

Environmental antecedents of workplace bullying:

A multi-design approach

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Abstract

The overall aim of this thesis is to contribute to an increased understanding of why bullying occurs at workplaces. Workplace bullying may be understood as the process of repeated and prolonged mistreatment and abuse of an individual at work who perceive to have little opportunity or recourses to retaliate in kind. Although the reasons for why bullying develops are likely to be both complex and interwoven, and may be related to both characteristics of the target and characteristics of the perpetrator, prevailing explanations all emphasise the role of the employing organisation in this process. In line with Leymann's (1996) work environment hypothesis, stressful working environments have for long been assumed to create conditions that, directly or indirectly, may lead to the development of workplace bullying. Although an increasing amount of research have investigated the role of the work environment in relation to workplace bullying during the last couple of decades, many empirical as well as theoretical questions regarding why bullying occurs at workplaces are still left unanswered. This thesis comprises four empirical studies that all examine work environment factors as antecedents of workplace bullying by means of different research approaches and analytical designs.

Paper 1 reports on data from a cross-sectional representative sample of the Norwegian workforce. The aim of Paper 1 was to simultaneously investigate a broad spectrum of job characteristics as antecedents of exposure to workplace bullying, in order to examine the relative importance of various factors in relation to bullying. The findings showed role conflict, interpersonal conflicts, and tyrannical and laissez-faire leadership behaviour to be strong predictors of exposure to workplace bullying. However, the strength of associations differed for various measures of bullying, with associations between the predictor variables and bullying measured by a behavioural experience measure found to be generally stronger as

compared to a self-labelling measure of bullying. Support was also found for an interactive relationship in explaining bullying, between both decision authority and role conflict for different levels of laissez-faire leadership. The findings also showed that not only targets, but also observers of bullying assessed their work environment more negatively than did non-involved employees.

Paper 2 reports on data from the same cross-sectional sample as employed in Paper 1. The aim of Paper 2 was to investigate antecedent factors for engaging in bullying of others at work. Drawing on previous findings from workplace aggression research and the stressor-emotion model of counterproductive work behaviour (Spector & Fox, 2005), Paper 2 investigated the effects of both individual and situational factors as predictors of being a perpetrator of bullying. Results from logistic regression analysis showed that being exposed to workplace bullying, regardless of the frequency, and being male strongly predicted involvement in bullying of others. Although supervisors are often argued to be perpetrators more often than subordinates, the results of Paper 2 identified no such differences as regards perpetrator status. Among the situational factors investigated, role conflict and interpersonal conflicts significantly predicted being a perpetrator of bullying. The findings of Paper 2 highlight the importance of also considering actor-oriented approaches when aiming to explain the occurrence of workplace bullying.

Paper 3 reports on data from a longitudinal two-wave sample of the sample constituting the sample for Paper 1 and Paper 2. Although an increasing amount of cross-sectional studies have shown perceived job characteristics to be related to exposure to workplace bullying, no studies have so far investigated the causal direction of this relationship by means of longitudinal data. The aim of Paper 3 was to investigate causal relationships according to a proposed individual level model, in which perceived role stress is

regarded as antecedents of exposure to workplace bullying (Bowling & Beehr, 2006). However, contrary to hypothesised causal relationships and interpretations of prior cross-sectional findings on perceived role stress as antecedents of exposure to workplace bullying, the findings failed to identify any significant relationships in support of such an explanation. Rather, exposure to workplace bullying accounted for subsequent variation in role ambiguity, role conflict, and role overload, alike. The findings of Paper 3 question the usefulness of regarding factors such as perceived role stress as antecedent conditions of exposure to workplace bullying at an individual level of analysis.

Paper 4 reports on data from a large cross-sectional sample of employees nested within departments. The aim of Paper 4 was to investigate group-level environmental characteristics as predictors of workplace bullying. In line with the work environment hypothesis (Leymann, 1996), the predictive effects of role conflict, role ambiguity and non-supportive leadership practises were investigated applying group-level and multilevel analysis. The findings show the presence of role conflict and non-supportive leadership practises to predict the overall level of bullying within departments, and further, that being exposed to such environmental characteristics are associated with an increased likelihood of being exposed to bullying. The findings from Paper 4 highlight the importance of taking into account work-group characteristics in explaining bullying, and point attention towards areas in which preventive measures against bullying may be successfully implemented.

In conclusion, the findings of this thesis render general support to Leymann's (1996) work environment hypothesis in that prevailing organisational conditions to a large extent may account for the overall incidence of workplace bullying, influencing on the prevalence of both perpetrators and targets of bullying within organisations. Leadership practises, interpersonal conflicts, and role conflict appear to be decisive factors in this process. At the

same time, the present findings highlight challenges in investigating factors that may contribute to the development of bullying at workplaces. The overall findings question the general assumption that individual level perceptions of environmental factors may be regarded as actual antecedents of exposure to workplace bullying. On the other hand, such individual level perceptions may account for why individuals engage in bullying of others, thereby indirectly influencing also on exposure to workplace bullying. Thus, a sound and thorough integration of actor-oriented and target-oriented approaches in relation to workplace bullying is likely to bring valuable knowledge to the field in attempting to bring an end to the problem. Future research aimed at explaining why bullying occurs at workplaces is also likely to benefit from adopting multilevel approaches by simultaneously investigating both individual-level and higher-order factors in relation to workplace bullying. Being able to establish such relationships in relation to workplace bullying will undoubtedly bring about valuable knowledge in terms of counteracting the problem, but will also yield valuable knowledge to researchers in terms of developing sound and explicit theoretical frameworks that can be rightfully empirically tested.

List of Publications

Paper I

Hauge, L. J., Skogstad, A., & Einarsen, S. (2007). Relationships between stressful work environments and bullying: Results of a large representative study. *Work & Stress*, 21(3), 220-242.

Paper II

Hauge, L. J., Skogstad, A., & Einarsen, S. (2009). Individual and situational predictors of workplace bullying: Why do perpetrators engage in the bullying of others? *Work & Stress*, 23(4), 349-358.

Paper III

Hauge, L. J., Skogstad, A., & Einarsen, S. (submitted). Role stressors and exposure to workplace bullying: Causes or consequences of what and why?

Paper IV

Hauge, L. J., Einarsen, S., Knardahl, S., Lau, B., Notelaers, G., & Skogstad, A. (submitted). Leadership and role stressors as departmental level predictors of workplace bullying.

Contents

ACKNOWLEDGEMENTS.....	2
ABSTRACT	3
LIST OF PUBLICATIONS.....	7
CONTENTS.....	8
1. INTRODUCTION	10
1.1 THE CONCEPT OF WORKPLACE BULLYING	12
1.2 CONSEQUENCES OF WORKPLACE BULLYING	18
1.3 WHY DOES BULLYING OCCUR AT WORKPLACES?.....	20
<i>1.3.1 Demographical Factors</i>	<i>20</i>
<i>1.3.2 The Role of the Perpetrator.....</i>	<i>21</i>
<i>1.3.3 The Role of the Target.....</i>	<i>23</i>
1.4 THE ROLE OF THE EMPLOYING ORGANISATION	24
<i>1.4.1 Organisational Characteristics</i>	<i>25</i>
<i>1.4.2 The Work Environment Hypothesis.....</i>	<i>25</i>
1.5 OVERALL AIM OF THESIS	29
2. OBJECTIVES, SAMPLES AND RESULTS.....	35
2.1 PAPER I.....	35
2.2 PAPER II	37
2.3 PAPER III.....	38
2.4 PAPER IV.....	40

3.	DISCUSSION	43
3.1	DISCUSSION OF FINDINGS.....	43
3.2	THEORETICAL IMPLICATIONS OF FINDINGS.....	46
3.3	METHODOLOGICAL IMPLICATIONS OF FINDINGS	52
3.4	PRACTICAL IMPLICATIONS OF FINDINGS	56
3.5	STRENGTHS AND LIMITATIONS	59
4.	CONCLUSIONS.....	62
	REFERENCES	63
	APPENDIX.....	70

1. INTRODUCTION

In the 1970s and 1980s, parallel streams of research evolved in the United States, Sweden and Norway, describing a phenomenon where employees from all organisational levels were being systematically mistreated and abused while at work. In their pioneering work, Carroll M. Brodsky (1976), Heinz Leymann (1986) and Svein M. Kile (1990) identified a group of employees who suffered from severe stress reactions and ill-health, without having been exposed to injuries or any obvious physical damage. This group of employees shared the common denominator that they, often for no apparent reason, had been exposed to repeated and prolonged mistreatment by their supervisors or co-workers, most often carried out by rather subtle and discrete means, yet still causing severe and traumatic effects on the targets. Inspired by these early findings and increasing public interest into the phenomenon labelled as mobbing by Leymann (1986) and Kile (1990), and as harassment by Brodsky (1976), large scale research projects into this newly discovered workplace phenomenon were initiated during the 1990s under the label of workplace bullying (Einarsen, Matthiesen, & Hauge, 2008). Drawing on experiences from research conducted on bullying among school children (e.g., Olweus, 1993), these projects aimed at investigating the existence and incidence of the phenomenon, identifying possible causes of it, and documenting the consequences of such mistreatment for its targets. Research interest into the phenomenon of workplace bullying has increased tremendously during the last 20 years, with researchers demonstrating severe consequences for both exposed individuals and for organisations at large in which bullying take place (Aquino & Thau, 2009; Bowling & Beehr, 2006).

The occurrence of mistreatment and abuse of individuals within organisational contexts is certainly not a new phenomenon, but is rather something that has existed as long as people have interacted with one another at work (Keashly & Harvey, 2005). What is new is the increased interest in gaining a thorough understanding of the phenomenon from a scientific standpoint. Based on his studies of a large number of cases of bullying, Leymann (1992) became convinced that the problem of workplace bullying could not be explained by characteristics of those being exposed to such mistreatment at work, but that its true underlying causes were to be found within the organisations and the working environments in which it take place, what has later been referred to as the work environment hypothesis.

In aiming to bring about more systematic knowledge as to why bullying occurs at workplaces, the four studies constituting the present thesis are explicitly aimed at addressing the role of the psychosocial work environment in relation to workplace bullying, in order to shed light on several important areas of workplace bullying research still to be empirically addressed. More specifically, the role of the work environment will be investigated in relation to both exposure to and perpetration of workplace bullying. Furthermore, causal relationships in line with interpretations of previous cross-sectional findings will be investigated in order to examine if the work environment perceptions of targets of bullying can be regarded as antecedents for their bullying exposure. Looking at the work environment as a potential antecedent for workplace bullying also raises the question relating to level of conceptualisation as regards work environment factors. Thus, the role of the work environment in relation to bullying will also be addressed employing a multilevel design.

1.1 The Concept of Workplace Bullying

The larger phenomenon of mistreatment and abuse of individuals at work has traditionally been approached from two different, although highly interrelated, angles of research. Much of North American research have primarily been occupied with the occurrence of single instances of enacted aggression at work, focusing on the motives and characteristics of perpetrators, and often applying the concept of workplace aggression to describe the phenomenon (cf. Barling, Dupré, & Kelloway, 2009; Keashly & Jagatic, 2003). Most European research, on the other hand, have primarily been occupied with the experiences of individuals being exposed to systematic and prolonged mistreatment at work (cf. Einarsen, Hoel, Zapf, & Cooper, 2003). Thus, in addition to the distinction between a target-orientated versus an actor-oriented focus of research, the critical aspect distinguishing these two research traditions is the focus on single events versus patterned and persistent hostile behaviours (Keashly & Jagatic, 2003). In this thesis, the concept of workplace bullying will be applied to refer to the phenomenon of systematic and prolonged mistreatment of an individual at work, and although a number of terms are currently in use to account for this phenomenon, many of these share common characteristics, although some differences between the concepts do exist.

A central characteristic of research and theorising on the concept of workplace bullying is that it is studied and approached from the target's perspective, highlighting the subjective experience of targets at the core of the phenomenon (Einarsen et al., 2003). Aquino and Thau (2009) summarised similarities and dissimilarities of various constructs applied in the literature to describe the phenomenon of systematic and prolonged mistreatment of an individual at work, focusing on the type of harm exposure to such behaviour can cause, how the behaviour involved may be conducted, as well as the status of the perpetrator of the

behaviour. Constructs labelled as harassment (Björkqvist, Österman, & Hjelt-Bäck, 1994), bullying (Einarsen et al., 2003), mobbing (Zapf, 1999), emotional abuse (Keashly & Harvey, 2005), and victimisation (Aquino, Grover, Bradfield, & Allen, 1999) all share that the experienced aggression may cause both psychological and physiological harm, be both direct and indirect, and be conducted by supervisors, co-workers, or subordinates alike. Other constructs, such as abusive supervision (Tepper, 2000) and petty tyranny (Ashforth, 1994), deviates to the extent that the aggressive behaviour is conducted by an individual in a supervisory position as opposed to other organisational members. Yet other constructs, such as incivility (Andersson & Pearson, 1999), social undermining (Duffy, Ganster, & Pagon, 2002), and identity threat (Aquino & Douglas, 2003) differs primarily in the sense that the harm induced on targets is of a psychological rather than physical nature. However, these conceptual differences need not to be of substantial practical importance. For instance, the distinction between behaviours that can cause psychological and physical harm may prove to have little practical implications because the latter type of behaviours are far less common in organisations than are the former (Barling et al., 2009; Einarsen, Hoel, & Notelaers, 2009). Thus, at a practical level, most research into these various constructs deals with essentially the same phenomenon, namely repeated exposure to aggressive behaviour from others at work (Aquino & Thau, 2009), labelled as workplace bullying in this thesis.

