THE RELATIONSHIP BETWEEN THE OCCURRENCE OF CONFLICTS IN THE WORK UNIT, THE CONFLICT MANAGEMENT STYLES IN THE WORK UNIT AND WORKPLACE BULLYING

Elfi BAILLIEN & Hans DE WITTE
Katholieke Universiteit Leuven

The current study examines the relationship between the occurrence of conflicts in the work unit and conflict management styles in the work unit, and workplace bullying. First, we assume a positive relationship between the occurrence of conflicts and bullying; and that the conflict management styles 'fighting', 'avoiding' and 'yielding' associate positively and 'problem solving' associates negatively with bullying. Second, we expect that the work unit's conflict management styles moderate the relationship between the occurrence of conflicts and bullying. Results (N = 942) revealed a positive association between the occurrence of conflicts and bullying, as well as between fighting and bullying. Problem solving related negatively with bullying. Unexpectedly, we found no moderation. Our findings suggest that particularly the occurrence of conflicts relate to bullying, which may be owed to a strong negative connotation associated with (many) conflicts at work or to its negative impact on the work unit's social climate. Organisations may also encourage problem solving and discourage fighting to prevent bullying.

Introduction

Over the last decade researchers have been focussing on 'workplace bullying', a phenomenon that has predominantly been attributed to a stressful and discordant work environment (i.e., 'the work environment hypothesis'; see Hauge, Skogstad, & Einarsen, 2007; Leymann, 1996). Despite valuable suggestions as respects the role of a conflictuous work environment in the development of workplace bullying, rather few studies to date have explicitly focussed upon this issue. Indeed, research has identified the occurrence and management of conflicts as one of its main causes (e.g., Baillien, Neyens, De Witte, & De Cuyper, 2009; Einarsen, 1999; Vartia, 1996; Zapf & Gross, 2001). However, which specific conflict management styles may encourage workplace bullying has, to the best of our knowledge, not been investigated so far. Moreover, the studies that have explored such styles considered conflict management as a social competence of the employee (e.g., Zapf, 1999)

instead of a work environmental feature. Therefore, the current study aims to investigate the relationship between conflicts and bullying from a work environmental perspective; the work unit's tendency to engage in conflict (i.e., the occurrence of conflicts within the work unit) and its ways of managing these conflicts (i.e., the work unit's conflict management styles).

The aims of the current study are threefold. First, it wants to add to the bullying literature by investigating whether the occurrence of conflicts and conflict management styles relate to bullying. One specific innovation concerns that we define the conflict management styles by means of a well-known theoretical framework in the realm of conflict management, i.e., the Dual Concern Theory (De Dreu, Weingart, & Kwon, 2000; Pruit & Rubin, 1986; Van de Vliert, 1997). Second, inspired by recent theorising in the workplace bullying research domain, the study investigates whether these conflict management styles moderate the relationship between occurrence of conflicts and workplace bullying. Third, the study aims to adopt the work environment hypothesis to conflict and conflict management by investigating the occurrence as well as management of conflicts from a work unit perspective.

Workplace bullying versus conflicts at work: conceptual differences

Workplace bullying refers to systematic (e.g., weekly) and persistent (e.g., six months) exposure to negative acts at work (Einarsen, 2000; Leymann, 1996; Notelaers, Einarsen, De Witte, & Vermunt, 2006). These acts may concern work-related (e.g., withholding information) or personal issues (e.g., gossiping, social isolation). They often cause humiliation, anxiety, depression and distress (Björkvist, Österman, & Hjelt Bäck, 1994; Mikkelsen & Einarsen, 2002), and may interfere with job performance and/or cause an unpleasant work environment (Hoel, Zapf, & Cooper, 2002; Kivimäki, Elovaino, & Vahtera, 2000; Quine, 2002).

Conflict, on the other hand, refers to an interaction between two individuals, an individual and a group or two groups in which at least one of the parties feels obstructed or irritated by the other (Van de Vliert, 1997, p. 351). Following this definition, some scholars have thought of bullying as a subset of conflicts (e.g., De Dreu, Emans, Euwema, & Steensma, 2001) or as an extreme form of (relational) conflict (De Dreu, Van Dierendonck, & Dijkstra, 2004). By contrast, however, numerous researchers in the realm of bullying underlined that equating bullying with conflict underestimates its unethical and counterproductive nature (e.g., Keashly & Nowell, 2003; Matthiesen & Einarsen, unpublished manuscript). Firstly, they stress that workplace bullying involves stigmatisation of one particular employee, the target, into an inferior position, which hampers the target's possibilities to

counteract the negative acts (Einarsen, Raknes, & Matthiesen, 1994; Einarsen & Skogstad, 2006; Leymann, 1996; Zapf & Gross, 2001). Stigmatisation is not a defining characteristic of conflict (e.g., Jehn, 1995). Secondly, conflicts may be short as well as rather long-standing, including a single episode (for instance, unclear procedures are clarified as soon as they caused a misunderstanding) or a series of episodes (for instance, a long-lasting discussion between two employees regarding who's responsible for a certain task). Bullying, in contrast, is by definition long-standing and refers to the outcome of a subsequent number of episodes in which negative acts escalate over time (Einarsen et al., 1994; Olweus, 1990). Thirdly, workplace bullying clearly has a negative connotation which is reflected in systematically directing negative acts towards a specific employee. Conflicts do not necessarily yield a negative connotation (Thomas, 1992). And finally, bullying contains an actual or by the victim perceived intention to cause harm (Björkvist et al., 1994). Intention, however, is not a defining element of conflicts. In sum, we may thus conclude that workplace bullying and conflicts at work differ on a conceptual level and cannot be regarded as interchangeable phenomena.

