

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*, Vol. 73, No. 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*, Vol. 44, No. 6: 837-862.

Maier, M. (1999). On the gendered substructure of organisation: Dimensions and dilemmas of corporate masculinity, in *Handbook of Gender and Work*, G. Powell, (eds.), Sage, Thousand Oaks.

Marsden, P., V. Kalleberg, A. L. (1993). Gender differences in organisational commitment, *Work and Occupations*, Vol. 20, No. 3: 23-29.

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.

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.

Mayhew, C. and Chappell, D., (2003). Internal occupational violence (or bullying) in the health care industry, *Journal of Occupational Health and Safety – Australia and New Zealand*, Vol. 19: 59-71.

McCaul. H. S., Hinsz, V. B. and McCaul, K. D. (1995). Assessing organisational commitment : An employee's global attitude towards the organisation, *The Journal of Applied Behavioral Science*, Vol. 31, No. 1: 80-90.

McCormack, D., Djurkovic, N., Casimer, G. and Yank L., (2009). Workplace bullying and intention to leave among schoolteachers in China: The mediating effect of affective commitment, *Journal of Applied Social Psychology*, Vol 39, No. 9:2106-2127.

Metcalfe. 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.

Metcalfe. 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.

Mottaz, C. (1988). .Determinants of organisational commitments, *Human Relations*, Vol. 41 No. 6: 467-82.

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.

O'Reilly, C., Chatman, J. and Caldwell, D.F. (1991). People and organisational culture: a profile comparison approach to assessing person-organisation fit'', *Academy of Management Journal*, Vol. 34: 487-516.

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, McIvor 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*, Vol. 7, No. 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*, Vol. 14, No. 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, pp. 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.

Rhoades, L. and Eisenberger, R., (2002). Perceived Organisational Support: A review of the literature, *Journal of Applied Psychology*, Vol. 87, No. 4: 698-714.

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.

Siegal, P. H., Sisaye, S. (1997). An analysis of the difference between organisation identification and professional commitment: A study of certified public accountants, *Leadership and Organisation Development Journal*, Vol. 18, No. 3: 149-165.

Steers. R.M. (1977). Antecedents and outcomes of organisational commitment, *Administrative Science Quarterly*, Vol. 22: 46-56.

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*, Vol. 5, No. 2: 215-237.

Bullying and Organisational Commitment in the Police: Exploring the influence of organisational and supervision factors
Figures and Tables

Figure 1

Organisation commitment and workplace bullying model
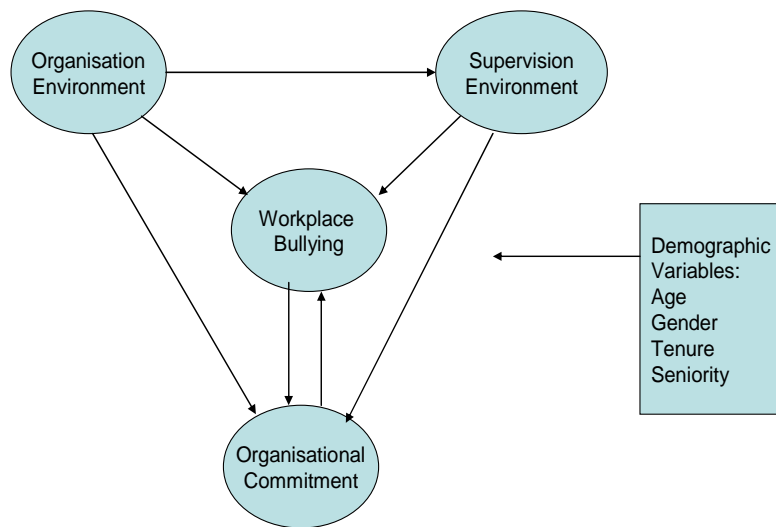
Table 1

Sample characteristics

Rank	In Service	Returns		Demographic data		
Constable	78%	501	74%	**Gender**		
Sergeant	15%	100	15%	Female	121	19%
Inspector	5%	34	5%	Male	526	81%
Chief Inspector	1.3%	9	1.3%			
Superintendent or above	1.1%	3	0.4%	**Tenure**		
Unspecified		23	3.4%	< 2 years	85	13%
Officers Total	1500	670	46%	2-5 years	124	19%
				6-9 years	89	14%

10-14 years	113	17%
15-19 years	101	16%
20 or more	138	21%

Table 2

Correlations of demographic variables, managerial environment factors with organisational commitment and bullying index

	Gender	Age	Tenure	Rank	S-E.	O-E.	OC
Gender	1.00						
Age	-0.20*	1.00					
Tenure	-0.07	0.73*	1.00				
Rank	-0.11*	0.33*	0.36*	1.00			
Supervision-Environment	0.05	-0.05	-0.12*	-0.08	1.00		
Organisation-Environment	-0.04	0.06	0.03	0.11*	0.40*	1.00	
Organisational Commitment	-0.06	0.18*	0.12*	0.25*	0.50*	0.45*	1.00
Bullying index	-0.05	-0.05	-0.02	0.13*	-0.51*	-0.32*	-0.26*
Task-attack	-0.04	-0.07	-0.04	0.12*	-0.43*	-0.26*	-0.28*
Personal-attack	-0.06	-0.01	-0.01	0.08*	-0.46*	-0.24*	-0.17*
Intimidation	-0.01	0.01	0.03	0.10*	-0.33*	-0.27*	-0.15*

* Correlations significant at the 0.01 level. Other correlations are not statistically significant < 0.06.