Brodsky (1976) described the phenomenon as repeated and persistent attempts by one or more individuals to torment, wear down or frustrate another individual, and as treatment that persistently provokes, pressures, frightens, intimidates, or otherwise causes discomfort in an individual at work. Workplace bullying may take a direct form, such as verbal abuse, accusations and public humiliation, but may also be of a more subtle and indirect nature, such as gossiping, rumour spreading and withholding of information (Einarsen et al., 2008). Bullying may also be carried out by work-related means that make it difficult for targets to

perform their work, or involve actions such as taking away some or all of the target's responsibilities (Hoel, Zapf, & Cooper, 2002). Although workplace bullying may be carried out by both psychological and physical means, studies show bullying to be most frequently carried out as verbal, indirect and rather passive kinds of aggression (Baron & Neuman, 1998; Nielsen et al., 2009).

One of the main characteristics that distinguishes the concept of workplace bullying from other negative and unwanted incidents encountered at work is the frequency and the duration of the aggressive behaviour taking place (Einarsen et al., 2003; Olweus, 2003). Many of the acts that may constitute bullying are relatively common incidents in the workplace and may be experienced by most organisational members from time to time. However, as for the concept of workplace bullying, the emphasis is not so much on what is done or how it is done, but rather on the frequency of what is done (Leymann, 1996). Although there exist no definitive list of possible behaviours that may constitute bullying, workplace bullying may be considered as the patterning of a variety of hostile events co-occurring on a frequent basis (Keashly & Jagatic, 2003). Thus, workplace bullying does not reflect single and isolated negative incidents, but rather behaviour that is repeatedly and persistently directed towards one or more individuals, either by a single perpetrator or even more or less all members of the work group (Einarsen et al., 2003).

Although most researchers agree that persistency is a central element in defining workplace bullying, there is less consensus regarding when the actual exposure is frequent enough to be labelled as bullying (Zapf & Einarsen, 2005). Some argue that the individual will have to be exposed to at least one negative act per week over a period of at least six months for the exposure to be labelled bullying (Leymann, 1990), while others argue for at least two negative acts to classify the exposure as bullying (Mikkelsen & Einarsen, 2001).

However, in many cases it may be difficult to apply a strict criterion for when to label certain behaviour or processes as bullying, because not all bullying exposure is necessarily episodic in nature. Being the target of malicious rumours may be harmful and threaten to destroy one's career or reputation, even if it is not repeated weekly. The main criterion is therefore that the behaviour, or the consequences of the behaviour, occur on a regular as opposed to an occasional basis (Einarsen et al., 2003).

Workplace bullying is not necessarily an "either or" phenomenon, but may rather be considered to exist on a continuum and as a gradually evolving process (Leymann, 1990; Zapf & Gross, 2001). In line with Leymann (1990), Einarsen (1999) classified the bullying process into four stages as aggressive behaviour, bullying, stigmatisation, and severe trauma. The aggressive behaviour directed towards a target may in the beginning of the process be both subtle and indirect, and thus hard to recognise and confront. Later on, the target may be subjected to more direct negative behaviours in which the target becomes increasingly more humiliated, ridiculed and isolated. The following stigmatisation process makes it even more difficult for the target to defend oneself against further acts of aggression from perpetrators. At the end of the bullying process, targets often suffer from severe stress reactions in which long periods of sickness absenteeism may be necessary to cope with the situation (Einarsen, Raknes, & Matthiesen, 1994). Leymann (1990) refer to this stage of the process as expulsion, in which targets, due to their increasingly unbearable work situation, either decides to leave the organisation or are forced to leave by means of dismissal or redundancy.

Another central element in most definitions of workplace bullying is the power imbalance between the parties involved. Typically, targets of bullying find it difficult to defend themselves against the negative behaviour, as their opportunity for retaliation is more or less ruled out (Zapf & Einarsen, 2005). Power differences may have many origins, such as

the parties' physical size, their position in the organisation, or even the number of colleagues considered to be on one's side (Bowling & Beehr, 2006). Knowledge about someone's weak points and deficiencies may also be exploited and become a strong source of power in the development of bullying cases (Einarsen, 1999). The imbalance of power may also reflect formal power structures within the organisational context in which the bullying scenario unfolds. However, while some studies show supervisors to be more often in the role of the perpetrator as compared to subordinates (Hoel, Cooper, & Faragher, 2001), other studies show no such differences in occupational status among perpetrators (De Cuyper, Baillien, & De Witte, 2009; Hauge, Skogstad, & Einarsen, 2009), indicating that targets may indeed be bullied by members from all organisational levels (Zapf & Einarsen, 2003).

Clearly, workplace bullying may be considered as a kind of repeated and prolonged aggression encountered in the work setting, and may be used both to describe the aggressive behaviour enacted by perpetrators as well as the victimisation process of particular targets (Einarsen et al., 2003). Aggression has been defined as any behaviour directed towards one or more individuals that is carried out with the intent to cause harm and that the target is motivated to avoid (cf. Anderson & Bushman, 2002). In the work setting, workplace aggression may therefore be conceptualised as behaviour carried out by one or more employees towards other employees in their organisational context intended to cause harm of primarily a psychological nature, thus distinguishing workplace aggression from workplace violence that refers to behaviour of a more physical and violent nature (cf. Barling et al., 2009). While the aggressive behaviour enacted by perpetrators may be both frequent and persistent, the aggressive actions carried out may be distributed across several persons within the organisational context. Workplace bullying, however, concerns aggressive behaviour that is systematically and persistently targeted at particular individuals by one or more perpetrators (Einarsen et al., 2003). Hence, as for the concept of workplace bullying, multiple

perpetrators may be involved, and each individual contribution from perpetrators may not alone explain the total impact on the target.

Moreover, while intent is considered critical in many definitions of various hostile work behaviours such as workplace aggression (Keashly & Jagatic, 2003), considerable disagreement exist with regard to the inclusion of intentionality in definitions of workplace bullying (Einarsen et al., 2003; Hoel, Rayner, & Cooper, 1999). While most North American research argues for the inclusion of intent (e.g., Neuman & Baron, 2003), European research, in general, exclude intentionality as a key element of workplace bullying (cf. Einarsen et al., 2003). According to the American perspective, intent is considered a necessary defining element as it distinguishes these abusive and aggressive behaviours from other forms of harmful behaviour, such as accidental behaviours that may also induce harm on the individual (Keashly & Nowell, 2003). However, in many cases, it may be impossible to verify the presence of intent (Hoel et al., 1999). For instance, intentionality may be linked to whether the behaviour carried out was intended in the first place, to whether the action was intended to harm the target, and to whether it was intended to become systematic (Einarsen et al., 2003). As research into the concept of workplace bullying is mainly interested in aggression from the target's perspective, Aquino and Thau (2009) argue that, for both theoretical and practical purposes, it is reasonable to classify the experienced behaviour as aggressive if the exposed target perceives it as such. Their position recognises the target's interpretation of the perpetrator's behaviour as at the core of the phenomenon. Thus, the concept of workplace bullying may be considered as a subjective stressor encountered at work in which the target's appraisal of the situation is most consequential for the subsequent response to the bullying exposure (cf. Frese & Zapf, 1988; Lazarus & Folkman, 1984; Zapf, 1999).

In this thesis, the following definition will be applied to refer to the concept of workplace bullying (Einarsen et al., 2003, p. 15);

“Bullying at work means harassing, offending, socially excluding someone or negatively affecting someone’s work tasks. In order for the label bullying (or mobbing) to be applied to a particular activity, interaction or process it has to occur repeatedly and regularly (e.g. weekly) and over a period of time (e.g. about six months). Bullying is an escalating process in the course of which the person confronted ends up in an inferior position and becomes the target of systematic negative social acts. A conflict cannot be called bullying if the incident is an isolated event or if two parties of approximately equal ‘strength’ are in conflict.”

1.2 Consequences of Workplace Bullying

As discussed above, workplace bullying may be considered as an extreme type of social stressor at work where aggressive behaviour is systematically and persistently aimed at a targeted individual (Zapf, 1999). Unlike exposure to other stressors encountered at work, which may reflect a negative job feature that is experienced by most organisational members to various degrees, the aggressive behaviour experienced by targets of bullying is likely to thwart the satisfaction of fundamental psychological and relational needs (e.g., sense of belonging and trust in others) and inflict severe psychological, emotional, and even physical pain upon the exposed individuals (Aquino & Thau, 2009; Baumeister & Leary, 1995). The persistent exposure to such behaviour also seems to drain the individual of coping resources, gradually making the individual less able to cope with daily work tasks and the requirements of the job (Leymann, 1990). The uncertainty caused by exposure to such working conditions is thus expected to be related to strain in the affected individuals. Not surprisingly, quite a few

studies have identified consistent relationships between experienced workplace bullying and both individual and organisational related outcomes. For instance, targets of bullying have been found to portray high levels of anxiety and depression (Hansen et al., 2006; Zapf, 1999), more fatigue (Agervold & Mikkelsen, 2004; Hogh, Borg, & Mikkelsen, 2003) and psychosomatic symptoms (Hansen et al., 2006; Mikkelsen & Einarsen, 2001), higher levels of emotional exhaustion (Einarsen, Matthiesen, & Skogstad, 1998; Grandey, Kern, & Frone, 2007) and lower levels of job satisfaction (Einarsen et al., 1998; Hauge, Skogstad, & Einarsen, 2007) as compared to non-targets. Moreover, Vartia (2001) showed that not only targets of bullying, but also observers of such behaviour, reported higher levels of general stress and mental stress than did non-targets. The severe consequences observed due to bullying have even made some to argue that workplace bullying is a more crippling and devastating problem for affected individuals than the effects of all other work-related stressors put together (Adams, 1992; Wilson, 1991). And indeed, the few studies investigating the relative predictive effect of workplace bullying in relation to individual and organisational outcomes have shown exposure to bullying to be a potent stressor and to account for incremental variation in factors such as anxiety, depression, job satisfaction, turnover intention, and absenteeism, above that accounted for by other stressors frequently encountered at work (Bowling & Beehr, 2006; Hauge, Skogstad, & Einarsen, in press; Keashly, Hunter, & Harvey, 1997). Thus, the devastating consequences reported by targets of bullying makes in itself workplace bullying an important phenomenon to study from both a practical and a scientific standpoint. Identifying possible causes of why bullying occurs at workplaces will therefore be highly important in terms of bringing about valuable knowledge as for how to successfully prevent and counteract the problem.

1.3 Why Does Bullying Occur at Workplaces?

As the reasons for why bullying develops are likely to be both complex and interwoven, no single explanation is probably sufficient on its own to accurately explain why bullying occurs at workplaces (Baillien, Neyens, De Witte, & De Cuyper, 2009; Zapf, 1999). Thus, most theoretical frameworks aiming to explain why some and not others become targets of workplace bullying highlight possible causes in both the targets and the perpetrators of bullying, as well as pointing to possible causes related to the organisational context in which it unfolds (Baillien et al., 2009; Bowling & Beehr, 2006; Einarsen et al., 2003; Keashly & Harvey, 2005). In the following, some empirical findings and theoretical explanations as to why bullying occurs at workplaces will be addressed, focusing on demographical characteristics and the role of both perpetrators and targets of workplace bullying.

1.3.1 Demographical Factors

Research investigating the possible influence of demographical factors such as gender, age and occupational position in relation to bullying do not portray a consistent picture of the relationships between such factors and exposure to workplace bullying. Although some studies have identified gender differences in exposure to workplace bullying (e.g., Aquino & Bradfield, 2000; Björkqvist et al., 1994), other studies have found no, or only marginal, gender effects (e.g., Bowling & Beehr, 2006; De Cuyper et al., 2009; Vartia & Hyyti, 2002). Men, however, have been found to be perpetrators of bullying more often than women (e.g., Hauge et al., 2009; Hershcovis et al., 2007). Also for age do research show mixed results with some findings showing older employees to be more frequently exposed to workplace bullying (e.g., Einarsen & Skogstad, 1996), others showing younger employees to be somewhat more

frequently exposed (e.g., Bowling & Beehr, 2006), yet others studies showing no relationship between age and exposure to bullying (e.g., De Cuyper et al., 2009; Hauge et al., 2009). Some evidence exist documenting employees in lower hierarchical positions to be more frequently exposed to bullying than managers and supervisors (e.g., Björkqvist et al., 1994; Hoel et al., 2001; Salin, 2001), although other studies show no such differences as regards hierarchical position (e.g., Aquino & Bradfield, 2000; De Cuyper et al., 2009). UK studies tend to more frequently identify individuals in higher hierarchical positions as perpetrators of bullying (e.g., Hoel et al., 2001; Rayner, 1997), while studies undertaken in other countries do not show such systematic differences as regards perpetrator status (e.g., De Cuyper et al., 2009; Hauge et al., 2009). Overall, demographic variables related to targets and perpetrators are likely to explain relatively little of the variation in workplace bullying.

1.3.2 The Role of the Perpetrator

There may be a number of different reasons as for why individuals engage in aggressive behaviour and bullying towards others at work, yet often such reasons may be attributed to norm violations, perceptions of unfair treatment, or to something another person said or did (Neuman & Baron, 2003). As such, enactment of aggression may be triggered or elicited by various aspects of the current situation, and be dependent on predispositions that individuals bring with them to a given context (Anderson & Bushman, 2002). Acknowledging that obtaining valid and reliable information from perpetrators of bullying is difficult because many perpetrators will be reluctant to admit engaging in such detrimental behaviour, any approach aimed at explaining the occurrence of workplace bullying leaving out the role of the perpetrator is likely to be insufficient. When seeking to explain the occurrence of workplace

bullying, targets often report envy, competition for tasks, status or advancement, on behalf of the perpetrator, as the reason for their bullying exposure (Björkqvist et al., 1994; Vartia, 1996). Engaging as a perpetrator of bullying has also been proposed to be a consequence of oneself being exposed to bullying and as a problem-focused coping strategy in defending oneself against further acts of mistreatment (Aquino & Thau, 2009; Lee & Brotheridge, 2006). This assumption is supported by studies showing a considerable relationship between being a target and being a perpetrator of bullying (De Cuyper et al., 2009; Glomb & Liao, 2003; Hauge et al., 2009), although the causal direction of this relationship so far remains unknown. Others have shown stressor exposure to be related to enactment of aggression differently depending on individual characteristics such as trait-anger (Fox, Spector, & Miles, 2001).

