A Study Analyzing the Association between Post-Traumatic Embitterment Disorder and Workplace Bullying

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Published online: 02 May 2014.

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The aim of this study was to investigate the association between perceived victimization from workplace bullying and self-reported embitterment reactions. Data were obtained through anonymous questionnaires from 397 participants working in the public sector. Among the participants, 23.9% were labeled as victims of bullying. Significant differences were observed in the mean scores of post-traumatic embitterment disorder between victims and nonvictims and experiencing bullying was found to be highly in correlation with displaying embitterment reactions. Feelings of injustice, intrusive thoughts, and negative mood were determined as the reactions that received the highest mean scores among victims.

KEYWORDS mobbing, post-traumatic embitterment disorder (PTED), psychological health, victimization, workplace bullying

INTRODUCTION

Workplace bullying, also referred to as mobbing (Leymann, 1996), emotional abuse (Keashly, 1998) or work harassment (Björkqvist, Österman, & Hjelt-Bäck, 1994), describes persistent exposure to destructive negative behaviors and mistreatment received from one or more employees at work (Einarsen & Skogstad, 1996; Hogh, Hoel, & Carneiro, 2011). There is no generally

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accepted definition of the phenomenon in the literature, but a commonly accepted view emphasizes the following aspects for the label *bullying* to be applied to a harassing situation or process. Accordingly, exposure to negative behaviors should repeat systematically (e.g., weekly) and continue over a period of time (e.g., about 6 months), and there must be an imbalance of power between the bully and the victim, with a more powerful person or group bullying the less powerful one (Einarsen, Hoel, Zapf, & Cooper, 2003; Mikkelsen & Einarsen, 2001; Vartia, 2001). This asymmetry of power may stem from formal power differences like the hierarchical position between an employee and a superior or from informal power differences like previous interpersonal conflict situations, personal contacts, or network of organizational relationships (Vartia, 2003). Workplace bullying is also described as a process that typically starts with a triggering event, such as a conflict, and escalates with systematic, enduring unethical behavior that leads to the victimization of the worker (Leymann, 1996). In the later stages of the process, victims suffer from a wide range of stress symptoms and feel vulnerable to defend themselves (Einarsen et al., 2003).

Bullying behaviors can be very overt, such as shouting, using abusive or offensive language, publicly criticizing the person's appearance or can be carried out covertly like socially excluding, withholding information, or insinuating negative glances and gestures (Kaukiainen et al., 2001). According to a more comprehensive classification, bullying can take the form of work-related behaviors (having one's opinions ignored, excessive monitoring of one's work, being exposed to unmanageable workload, etc.), person-related behaviors (spreading of gossip and rumors about an individual, being ignored or excluded, having allegations made against him/her, etc.) and physically intimidating behaviors (threats of violence, finger-pointing, etc.) (Einarsen, Hoel, & Notealears, 2009).

Workplace bullying has caught the attention of researchers over the last two decades, and research has shown that it is a major social stressor (Zapf, Knorz, & Kulla, 1996) that affects the victims' health and well-being (Björkqvist et al., 1994; Einarsen & Mikkelsen, 2003; Vartia, 2001). There is evidence that victims of workplace bullying suffer from psychological health problems. For instance, in a study carried out with 224 white-collar employees and blue-collar workers, exposure to workplace bullying accounted for 27% of the variance in psychological health complaints and 10% of the variance in psychosomatic health complaints (Mikkelsen & Einarsen, 2002b). A Danish study performed in various work sectors has revealed that psychological stress symptoms were strongly related with exposure to bullying behaviors (Mikkelsen & Einarsen, 2001). Among 877 Turkish white collar employees, significant differences in anxiety, depression, and job-induced stress scores between the bullied and nonbullied participants were observed (Bilgel, Aytaç, & Bayram, 2006). In the beginning of the 1990s, Leymann claimed that posttraumatic stress disorder (PTSD) is probably the correct