Conflict and conflict management: antecedents of workplace bullying

Research in the realm of workplace bullying however identified conflict as an antecedent of workplace bullying, both on an empirical and theoretical level. As respects empirical findings, targets identified conflicts as one of the main causes of bullying (e.g., O'Moore, Lynch, & Daéid, 2003; Zapf, 1999; Zapf, Knorz, & Kulla, 1996). Investigating the relative strength of a broad range of organisational antecedents of bullying (i.e., job stressors, leadership behaviour and aspects of the organisational climate), interpersonal conflict was revealed as one of its strongest predictors (Hauge et al., 2007). By means of a multi-method approach, Ayoko, Callan, and Härtel (2003) found that conflict incidents successfully predicted workplace bullying. Moreover, their results suggest a significant relationship between the employee's reaction to conflicts and bullying: 'productive reactions' (i.e., solving the conflict) related to a decrease in bullying, whereas 'destructive reactions' (i.e., ignoring the conflict or wanting to win the fight) associated with increased bullying. In other words, not only conflict(s) as such, but also how employees manage such conflict(s) may encourage or discourage workplace bullying. These results align with earlier findings from Vartia (1996), who identified reactions to conflicts as an important work environmental antecedent of bullying. At bullying workplaces, conflicts were for the greater part managed by taking advantage of one's position of authority. At bullying-free workplaces, conflicts were usually settled by means of negotiation and open communication. In summary, empirical findings suggest two

crucial conflict related components which determine whether or not bullying may arise: the occurrence of conflicts within the work environment and the employee's or work unit's way of managing conflicts.

As respects theory, Leymann (1996) formulated a four stage bullying model in which the starting point of bullying lies in an unresolved conflict (i.e., stage one). In stage two, power differences come into the picture and the weaker employee in the conflict is stigmatised in his or her role as a target. Prejudices about the target develop, and these, in turn, justify and encourage more acts of bullying. In stage three, the supervisor adopts the group's prejudices about the target. Consequently, he or she rarely puts an end to the bullying acts and further reinforces the target's role instead. Eventually, the target may quit the job, leave the organisation or may even commit suicide (i.e., stage four). In this model, stages two to four refer to the actual bullying (Leymann, 1996), as the result of the unresolved conflict in stage one. In line with Leymann (1996), Glasl's (1982; 1994) model relates conflict escalation to destructive behaviour such as bullying through three stages. First, the employees involved focus on the conflict's content and seek a rational and reasonable solution (i.e., 'rational conflict'). Gradually, both parties realise and stress each other's differences (i.e., 'polarisation'). Second, the initial conflict (i.e., what is the problem?) is replaced by personal concerns (i.e., who is the problem?) (i.e., 'emotional/rational conflict') and is fuelled by fear of losing face, concerns about one's own reputation and threats to the opposite party. Third, the employees aim at destructing the opposite party, which, in turn, encourages a pattern of negative behaviour or bullying (Zapf & Gross, 2001). In this model, stage three refers to bullying, as a result from the conflict stages one and two. The importance of conflict was also underlined by Einarsen (1999), who distinguished 'dispute related bullying' (i.e., bullying as a result of quarrels and personal conflicts) and 'predatory bullying' (i.e., bullying as the result of venting stress and frustration on a co-worker) to account for two important situations in which bullying may arise. The recently developed Three Way Model of Workplace Bullying further elaborated on this distinction by adding a process-view based on 87 bullying incidents (Baillien et al., 2009). One process, and most critical in the context of this paper, underlined that the occurrence of conflicts at work and the way they are managed may contribute to bullying: escalatory management styles may encourage workplace bullying; whereas de-escalatory management styles may discourage bullying. Moreover, conflicts at work specifically relate to bullying when managed badly, suggesting that conflict management moderates the association between conflicts and workplace bullying. A second process concerned inefficient coping with strain and frustration; the third process concerned a direct relationship between team and organisational characteristics (e.g., culture of gossip) and bullying.

In sum, we can conclude that bullying may result from the occurrence of conflicts as well as the way conflicts are managed. The empirical findings and models described above, however, do not specify which ways of managing conflicts (i.e., conflict management styles) may encourage or discourage bullying. The current study wants to address this issue by drawing on the Dual Concern Theory (De Dreu et al., 2000; Pruit & Rubin, 1986; Van de Vliert, 1997).
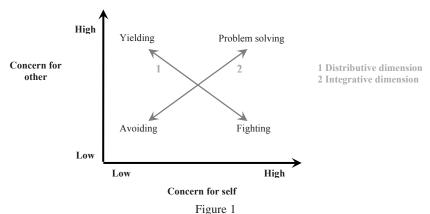
Dual Concern Theory

The Dual Concern Theory (De Dreu et al., 2000; Pruit & Rubin, 1986; Van de Vliert, 1997) defines four[1] conflict management styles, namely 'fighting', 'avoiding', 'problem solving', and 'yielding' (see Figure 1). These conflict management styles are determined by two central concerns. A first concern refers to the importance of reaching one's own goal. The second deals with the concerns regarding the opposite party's welfare. 'Fighting' results from a high care for one's own goals and a low interest in the opposite party's goals, and reflects the need to prevail at the expense of the opposite party. 'Avoiding' combines a low concern for one's own as well as the opposite party's goals, and refers to the prevention or termination of actually dealing with the conflict. Genuine attention for one's own as well as the opposite party's goals results in 'problem solving'. This conflict management style includes a process of open negotiation to reconcile the counterpart's basic interests in the end. 'Yielding' reflects a high concern for the opposites party's goals combined with less worries for one's own goals, and occurs when one gives in to the opponent's point of view or demand.