Workplace bullying have also been proposed to develop as a result of a self-regulatory process with regard to protection of ones self-esteem (Zapf & Einarsen, 2003). Protecting and enhancing one's self-esteem is considered a basic motive in individuals and would thus influence on and take part in determining one's behaviour. When individuals feel respected and recognised, interaction with others is likely to proceed well, while when this is not the case, conflicts may arise and aggression towards others may be one possible outcome. Lack of social competencies may be another characteristic of perpetrators. To be high on social and emotional competence would require the ability to detect, understand, and respond appropriately to others' feelings. Supervisors or colleagues yelling at others at work due to frustration or anger may indicate lack of emotional control. Some perpetrators may not be fully aware of what they are doing and how their behaviour may affect others in the work setting, implying that bullying may be the result of a lack of self-reflection and perspective taking (Zapf & Einarsen, 2003).

1.3.3 The Role of the Target

Workplace bullying is a complex and multifaceted phenomenon in which many different factors relating to the social context as well as to the individuals employed within it may influence on the bullying process and who will end up as targets of bullying. As such, one stream of research have investigated if specific characteristics within individuals may predispose who will be exposed to bullying, and explored the role of target personality as a predictor for workplace bullying. While some studies show that targets tend to be more introverted (e.g., Coyne, Seigne, & Randall, 2000; Glasø, Matthiesen, Nielsen, & Einarsen, 2007), others have not identified such differences between targets and non-targets (e.g., Coyne, Chong, Seigne, & Randall, 2003). Some studies indicate that targets of bullying tend to be more conscientious than non-targets (e.g., Coyne et al., 2000), although others fail to support such a relationship (e.g., Coyne et al., 2003). More consistent findings relate to self-esteem, negative affect and emotional stability, in that targets of bullying have been found to report lower levels of self-esteem (e.g., Matthiesen & Einarsen, 2007; Vartia, 1996), higher levels of negative affect (e.g., Bowling & Beehr, 2006), and to be more emotional unstable (e.g., Coyne et al., 2003; Glasø et al., 2007) as compared to non-targets.

However, to look for antecedents of bullying in the personality of targets has been a controversial issue in workplace bullying research, as victim-blaming may easily follow such an approach (Zapf & Einarsen, 2005). To state that anxiety and low self-esteem are prominent characteristics of many targets of bullying is probably uncontroversial. The controversy lies in whether, and to what extent, these observed characteristics can actually be considered as true causes of bullying or whether they are the result of the bullying exposure. As longitudinal studies investigating the role of personality are scarce, the causal direction of relationships between personality characteristics and target-status remains uncertain. However, Leymann

(1996) strongly opposed the notion that the personality of an individual predisposes who becomes a target of bullying. The neurotic and often obsessive behaviour of many targets should rather be understood as a normal response to an abnormal situation, and the observed characteristics of targets be interpreted as a consequence of their traumatic experience of being exposed to bullying (Leymann & Gustafsson, 1996). Instead, Leymann (1996) argued for a situational explanation as for why bullying occurs at workplaces, highlighting factors in the employing organisation as its true causes, an assumption that will be investigated by means of different research approaches and methodological designs in the four empirical studies of this thesis.

1.4 The Role of the Employing Organisation

Workplace bullying is a complex and dynamic process where both the actions of perpetrators and the reactions of targets needs to be understood within the social context in which it take place (Hoel & Salin, 2003). As workplace bullying refers to behaviour and interaction taking place between organisational members, the significance of the organisational context in which it unfolds is crucial in terms of gaining a thorough understanding as for why it occurs. As such, researchers have aimed at identifying risk factors of workplace bullying by addressing larger organisational characteristics as well as the psychosocial work environment within organisations.

1.4.1 Organisational Characteristics

One stream of research investigating how the organisational context may influence on the likelihood of workplace bullying is studies investigating bullying by means of sector and the type of work the organisation perform. For instance, Leymann (1996) found employees in the health and educational sectors to be over-represented as targets of bullying, while Mikkelsen and Einarsen (2001) found employees in a manufacturing company to report more workplace bullying than did employees in two hospitals. Einarsen and Skogstad (1996) found bullying to be more prevalent among employees in the private sector than among employees in the public sector, while others have found bullying to be more prevalent in the public sector than in the private sector (Hoel & Cooper, 2000; Salin, 2001). In addition, some evidence also exist showing workplace bullying to be more prevalent within large and male-dominated organisations (Einarsen & Skogstad, 1996). Overall, studies investigating risk factors of bullying as a function of occupation or sector do not seem to present a clear picture of what type of sectors or type of organisations are likely to have a higher likelihood of bullying to occur. More consistent findings exist with regard to the role of the work environment in relation to workplace bullying. As such, the role of the work environment will be empirically addressed by means of different research approaches and methodological designs in the four studies constituting this thesis, in order to bring about more systematic knowledge as to why bullying occurs at workplaces.

1.4.2 The Work Environment Hypothesis

The work environment hypothesis, stating that stressful and poorly organised working environments will create conditions that may lead up to and encourage bullying, has

traditionally been the favoured model when seeking to explain the occurrence of workplace bullying, especially in Scandinavia (Agervold & Mikkelsen, 2004; Einarsen et al., 1994; Leymann, 1996). The basic assumptions of Leymann's (1992) work environment hypothesis is that stress and frustration due to a negative psychosocial work environment may lead to bullying of exposed individuals, especially if the management of the organisation does not handle the situation in a firm and just way. A range of environmental and organisational factors may produce or elicit occupational stress in individuals which, in turn, may increase the risk of interpersonal conflicts and of bullying to occur (Agervold & Mikkelsen, 2004; Einarsen et al., 1994). To account for how environmental factors are related to the occurrence of workplace bullying, two main explanations have frequently been applied in the literature, namely explanations in line with social interactionist theory (e.g., Neuman & Baron, 2003; Tedeschi & Felson, 1994), and explanations in line with the frustration-aggression hypothesis (e.g., Berkowitz, 1989; Fox & Spector, 1999).

According to social interactionist theory (e.g., Neuman & Baron, 2003; Tedeschi & Felson, 1994), stressful working environments may affect bullying and aggression indirectly through its effect on the target's behaviour. Experienced occupational stress may for instance cause some individuals to violate workplace norms and to perform their work less competently than others. Employees may thus have a tendency to become targets of bullying because stressors in their jobs generate affective and behavioural reactions in them that may encourage others to engage in aggressive behaviour towards them, possibly as a means of gaining social control (Neuman & Baron, 2003). In particular, distressed individuals may violate established and accepted social norms of politeness, and thus evoke aggressive behaviour in other organisational members.

In line with explanations according to a social interactionist perspective, quite a number of cross-sectional studies have rendered support for consistent relationships between perceived work environment factors and exposure to workplace bullying. Employees reporting to be exposed to workplace bullying also tend to report high levels of role conflict and role ambiguity (e.g., Bowling & Beehr, 2006; Einarsen et al., 1994; Jennifer, Cowie, & Ananiadou, 2003; Notelaers, De Witte, & Einarsen, 2009), low levels of control (e.g., Vartia, 1996; Vartia & Hyyti, 2002; Zapf, Knorz, & Kulla, 1996), high cooperation requirements (e.g., Zapf, Knorz et al., 1996), high workloads (e.g., Einarsen et al., 1994; Hoel & Cooper, 2000; Salin, 2003), a poor social climate (e.g., Einarsen et al., 1994; Vartia, 1996), low levels of social support (e.g., Hansen et al., 2006) and poor and unfavourable management styles (e.g., Einarsen et al., 1994; Skogstad, Einarsen, Torsheim, Aasland, & Hetland, 2007; Vartia, 1996). A possible explanation for these more systematic findings have been claimed to be that employees may be at greater risk of being exposed to bullying in jobs and organisations where they are required to interact frequently with others and to work interdependently, in that bullying may be applied as a means of punishing individuals who do not perform as expected by the rest of the work group (Aquino & Thau, 2009; Zapf, Knorz et al., 1996).

However, perpetrators of bullying have a work environment too, and another explanation which may account for the development of bullying and aggression at work is frameworks in line with the frustration-aggression hypothesis. According to the frustration-aggression hypothesis (Berkowitz, 1989; Fox & Spector, 1999), the presence of environmental stressors may give rise to aggressive behaviour by generating negative affect in individuals, thus encouraging perpetrators to engage in bullying of other organisational members. Stressful working environments may thus result in more frequent bullying through environmental factors' effect on aggressive behaviour in general. Tense and frustrated employees may show more aggressiveness and be more involved in confrontations with

others within such working environments, thereby triggering the bullying process (Einarsen, Hoel, Zapf, & Cooper, 2005). As a more recently developed refinement of the frustration-aggression hypothesis, the stressor-emotion model of counterproductive work behaviour (Spector & Fox, 2005) proposes engaging in aggressive behaviour to be an emotion-based response to stressful environmental conditions experienced by employees. Individuals perceive and respond to factors in their work environment differently, and individual dispositions and perceived control at work are considered important in the stressor-aggression process. According to this view, events in the work environment are appraised for their seriousness for the individuals affected, and events and encounters with job stressors appraised as threats to well-being may induce negative emotional reactions such as anger and anxiety in some individuals. Engaging in aggressive behaviour towards other organisational members may be the outcome of this stress process (Spector & Fox, 2005).

Much less empirical attention has been devoted seeking to explain why perpetrators engage in bullying of others at work. Yet, taken as a whole, research into the phenomena of workplace bullying, workplace aggression, and personal-oriented counterproductive work behaviour, show that individuals reporting to engage in bullying and aggressive behaviour towards others at work also tend to report high levels of role conflict and role ambiguity (Chen & Spector, 1992; Matthiesen & Einarsen, 2007), interpersonal conflicts (Chen & Spector, 1992), job insecurity (De Cuyper et al., 2009), organisational constraints interfering with job performance (Fox et al., 2001), and dissatisfaction with leadership (Hershcovis et al., 2007). Thus, environmental factors may indeed have an influence on the incidence of bullying within organisations through their effects on perpetrators of bullying.

However, who will end up as a target of bullying due to perpetrators' aggressiveness may be highly arbitrary (Leymann, 1992). In some situations in which an individual is highly

stressed due to an escalated conflict with another individual at work, bullying towards this person may be one possible outcome, what has been referred to as dispute-related bullying (Einarsen, 1999). In other situations, in which the actual sources of stress and frustration are either indefinable, inaccessible, too respected or too powerful to be acted upon, perpetrators, or even more or less all members of the work group, may turn their hostility and frustration towards a person who is less powerful than themselves, using this person as a suitable scapegoat (Björkqvist et al., 1994; Brodsky, 1976; Thylefors, 1987). Such displaced aggression refer to the tendency of aggressing against someone other than the actual source of frustration or provocation (Marcus-Newhall, Pedersen, Carlson, & Miller, 2000). Because aggressing against the source of frustration may be both dangerous and in some cases even impossible, individuals willing to aggress against conditions within their workplaces may select targets that are relatively weak and defenceless as outlets for their frustration, and use rather subtle and disguised forms of aggression that make it difficult to identify them as the actual source of the aggressive behaviour (Björkqvist et al., 1994; Neuman & Baron, 2003). Acknowledging that being able to predict who will end up as a scapegoat and as a target of bullying in such situations may be challenging, it seems fair to assume that within working environments characterised by unfavourable working conditions and inadequate leadership practises (cf. Leymann, 1996), the incidence of enacted aggression, and in consequence targets being exposed to workplace bullying, will likely be higher as compared to more favourable working environments.

1.5 Overall Aim of Thesis

Although an increasing amount of research has evolved on the role of the work environment in relation to workplace bullying during the last couple of decades (cf. Aquino & Thau, 2009;

Bowling & Beehr, 2006), the field still lack systematic and thorough knowledge of what are the main predictors of bullying, how such factors may influence on exposure to and enactment of bullying, how such factors and bullying are causally linked, and how level of conceptualisation may be understood when making inferences about environmental factors in relation to workplace bullying. The overall aim of this thesis is therefore to empirically address these issues by investigating relationships between work environment factors and workplace bullying by means of different research approaches and analytical designs, in order to contribute to the extension of knowledge as to why bullying occurs at workplaces.

Studies aimed at addressing the role of the work environment in relation to workplace bullying has so far mainly been occupied with the experiences of targets of bullying. In line with social interactionist theory (cf. Neuman & Baron, 2003), individuals experiencing high levels of job stress may have a tendency to become targets of bullying because stressors in their environment generate affective and behavioural reactions in them that may encourage others to engage in aggressive behaviour and bullying towards them. Although quite a few studies have shown that targets of bullying also tend to report high levels of job stress (cf. Hoel & Salin, 2003), most studies are based on correlational designs and surprisingly few studies have explored more than a few factors as possible predictors of workplace bullying, thus leaving evaluations of the relative importance of various factors unknown. Many studies have also been conducted using convenience samples, rather small samples or selected groups such as targets of bullying, leaving questions regarding the generalisability of findings unknown. Previous studies are also difficult to compare due to differences in the research designs, measures, and statistical analyses employed. In addition to different ways of measuring bullying, studies differ also in the way environmental factors are measured, with some studies using single item measures to capture factors experienced at work, while other studies apply well-established and validated measurement instruments. Thus, there is clearly a

need for more systematic investigations of relationships between environmental factors and exposure to workplace bullying in order to validate previous findings in line with a social interactionist perspective towards explaining the development of workplace bullying.