diagnostic term for approximately 95% of the bullied individuals (Leymann & Gustafsson, 1996). Subsequent studies that examined the symptoms of post-traumatic stress among victims of workplace bullying have supported this statement and ascertained that victims of bullying suffer from PTSD (Balducci, Fraccaroli, & Schaufeli, 2011; Matthiesen & Einarsen, 2004; Mikkelsen & Einarsen, 2002a; Niedl, 1996; Nolfe, Petrella, Blasi, Zontini, & Nolfe, 2007; Rodriguez-Munoz, Boreno-Jimenez, Vergel, & Hernandez, 2010; Tehrani, 2004). However, it is also observed that A1 criterion for PTSD (report serious injuries or threats to physical integrity) generally failed to be fulfilled by the victims of bullying investigated (Einarsen & Mikkelsen, 2003; Mikkelsen & Einarsen, 2002a; Rodriguez-Munoz et al., 2010). Einarsen and Mikkelsen (2003) suggested that most victims of bullying cannot be diagnosed with PTSD, and an alternative diagnosis should be considered. Posttraumatic embitterment disorder (PTED), which has lately been discussed and suggested as an appropriate diagnostic term for victims of workplace bullying (Ege, 2010; Gregersen, 2010; Yamada, 2011), was first proposed as a new mental disorder by the German psychiatrist Linden (2003). This new definition is not included in the latest edition of *Diagnostic and Statistical Manual of Mental Disorders* (*DSM-5*) (American Psychiatric Association, 2013), which prevents its application as a formal diagnosis. It is expected that the proposed disorder should be included in the future editions of *DSM* diagnostic criteria (Dobricki & Maercker, 2010; Linden, 2003).

PTED was evaluated as a subtype of adjustment disorder and defined as the mental reaction to exceptional, though normal negative life events, such as unemployment, divorce, death of a relative, or conflict at work (Dobricki & Maercker, 2010; Linden, Baumann, Lieberei, & Rotter, 2009). Contrary to PTSD, negative life events do not have to be critical, exceptional, or life threatening but perceived as unjust and unfair and as a violation of basic beliefs or valid overvalued schemas (Linden et al., 2009). Extreme anxiety is the predominant emotion in PTSD but the principal aspect of the reaction pattern in PTED is a persistent and prolonged feeling of embitterment (Dobricki & Maercker, 2010). Rage; helplessness; anger; sadness; aggression; intrusive thoughts and memories; thoughts of revenge; depressed mood; avoidance of the place or persons related to the event; reduction in social, occupational, and family activities; blaming oneself for the event for not being able to cope with it; and somatic complaints such as loss of appetite and sleep disturbance are the examples of other psychopathological signs and symptoms of PTED (Linden, 2011).

Muschalla and Linden (2011) emphasized that workplace bullying, particularly involving humiliation and injustice, would lead to embitterment reactions. Ege's study (2010) supported this statement and revealed that 91.5% of a sample consisting of 118 people reporting to have suffered from work conflicts experienced a PTED symptom, and this rate was 94.7% for the participants who reported bullying at work. Previous researches have also shown

that persons who experienced bullying or aggression in the workplace reported malaise symptoms concurrent with the ones in the PTED scale, that is, feelings of intrusive thoughts (Hogh, Hansen, Mikkelsen, & Persson, 2012; Leymann & Gustafson, 1996; Namie, 2012); feelings of revenge (Hallberg & Strandmark, 2006); feelings of guilt (Brousse et al., 2008); feelings of helplessness (Hauge, Skogstad, & Einarsen, 2010); feelings of resignation, anger, self-blame (Holden, 1985); feelings of aggression (Björkqvist et al., 1994; Matthiesen & Einarsen, 2007); and sleep disturbances (Lalluka, Rahkonen, & Lahelma, 2011; Niedhammer, David, Degioanni, Drummond, & Philip, 2009; Vartia, 2001).

In accordance with the above argumentation, we hypothesized that workplace bullying would be positively associated with PTED. Moreover, we aimed to examine the strength of the association between individual bullying behaviors and clinically relevant embitterment and how it varies for men and women. To our knowledge, this was one of the earliest studies to report the statistical relationship between workplace bullying and PTED.