As illustrated in Figure 1, the conflict management styles can be located on two dimensions (De Dreu, Evers, Beersma, Kluwer, & Nauta, 2001; Van de Vliert, 1997). The first dimension refers to distributive behaviour and aims at maximising the outcomes for one party at the expense of the other party. The second dimension includes integrative behaviour and contains the maximisation versus minimisation of the outcomes for all parties involved. Fighting and yielding mark the poles of the distributive dimension; whereas problem solving and avoidance are located on the integrative dimension. Both dimensions can help us to formulate predictions in view of the escalative versus de-escalative nature of the conflict management styles; however,

---

[1] The Dual Concern Theory (De Dreu et al., 2000; Pruit & Rubin, 1986; Van de Vliert, 1997) also defined a fifth conflict management style, i.e., 'compromising'. This style refers to the pursuance of a mutually acceptable settlement in which each of the conflicting parties makes some concessions; and contains an average concern for one's own and the opposite party's goals. However, for this study we wished to focus on the extreme poles of the concerns as well as the dimensions. Therefore, compromising was omitted.

following a slightly different logic for each dimension. As respects the distributive dimension, low (i.e., yielding) as well as high scores (i.e., fighting) encourage conflict escalation (Van de Vliert, 1997). As respects the integrative dimension, low scores (i.e., avoiding) are related to conflict escalation, whereas high scores (i.e., problem solving) involve conflict de-escalation.

Figure 1
Distributive and integrative dimension of conflict management strategies
(Van de Vliert, 1997; De Dreu et al., 2001)

Hypotheses

Inspired by the literature, we argue that the occurrence of conflicts as well as the conflict management styles associate with bullying. In line with the work environment hypothesis, which attributes bullying to a stressful and discordant work environment (Hauge et al., 2007; Leymann, 1996), the occurrence of conflicts and the conflict management styles are defined from a broader work environmental perspective. Specifically, as employees interact with co-workers on a frequent basis and often share (interpersonal) problems, individuals within the same work unit may create rather stable and socially shared preferences on how to deal with each other and with social or work-related problems (Mohammed, Klimoski, & Rentsch, 2000). Accordingly, work units are likely to develop a 'conflict climate' that embraces a relatively stable tendency to engage in conflict as well as a relatively stable set of conflict management styles (De Dreu et al., 2004; Nauta, De Dreu, & Van der Vaart, 2002). Or, some units may engage in conflicts rather easily (i.e., high occurrence) and usually manage conflicts through reconciliation of all parties' basic interests. Others, however, may show rather few conflicts (i.e., low occurrence), but tend to approach them by trying to defeat the opponent. In line with this reasoning, the occurrence of conflicts and the four

Dual Concern conflict management styles are investigated as characteristics of the work unit. Inspired by the bullying literature and the Dual Concern Theory, we hypothesise:

Hypothesis 1: The occurrence of conflicts in the work unit relates positively to workplace bullying.

Hypotheses 2: Fighting within the work unit relates positively to workplace bullying.

Hypothesis 3: Avoiding within the work unit relates positively to workplace bullying.

Hypothesis 4: Yielding within the work unit relates positively to workplace bullying.

Hypothesis 5: Problem solving within the work unit relates negatively to workplace bullying.

In addition, we assume that conflicts particularly tend to encourage bullying when managed in an escalatory way, which is specifically elaborated in the Three Way Model of Workplace Bullying (Baillien et al., 2009). We hypothesise:

Hypothesis 6: The relationship between the occurrence of conflicts within the work unit and bullying is moderated by the conflict management styles. We expect a stronger relationship between occurrence of conflict within the work unit and workplace bullying when employees perceive more (a) fighting, (b) avoiding and (c) yielding; and less (d) problem solving within the work unit.

Method

Sample

In 2007, data were gathered in eight organisations in the Dutch speaking part of Belgium (Flanders) by means of anonymous self-report questionnaires. The organisations were recruited based on the distribution of sectors in Flanders: two organisations represented the manufacturing sector, one organisation represented the service sector and five organisations belonged to the non-profit sector. Participation was voluntary and confidential. To encourage the respondent's candidness and honesty, respondents were instructed to mail their questionnaire under sealed envelopes directly to the author's research department. A total of 942 respondents returned the questionnaire (response rate of 39%[2]), of which 934 answered all items and could be used for the current study.

---

[2] We did not have access to the organisation's background characteristics as two participating organisations preferred not to share more detailed information as respects their work force. Therefore, more detailed information regarding the background of the non-responders is absent.

Table 1 summarises the sample's characteristics. The average age of the respondents was 41.30 years (*SD* = 10.48) with a range from 20 to 65 years. The sample consisted of slightly more men (57%) than women (43%). About 10% of the respondents were blue-collar workers, whereas 64% were white collars. Twenty-six percent had a managerial position. The majority of the respondents (47%) went to college (higher education or university); 34% had a high school diploma. The sample was thus higher educated than the average Flemish working population (i.e., 37% college and 41% high school diploma). About one in five respondents (19%) were low educated.