While a growing body of research has evolved during the last couple of decades showing a range of work-related factors to be related to exposure to workplace bullying, considerably less attention has been devoted to explain why perpetrators engage in bullying of others at work. In line with theoretical frameworks linking the experience of job-related stress to the experience of frustration and subsequent enactment of aggression (cf. Berkowitz, 1989; Spector & Fox, 2005), it is reasonable to assume that environmental factors also relate to the enactment of workplace bullying. Due to difficulties in collecting and obtaining valid and reliable information from perpetrators, existing empirical knowledge on perpetrators and perpetrator characteristics is scarce, and has mainly been obtained from reports by targets of bullying. Although some risk factors for engaging in bullying of others have been identified, little systematic knowledge exists regarding perpetrators of bullying. However, drawing conclusion based on zero-order correlations may capitalise on chance and can potentially lead to erroneous conclusions (Barling et al., 2009). Thus, there is clearly a need to systematically investigate how environmental factors may influence on the enactment of bullying, in order to examine how such processes necessarily indirectly influences also on exposure to workplace bullying.

One of the major shortcomings of research conducted so far in the field of workplace bullying is the overwhelming use of cross-sectional research designs when seeking to explain the occurrence of bullying. While researchers for long have advocated the use of longitudinal research designs in order to enable the establishment of causal relationships in relation to workplace bullying, no studies were identified adopting longitudinal designs in investigating

antecedents of bullying. Bowling and Beehr (2006) proposed a theoretical model on workplace bullying from the target's perspective, hypothesising role stressors to be important antecedents of subsequent exposure to workplace bullying. Although they apply explanations in line with both a social interactionist perspective (cf. Neuman & Baron, 2003; Tedeschi & Felson, 1994) and enactment of aggression (cf. Berkowitz, 1989; Spector & Fox, 2005) to account for how role stressors are related to workplace bullying, their meta-analysis undertaken to investigate the usefulness of the model concerns cross-sectional findings of relationships between individual perceived role stress and individual exposure to workplace bullying, an explanation necessarily in line with a social interactionist perspective only. However, due to the lack of longitudinal studies investigating such relationships, one cannot know whether individuals are actually being targeted from bullying due to how the work environment influences on them, or whether such a relationship is in fact spurious and even the other way around (Agervold & Mikkelsen, 2004). Given that targets of bullying are likely to be negatively affected by their bullying exposure, the extent to which their negative evaluations of environmental factors can actually be considered true causes of their bullying exposure or whether their evaluations simply yields a causal attribution towards environmental factors, remain unknown (Agervold & Mikkelsen, 2004; Shaw, Wild, & Colquitt, 2003). Thus, investigations of the usefulness of such an individual level approach to explain why individuals are being exposed to workplace bullying are clearly needed.

With only few exceptions (e.g., Agervold, 2009; Magerøy, Lau, Riise, & Moen, 2009), research in line with Leymann's (1996) work environment hypothesis has so far been conducted with the individual as the unit of both measurement and analysis. Although Leymann (1996) argued that bullying occurs primarily as a consequence of prevailing environmental conditions within organisations, empirical research conducted so far has mainly reflected targets' of bullying perceptions of their work environment. Consequently,

although targets in general report their work environment as more negative than do non-targets, interpretations of findings along these lines are limited by being on an individual level only. The extent to which such perceptions constitute a shared and objective picture of the environment in question or whether it simply reflects targets' subjective interpretations of it still remains unknown (Agervold & Mikkelsen, 2004). If the core assumptions of Leymann (1996) is valid, it must be demonstrated that the working environments in which bullying take place is actually poor in several aspects, regardless of what the individuals employed within these environments experiences individually (Agervold, 2009). Thus, research investigating how work-group level characteristics may influence on the incidence of workplace bullying will yield valuable additional knowledge to the research field of workplace bullying, by demonstrating differences between environments that are prone to bullying and environments that are less prone to such behaviour.

In sum, the four empirical studies constituting this thesis are conducted for theoretical, methodological and applied reasons alike. By simultaneously investigating several environmental factors for their relationships with both exposure to and perpetration of workplace bullying employing multivariate designs, a stronger basis is provided for making conclusions regarding what factors and mechanisms may contribute to the occurrence of bullying at workplaces (Notelaers et al., 2009). In turn, such findings may contribute to the development of refined and more explicit theoretical frameworks in explaining bullying at work, which may be rightfully empirically tested. Methodologically, this thesis consists of both cross-sectional and longitudinal studies, and although previous cross-sectional studies have interpreted environmental factors as likely antecedents of why individuals are being exposed to subsequent workplace bullying, causal inferences can only be tested applying a longitudinal design. However, the primary reason for investigating antecedents of workplace bullying must be to enable management and organisations to prevent and counteract the

problem from workplaces. Thus, the conclusions to be drawn from this thesis should be of strong applied and practical interest.

2. OBJECTIVES, SAMPLES AND RESULTS

2.1 Paper I

The aim of Paper 1, “*Relationships between stressful work environments and bullying: Results of a large representative study*”, was to systematically investigate a range of work environment factors as possible antecedents of workplace bullying at an individual level of analysis, in order to contribute to the relative sparse knowledge that exists on relationships between work environment factors and bullying. A random representative sample of 4,500 employees was drawn from the Norwegian Central Employee Register. Altogether, 2,539 questionnaires were returned, yielding a response rate of 56.4 per cent. The cross-sectional sample consisted of 52 per cent women and 48 per cent men. The mean age was 43.8 years and 19.8 per cent of the sample reported to occupy a supervisory position. The mean working hours per week were 37.5, the normal weekly working hours in Norway. Except for women being slightly overrepresented, the sample can be considered as representative for the Norwegian working population (cf. Høstmark & Lagerstrøm, 2006).

To address the study aim of Paper 1, two different measures of exposure to workplace bullying were applied and regressed on a broad spectrum of job characteristics in order to investigate their relative effects as predictors of bullying at an individual level of analysis. Workplace bullying was measured by both a behavioural experience method, applying the Negative Acts Questionnaire-Revised (Einarsen et al., 2009), and a self-labelling with definition method (Einarsen & Skogstad, 1996), whereby the respondents were asked to indicate whether they considered themselves to have been exposed to bullying during the last six months. The respondents were also asked to indicate whether they had exposed others to

bullying and to indicate if they had observed others being exposed to bullying at work, according to the same definition. In addition to a measure of job satisfaction (Brayfield & Rothe, 1951), the job characteristics investigated in Paper 1 refer to job demands, decision authority, role ambiguity, role conflict, interpersonal conflicts, job insecurity, constructive-, tyrannical-, and laissez-faire leadership behaviour (cf. Bass & Avolio, 1990; Einarsen, Skogstad, Løseth, & Aasland, 2002; Ekvall & Arvonen, 1991; Hellgren, Sverke, & Isaksson, 1999; Rizzo, House, & Lirtzman, 1970; van Veldhoven & Meijman, 1994). The statistical analyses for Paper 1 were conducted using the Statistical Package for Social Sciences (SPSS). Hierarchical multiple regression analyses were performed in order to investigate the relative strength of the environmental factors and the leadership scales as predictors of workplace bullying, employing both the behavioural experience measure (NAQ-R) and the self-labelling measure of workplace bullying as dependent variables. Multivariate analyses of variance (MANOVA) were also conducted to compare differences in perceptions of the environmental factors between different groups of employees, based on their bullying status.

The findings from Paper 1 show that targets of bullying tend to evaluate factors in their work environment poorly. In addition to portraying a low level of job satisfaction, targets of bullying also reported elevated levels of job stress as compared to non-involved individuals. Moreover, not only targets, but also observers of bullying generally report lower levels of job satisfaction and higher levels of job stress than do non-involved individuals. When investigating more fully what factors contribute in explaining being a target of workplace bullying, the findings from Paper 1 showed that role conflict, leadership behaviour, and interpersonal conflicts were the overall strongest predictors of workplace bullying, accounting for a large amount of the variation in bullying. Moreover, support was also found for an interactive relationship between job stressors and leadership behaviour. Moderator analysis showed that both decision authority and role conflict interacted with laissez-faire

leadership in relation to bullying, indicating that the combined impact of several stressors experienced at work may affect the individual over and above what is accounted for by their additive effects separately. In sum, the cross-sectional findings from Paper 1 may be considered to render support to a social interactionist perspective in explaining workplace bullying (cf. Neuman & Baron, 2003), in that individuals reporting to be targets of bullying also tend to experience high levels of job stress.

2.2 Paper II

The aim of Paper 2, “*Individual and situational predictors of workplace bullying: Why do perpetrators engage in the bullying of others?*”, was to investigate how individual and situational factors may predict being a perpetrator of workplace bullying, in order to bring about knowledge as to why individuals engage in bullying of others at work. For Paper 2, the same sample as used in Paper 1 was applied. Being a perpetrator of workplace bullying was measured by the self-labelling with definition method (Einarsen & Skogstad, 1996). The predictor variables applied in Paper 2 refer to the individual factors exposure to workplace bullying, gender, hierarchical position and age, and the situational factors decision authority, role ambiguity, role conflict and interpersonal conflicts (cf. Rizzo et al., 1970; van Veldhoven & Meijman, 1994). The statistical analyses for Paper 2 were conducted by correlational and logistic regression analysis, using the Statistical Package for Social Sciences (SPSS).

Applying previous findings from workplace aggression research (cf. Barling et al., 2009) and the stressor-emotion model of counterproductive work behaviour as a theoretical

backdrop (cf. Spector & Fox, 2005), the aim of Paper 2 was to investigate the predictive effects of both individual and situational factors as predictors for being a perpetrator of bullying. The findings from Paper 2 show that perceived environmental factors not only may predict being a target of bullying, but may also account for why individuals engage in the bullying of others at work. Although some studies tend to identify supervisors and managers as perpetrators of bullying more often than subordinates (e.g., Hoel et al., 2001), the findings showed no such difference as regards perpetrator status. Men, however, showed an increased likelihood of being perpetrators as compared to women. Being oneself a target of bullying was found to be the overall strongest predictor for engaging in bullying of others, with targets being exposed to bullying on a frequent basis showing the largest probability to be a perpetrator. One third of the perpetrators in the sample reported also being targets of bullying. Among the situational factors investigated, experiencing role conflict and interpersonal conflicts significantly predicted involvement in bullying of others, while decision authority and role ambiguity did not when controlling for the effects of the other predictors. The findings from Paper 2 render support to frameworks linking the experience of job-related stress to engaging in aggressive behaviour at work (e.g., Spector & Fox, 2005) and yields an important contribution in terms of explaining why bullying occurs at workplaces.

2.3 Paper III

The aim of Paper 3, *“Role stressors and exposure to workplace bullying: Causes or consequences of what and why?”*, was to longitudinally investigate causal relationships in

explaining exposure to workplace bullying. An individual level model proposed by Bowling and Beehr (2006), regarding role stressors as antecedents of workplace bullying, was tested. For Paper 3, a longitudinal two-wave sample of the sample constituting the sample for Paper 1 and Paper 2 was applied. The 2,539 respondents who completed questionnaires at measurement wave 1 were asked to complete a second measurement after two years. A total of 1,775 questionnaires were returned, yielding a second-wave response rate of 70 per cent. To address the study hypothesis for Paper 2, only respondents employed in full or part-time positions at both measurement points, who had not changed their place of employment from measurement wave 1 to wave 2, were included in the sample to be analysed, leaving a longitudinal sample of 1,207 cases to be analysed. The two-wave sample consisted of 52.6 per cent women and 47.4 per cent men. Mean age was 46 years and 21 per cent of the sample reported to occupy a supervisory position.

For Paper 3, a nine item short-version (NAQ-S) of the original 22 item Negative Acts Questionnaire was applied to measure exposure to workplace bullying (Einarsen et al., 2009; Notelaers & Einarsen, 2008). An overview of the 22 items in the full-version and the nine items constituting the short-version of the Negative Acts Questionnaire is presented in the Appendix of this thesis. In Paper 3, three role stressors were investigated for their relationship with exposure to workplace bullying over time. Role ambiguity and role conflict were measured by the scales of Rizzo and colleagues (1970), also applied in Paper 1 and Paper 2. In addition, role overload was included and measured by the scale of Beehr, Walsh and Taber (1976). Statistical analyses for Paper 2 were conducted using structural equation modelling in LISREL version 8.80 (Jöreskog & Sörbom, 1996).

Although previous cross-sectional findings have consistently shown individually experienced role stress to be related to exposure to workplace bullying, and such findings

been interpreted as likely antecedents of bullying, the findings of Paper 3 failed to identify any significant causal relationships between perceived role stress and subsequent exposure to workplace bullying according to such an explanation. The reverse direction of relationships, however, namely exposure to workplace bullying being an antecedent of subsequent experienced role stress, received support. Exposure to workplace bullying accounted for subsequent variation in role ambiguity, role conflict and role overload, alike. The strength of associations between exposure to workplace bullying and the role stressors over time, were found to be in line with previous cross-sectional findings, with bullying showing the strongest relationship with role conflict, followed by role ambiguity and role overload. Overall, the findings from Paper 3 question whether individually experienced stress can be considered an actual antecedent of exposure to workplace bullying. In line with theoretical frameworks relating experienced stress to enactment of aggression, it seems likely that individually experienced role stress may rather account for enactment of bullying than exposure to workplace bullying.