METHOD

Participants

Data were collected by means of anonymous self-report questionnaires in the social security institutions located in the Asian part of Istanbul, Turkey. Altogether, 1,015 questionnaires were delivered between May and September 2011 and 589 questionnaire responses received. One hundred ninety-two contained incomplete responses and were discarded, leaving 397 complete questionnaires for the study sample. Of the participants, 57.2% were male and 54.4% of them were age 28 to 43 years. The majority of them had a university degree (61%) and were employed in nonmanagerial positions (83.1%).

Instruments

Workplace bullying was measured by using a combination of behavioral experience method and self-labeling method (Nielsen, Matthiesen, & Einarsen, 2010). In the first part of the questionnaire, the behavioral experience method was employed. Accordingly, participants were presented an inventory that included various types of bullying behavior and then asked to report how frequently they have been exposed to different behaviors (Nielsen et al., 2010). Frequency of exposure to bullying behaviors was measured on a 5-point scale from 1 (*never*) to 5 (*daily*). The scale consisted of 30 bullying behaviors primarily adopted from the Negative Acts Questionnaire Revised (NAQ-R; Einarsen et al., 2009). We also added eight more items extracted from the other bullying scales, namely, "being ridiculed in front of others," "accusations of being mentally disturbed," "having one's sense

of judgment questioned" (Björkqvist & Österman, 1992), "someone else taking credit of one's work" (Fox & Stallworth, 2005), "being treated like air," "being sexually harassed or getting unwanted sexual attention,", "being moved to a room far from colleagues" (Zapf et al., 1996), and "being excluded from social events of the organization" (Salin, 2001). Bullying behaviors were translated into Turkish by a group of expert researchers who were experienced in organizational behavior and work psychology. Cronbach's alpha of the scale was .92. We determined the prevalence of bullying at work by using the criterion of exposure to at least two negative behaviors per week over a period of at least 6 months (Mikkelsen & Einarsen, 2001).

In the second part of the questionnaire, we used the self-labeling method, in which we presented a definition of *workplace bullying* and asked the participants whether they felt victimized (Nielsen et al., 2010). In addition, participants who self-labeled themselves as victims were also asked to indicate the length of their experiences. Therefore, participants who fulfilled the criteria for the self-labeling method and the behavioral experience method were considered as victims of bullying at work (Nielsen et al., 2010).

Information on PTED symptoms was obtained by Post-Traumatic Embitterment Disorder Self-Rating Scale (PTED Scale), which is designed to assess the features of embitterment reactions to negative life events (Linden et al., 2009). PTED Scale asks participants to indicate their reactions to a severe and negative life event during the recent years on a 5-point scale ranging from 0 (*not true at all*) to 4 (*extremely true*). It starts with the line "During the last few years there was a severe and negative life event…" and includes 19 statements like "that hurt my feelings and caused considerable embitterment," "that I see as very unjust and unfair." However, in this study, participants were specifically asked to fill out the scale considering the negative events they had experienced in their workplaces. The scale was translated into Turkish by three linguists. Cronbach's alpha of the scale was calculated as .97. A mean total score of 2.5 was used as a cutoff score to detect the clinically significant intensity of reactive embitterment (Linden et al., 2009).

Statistics

All statistical analyses were conducted with SPSS software, version 19. Spearman correlation analysis was implemented to compute the relation between experiencing workplace bullying behaviors and displaying embitterment reactions. Pearson's χ^2 test was executed to assess the association between victimization from bullying at work and suffering from clinically relevant embitterment. To determine which bullying behaviors have the strongest relation with experiencing clinically relevant embitterment, we used odds ratio (OR) analysis. The dichotomous dependent variable was whether the participant suffered from clinically relevant embitterment or not. The

dichotomous independent variables in the analysis included 30 bullying items in the following manner (0 = *not experienced at all*, 1 = *somehow experienced*). An odds ratio of 2 is considered as a threshold value (Hoel, Faragher, & Cooper, 2004). The analyses were also adjusted according to the gender of the participants (0 = female, 1 = male). Group differences in the mean scores of victims and nonvictims of bullying on PTED were calculated by using Mann-Whitney U test due to the different group sizes and unequal variances. The same analysis was carried out to investigate how the PTED scores of victims vary according to the independent variables like gender, age, organizational level, educational level and the length of bullying. A p value < 0.05 was regarded as statistically significant, and 95% confidence intervals were calculated.