Table 1
Sample as compared to the working population of Flanders in 2007,
N = 934 (source: Steunpunt WSE)

Characteristics	Sample (%)	Population of Flanders (%)	χ^2	df	*p*
Gender			0.69	1	ns
Male	56.6 %	55.3%			
Female	43.4%	44.7%			
Age			18.51	2	*p* < .001
<25 years	5.1%	8.5%			
25-49 years	69.6%	69.9%			
>64 years	25.3%	21.6%			
Job status			569.52	2	*p* < .001
Blue collar	9.5%	36.8%			
White collar	64.4%	55.0%			
Management	26.2%	8.2%			
Educational level			42.49	1	p < .001
Low (i.e., secondary school or lower)	18.8%	22.3%			
Middle (i.e., high school)	34.4%	41.2%			
High (i.e., higher education or university)	46.8%	36.5%			

Measures

Independent variables

The occurrence of conflicts within the work unit and the work unit's conflict management styles are investigated in terms of the individual employee's perceptions regarding the work unit. Reasons for this approach are twofold. First, the participating organisations did not allow us to gather information regarding work unit membership. Accordingly, the data could not be analysed by means of a multi-level approach. Second, as relatively few employees are targets of workplace bullying, hypotheses can only be tested by means of large samples (Hoel et al., 2002). Measuring the occurrence of conflicts and the conflict man-

agement styles from a multi-level perspective would therefore yield problems in case of a low response within specific work units, as these units could not be included in the analyses. This would, in turn, decrease the number of victims in our sample and lead to less reliable results. To make sure the respondents attributed the same meaning to 'the work unit', this concept was defined as '[…] all employees performing their job under supervision of the same supervisor'. This definition was presented to them before the actual items.

Occurrence of conflict within the work unit was measured with one self-constructed item ranging from 1 to 5, which examined how frequently the respondent and other members of the work unit are confronted with conflicts. The response categories were 'almost never' (= 1), 'a couple of times a year' (= 2), 'a couple of times a month' (= 3), 'a couple of times a week' (= 4) and '(almost) every day' (= 5). Inspired by Pondy (1972), we defined 'conflict' as '[…] a difference of opinion, disagreement, confrontation or quarrel between different members (among co-workers as well as between one or more co-workers and the supervisor) of the work unit'.

The Dutch Test for Conflict Handling (DUTCH; De Dreu, Evers et al., 2001; Van de Vliert, 1997) was used to investigate the four conflict management styles. To focus on *the conflict management styles of the work unit*, the original items were modified to measure the work unit level ('we') instead of the individual level ('I'). In line with the conflict climate perspective, which defines conflict behaviour as the joint outcome of all members of the work unit (Salanick & Pfeffer, 1977), the modified measure combined the employee's perception of personal conflict behaviour as well as the employee's perception of co-workers' conflict behaviour. Response categories ranged from 'never' (1) to 'almost always' (5). A sample item for *'fighting'*, which was measured by means of 4 items, was 'we aim at winning the conflict'. For this scale, Cronbach's Alpha was .86. *'Avoiding'* was measured by 3 items such as 'We try to avoid confrontation about our differences', which yielded a reliability coefficient of .79. *'Yielding'* consisted of 4 items such as 'We adapt to the other party's goals and interests'. Cronbach's Alpha equalled .68. *'Problem solving'* contained 4 items, such as 'We examine issues until we find a solution that really satisfies all parties involved'. Reliability (Cronbach's Alpha) equalled .91. As shown in Table 2, problem solving was the most wide-spread conflict management strategy within our sample.

Dependent variable

Exposure to bullying at work was measured by means of the Short Negative Acts Questionnaire (S-NAQ; Notelaers & Einarsen, 2008). The S-NAQ consists of 9 items describing various negative acts which may be perceived as bullying when occurring on a regular basis. The items refer to personal (e.g., gossiping) as well as work-related bullying (e.g., being withheld information)

and examine how often the respondent was exposed to a specific act during the last six months. The response categories were 'never' (= 1), to 'now and then' (= 2), 'monthly' (= 3), 'weekly' (= 4) and 'daily' (= 5). In line with the bullying literature, all items were included in one scale (for a discussion, see Einarsen, Hoel, & Notelaers, 2009; Nielsen, Skogstad, Matthiesen, Glaso, Aasland, Notelaers et al., 2009). Reliability (Cronbach's Alpha) reached .82.

Control variables

The questionnaire included following controls: gender (1 = male; 2 = female), job status (1 = blue-collar worker; 2 = white collar worker; 3 = management), and age (in years).

Table 2 presents the means, the standard deviations and the correlations between the scales. The following issues are worthy of further consideration: the correlations between workplace bullying and occurrence of conflicts/ conflict management styles ranged between .38 and -.37, meaning that bullying indeed was related to conflicts and the way they are managed[3]. Finally, note the fairly high negative correlation between fighting and problem solving (Cohen, 1988; 1992; Field, 2005), indicating that high scores on fighting associated with low scores on problem solving.

Table 2
Means, standard deviations, and correlations of the scales (N = 928)

		M	SD	1	2	3	4	5	6	7	8	9
1.	Age	41.23	10.29									
2.	Gender	0.43	0.49	.25**								
3.	Manager	0.26	0.44	.10**	.11**							
4.	Blue-collar worker	0.10	0.29	.12**	.12**	-.19**						
5.	Occurrence of conflicts	2.15	1.01	-.12**	.07*	.04	.01					
6.	Fighting	2.76	0.81	-.02	.05	-.03	.04	.46**				
7.	Avoiding	2.92	0.81	.08*	-.04	-.08*	.01	.10*	.29**			
8.	Yielding	3.09	0.49	.08*	-.04	-.04	-.01	-.27**	-.27**	.19**		
9.	Problem Solving	3.58	0.85	.05	.01	.07*	.01	-.46**	-.61**	-.30**	.43***	
10.	Workplace bullying	1.43	0.44	.02	.02	.08*	.06	.38**	.38**	.10**	-.19**	-.37**

**p < .01; *p < .05

---

[3] These correlations were not sufficient to suspect tautology (for a discussion, see Campbell, 1960). Moreover, confirmatory factor analysis (CFA; AMOS 16.0) distinguishing 6 factors (i.e., conflict occurrence, four conflict management styles, and workplace bullying) revealed a better and more satisfactory fit ($\chi^2(256)$ = 1179.1; RMSEA = .05; CFI = .95; NFI = .92; SRMR = .04) as compared to a one factor model ($\chi^2(275)$ = 4401.2; RMSEA = .13; CFI = .59; NFI = .57; SRMR = .09), two factor model (i.e., conflict and workplace bullying) ($\chi^2(274)$ = 2309.1; RMSEA = .11; CFI = .64; NFI = .69; SRMR = .08) or a three factor model (i.e., conflict occurrence, conflict management, and workplace bullying) ($\chi^2(273)$ = 2903.14; RMSEA = .11; CFI = .74; NFI = .72; SRMR = .06). Accordingly, the occurrence of conflicts, the four conflict management styles and workplace bullying may be considered as distinctive factors.