Table 3

Organisation commitment and time served constables

Years served	Cases	Mean	Std deviation.
Up to 2	78	45.0	6.08
2 to 5	119	44.9	7.33
6 to 9	71	44.2	6.65
10 to 14	81	43.8	7.43
15 to 19	55	43.1	7.02
20 and above	81	47.1	7.23
Average	485	44.8	7.07

Organisation Commitment Scale mid-point = 45

F-test between groups = 2.80, significance < 0.017

Correlation ratio (Eta squared) = 0.028

Table 4
Organisation commitment by seniority

Rank	Cases	Commitment mean	Std deviation
Constables	486	44.8	7.1

Sergeants	98	46.8	7.0
Inspectors	34	52.4	6.5
Chief Inspector	9	58.7	3.9
Superintendent and above	2	53.5	2.1
All ranks	629	45.7	7.4

Organisation Commitment Scale mid-point = 45

F-test between groups = 18.6, significance < 0.001.

Correlation ratio (Eta squared) = 0.107

Table 5

Means of behaviours for bullying factors and bullying 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
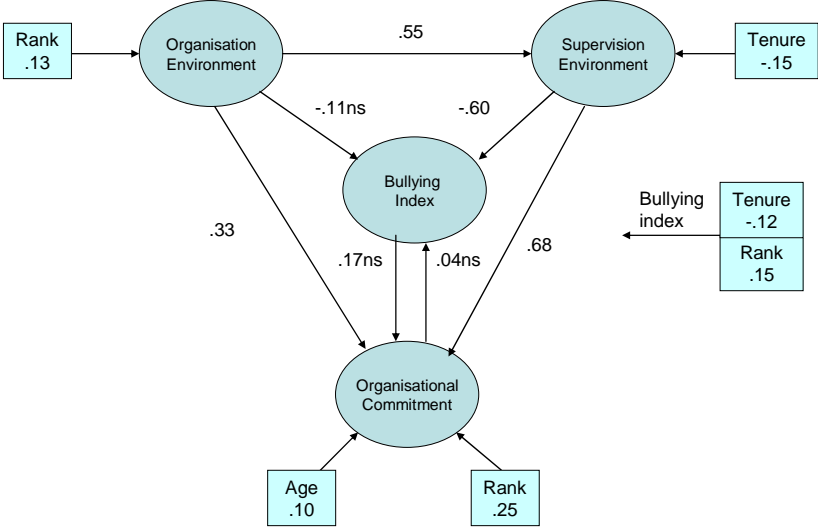
Table 6

Path regression weights for antecedents of bullying index and organisational commitment

	Organisation Environment	Supervision Environment	Bullying	Organisation commitment
Age	0.07	0.08	0.00	0.10*
Tenure	-0.08	-0.15*	-0.12*	0.03
Rank	0.13*	-0.04	-0.15*	0.25*
Demographics R^2		**1%**	**5%**	**17%**
Org Environment		0.55*	-0.11	0.33*

Sup Environment		-0.60*	0.68*
Environment R²	**31%**	**36%**	**61%**
Total R²	**32%**	**41%**	**78%**

* Regression is statistically significant at >0.05 level.

Figure 2

Model path regression weights

Appendix Table 1

Factor analysis of questionnaire items relating to bullying-index

Item	Factor loading
Task-attack factor	
Scale reliability 0.72	
Set unrealistic targets	0.78
Excessive work monitoring	0.66
Given meaningless tasks	0.59
Personal-attack factor	
Scale reliability 0.81	
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	
Scale reliability 0.78	
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 *combined Task, Personal and Intimidation factors*	
Scale reliability 0.86. 60% of variance extracted	

Appendix Table 2

Factor analysis of questionnaire items relating to the supervision and organisation environment

Item	Factor loading
Managerial-support factor	
Scale reliability 0.92	
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

Appendix Table 3

Factor analysis of questionnaire items loading on variables that are components of organisational commitment

Item	Factor loading
ORGANISATIONAL COMMITMENT *combined Pride, Goals and Involvement*	
Scale reliability 0.86	
Pride factor	
Scale reliability 0.78	
I am proud to be working for the Force	0.72
I hold the Force in high regard	0.64
The quality of the work within my division/department is excellent	0.57
I'm not really interested in the Force its just a job *	0.42
My role is considered important within the Force	0.57
Generally my division/department is taking action to improve the quality of its work	0.59
Goals factor	
Scale reliability 0.83	
I understand the links between the Police Authority's annual plan and the policing priorities of the Force	0.90
I am aware of the goals/vision of the Force	0.67
I understand the links between the Police Authority's annual plan and my division/dept plan	0.89
I am aware of the priorities and strategic direction of the Force	0.62
Involvement factor	
Scale reliability 0.80	
Please indicate your level of involvement in improving your division/dept quality/work standards	0.68
Please indicate your level of involvement in developing objectives for your division/dept	0.66
Please indicate your level of involvement in negotiating your own work objectives	0.73
I contribute to decisions that affect my work	0.73
I have considerable freedom in negotiating my work priorities	0.74

*Reverse coded items