RESULTS

Of the participants 23.9% ($n = 95$) were labeled as victims of bullying based on the measurement method that combine the self-labeling with the behavioral experience approach. No significant difference was detected according to the sociodemographics, except that participants younger than age 51 were bullied markedly more often, $\chi^2(2) = 9.097$, $p < 0.05$. Experiencing workplace bullying was found to be highly in correlation with displaying embitterment reactions ($r_s = .61$, $p < 0.001$), confirming our hypothesis. Besides, a significant relationship was found between victimization from bullying and clinically relevant embitterment, $\chi^2(1) = 49.433$, $p < 0.001$. The OR for the risk of clinically relevant embitterment associated with experiencing individual bullying behaviors was calculated to be above the threshold value for 28 behaviors out of 30. The highest OR was found for "having key areas of responsibility removed or replaced with more trivial or unpleasant tasks" (OR = 9.46) followed by "being ridiculed in front of others" (OR = 7.35), "having allegations made against you" (OR = 6.97), "being the subject of excessive teasing or sarcasm" (OR = 6.74) and "being ignored or excluded" (OR = 6.48). Odds ratios and confidence levels for the risk of clinically relevant embitterment related with experiencing bullying behaviors are shown in Table 1. We also used the same analysis with respect to the gender of the participants and the highest odds ratio for female participants were found as "being ridiculed in front of others" (OR = 16.47), "having allegations made against you" (OR = 10.05), "accusations of being mentally disturbed" (OR = 9.25), "threats of violence or physical abuse" (OR = 8.21), and "being shouted at or being the target of spontaneous anger" (OR = 7.80). For male participants, the highest ORs were determined for "having key areas of responsibility removed or replaced with more trivial or unpleasant tasks" (OR = 19.61), "being ignored or excluded" (OR = 8.76), "having your opinions ignored" (OR = 8.14), "persistent criticism of your errors or

TABLE 1 Odds Ratios and Confidence Levels for the Risk of Clinically Relevant Embitterment Associated with Experiencing Bullying Behaviors

Item number	Workplace bullying behaviors	Odds ratio	95% confidence limits
9.	Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks	9.46	[3.30, 27.10]
15.	Being ridiculed in front of others	7.35	[3.67, 14.72]
18.	Having allegations made against you	6.97	[3.53, 13.75]
17.	Being the subject of excessive teasing, sarcasm	6.74	[3.40, 13.35]
22.	Being ignored or excluded	6.48	[3.23, 12.91]
29.	Accusations of being mentally disturbed	6.40	[2.60, 15.76]
30.	Hints or signals from others that you should quit your job	5.85	[2.92, 11.73]
23.	Being moved to a room far from colleagues	5.36	[2.63, 10.92]
19.	Being treated like air	5.28	[2.68, 10.42]
10.	Having your opinions ignored	5.27	[2.16, 12.85]
11.	Being shouted at or being the target of spontaneous anger	5.13	[2.53, 10.42]
6.	Pressure not to claim something to which by right you are entitled	4.95	[1.90, 12.91]
24.	Being sexually harassed or getting unwanted sexual attention	4.90	[2.13, 11.27]
14.	Persistent criticism of your errors or mistakes	4.87	[2.50, 9.50]
4.	Repeated reminders of your errors or mistakes	4.68	[2.27, 9.66]
20.	Being ignored or facing a hostile reaction when you approach	4.44	[2.23, 8.85]
13.	Intimidating behaviors such as finger-pointing, invasion of personal space, shoving, blocking your way	4.07	[1.89, 8.77]
3.	Being humiliated or ridiculed in connection with your work	4.02	[2.05, 7.86]
25.	Spreading of gossip and rumors about you	4.00	[2.05, 7.81]
21.	Someone taking credit of your work	3.98	[1.99, 7.96]
16.	Having insulting or offensive remarks made about your attitudes or your private life	3.96	[2.03, 7.71]
5.	Someone withholding information which affects your performance	3.64	[1.80, 7.37]
27.	Threats of violence or physical abuse	3.76	[1.93, 7.30]
8.	Being exposed to an unmanageable workload	3.42	[1.47, 7.92]
26.	Being excluded from social events of the organization	3.24	[1.67, 6.29]
12.	Having your sense of judgment questioned	2.68	[1.27, 5.63]
7.	Being given tasks with unreasonable deadlines	2.53	[1.20, 5.32]
1.	Excessive monitoring of your work	2.23	[1.0, 4.98]
2.	Being ordered to do work below your level of competence	1.72	[0.85, 3.48]
28.	Practical jokes carried out by people you don't get along with	0.89	[0.86, 0.93]