2.4 Paper IV

The aim of Paper 4 “*Leadership and role stressors as departmental level predictors of workplace bullying*”, was to investigate work-group level predictors of workplace bullying in order to address the assumption of Leymann’s (1996) work environment hypothesis that workplace bullying is primarily a consequence of overall environmental conditions within organisations. For Paper 4, a cross-sectional sample of Norwegian employees nested within a

large number of departments was employed. Data was collected through anonymous self-reporting questionnaires as part of work environment surveys conducted by the Norwegian National Institute of Occupational Health (NIOH). Average response rates in the various samples were 71.5 per cent. The sample was predominantly female, consisting of 68.2 per cent women and 31.8 per cent men. Mean age was 44.6 years.

All measurement instruments applied were measured by the General Nordic Questionnaire (QPS_{Nordic}) for Psychological and Social Factors at Work (Dallner et al., 2000). In Paper 4, aggregated measures of supportive leadership, role ambiguity and role conflict were applied to investigate work-group level characteristics as predictors for the overall incidence of and individual likelihood of being exposed to bullying. Workplace bullying was measured by two single items where respondents were asked to indicate if they themselves had been exposed to bullying and harassment at their workplace during the last six months, and also to indicate if they had noticed anyone else in their workplace being subjected to bullying and harassment during the last six months. Both items were measured according to the following definition: *“Bullying is a problem at some workplaces and for some workers. To label something bullying the offensive behaviour has to occur repeatedly over a period of time, and the person confronted has to experience difficulties defending himself/herself. The behaviour is not bullying if two parties of approximately equal strength are in conflict or the incident is an isolated event.”* In addition to the individual level variables gender and hierarchical position, two between level covariates representing departmental size and gender distribution within departments were included. Statistical analyses were conducted using multilevel confirmatory factor analysis and multilevel structural equation modelling in *Mplus* version 5.2 (Muthén & Muthén, 1998-2007).

The findings from Paper 4 showed non-supportive leadership practises and the presence of role conflict to be potent predictors for the overall incidence of bullying at the departmental level. In addition, individuals being employed within such unfavourable working environments also showed a significant probability of being exposed to bullying. Role ambiguity did not contribute in predicting workplace bullying when controlling for the effects of the other predictors. At the individual level, neither gender nor hierarchical position significantly predicted exposure to bullying. Although previous research have identified bullying to be more prevalent within large and male-dominated environments (Einarsen & Skogstad, 1996), no evidence of such relationships were identified. The findings from Paper 4 render overall support to Leymann's (1996) work environment hypothesis in that environmental conditions within departments do account for considerable variation in workplace bullying, and show that unfavourable working environments do have a higher incidence of workplace bullying than do more favourable environments.

3. DISCUSSION

3.1 Discussion of Findings

The overall aim of this thesis was to investigate work environment factors as possible antecedents of workplace bullying. More specifically, based on the four empirical studies conducted, work environment factors were investigated in relation to both exposure to and enactment of workplace bullying at an individual level of analysis, causal relationships in line with interpretations of previous cross-sectional findings were investigated, in addition, the emerging issue related to level of conceptualisation in aiming to explain the occurrence of workplace bullying was addressed. Accordingly, the findings of this thesis have important theoretical, methodological and practical implications, alike.

In line with what one may label as the traditional approach to investigate antecedents of workplace bullying, the findings from Paper 1 show unfavourable leadership behaviour, role conflict and interpersonal conflicts to be particularly strongly related to reports of exposure to workplace bullying, thus substantiating the main findings from previous individual level studies applying such an approach (e.g., Bowling & Beehr, 2006; Einarsen et al., 1994; Vartia, 1996). Moreover, not only targets, but also observers of bullying reported higher levels of job stress and less job satisfaction than did non-involved individuals, indicating overall negative working conditions within environments in which bullying take place. These findings show that reports of exposure to workplace bullying will likely co-occur also with claims of being involved in interpersonal conflicts at work, with claims of being subjected to unfavourable forms of leadership, along with descriptions of an overall negative work situation, on behalf of targets. The severity of such a situation is substantiated by the

finding that the job characteristics decision authority and role conflict, both interacted with perceptions of laissez-faire leadership behaviour in relation to workplace bullying. The findings from Paper 1 may be taken as support for a social interactionist perspective in explaining bullying (e.g., Neuman & Baron, 2003), in that individually experienced job stress and perceptions of unfavourable leadership may be related to exposure to workplace bullying indirectly through stressors' effects on the target's behaviour.

In consequence, if individual perceptions of job characteristics such as role stressors are in fact capable of accounting for why individuals are being exposed to workplace bullying, it must be empirically demonstrated that such a causal ordering of variables is indeed plausible. However, the findings from Paper 3 failed to demonstrate any such relationships between perceived role stress and subsequent exposure to workplace bullying. On the other hand, individuals being exposed to workplace bullying reported subsequent elevated levels of role ambiguity, role conflict, and role overload, alike. Although no longitudinal studies were identified to compare and validate these findings, the finding that exposure to workplace bullying accounts for subsequent role stress render support to the assumption that individuals are likely to be negatively affected by their bullying exposure, and that this exposure in turn may influence on subsequent negative assessments of factors in the working environment (Agervold & Mikkelsen, 2004), possible due to an increase in state negative affect (Mikkelsen & Einarsen, 2002).

However, individual perceptions of environmental factors may still account for workplace bullying, in that experienced job stress may account for enactment of aggression and bullying towards others (e.g., Spector & Fox, 2005). The findings from Paper 2 show that individuals experiencing role conflict and interpersonal conflicts have a significant likelihood of engaging in bullying towards others at work, and what is more, individuals being exposed

to bullying do have a substantial likelihood of also engaging as perpetrators of bullying, and increasingly more so with frequent bullying exposure. Regardless of the causal direction between the two, this may indicate an escalating work environment problem in which increasingly more individuals may take the role as targets or perpetrators of bullying as time goes by. Thus, at least indirectly, how individuals perceive their work environment may indeed account for the overall level of bullying at workplaces.

The individual level findings outlined above show that environmental factors may have a considerable impact on the development of workplace bullying. However, as shown, direct individual level explanations may at best account for only parts of the larger picture, at least in terms of exposure to workplace bullying. Leymann (1996) claimed bullying to occur primarily as a consequence of prevailing environmental conditions within organisations, and pointed at poorly organised working conditions and inadequate leadership practises as the main causes for why bullying occurs. Still, the extent to which individual perceptions of environmental factors are at the core of such an explanation is quite uncertain. Thus, another approach to gain a more thorough understanding of why bullying occurs at workplaces may be to investigate the influence of overall work-group level environmental characteristics in relation to bullying. As such, the findings from Paper 4 show that unfavourable leadership practises and the presence of role conflict within departments significantly accounted for variation in the overall incidence of bullying within departments, and further, that such environmental characteristics also accounted for an increased individual likelihood of being exposed to bullying. However, the finding that role ambiguity did not predict workplace bullying may indicate that not all assumed predictors may be considered equally important for the development of bullying, but that the actual triggering events may be better conceptualised as factors relating to conflicting conditions and to leadership practises at work. Nevertheless, such findings show that differences in characteristics of certain working

environments show a systematic relationship with differences in incidence of workplace bullying within these environments. Although such group level explanations do not directly identify who will be singled out as targets of bullying within such environments, the findings and conclusions to be drawn identify factors towards which preventive measures may be successfully implemented, in turn likely to reduce both the enactment of and the overall incidence of workplace bullying. In sum, these findings recognise workplace bullying as an environmental problem as well as a considerable leadership problem within organisations. Leadership practises may contribute to the development of bullying not only directly, but also indirectly, in that supervisors and managers that neglects or avoids to interfere in and manage environmental problems, in turn, may create conditions resulting in increased aggressiveness among individuals and eventually to the occurrence of bullying (Einarsen, Aasland, & Skogstad, 2007).

3.2 Theoretical Implications of Findings

Taken as a whole, the findings from the studies of this thesis may be considered to render general support to Leymann's (1996) work environment hypothesis, in that environmental characteristics were found to be systematically related to workplace bullying, both in relation to exposure to and enactment of bullying, as well as for the overall incidence of bullying at the work-group level. Especially, factors relating to leadership and to conflicting working conditions appear to be of vital importance. The overall finding that workplace bullying relates to social stressors more strongly than to task-related stressors, substantiates bullying as a problem more relating to the social working environment than to more organisational and strictly task-related conditions of work. Although the findings from the studies of this thesis

render empirical evidence as regards what factors may be especially important as antecedents of bullying, the findings and conclusions to be drawn also point towards more conceptual areas in workplace bullying research in which more theoretically founded knowledge on the occurrence of workplace bullying is clearly needed. More specifically, does poor and stressful environmental conditions relate to workplace bullying as such, does it relate to individuals being exposed to bullying, or does it relate to individuals engaging in bullying towards others? Moreover, as regards the environmental conditions responsible for the occurrence of bullying, is it the environment as experienced by the individual being exposed to bullying that is of primary interest, is it the perpetrator's perception of it, or is it the overall work environment as such, shared by all members of the work group that is of interest? Although several theoretical frameworks have been proposed to account for why bullying occurs at workplaces (e.g., Bowling & Beehr, 2006; Einarsen et al., 2003; Keashly & Harvey, 2005), these frameworks appear rather vague in terms of guiding researchers towards conducting empirical investigations of environmental factors as antecedents of workplace bullying. Accordingly, the usefulness and empirical validity of such general frameworks remains uncertain.

As it reads, the work environment hypothesis put forward by Leymann (1996), clearly lacks theoretical specificity regarding how and what kinds of environmental factors are in fact related to bullying. Except for his claim that inadequate leadership practises are at the core of the problem, what factors may best represent and conceptually capture what he referred to as poor and stressful working conditions is still an open question. Consequently, many studies aimed at investigating relationships in line with such a framework have failed to provide a clear theoretical rationale for variable selection (Aquino & Thau, 2009). In general, targets of bullying tend to evaluate most factors in their work environment poorly, and although a number of environmental factors have been identified as related to workplace bullying,

studies adopting multivariate approaches indicate some factors as more important than others. Typically, factors such as leadership style and role conflict show the overall strongest associations with bullying, while other factors such as role ambiguity, workload and control at work, generally show weaker associations (Einarsen et al., 1994; Notelaers et al., 2009). These findings are substantiated in the studies of this thesis, both in relation to exposure to and enactment of bullying. Yet, while some environmental factors appear to be more important than others and may indeed be the triggering events for the onset of the bullying process, the overall negative and unfavourable environmental characteristics as reported by both targets and observers of bullying may indicate more complex and far-reaching environmental problems in which a conglomerate of factors may co-occur in causing workplace bullying. Thus, although some factors may appear rather unimportant in relation to bullying, they may influence on the presence of and intensity of other factors which, in turn, may lead to an overall negative and stressful environment in which bullying can flourish (Skogstad et al., 2007). However, theoretical frameworks to explain the occurrence of workplace bullying tend to focus on the environment as such, and remain rather vague in describing possible indirect relationships between factors of interest. The development of more explicit frameworks to explain the occurrence of bullying is therefore likely to benefit future research considerably.

Due to the almost exclusive focus on the subjective experiences of targets of bullying, empirical research in line with the European tradition has mostly been occupied with individual level relationships between environmental factors and exposure to workplace bullying. Theoretically, workplace bullying has been understood both as a response to stress as well as a stressor influencing on individual and organisational related outcomes (Hoel et al., 2002). In line with traditional job-stress theory (e.g., Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Karasek & Theorell, 1990; Katz & Kahn, 1978), individuals being exposed

to stressful working conditions may experience work related distress that, if not adequately coped with, can result in psychological, physical, or behavioural strain as outcomes of this stress process. Several meta-analytical studies have shown perceptions of a range of environmental factors, such as role stressors and leadership style, as well as exposure to workplace bullying, to be consistently associated with outcomes such as anxiety, depression, job satisfaction and intention to leave the job (e.g., Bowling & Beehr, 2006; Hershcovis & Barling, 2010; Örtqvist & Wincent, 2006). In line with the reasoning according to a traditional stressor-strain framework, exposure to workplace bullying may therefore be considered as a work related stressor, likely to result in strain for exposed individuals (Zapf, 1999). However, workplace bullying is also frequently considered as an outcome of stressor exposure (Hoel et al., 2002). As the overwhelming amount of studies investigating such relationships has been conducted at an individual level of analysis with the sole focus on targets of bullying, the relationships analysed necessarily reflects individual level perceptions of environmental factors and individual exposure to workplace bullying. Although such findings may be theoretically founded within frameworks such as social interactionist theory (e.g., Neuman & Baron, 2003), no evidence of the usefulness of such an individual level approach in explaining the occurrence of workplace bullying was identified in the longitudinal study of this thesis. As indicated by the findings, the high stress levels observed in targets may rather be considered a consequence of their bullying exposure (Agervold & Mikkelsen, 2004). As such a finding opposes interpretations of previous cross-sectional findings and may appear to contradict the assumptions of Leymann's (1996) work environment hypothesis, several questions comes to mind. Is it necessarily the work environment as experienced by targets that is most decisive in relation to bullying, or may it be that environmental factors' effect on bullying may be more rightfully addressed by focusing on organisational members others than targets of bullying?