Analyses

Hypotheses were tested by means of moderated hierarchical regression analyses (listwise deletion) (SPSS 15.0), following recommendations by Aiken and West (1991) and Baron and Kenny (1986). In order to rule out alternative explanations, age, gender (dummy coded; 1 = male, 0 = female) and job status (dummy coded; 0 = white collar/management, 1 = blue collar and 0 = white collar/blue collar and 1 = management) have been controlled for in all analyses (step 1). In step 2, we included the occurrence of conflicts within the work to investigate this factor's contribution above the control variables. In step 3, we additionally entered the four Dual Concern conflict management styles (De Dreu et al., 2000; Pruit & Rubin, 1986; Van de Vliert, 1997), allowing us to see if these styles contributed above the control variables and the occurrence of conflict. Similarly, step 4 contained the interactions between the occurrence of conflicts and the conflict management styles within the work unit to assess their contributions above the controls, the occurrence of conflict and the conflict management styles. In line with Aiken and West (1991) and Van Breukelen, Konst, and van der Vlist (2004) all predictors were centred. The interaction terms were calculated by multiplying the centred scales 'fighting', 'avoiding', 'yielding' and 'problem solving' with the centred 'occurrence of conflicts in the work unit' scale (Aiken & West, 1991; Van Breukelen et al., 2004). To account for the correlation between fighting and problem solving (see Table 2), colinearity was checked by means of the variation inflation factor (VIF) and the tolerance statistic (Field, 2005). As all VIF values scored lower than 10 (Myers, 1990) and all tolerance statistics exceeded .20 (Menard, 1995), our regression analyses were not influenced by colinearity.

Results

Hierarchical multiple regression analyses revealed a small contribution of the control variables to the prediction of workplace bullying (R^2 = .01; see Table 3, step 1). Adding the occurrence of conflicts (step 2) increased the explained variance to 15% (ΔR^2 = .14): the occurrence of conflicts within the work unit associated positively with workplace bullying, confirming hypothesis 1. Adding the four conflict management styles (step 3) explained a total of 23% in the variance of workplace bullying (ΔR^2 = .08) and yielded significant results for fighting (β = .17; $p < .001$) and problem solving (β = -.19; $p < .001$). Hypothesis 2 and hypothesis 5 were thus confirmed. Fighting was related to more bullying (hypothesis 2), whereas problem solving was related to less bullying (hypothesis 5). Hypotheses 3 and 4 were rejected:

avoiding and yielding did not predict workplace bullying (see Table 3). The occurrence of conflicts remained significant ($\beta = .21$; $p < .001$). In step 4, we additionally included the interactions between occurrence of conflicts and each of the four conflict management styles, which resulted in 24% explained variance ($\Delta R^2 = .01$). In contrast to hypothesis 6, no significant relationships were found between the interactions occurrence of conflicts – fighting, occurrence of conflicts – avoiding, occurrence of conflicts – yielding, occurrence of conflicts – problem solving and workplace bullying. Moreover, the main effect of the occurrence of conflicts, fighting and problem solving remained significant.

Table 3
Regression analyses with workplace bullying as dependent variable (N = 934)

	Standardised β			
	Step 1	Step 2	Step 3	Step 4
Predictors				
Age	.01	.06	.06	.06
Gender	.01	-.03	-.03	-.03
Blue collar	.08*	.08**	.08**	.08*
Management	.08*	.08**	.10***	.10**
Occurrence of conflicts	-	.38***	.21***	.20***
Fighting	-	-	.17***	.17***
Avoiding	-	-	-.03	-.04
Yielding	-	-	-.03	-.04
Problem Solving	-	-	-.19***	-.19***
Occurrence of conflicts*fighting	-	-	-	.07
Occurrence of conflicts*avoiding	-	-	-	-.05
Occurrence of conflicts*yielding	-	-	-	-.06
Occurrence of conflicts*problem solving	-	-	-	-.06
R^2	.01*	.15***	.23***	.24***
ΔR^2	-	.14***	.08***	.01*

Note: 'Gender' is dummy coded (1 = male; 0 = female); 'Blue Collar Worker' is dummy coded (0 = white collar worker/management; 1 = blue collar worker); 'Management' is dummy coded (0 = white/blue collar worker; 1 = management); ΔR^2 Step 2: increase of R^2 as compared to Step 1; ΔR^2 Step 3: increase of R^2 as compared to Step 2; ΔR^2 Step 4: increase of R^2 as compared to Step 3