mistakes" (OR = 6.75), and "being excluded from social events of the organization" (OR = 6.73). The top five OR values for the risk of clinically relevant embitterment related with experiencing bullying behaviors for male and female participants are shown in Table 2).

TABLE 2 The Top Five Odds Ratio Values and Confidence Levels for the Risk of Clinically Relevant Embitterment Associated with Experiencing Bullying Behaviors for Male and Female Participants

Item number	Workplace bullying behaviors	Odds ratio	95% confidence limits
	Female participants		
15.	Being ridiculed in front of others	16.47	[5.08, 53.44]
18.	Having allegations made against you	10.05	[3.57, 28.33]
29.	Accusations of being mentally disturbed	9.25	[1.73, 49.70]
27.	Threats of violence or physical abuse or actual abuse	8.21	[2.94, 22.91]
11.	Being shouted at or being the target of spontaneous anger	7.80	[2.46, 24.76]
	Male participants		
9.	Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks	19.61	[2.59, 148.55]
22.	Being ignored or excluded	8.76	[3.44, 22.36]
10.	Having your opinions ignored	8.14	[1.85, 35.74]
4.	Persistent criticism of your errors or mistakes	6.75	[2.21, 20.66]
20.	Being excluded from social events of the organization	6.73	[2.68, 16.93]

Victims of bullying had statistically higher scores on the PTED self-rating scale than nonvictims ($U = 5923.50$, $z = -8.72$, $p < 0.001$). This significant difference was valid as well for each item on PTED ($p < 0.001$). Items with the highest mean scores for the victims were observed as "the event led to the feeling that there is no sense in striving or making an effort," "see the event as unjust and unfair," "have to think about the event over and over again," "the event makes me feel frequently sullen and unhappy," and "the event hurt my feelings and caused considerable embitterment." Mean ranks of the victims and non-victims on PTED items together with the Mann-Whitney U test results are reported in Table 3.

No significant differences were detected in the PTED scores of the victims of bullying with respect to the independent variables. However, victims who were bullied for longer than one year had scored statistically higher than other victims, only on the PTED item, namely, "the event triggers feelings of satisfaction when I think that the responsible party experiences a similar situation" ($U = 599.00$, $z = -2.41$, $p < 0.05$).

DISCUSSION

The aim of this study was to investigate the associations between perceived victimization from bullying at work and self-reported embitterment reactions. In addition, we examined the strength of the association between individual bullying behaviors and experiencing PTED and the symptoms that bother the

TABLE 3 Comparative Mean Ranks of PTED Items for Victims and Nonvictims (Mann-Whitney *U* Test results)