Although environmental factors as experienced by targets of bullying may be of little importance as regards why they are being exposed to bullying, environmental factors at an individual level of analysis may still account for workplace bullying, but rather through its effect on perpetrators of bullying. As such, workplace bullying may therefore be conceptualised within a traditional job-stress framework, in which engaging in aggressive behaviour and bullying towards others may be considered a behavioural outcome of stressor exposure (e.g., Spector & Fox, 2005). However, this does not imply that all employees experiencing job-related distress will engage in bullying of others. On the contrary, such relationships may to a considerable extent be dependent on additional factors such as individual dispositions, in that some individuals have a higher probability than others for engaging in aggressive behaviour at work, as well as the organisation's tolerance for such behaviour to unfold (Brodsky, 1976). For instance, Fox and colleagues (2001) showed that the experience of organisational constraints interfering with job performance related to engaging in personal-oriented counterproductive work behaviour differently depending on the individual's level of trait-anxiety, and similarly, that the experience of interpersonal conflicts related to engaging in such behaviour differently depending on the individual's level of trait-anger. Thus, environmental factors can have a considerable impact on the overall level of workplace bullying in organisations through their effect on perpetrators of bullying. However, who will eventually be exposed to workplace bullying due to perpetrators' aggressiveness may be quite arbitrary and to a large extent represent scapegoating processes and displacement of aggression, in which individuals considered to be relatively weak and defenceless may be singled out and end up as targets of bullying (Björkqvist et al., 1994; Leymann, 1992; Marcus-Newhall et al., 2000). Assuming that such processes may be relatively common in situations leading up to an individual being exposed to workplace bullying, the

usefulness of approaches investigating targets' perceptions of environmental factors as the true causes for why they are being exposed to bullying seems questionable.

A more fruitful approach towards explaining the occurrence of workplace bullying may be to shift the focus from individual perceptions to larger social entities such as the overall work group. Theoretically, such an approach to explain workplace bullying also seems to more in accordance with the core reasoning in Leymann's (1996) work environment hypothesis, in that the overall quality of the working environment is what is most decisive for the occurrence of bullying, influencing to greater and lesser extent on the individuals employed within it. Empirically, such an approach makes it possible to investigate overall environmental characteristics as regards their relationship with individuals being exposed to bullying and for individuals engaging in bullying of others. By being able to identify organisational level factors that show a systematic relationship with bullying at the organisational level, such an approach also acknowledges that it is the quality of the working environment as such that is decisive for the occurrence of bullying. Such an approach not only reduces victim-blaming of exposed individuals, but rightfully places the responsibility for bullying on the employing organisation and its management, who in any case are responsible for what takes place within the organisation (Einarsen & Hoel, 2008).

Although the studies of this thesis and previous studies have shown factors such as role conflict and leadership practises to be consistently and strongly related to workplace bullying (Agervold & Mikkelsen, 2004; Einarsen et al., 1994), a considerable amount of variance is unaccounted for, suggesting that future research will need to investigate additional factors in order to more fully explain why bullying occurs (Notelaers et al., 2009). Thus, there is clearly a need to acknowledge that the causes of workplace bullying may also reside outside the individual, and that the reasons for why bullying occurs may be found at different levels of

explanations. Moreover, by shifting the focus of interest beyond the target being exposed to bullying, workplace bullying is also recognised as an organisational problem, not to be fully explained by individual experiences or individual characteristics of either the target or the perpetrator of bullying (Lewis, 2006). Socio-ecological approaches (e.g., McLeroy, Bibeau, Steckler, & Glanz, 1988) acknowledges that determinants of behaviour reside both within the individual as well as in larger social entities, such as the work group. A key feature of such models is that they incorporate two or more analytical levels, and thereby permits researchers to investigate both individual and aggregate manifestations of factors that may influence on phenomena such as workplace bullying. Thus, conceptual blind-spots resulting from an exclusive focus on either individual or environmental factors at single analytical levels are avoided by giving explicit attention to their continuous dynamic interplay (McLeroy et al., 1988). Future theory development on the concept of workplace bullying is likely to benefit considerably from adopting such an approach in aiming to bring about sound and thorough theoretical frameworks that can be rightfully empirically tested and validated.

3.3 Methodological Implications of Findings

More than a decade ago, Zapf (1999) stated that there is insufficient research undertaken to adequately explain why bullying occurs at workplaces, and that empirical investigations into the phenomenon of workplace bullying is hampered by methodological problems. Still, with the exception of the quite few studies emerging taking into account between-group differences in explaining bullying (e.g., Agervold, 2009), research aiming to explain why bullying develops has been carried out in more or less similar manners as back then, mainly focusing on the experiences of targets of bullying, and still not addressed important issues

such as causality between factors of interest. By investigating antecedents of bullying by means of different research approaches and analytical designs, the findings from the studies constituting this thesis therefore adds valuable knowledge to the research field of workplace bullying. Although some limitations and possible flaws of previous research were identified, the findings also point direction towards areas in which new knowledge is likely to advance.

One of the main conclusions that may be drawn from the above discussion is that more explicit theoretical frameworks are needed if research based knowledge as to why bullying occurs at workplaces is to advance. A sound theoretical framework is indeed important in terms of guiding researchers when conducting empirical research as regards relationships between environmental factors and workplace bullying. However, as the findings from the studies and the conceptual discussion shows, several conceptual and methodological questions need to be taken into consideration before firm conclusions regarding such relationships can be made. When investigating relationships between environmental factors and workplace bullying, researchers need to consider two main issues, namely, who is the focal person of interest, and what is the level of interest at which generalisations are to be made. Level issues may create particular problems when the level of theory, the level of measurement, or the level of analysis are incongruent (Klein, Dansereau, & Hall, 1994). As discussed above, the reasons for why perpetrators engage in bullying of others may be quite different from the reasons as to why an individual becomes a target of bullying. In consequence, how one conceptualises the role of the work environment in this process will be decisive for what kind of research questions can be adequately addressed, as well as for what kind of methodological approach should be employed. Below a model is proposed which may guide researchers when conducting research to explain why bullying occurs at workplaces, highlighting distinctions between target-oriented and actor-oriented approaches, as well as the level of analysis for the research questions of interest (Figure 1).

		Focal Level	
		Individual	Group
Focal Person	Perpetrator	<i>Individual Perpetrator</i>	<i>Group Perpetrator</i>
	Target	<i>Individual Target</i>	<i>Group Target</i>

Figure 1 *Research framework to explain workplace bullying*

If an individual level factor is considered as the cause of an individual level outcome, this relationship is rightfully addressed at an individual level of analysis. Similarly, if a higher-order factor is considered as the cause of a higher-order outcome, this relationship is rightfully addressed at a higher-order analytical level (e.g., the work-group level). If, on the other hand, the individual is in focus and the antecedent of interest may be considered to reside outside the individual and be located at a different level, such as the work-group or even the organisational level, an individual level approach will not be appropriate to address this research question, but in fact represent a fallacy of the wrong level (Hox, 2002). Thus, in order to adequately address the research question of interest, the methodological and

analytical approach applied will have to be in accordance with the theoretical framework for the particular research question (Heck & Thomas, 2009). Consequently, how one most rightfully may conceptualise work environment factors in relation to workplace bullying is therefore highly important for both theoretical and empirical reasons, and will be decisive for the choice of methodological approach to investigate such relationships.

To illustrate the above model, both individual and situational factors will be applied as examples of antecedent factors in relation to workplace bullying. An individual factor such as personality is rightfully analysed at an individual level, regardless if the focal person is a perpetrator or a target of bullying, and regardless of the controversy regarding personality as an antecedent of bullying. Moreover, in line with a stress theoretical framework (e.g., Karasek & Theorell, 1990; Lazarus & Folkman, 1984), a perceived situational factor such as role conflict is also rightfully analysed at an individual level, if this factor may be considered as the true cause of a subsequent response. As such, the individual's perception of a situational factor such as role conflict is what is decisive for the individual's subsequent response, for instance in relation to individual outcomes such as anxiety or job dissatisfaction. Following the same line of arguments in line with stress theory, individually perceived role conflict may be considered as an antecedent of individual enactment of aggression and bullying towards others (e.g., Spector & Fox, 2005), also rightfully addressed at an individual level of analysis. However, as shown by the longitudinal findings of this thesis, an individual level approach to explain exposure to workplace bullying by means of an individual perceived factor such as role conflict do not necessarily adequately address why individuals are being exposed to bullying. Therefore, this overall question may not be rightfully addressed by seeking its causes in the experiences of targets of bullying, but may rather be more rightfully addressed by seeking its causes in the working environment as such, and at a higher level of conceptualisation such as the overall work-group level. The work environment hypothesis

proposes bullying to develop due to poor working conditions and inadequate leadership practises within organisations (Leymann, 1996), and as such, the work environment hypothesis appears to be better conceptualised at a higher level of conceptualisation. By their very nature, organisations are multilevel and to investigate organisational phenomena is therefore to encounter level issues (Klein et al., 1994). Individuals work in teams and departments within the larger organisational context, and a range of complex and interrelated processes within such working units may cause different responses in individuals, possibly resulting in some individuals being exposed to bullying. However, who will end up as targets of bullying may be quite arbitrary and be dependent on a range of factors, such as the organisation's tolerance for bullying to unfold (Brodsky, 1976; Leymann, 1992). In consequence, such processes are more likely to be rightfully captured by analysing higher-order environmental factors as antecedents of exposure to workplace bullying in a multilevel framework. As illustrated, processes leading up to workplace bullying may indeed be complex and be influenced by factors at different explanatory levels, simultaneously. Thus, to reach valid empirical conclusions in order to address such complex and interwoven relationships, researchers must address the research questions at the levels at which they rightfully belong. Future research acknowledging that individuals are influenced by many factors at plural levels are likely to bring about valuable knowledge to the field, and thus to benefit many employees suffering from being exposed to workplace bullying.

3.4 Practical Implications of Findings

The primary aim of identifying antecedent conditions or risk factors of workplace bullying is not first and foremost of pure empirical interest, but rather of practical and applied interest.

When seeking to identify such factors from a scientific standpoint, counteracting bullying from workplaces must be the overall goal, for researchers, practitioners and management of organisations alike. However, before being able to implement research based interventions aimed at counteracting bullying, researchers must empirically demonstrate valid relationships between likely antecedents and workplace bullying (Salin, 2008). As such, the findings from the four studies constituting this thesis yield an important contribution to knowledge in the field and do point direction towards factors that are consistently associated with workplace bullying and where preventive measure may be successfully implemented.

According to the findings of this thesis, workplace bullying does not evolve out of nothing, but is rather a sign of larger and profound environmental problems in which a range of unfavourable factors are likely to co-exist in the development of bullying. The finding that not only targets but also observers of bullying tend to experience their working environments as overall negative and stressful supports such an assumption. In addition, by investigating differences in environmental characteristics between departments, evidence is provided demonstrating differences in the overall quality of the work environment between departments in which bullying is prevalent and departments in which it is not. Identifying antecedents of bullying at a higher level of conceptualisation, such as the overall work-group level, yield great potential in terms of counteracting bullying from workplaces. Counteracting bullying from an organisational perspective will not only avoid victim-blaming of exposed individuals, it may in fact prove to be the most effective way to proceed in reducing bullying from workplaces. Being able to identify which processes are taking place and which factors are present within environments in which bullying is prevalent, that are to a lesser extent present in others, may give researchers, practitioners and management valuable knowledge about factors that may be successfully altered or terminated, which in turn are likely to be associated with a significant reduction in the overall incidence of workplace bullying. In line

with Leymann's (1996) assumptions, the overall findings of this thesis show factors related to leadership practises, role conflicts and interpersonal conflicts to be especially important in relation to workplace bullying, factors that are to a great extent under managerial control, and thus open to change (Salin, 2008). Because the existence, prevention and constructive management of bullying resides with the managers and supervisors of organisations, leadership practises will be highly decisive in terms of counteracting bullying from workplaces (Einarsen & Hoel, 2008). Promoting positive and supportive leadership practises, ensuring that managers have received necessary training in conflict management, and creating a culture where all organisational members are treated fairly and with respect and in which bullying is not tolerated, are important factors in this respect. Bullying will only be able to occur within organisations that allow such behaviour to take place (Brodsky, 1976), and organisations in which a clear zero-tolerance for bullying have been stated will likely have low incidences of such behaviour, like have been shown in relation to sexual harassment (cf. Pryor & Fitzgerald, 2003). Accordingly, a well-developed anti-bullying policy which clearly communicates the organisation's commitment and intent in relation to dealing with bullying is a necessary and important tool in this respect (Einarsen & Hoel, 2008).

Interventions aimed at creating a social working climate characterised by openness and respect may prove valuable in preventing bullying, but also in terms of creating a work environment in which individuals are less exposed to stress, frustration and conflicts (Einarsen & Hoel, 2008). A well-run organisation, in which clear goals, roles, and responsibilities have been defined, is likely to have an overall low level of bullying. In terms of preventing bullying from workplaces, findings from research on school-bullying can point direction towards areas in which preventive measures may be successfully implemented (Olweus, 1993). Acknowledging that the school setting may be quite different from the work setting, sound implementation of intervention programs against school bullying, aimed at

defining acceptable behaviour and interaction among individuals in the school environment, have shown impressive reductions in both exposure to and enactment of bullying. In addition, marked improvements have been identified with regard to factors such as social climate and overall student satisfaction (cf. Olweus, 2003). Thus, thorough interventions aimed at multiple areas within the organisational context may improve the overall quality of the work environment within organisations, in addition to creating a climate in which bullying is less likely to prosper. Unfortunately, few, if any, studies have been undertaken to investigate the effects of such interventions as regards workplace bullying. However, such intervention studies are indeed important in terms of evaluating the effects of various intervention programs aimed at counteracting the problem.