Discussion

Implications for research and theory

Investigating the relationship between workplace bullying, the occurrence of conflicts and specific ways of dealing with conflict (i.e., conflict management styles) by means of a well-known theoretical framework in the realm of conflict research (De Dreu et al., 2000; Pruit & Rubin, 1986; Van de Vliert, 1997) is perhaps the current study's main contribution. As respects the conflict management styles, our results revealed that fighting associated with more bullying, whereas problem solving associated with less bullying. Avoiding and yielding did not relate to workplace bullying. In view of the Dual Concern Theory, fighting has been defined as a distributive conflict management style that combines a high concern for one's own goals and a low concern for the opposite party's goals. Problem solving is integrative and explicitly pursuits a satisfactory outcome for all conflicting parties by combining a high concern for one's own goals and a high concern for the opposite party's goals. A common feature of both fighting and problem solving is thus their high concern for the own goals, which, based on the current study's results, converts in conflict management styles that relate to workplace bullying. Subsequently, high versus low scores on the concern for the opposite party's goals may determine whether the conflict management styles encourage or discourage bullying. A low concern for the opposite party's goal (i.e., fighting) may associate with more bullying; whereas a high concern for the opposite party's goals (i.e., problem solving) may relate to less bullying. Avoiding and yielding, in contrast, are fuelled by a low concern for the own goals and did not associate with bullying. Note however that the current study did not measure the dual concerns as such and focussed on the specific conflict management styles instead. Future research may therefore benefit from a more explicit investigation of the link between the concerns and bullying.

As respects the occurrence of conflicts in the work unit, our results revealed a significant main effect of the occurrence of conflicts on bullying. This finding aligns with Zapf (1999), who argued that higher base rates of conflicts in the work environment lead to higher rates of workplace bullying. Contrary to our expectations, the relationship between the occurrence of conflicts within the work unit and bullying was however not moderated by the conflict management styles. Based on these findings, we may thus conclude that the occurrence of conflicts within the work unit relates to bullying regardless of the way they are managed or that the conflict management styles do not strengthen or weaken the association between the occurrence of conflicts and bullying. Possible explanations for these results

are threefold. Firstly, these results may be attributed to a possible negative connotation associated with the occurrence of (many) conflicts (Keashly & Nowell, 2003). Accordingly, a high occurrence of conflicts within the work unit may elicit frustrations and strains which, in turn, may encourage escalation to bullying. This relationship between conflicts, frustration and bullying has been described by Baillien and colleagues (2009) in their Three Way Model. In line with the Revised Frustration Aggression Theory (Berkowitz, 1989), frustrations may cause bullying by (systematically) venting ones negative emotions on a co-worker, which leads to becoming a perpetrator of bullying. On the other hand, frustrations may encourage bullying as suggested by the Social Interactionist framework (Felson, 1992; Neuman & Baron, 2004). In this respect, frustrations may stimulate volition of social norms through a process of psychological dissociation (e.g., the frustrated employee makes more job related mistakes or adopts a more unfriendly attitude). Such employees may provoke negative reactions from colleagues as a form of retaliation, and become a target of bullying. Secondly, the main effect of occurrence of conflicts may be explained by the negative impact of highly escalated conflicts on the overall social climate within the work unit (Einarsen & Mikkelsen, 2003). As members who were initially not involved in the conflict may be forced to take a position, new or more severe conflicts may arise which, in turn, may encourage escalation to bullying. Thirdly, we may not have detected moderation because the relationship between the occurrence of conflicts and bullying could in fact be mediated by the conflict management styles; high levels of conflict occurrence associate with bullying because they trigger specific conflict management styles. As the current study aligns with theorising in the realm of workplace bullying which particularly expects conflicts to associate more or less with bullying due to certain conflict management styles, investigating mediation was beyond the scope of this paper. Future studies may, however, go into this issue by exploring links between rates of conflict occurrence and conflict management styles on the one hand, and testing mediation of management styles when predicting bullying by means of the occurrence of conflict on the other hand.

Implications for practice

Overall, our findings may suggest valuable leads for organisations who wish to pursue a policy against workplace bullying. In line with our results, organisations may discourage employees to react to conflicts in a fighting way, and stimulate them to settle quarrels and differences of opinion by means of a problem solving strategy. This may, for example, be attained by team building activities with a detailed focus on specific reactions to

conflicts. Our findings furthermore reveal that the association between the occurrence of conflicts and bullying is not moderated by the conflict management styles, underlining that investing in low conflict occurrence within the teams may overtrump investing in conflict management styles when aiming to prevent bullying. Along similar lines, future research may define the number of conflicts after which the work unit's climate can become problematic in terms of bullying (i.e., main effect of occurrence of conflicts). Surpassing this limit can signal fundamental social problems within the work unit that should be addressed immediately.

Limitations and future research

The study has some drawbacks. Firstly, as described in the introduction, the literature in the realm of workplace bullying has paid a great deal of attention to the distinction between conflicts and bullying. Simultaneously, various researchers have defined workplace bullying as an escalated conflict (Baillien et al., 2009; Glasl, 1982; Leymann, 1996; Zapf & Einarsen, 2003). Bullying can however not be reduced to an all-or-nothing phenomenon (Einarsen et al., 1994). It rather covers a gradually evolving process in which an employee is systematically confronted with deteriorating negative acts. As the bullying process may start with an unresolved conflict (Leymann, 1996) and an escalatory conflict management (Baillien et al., 2009), conflicts and conflict management might thus be part of the bullying concept. Accordingly, the occurrence of conflicts might implicitly measure the number of bullying incidents, or fighting could give feedback regarding bullying acts. Measuring bullying at work as perceptions of individual experiences ('I'), while focussing on the occurrence of conflicts and conflict management as perceptions of the work unit climate ('we') may have reduced this problem. Additionally, a confirmatory factor analyses revealed bullying, the occurrence of conflict and the conflict management styles as distinct latent factors.

A related issue concerns our self-report data that prevented us from separating method variance from true score variance. Yet we feel confident that common method variance did not strongly affect the importance of our findings. For a start, our questionnaire was designed to reduce risks of common method variance, as suggested by Podsakoff, Mackenzie, Lee, and Podsakoff (2003). Examples are underlining the confidentiality of results, offering variations in the response format, and instructing the participants that there are no right or wrong answers. Nevertheless, future studies could strengthen the design used in this study by gathering data from different sources.