Items of PTED Scale	Victims ($n = 95$)	Nonvictims ($n = 302$)	Mann-Whitney *U* test results		
During the last years there was a severe and negative life event	Mean rank	Mean rank	*U*	*z*	*p*
1. that hurt my feelings and caused considerable embitterment	271.79	176.10	7429.500	−7.735	.000
2. that led to a noticeable and persistent negative change in my mental well-being	259.98	179.82	8551.500	−6.794	.000
3. that I see as very unjust and unfair	275.14	175.05	7111.500	−7.698	.000
4. about which I have to think over and over again	274.24	175.33	7197.500	−7.745	.000
5. that causes me to be extremely upset when I am reminded of it	271.78	176.11	7431.000	−7.407	.000
6. that triggers me to harbor thoughts of revenge	248.89	183.31	9605.500	−5.837	.000
7. for which I blame and am angry with myself	252.32	182.23	9280.000	−6.103	.000
8. that led to the feeling that there is no sense in striving or making an effort	275.85	174.82	7044.000	−8.044	.000
9. that makes me too frequently feel sullen and unhappy	272.71	175.81	7342.500	−7.516	.000
10. that impaired my overall physical well-being	264.42	178.42	8130.500	−7.128	.000
11. that causes me to avoid certain places or persons so as to not be reminded of them	271.11	176.32	7495.000	−7.915	.000
12. that makes me feel helpless and disempowered	264.67	178.34	8106.000	−7.325	.000
13. that triggers feelings of satisfaction when I think that the responsible party experiences a similar situation	253.50	181.86	9167.500	−5.984	.000
14. that led to a considerable decrease in my strength and drive	264.89	178.27	8085.500	−6.978	.000
15. that makes me more easily irritated than before	262.04	179.17	8356.500	−6.733	.000
16. that means that I must distract myself in order to experience a normal mood	255.02	181.38	9023.000	−6.090	.000
17. that made me unable to pursue occupational and/or family activities as before	254.11	181.67	9110.000	−6.513	.000
18. that caused me to draw back from friends and social activities	265.82	177.98	7997.500	−7.711	.000
19. which frequently evokes painful memories	265.25	178.16	8051.500	−7.534	.000

Note. PTED Scale = Post-Traumatic Embitterment Disorder Self-Rating Scale.

victims most. The findings of this study revealed that exposure to workplace bullying is positively associated with reporting embitterment reactions. Some of the behaviors represented the highest risk for clinically relevant embitterment, that is, "having key areas of responsibility removed or replaced with more trivial or unpleasant tasks," "being ridiculed in front of others," "being the subject of excessive teasing," "having allegations made against you," and "being ignored or excluded." Similarly, a study performed with 396 Spanish workers found out that ignoring individuals by meeting their questions or attempts to participate in conversations with silence was strongly correlated to psychosomatic complaints (Meseguer de Pedro, Sanchez, Navarro, & Izquierdo, 2008). In Vartia's study (2001), "assigning meaningless tasks" was one of the behaviors that was found to be strongly associated with mental stress reactions. In addition, a study that investigated the strength of association between individual negative behaviors and mental health among 5,288 employees (Hoel et al., 2004) showed that work-related (e.g., attempts to find fault in your work) and person-related (e.g., hints that you should quit, persistent criticism) behaviors constitute the greatest risk of mental illness for males and females. Yet, in this study, behaviors that constitute higher risk of PTED were more likely to be person-related (e.g., accusations of being mentally disturbed, being ridiculed in front of others) or physically intimidating behaviors (threats of violence or physical abuse) for female victims andwork-related (e.g., having key areas of responsibility removed) and socially isolating behaviors (e.g., being ignored) for male victims.

Another finding of this study was that victims reported each PTED symptom statistically higher than nonvictims. Besides, the symptoms that bothered the victims most have reflected the major characteristic features of PTED symptomatology which are (a) the central role of a negative life event that frequently triggers painful and intrusive memories, (b) the feeling of helplessness and injustice caused by the event, and (c) the resulting in deterioration of psychological well-being (Linden et al., 2009). For instance, the intrusive thoughts and memories that consisted of items like "thinking of the event over and over again" was one of the symptoms with the highest mean scores among victims of bullying at work. Prior studies investigating the impact of workplace bullying on individuals' health have shown similar findings. In a study of 516 self-reported victims of bullying at work, intrusive thoughts were indicated as one of the most frequently reported symptoms (Namie, 2012). In a study that investigated the association between exposure to negative acts at work and psychological stress reactions, avoidance behavior and intimidating behaviors were found to be significantly associated with reports of intrusive thoughts (Hogh et al., 2012).