3.5 Strengths and Limitations

A significant strength of the empirical studies constituting this thesis is that they are based on large, and in part, representative samples. Although generalisations to wider populations must always be done with caution, the use of large scale and heterogeneous samples generally increases the robustness of the findings (Tabachnick & Fidell, 2007). In addition, compared with surveys on workplace phenomena in general, the response rates in the present samples are quite high (cf. Baruch & Holtom, 2008). Moreover, the use of longitudinal data and multilevel approaches in investigating antecedents of workplace bullying also adds valuable knowledge to the field, previously mainly been approached by individual level research and by cross-sectional data. By applying a structural equation modelling approach, Paper 3 also addressed several issues raised in the literature relating to longitudinal studies, such as reverse causation, stability of constructs over time, and measurement error in observed indicators

(MacCallum & Austin, 2000; Zapf, Dormann, & Frese, 1996). Still, factors such as time lag and arbitrary measurement points in longitudinal studies may always be open to criticism. A too short time lag may lead to the conclusion that no causal effect exists, whereas a too long time lag may lead to an underestimation of the true causal effect (Zapf, Dormann et al., 1996). As the literature gives little indication of when environmental factors may result in bullying, the validity of the findings from Paper 3 needs to be further tested in future research. Nevertheless, because different time lags may have different effects and no one time lag is the only correct or true one, other time lags than the two-year time lag employed in Paper 3 should also be investigated in order to more fully understand the nature and effects of various time lags in relation to bullying (cf. Gollob & Reichardt, 1987). Future research aiming at investigating such causal individual level relationships between environmental factors and workplace bullying is likely to benefit from also taking into account how environmental factors may relate to enactment of bullying over time, theoretically founded within a traditional job-stress and aggression framework (e.g., Spector & Fox, 2005).

The samples applied in this thesis all rely on single-source self-report data, which may entail the possibility of common method bias in that some of the variation observed may be attributable to the measurement method rather than to true variation in the constructs the measures are aimed to represent (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Relying solely on self-report methodology may be problematic, and probably especially so with regard to factors such as enactment of bullying, due to the detrimental nature of such behaviour. Although anonymity is ensured, there exists a significant possibility that individuals will underreport engagement in such behaviour. Such underreporting may attenuate correlations between enactment of workplace bullying and other variables because some individuals will be less honest in their reporting than others, and thus introduce error in the observed relationships (Spector & Fox, 2005). Triangulation with other sources of information such as

peer-reported behaviour may prove useful in aiming at reducing possible mono-method bias. Another concern, relating to Paper 4, is the aggregation of individual level responses to reflect shared environmental characteristics as a proximate for the objective working environment. Preferably, actual higher order characteristics would be applied to reflect such environmental factors. Yet, as shown by the intraclass correlations calculated, the data contained sufficient between-group variation to warrant the use of multilevel modelling, thus indicating that the shared individual level responses may be applied as an expression of the overall work group.

It must also be noted that other factors than those investigated in the papers of this thesis may be relevant and play an important role in relation to workplace bullying. Especially with regard to environmental or organisational characteristics, it may be additional factors that may explain the occurrence of bullying. For instance, a distinction between departments in which blue-collar workers are employed versus departments in which white-collar workers are employed may reflect different processes in interaction among individuals, and may prove to yield valuable knowledge in mapping risk factors for bullying. Overall, future studies aiming at employing multilevel approaches in explaining workplace bullying is likely to bring valuable knowledge to the field.

4. CONCLUSIONS

The severe consequences observed in targets of bullying make in itself workplace bullying a highly important phenomenon to study. As such, the overall findings of this thesis substantiate workplace bullying as an environmental as well as a considerable leadership problem. At the end of the day, supervisors and managers are responsible for what is taking place within their organisations, and although they may not be directly involved in specific bullying cases, they are by their positions as employers inherently responsible for ensuring a satisfactory environment in which all employees are treated with dignity and respect. Taken together, the findings from the studies in this thesis yield valuable knowledge as to why bullying occurs at workplaces, which in turn may help many employees suffering from workplace bullying by pointing direction towards areas in which preventive measures against bullying is likely to be successfully implemented. At the same time, the findings also show that more explicit theoretical frameworks are needed to adequately explain why bullying occurs at workplaces. More theory driven research is clearly needed in order to shed light on a range of different issues not yet satisfactorily answered. As such, the findings and conclusions to be made from this thesis may indeed point direction towards areas in which research on workplace bullying may be advanced.

REFERENCES

- Adams, A. (1992). *Bullying at work: How to confront and overcome it*. London: Virago Press Ltd.
- Agervold, M. (2009). The significance of organizational factors for the incidence of bullying. *Scandinavian Journal of Psychology, 50*(3), 267-276.
- Agervold, M., & Mikkelsen, E. G. (2004). Relationships between bullying, psychosocial work environment and individual stress reactions. *Work & Stress, 18*(4), 336-351.
- Anderson, C. A., & Bushman, B. J. (2002). Human Aggression. *Annual Review of Psychology, 53*, 27-51.
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of Management Review, 24*(3), 452-471.
- Aquino, K., & Bradfield, M. (2000). Perceived victimization in the workplace: The role of situational factors and victim characteristics. *Organization Science, 11*(5), 525-537.
- Aquino, K., & Douglas, S. (2003). Identity threat and antisocial behavior in organizations: The moderating effects of individual differences, aggressive modeling, and hierarchical status. *Organizational Behavior and Human Decision Processes, 90*, 195-208.
- Aquino, K., Grover, S. L., Bradfield, M., & Allen, D. G. (1999). The effects of negative affectivity, hierarchical status, and self-determination on workplace victimization. *Academy of Management Journal, 42*(3), 260-272.
- Aquino, K., & Thau, S. (2009). Workplace victimization: Aggression from the target's perspective. *Annual Review of Psychology, 60*, 717-741.
- Ashforth, B. (1994). Petty tyranny in organizations. *Human Relations, 47*(7), 755-778.
- Baillien, E., Neyens, I., De Witte, H., & De Cuyper, N. (2009). A qualitative study on the development of workplace bullying: Towards a three way model. *Journal of Community & Applied Social Psychology, 19*(1), 1-16.
- Barling, J., Dupré, K. E., & Kelloway, E. K. (2009). Predicting workplace aggression and violence. *Annual Review of Psychology, 60*, 671-692.
- Baron, R. A., & Neuman, J. H. (1998). Workplace aggression - The iceberg beneath the tip of workplace violence: Evidence on its forms, frequency, and targets. *Public Administration Quarterly, 21*(4), 446-464.
- Baruch, Y., & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relations, 61*(8), 1139-1160.
- Bass, B. M., & Avolio, B. J. (1990). *Transformational leadership development: Manual for the Multifactor Leadership Questionnaire*. Palo Alto, CA: Consulting Psychologists Press.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*(3), 497-529.
- Beehr, T. A., Walsh, J. T., & Taber, T. D. (1976). Relationships of stress to individually and organizationally valued states: Higher order needs as a moderator. *Journal of Applied Psychology, 61*(1), 41-47.
- Berkowitz, L. (1989). Frustration-Aggression hypothesis: Examination and reformulation. *Psychological Bulletin, 106*(1), 59-73.
- Björkqvist, K., Österman, K., & Hjelt-Bäck, M. (1994). Aggression among university employees. *Aggressive Behavior, 20*, 173-184.

- Bowling, N. A., & Beehr, T. A. (2006). Workplace harassment from the victim's perspective: A theoretical model and meta-analysis. *Journal of Applied Psychology, 91*(5), 998-1012.
- Brayfield, A. H., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology, 35*(5), 307-311.
- Brodsky, C. M. (1976). *The harassed worker*. Toronto: Lexington Books.
- Chen, P. Y., & Spector, P. E. (1992). Relationships of work stressors with aggression, withdrawal, theft and substance use: An exploratory study. *Journal of Occupational and Organizational Psychology, 65*(3), 177-184.
- Coyne, I., Chong, P. S.-L., Seigne, E., & Randall, P. (2003). Self and peer nominations of bullying: An analysis of incident rates, individual differences, and perceptions of the working environment. *European Journal of Work and Organizational Psychology, 12*(3), 209-228.
- Coyne, I., Seigne, E., & Randall, P. (2000). Predicting workplace victim status from personality. *European Journal of Work and Organizational Psychology, 9*(3), 335-349.
- Dallner, M., Elo, A.-L., Gamberale, F., Hottinen, V., Knardahl, S., Lindström, K., et al. (2000). *Validation of the General Nordic Questionnaire (QPSNordic) for Psychological and Social Factors at Work*. Copenhagen: Nordic Council of Ministers.
- De Cuyper, N., Baillien, E., & De Witte, H. (2009). Job insecurity, perceived employability and targets' and perpetrators' experiences of workplace bullying. *Work & Stress, 23*(3), 206-224.
- Duffy, M. K., Ganster, D., & Pagon, M. (2002). Social undermining in the workplace. *Academy of Management Journal, 45*(2), 331-351.
- Einarsen, S. (1999). The nature and causes of bullying at work. *International Journal of Manpower, 20*(1/2), 16-27.
- Einarsen, S., & Hoel, H. (2008). Bullying and Mistreatment at Work: How Managers May Prevent and Manage Such Problems. In A. Kinder, R. Hughes & C. L. Cooper (Eds.), *Employee Well-being Support: A Workplace Resource* (pp. 161-173). Chichester: John Wiley & Sons Ltd.
- Einarsen, S., Hoel, H., & Notelaers, G. (2009). Measuring exposure to bullying and harassment at work: Validity, factor structure and psychometric properties of the Negative Acts Questionnaire-Revised. *Work & Stress, 23*(1), 24-44.
- Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. L. (2003). The concept of bullying at work: The European tradition. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace. International perspectives in research and practice* (pp. 3-30). London: Taylor & Francis.
- Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. L. (2005). Workplace bullying: Individual pathology or organizational culture? In V. Bowie, B. S. Fisher & C. L. Cooper (Eds.), *Workplace violence: Issues, trends, strategies* (pp. 229-247). Cullompton: Willan.
- Einarsen, S., Matthiesen, S. B., & Hauge, L. J. (2008). Bullying and Harassment at Work. In S. Cartwright & C. L. Cooper (Eds.), *The Oxford Handbook of Personnel Psychology* (pp. 464-495). New York: Oxford University Press Inc.
- Einarsen, S., Matthiesen, S. B., & Skogstad, A. (1998). Bullying, burnout and well-being among assistant nurses. *Journal of Occupational Health and Safety - Australia and New Zealand, 14*(6), 563-568.
- Einarsen, S., Raknes, B. I., & Matthiesen, S. B. (1994). Bullying and harassment at work and their relationship to work environment quality: An exploratory study. *European Work and Organizational Psychologist, 4*(4), 381-401.

-
- Einarsen, S., & Skogstad, A. (1996). Bullying at work: Epidemiological findings in public and private organizations. *European Journal of Work and Organizational Psychology*, 5(2), 185-201.
- Einarsen, S., Skogstad, A., Løseth, A. M. S. B., & Aasland, M. S. (2002). *Destructive leadership: A behavioural model*. Paper presented at the Forskning ved Institutt for samfunnspsykologi, Bergen.
- Einarsen, S., Aasland, M. S., & Skogstad, A. (2007). Destructive leadership behaviour: A definition and conceptual model. *Leadership Quarterly*, 18(3), 207-216.
- Ekvall, G., & Arvonen, J. (1991). Change-centered leadership: An extension of the two-dimensional model. *Scandinavian Journal of Management*, 7(1), 17-26.
- Fox, S., & Spector, P. E. (1999). A model of work frustration-aggression. *Journal of Organizational Behavior*, 20(6), 915-931.
- Fox, S., Spector, P. E., & Miles, D. (2001). Counterproductive work behavior (CWB) in response to job stressors and organizational justice: Some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior*, 59(3), 291-309.
- Frese, M., & Zapf, D. (1988). Methodological issues in the study of work stress: Objective vs subjective measurement of work stress and the question of longitudinal studies. In C. L. Cooper & R. Payne (Eds.), *Causes, coping and consequences of stress at work* (pp. 375-411). Oxford: John Wiley and Sons.
- Glasø, L., Matthiesen, S. B., Nielsen, M. B., & Einarsen, S. (2007). Do targets of workplace bullying portray a general victim personality profile? *Scandinavian Journal of Psychology*, 48(4), 313-319.
- Glomb, T. M., & Liao, H. (2003). Interpersonal aggression in work groups: Social influence, reciprocal, and individual effects. *Academy of Management Journal*, 46(4), 486-496.
- Gollob, H. F., & Reichardt, C. S. (1987). Taking account of time lags in causal models. *Child Development*, 58(1), 80-92.
- Grandey, A. A., Kern, J. H., & Frone, M. R. (2007). Verbal abuse from outsiders versus insiders: Comparing frequency, impact on emotional exhaustion, and the role of emotional labor. *Journal of Occupational Health Psychology*, 12(1), 63-79.
- Hansen, Å. M., Hogh, A., Persson, R., Karlson, B., Garde, A. H., & Ørbæk, P. (2006). Bullying at work, health outcomes, and physiological stress response. *Journal of Psychosomatic Research*, 60(1), 63-72.
- Hauge, L. J., Skogstad, A., & Einarsen, S. (2007). Relationships between stressful work environments and bullying: Results of a large representative study. *Work & Stress*, 21(3), 220-242.
- Hauge, L. J., Skogstad, A., & Einarsen, S. (2009). Individual and situational predictors of workplace bullying: Why do perpetrators engage in the bullying of others? *Work & Stress*, 23(4), 349-358.
- Hauge, L. J., Skogstad, A., & Einarsen, S. (in press). The relative impact of workplace bullying as a social stressor at work. *Scandinavian Journal of Psychology*.
- Heck, R. H., & Thomas, S. L. (2009). *An Introduction to Multilevel Modeling Techniques* (2nd ed.). New York: Routledge.
- Hellgren, J., Sverke, M., & Isaksson, K. (1999). A two-dimensional approach to job insecurity: Consequences for employee attitudes and well-being. *European Journal of Work and Organizational Psychology*, 8(2), 179-195.
- Hershcovis, M. S., & Barling, J. (2010). Towards a multi-foci approach to workplace aggression: A meta-analytic review of outcomes from different perpetrators. *Journal of Organizational Behavior*, 31(1), 24-44.