Secondly, our results cannot be interpreted in a causal way owing to the cross-sectional design of our data. Though we drew upon theoretical arguments and empirical models regarding the relationship between conflicts,

conflict management and workplace bullying, it could be argued that workplace bullying may cause conflicts rather than vice versa. A longitudinal design may help in answering the question regarding causality, reversed causation or reciprocal causation.

Thirdly, the current study explored the direct effect of the Dual Concern conflict management styles and did not account for situational elements that may influence the conflict management styles' availability and effects (Keashly & Nowell, 2003). One obvious situational feature that might play a role is (formal or informal) power. For example, problem solving assumes equality in the interaction, which can seldom be applied to workplace bullying in which the target rather swiftly pushed in a less powerful position, which, in turn, hampers the employee to manage (other) conflicts in a problem solving way (Hogh & Dofradottir, 2001; Zapf & Gross, 2001). Additionally, Baillien and colleagues (2009) relate escalated conflicts to bullying by means of power relations between the employees involved. As elaborated in their Three Way Model, the less powerful employee in conflict escalation will become target, whereas the powerful employee becomes offender. Further investigation of the relationship between conflict management styles, power and bullying may therefore be a fruitful avenue for future research.

And finally, we did not distinguish between task-related versus personal/relationship conflicts when measuring the occurrence of conflicts at work (e.g., De Dreu & Weingart, 2003; Jehn, 1995). As this is to the best of our knowledge one of the first studies to investigate more profoundly the association between conflict, conflict management and bullying; we feel that omitting this distinction does not undermine the aims and contribution of our research and findings. Nevertheless, future studies may benefit from going into the exact nature of the conflict(s) and its relationship with workplace bullying, exploring whether both types of conflict relate differently to workplace bullying, and investigating possible impacts of various specific conflict management styles.

Conclusion

In this study we investigated the relationship between the occurrence of conflicts in the work unit, the conflict management styles in the work unit and workplace bullying. Results revealed a positive relationship between the occurrence of conflicts in the work unit and workplace bullying, suggesting that higher base rates of conflict indeed encourage bullying. There was a positive association between fighting and bullying and a negative association between problem solving and bullying, suggesting that conflict management styles that reflect a high concern for the own goals may relate to bully-

ing: when combined with a low concern for the opposite party's goals (i.e., fighting) such conflict management styles may encourage bullying; when combined with a high concern for the opposite party's goals (i.e., problem solving) conflict management may discourage bullying. The relationship between the occurrence of conflicts in the work unit and bullying were not moderated by the conflict management styles, possibly owing to the negative connotation associated with conflicts at work, or to its negative impact on the social climate within the work unit.

References

Aiken, L.S., & West, S.G. (1991). *Multiple regression: testing and interpreting interactions.* Thousand Oaks, U.S.: Sage Publications.

Ayoko, O.B., Callan, V.J., & Härtel, C.E.J. (2003). Workplace conflict, bullying, and counterproductive behaviours. *The International Journal of Organizational Analysis, 11*, 283-301.

Baillien, E., Neyens, I., De Witte, H, & De Cuyper, N. (2009). Towards a three way model of workplace bullying: A qualitative study. *Journal of Community and Applied Social Psychology, 19*, 1-16.

Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.

Berkowitz, L. (1989). The frustration-aggression hypothesis: An examination and reformulation. *Psychological Bulletin, 106*, 59-73.

Björkvist, K., Österman, K., & Hjelt-Bäck, M. (1994). Aggression among university employees. *Aggressive Behaviour, 20*, 173-184.

Campbell, D.T. (1960). Recommendations for APA test standards regarding construct, trait, or discriminant validity. *The American Psychologist, 15*, 546 -553.

Cohen, J. (1988). *Statistical power analysis for the behavioural sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*, 155-159.

De Dreu, C., Emans, B., Euwema, M., & Steensma, H. (2001). Ziekmakende conflicten en pesterijen op het werk [Sickening conflicts and workplace bullying]. *Gedrag & Organisatie, 14*, 309-316.

De Dreu, C., Evers, A., Beersma, A., Kluwer, E., & Nauta, A. (2001). A theory-based measure of conflict management strategies in the workplace. *Journal of Organizational Behaviour, 22*, 645-668.

De Dreu, C., Van Dierendonck, D., & Dijkstra, M. (2004). Conflict at work and individual well-being. *International Journal of Conflict Management, 15*, 6-26.

De Dreu, C., & Weingart, R. (2003). Task versus relationship conflict, team performance, and team member satisfaction: A meta-analysis. *Journal of Applied Psychology, 88*, 741-749.

De Dreu, C., Weingart, R., & Kwon, S. (2000). Influence of social motives on integrative negotiation: a meta-analytic review and test of two theories. *Journal of Personality and Social Psychology, 78*, 889-905.

Einarsen, S. (1999). The nature and causes of bullying at work. *International Journal of Manpower, 20*, 16-27.

Einarsen, S. (2000). Harassment and bullying at work: A review of the Scandinavian approach. *Aggression and Violent Behaviour, 5*, 379-401.

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*, 24-44.

Einarsen, S., & Mikkelsen, E.G. (2003). Individual effects of exposure to bullying at work. 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. 127-145). London: Taylor and Francis.

Einarsen, S., Raknes, B.I., & Matthiesen, S.B. (1994). Bullying and harassment at work and their relationships to work environment quality: An exploratory study. *European Work and Organizational Psychologist, 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*, 185-201.

Felson, R.B. (1992). "Kick 'em when they're down": Explanations of the relationships between stress and interpersonal aggression and violence. *Sociological Quarterly, 33*, 1-16.