The feeling of injustice which represents another core feature of PTED was also determined as one of the embitterment reactions with the highest mean scores among the participants of this study. Feeling of injustice in

organizations may be aroused by unfair treatment due to organizational features, violation of codes of conduct, communications and decisions that are not truthful and justified, irrational and undeserved unjust treatment like betrayals by colleagues, or humiliation and wrongful accusations by superiors (Miller, 2001; Muschalla & Linden, 2011). Thus, it can be stated that workplace bullying leads to feeling of injustice because most of the acts that constitute bullying are unjust and disrespectful as well as humiliating, threatening, or intimidating (Namie, 2007).

In this study, other PTED items that received the highest mean scores among victims of bullying were found for the feeling of helplessness and negative mood that can be evaluated under the characteristic features of PTED, resulting in deterioration of psychological well-being. It is stated that workplace bullying behaviors may lead to severe anxiety and helplessness in the long run (Hauge et al., 2010), and prior studies have shown that workplace bullying may negatively impinge psychological well-being and result in negative emotional responses (Mikkelsen & Einarsen, 2002b; Tehrani, 2004; Vie, Glaso, & Einarsen, 2012). This may be related with the evolving nature of the workplace bullying process by which the victims become stigmatized over time and feel too vulnerable to defend themselves and, thus, suffer from several stress symptoms (Einarsen et al., 2003).

A feeling of grudge (we think the event triggers feelings of satisfaction when the responsible party experiences a similar situation) was determined as the only item where the long-term victims had significantly higher scores. Accordingly, it can be interpreted that exposure to particularly prolonged bullying might lead the embittered person to seek revenge as a remedy to cure his or her hatred due to the existence of a great need for satisfaction (Znoj, 2011). Holding a grudge against someone or desire for revenge should be considered as sources of violence in the workplace (Beech & Leather, 2006) and may provide a motive for counterproductive work behaviors or bullying behaviors (Jones, 2009). Besides, there is evidence that being bullied by others may lead to bullying behaviors on the part of the victims (Lee & Brotheridge, 2006; Matthiesen & Einarsen, 2007).

To sum up, this study's findings revealed the positive associations between subjective experiences of workplace bullying and PTED. They also showed that exposure to bullying, whether as a victim or not, may lead to embitterment reactions. However, a considerable proportion of the study participants have been found to suffer from PTED with an intensity of clinical relevance, mostly affected by the bullying behaviors that constitute humiliation (e.g., being ridiculed in front of others) and injustice (e.g., having key areas of responsibility removed or replaced with more trivial or unpleasant tasks). Our results also revealed that the PTED reactions that bothered the victims most were the ones that represented the core features of embitterment disorder. Thus, these results suggest that PTED should be considered as an appropriate diagnostic term for victims of workplace bullying.

Limitations, Future Research, and Implications

Some limitations of this study that could weaken its conclusions need to be discussed. First of all, this study was based on cross-sectional data, from which it is difficult to make causal inferences, thus, associations between study variables should be considered carefully before drawing some conclusions. Accordingly, further studies should take into account "third variables" such as personality of the individuals or characteristics of the work as potential cofounders. Second, our data were gathered from self-reported responses. Even though we have labeled the victimization from bullying based on the measurement method that combines the subjective with objective approach to minimize the recall bias, this study's findings still reflected the subjective perceptions and did not involve any information from any of the observers confirming the victimization reported. Therefore, our findings may have been subject to a certain degree of recall bias. The third limitation of this study was its low response rate (39%), however this low rate is considered as normal for bullying researches in which sensitive questions were asked (Björkqvist et al., 1994).

In spite of the above limitations, this study's findings have contributed to the workplace bullying research by clarifying the prevalence of embitterment among participants who experienced bullying at work. Therefore, the findings may provide support for the argument stating that PTED should be a viable diagnostic term for the victims of workplace bullying (Ege, 2010). In addition, our results have contributed to increasing the awareness regarding the PTED phenomenon. Therefore, from a clinical point of view, these data and the significance of the phenomenon might also have practical implications for physicians and psychiatrists enabling a better treatment for victims of bullying.

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