- Hershcovis, M. S., Turner, N., Barling, J., Arnold, K. A., Dupre, K. E., Inness, M., et al. (2007). Predicting workplace aggression: A meta-analysis. *Journal of Applied Psychology, 92*(1), 228-238.
- Hoel, H., & Cooper, C. L. (2000). *Destructive conflict and bullying at work*. Manchester: Manchester School of Management, University of Manchester Institute Science and Technology.
- Hoel, H., Cooper, C. L., & Faragher, B. (2001). The experience of bullying in Great Britain: The impact of organizational status. *European Journal of Work and Organizational Psychology, 10*(4), 443-465.
- Hoel, H., Rayner, C., & Cooper, C. L. (1999). Workplace bullying. In C. L. Cooper & I. T. Robertson (Eds.), *International review of industrial and organizational psychology* (pp. 195-230). Chichester: John Wiley & Sons.
- Hoel, H., & Salin, D. (2003). Organisational antecedents of workplace bullying. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace: International perspectives in research and practice* (pp. 203-218). London: Taylor & Francis.
- Hoel, H., Zapf, D., & Cooper, C. L. (2002). Workplace bullying and stress. In P. L. Perrewe & D. C. Ganster (Eds.), *Historical and current perspectives on stress and health* (Vol. 2, pp. 293-333). Amsterdam: Jai.
- Hogh, A., Borg, V., & Mikkelsen, K. L. (2003). Work-related violence as a predictor of fatigue: A 5- year follow-up of the Danish Work Environment Cohort Study. *Work and Stress, 17*(2), 182-194.
- Hox, J. (2002). *Multilevel analysis: Techniques and Applications*. Mahwah, NJ: Lawrence Erlbaum Associates, Publishers.
- Høstmark, M., & Lagerstrøm, B. O. (2006). *Undersøkelse om arbeidsmiljø: Destruktiv atferd i arbeidslivet. Dokumentasjonsrapport [A study of work environments: Destructive behaviours in working life. Documentation report]* (No. 44): Statistics Norway (SSB).
- Jennifer, D., Cowie, H., & Ananiadou, K. (2003). Perceptions and experience of workplace bullying in five different working populations. *Aggressive Behavior, 29*(6), 489-496.
- Jöreskog, K. G., & Sörbom, D. (1996). *LISREL 8: User's Reference Guide* (2nd ed.). Chicago, IL: Scientific Software International.
- Kahn, R. L., Wolfe, D. M., Quinn, R. P., Snoek, D. J., & Rosenthal, R. A. (1964). *Organizational Stress: Studies in Role Conflict and Ambiguity*. New York: John Wiley & Sons.
- Karasek, R. A., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic Books.
- Katz, D., & Kahn, R. L. (1978). *The Social Psychology of Organizations*. New York: John Wiley & Sons.
- Keashly, L., & Harvey, S. (2005). Emotional abuse in the workplace. In S. Fox & P. E. Spector (Eds.), *Counterproductive behavior. Investigations of actors and targets* (pp. 201-235). Washington, DC: American Psychological Association.
- Keashly, L., Hunter, S., & Harvey, S. (1997). Abusive interaction and role state stressors: Relative impact on student residence assistant stress and work attitudes. *Work and Stress, 11*(2), 175-185.
- Keashly, L., & Jagatic, K. (2003). By another name: American perspectives on workplace bullying. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace. International perspectives in research and practice* (pp. 31-61). London: Taylor & Francis.

-
- Keashly, L., & Nowell, B. L. (2003). Conflict, conflict resolution and bullying. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace. International perspectives in research and practice* (pp. 339-358). London: Taylor & Francis.
- Kile, S. M. (1990). *Helsefarlige ledere og medarbeidere [Health endangering leaders and co-workers]*. Oslo: Hjemmets Bokforlag AS.
- Klein, K. J., Dansereau, F., & Hall, R. J. (1994). Levels issues in theory development, data collection, and analysis. *Academy of Management Review*, 19(2), 195-229.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company.
- Lee, R. T., & Brotheridge, C. M. (2006). When prey turns predatory: Workplace bullying as a predictor of counteraggression/bullying, coping, and well-being. *European Journal of Work and Organizational Psychology*, 15(3), 352-377.
- Lewis, S. E. (2006). Recognition of workplace bullying: A qualitative study of women targets in the public sector. *Journal of Community & Applied Social Psychology*, 16(2), 119-135.
- Leymann, H. (1986). *Vuxenmobbing - Om psykiskt våld i arbetslivet [Mobbing - psychological violence at work places]*. Lund: Studentlitteratur.
- Leymann, H. (1990). Mobbing and psychological terror at workplaces. *Violence and Victims*, 5(2), 119-126.
- Leymann, H. (1992). *Från mobbing till utslagning i arbetslivet [From mobbing to expulsion in work life]*. Stockholm: Publica.
- Leymann, H. (1996). The content and development of mobbing at work. *European Journal of Work and Organizational Psychology*, 5(2), 165-184.
- Leymann, H., & Gustafsson, A. (1996). Mobbing at work and the development of post-traumatic stress disorders. *European Journal of Work and Organizational Psychology*, 5(2), 251-275.
- MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology*, 51, 201-226.
- Magerøy, N., Lau, B., Riise, T., & Moen, B. E. (2009). Association of psychosocial factors and bullying at individual and department levels among naval military personnel. *Journal of Psychosomatic Research*, 66(4), 343-351.
- Marcus-Newhall, A., Pedersen, W. C., Carlson, M., & Miller, N. (2000). Displaced aggression is alive and well: A meta-analytic review. *Journal of Personality and Social Psychology*, 78(4), 670-689.
- Matthiesen, S. B., & Einarsen, S. (2007). Perpetrators and targets of bullying at work: Role stress and individual differences. *Violence and Victims*, 22(6), 735-753.
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15(4), 351-377.
- Mikkelsen, E. G., & Einarsen, S. (2001). Bullying in Danish work-life: Prevalence and health correlates. *European Journal of Work and Organizational Psychology*, 10(4), 393-413.
- Mikkelsen, E. G., & Einarsen, S. (2002). Relationships between exposure to bullying at work and psychological and psychosomatic health complaints: The role of state negative affectivity and generalized self-efficacy. *Scandinavian Journal of Psychology*, 43(5), 397-405.
- Muthén, L. K., & Muthén, B. O. (1998-2007). *Mplus User's Guide. Fifth Edition*. Los Angeles, CA: Muthén & Muthén.

- Neuman, J. H., & Baron, R. A. (2003). Social antecedents of bullying: A social interactionist perspective. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace. International perspectives in research and practice* (pp. 185-202). London: Taylor & Francis.
- Nielsen, M. B., Skogstad, A., Matthiesen, S. B., Glasø, L., Aasland, M. S., Notelaers, G., et al. (2009). Prevalence of workplace bullying in Norway: Comparisons across time and estimation methods. *European Journal of Work and Organizational Psychology, 18*(1), 81-101.
- Notelaers, G., De Witte, H., & Einarsen, S. (2009). A job characteristics approach to explain workplace bullying. *European Journal of Work and Organizational Psychology, First Published Online 30 November 2009 (iFirst)*.
- Notelaers, G., & Einarsen, S. (2008). *The construction and validity of the Short - Negative Acts Questionnaire*. Paper presented at the 6th International Conference on Workplace Bullying, Montréal.
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Oxford: Blackwell Publishers.
- Olweus, D. (2003). Bully/victim problems in school: Basic facts and an effective intervention programme. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace. International perspectives in research and practice* (pp. 62-78). London: Taylor & Francis.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879-903.
- Pryor, J. B., & Fitzgerald, L. F. (2003). Sexual harassment research in the United States. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace. International perspectives in research and practice* (pp. 79-100). London: Taylor & Francis.
- Rayner, C. (1997). The incidence of workplace bullying. *Journal of Community & Applied Social Psychology, 7*, 199-208.
- Rizzo, J. R., House, R. J., & Lirtzman, S. I. (1970). Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly, 15*(2), 150-163.
- Salin, D. (2001). Prevalence and forms of bullying among business professionals: A comparison of two different strategies for measuring bullying. *European Journal of Work and Organizational Psychology, 10*(4), 425-441.
- Salin, D. (2003). Bullying and organisational politics in competitive and rapidly changing work environments. *International Journal of Management and Decision Making, 4*(1), 35-46.
- Salin, D. (2008). The prevention of workplace bullying as a question of human resource management: Measurements adopted and underlying organizational factors. *Scandinavian Journal of Management, 24*, 221-231.
- Shaw, J. C., Wild, E., & Colquitt, J. A. (2003). To justify or excuse? A meta-analytic review of the effects of explanations. *Journal of Applied Psychology, 88*(3), 444-458.
- Skogstad, A., Einarsen, S., Torsheim, T., Aasland, M. S., & Hetland, H. (2007). The destructiveness of Laissez-Faire leadership behavior. *Journal of Occupational Health Psychology, 12*(1), 80-92.
- Spector, P. E., & Fox, S. (2005). The stressor-emotion model of counterproductive work behavior. In S. Fox & P. E. Spector (Eds.), *Counterproductive behavior. Investigations of actors and targets* (pp. 151-174). Washington, DC: American Psychological Association.

-
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using Multivariate Statistics* (5th ed.). Boston: Pearson Education, Inc.
- Tedeschi, J. T., & Felson, R. B. (1994). *Violence, aggression & coercive actions*. Washington, D.C.: American Psychological Association.
- Tepper, B. J. (2000). Consequences of abusive supervision. *Academy of Management Journal*, 43(2), 178-190.
- Thylefors, I. (1987). *Syndabockar. Om utstötning och mobbning i arbetslivet [Scapegoats. About expulsion and bullying in working life]*. Stockholm: Natur och Kultur.
- van Veldhoven, M., & Meijman, T. F. (1994). *Het meten van psychosociale arbeidsbelasting met een vragenlijst: de vragenlijst beleving en beoordeling van de arbeid (VBBA) [The measurement of psychosocial job demands with a questionnaire: The questionnaire on the experience and evaluation of work (QEEW)]*. Amsterdam: Nederlands Instituut voor Arbeidsomstandigheden.
- Vartia, M. (1996). The sources of bullying - Psychological work environment and organizational climate. *European Journal of Work and Organizational Psychology*, 5(2), 203-214.
- Vartia, M. (2001). Consequences of workplace bullying with respect to the well-being of its targets and the observers of bullying. *Scandinavian Journal of Work, Environment and Health*, 27(1), 63-69.
- Vartia, M., & Hyyti, J. (2002). Gender differences in workplace bullying among prison officers. *European Journal of Work and Organizational Psychology*, 11(1), 113-126.
- Wilson, C. B. (1991). U.S. businesses suffer from workplace trauma. *Personnel Journal*, 70(7), 47-50.
- Zapf, D. (1999). Organisational, work group related and personal causes of mobbing/bullying at work. *International Journal of Manpower*, 20(1/2), 70-85.
- Zapf, D., Dormann, C., & Frese, M. (1996). Longitudinal studies in organizational stress research: A review of the literature with reference to methodological issues. *Journal of Occupational Health Psychology*, 1(2), 145-169.
- Zapf, D., & Einarsen, S. (2003). Individual antecedents of bullying: Victims and perpetrators. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and emotional abuse in the workplace. International perspectives in research and practice* (pp. 165-184). London: Taylor & Francis.
- Zapf, D., & Einarsen, S. (2005). Mobbing at work: Escalated conflicts in organizations. In S. Fox & P. E. Spector (Eds.), *Counterproductive work behavior. Investigations of actors and targets* (pp. 237-270). Washington, DC: American Psychological Association.
- 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., Knorz, C., & Kulla, M. (1996). On the relationship between mobbing factors, and job content, the social work environment and health outcomes. *European Journal of Work and Organizational Psychology*, 5(2), 215-237.
- Örtqvist, D., & Wincent, J. (2006). Prominent consequences of role stress: A meta-analytic review. *International Journal of Stress Management*, 13(4), 399-422.

Appendix: Items constituting the Negative Acts Questionnaire (NAQ-R)

1. Someone withholding information which affects your performance *
2. Being humiliated or ridiculed in connection with your work
3. Being ordered to do work below your level of competence
4. Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks
5. Spreading of gossip and rumours about you *
6. Being ignored or excluded *
7. Having insulting or offensive remarks made about your person, attitudes or your private life *
8. Being shouted at or being the target of spontaneous anger *
9. Intimidating behaviours such as finger-pointing, invasion of personal space, shoving, blocking your way
10. Hints or signals from others that you should quit your job
11. Repeated reminders of your errors or mistakes *
12. Being ignored or facing a hostile reaction when you approach *
13. Persistent criticism of your work or work-effort *
14. Having your opinions ignored
15. Practical jokes carried out by people you don't get along with *
16. Being given tasks with unreasonable deadlines
17. Having allegations made against you
18. Excessive monitoring of your work
19. Pressure not to claim something to which by right you are entitled (e.g., sick leave, holiday, entitlement, travel expenses)
20. Being the subject of excessive teasing and sarcasm
21. Being exposed to an unmanageable workload
22. Threats of violence or physical abuse or actual abuse

Note. Items marked by an asterisk constitute the nine item short-version of the Negative Acts Questionnaire (NAQ-S).