Field, A. (2005). *Discovering statistics using SPSS* (2nd ed.). London: Sage Publications.

Glasl, F. (1982). The process of conflict escalation and roles of third parties. In G.B.J. Bomers & R. Peterson (Eds.), *Conflict management and industrial relations* (pp. 119-140). Boston: Kluwer-Nijhoff.

Glasl, F. (1994). *Konfliktmanagement. Ein Handbuch für Führungskräfte und Berater* [Conflict management. A handbook for managers and consultants] (4th ed). Bern: Haupt.

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

Hoel, H., Zapf, D., & Cooper, C.L. (2002). Workplace bullying and stress. In P.L. Perrewé & D.C. Ganster, *Historical and current perspectives on stress and health* (pp. 293-333). Amsterdam: Elsevier.

Hogh, A., & Dorfradottir, A. (2001). Coping with bullying in the workplace. *European Journal of Work and Organizational Psychology, 10*, 485-495.

Jehn, K. (1995). A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly, 40*, 256-284.

Keashly, L., & Nowell, B. (2003). Workplace bullying and conflict resolution. In S. Einarsen, H. Hoel, D. Zapf, & C. Cooper (Eds.), *Bullying and emotional abuse in the workplace: International research and practice perspectives* (pp. 339-358). London: Taylor & Francis.

Kivimäki, M., Elovainio, M., & Vahtera, J. (2000). Workplace bullying and sickness absence in hospital staff. *Occupational and Environmental Medicine, 57*, 656-660.

Leymann, H. (1996). The content and development of mobbing at work. *European Journal of Work and Organizational Psychology, 5*, 165-184.

Matthiesen, S.B., & Einarsen, S. (unpublished manuscript). Bullying in the workplace. Definition, prevalence, antecedents, and consequences. Bergen, Norway: Bergen Bullying Research Group.

Menard, S. (1995). *Applied logistic regression analysis. Sage university paper series on quantitative applications in the social sciences, 07-106*. Thousand Oaks, CA: Sage.

Mikkelsen, E.G., & Einarsen, S. (2002). Basic assumptions and symptoms of post-traumatic stress among victims of bullying at work. *European Journal of Work and Organizational Psychology, 11*, 87-111.

Mohammed, S., Klimoski, R., & Rentsch, J.R. (2000). The measurement of team mental models: We have no shared schema. *Organizational Research Methods, 3*, 123-165.

Myers, R. (1990). *Classical and modern regression with applications* (2nd ed.). Boston, MA: Duxbury.

Nauta, A., De Dreu, C., & Van der Vaart, T. (2002). Social value orientation, organizational goal concerns and interdepartmental problem-solving. *Journal of Organizational Behaviour, 23*, 199-213.

Neuman, J.H., & Baron, R.A. (2004). Aggression in the workplace: A social-psychological perspective. In S. Fox & P.E. Spector (Eds.), *Counterproductive work behavior: Investigations of actors and targets* (pp. 13-40). Washington D.C.: APA.

Nielsen, M.B., Skogstad, A., Matthiesen, S.B., Glaso, L., Aasland, M.S., Notelaers, G., & Einarsen, S. (2009). Prevalence of workplace bullying in Norway: Comparisons across time and estimation methods. *European Journal of Work and Organizational Psychology, 18*, 81-101.

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, June 4-6, Montréal.

Notelaers, G., Einarsen, S., De Witte, H., & Vermunt, J. (2006). Measuring exposure to bullying at work: The validity and advantages of the latent class cluster approach. *Work & Stress, 20*, 288-301.

Olweus, D. (1990). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. In K. Rubin & D. Pepler (Eds.), *The development and treatment of children's aggression*. Hillsdale, NJ: Lawrence Erlbaum Associates Inc.

O'Moore, M., Lynch, J., & Daéid, N. (2003). The rates and relative risks of workplace bullying in Ireland, a country of high economic growth. *International Journal of Management and Decision Making, 4*, 82-95.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., & Podsakoff, N.P. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879-903.

Pondy, L. (1972). Letter to the Editor. *Administrative Science Quarterly, 17*, 408-409.

Pruitt, D.G., & Rubin, J. (1986). *Social conflict: Escalation, stalemate and settlement*. New York: Random House.

Quine, L. (2002). Workplace bullying in junior doctors: Questionnaire survey. *British Medical Journal, 324*, 878-879.

Salanick, G.R., & Pfeffer, J. (1977). An examination of need satisfaction models of

job satisfaction. *Administrative Science Quarterly, 22*, 427-456.

Thomas, K.W. (1992). Conflict and negotiation processes in organizations. In M.D. Dunnette & L.M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 651-717). Palo Alto, CA: Consulting Psychologists Press.

Van Breukelen, W., Konst, D., & van der Vlist, R. (2004). Reaction to "comments on 'the effects of leader-member exchange and differential treatment on work unit commitment': distinguishing between neutralizing and moderating effects". *Psychological Reports, 95*, 879-882.

Van de Vliert, E. (1997). *Complex interpersonal conflict behaviour.* East Sussex: Psychology Press.

Vartia, M. (1996). The sources of bullying – psychological work environment and organizational climate. *European Journal of Work and Organizational Psychology, 5*, 203-214.

Zapf, D. (1999). Organizational, work group related and personal causes of mobbing/ bullying at work. *International Journal of Man Power, 20*, 70-85.

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., & Gross, C. (2001). Conflict escalation and coping with workplace bullying: A replication and extension. *European Journal of Work and Organizational Psychology, 10*, 497-522.

Zapf, D., Knorz, C, & Kulla, M. (1996). On the relationship between mobbing factors, and job content, social work environment, and health outcomes. *European Journal of Work and Organizational Psychology, 5*, 215-237.