Workplace Bullying and Mental Health

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Contents

Abstract

The last two decades have seen a steep increase in the number of studies examining the relationship between workplace bullying and mental health. This

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comes as no surprise, considering that workplace bullying represents a powerful stressor and a severely traumatic experience that may profoundly shatter people's assumptions about themselves and the surrounding world. The goal of this chapter is to make an overview of the extant international literature on the relationship between workplace bullying and mental health. After presenting the available meta-analytic findings, the chapter will summarize the most methodologically robust international research investigating the impact of workplace bullying on a diverse array of mental health problems, including depression, anxiety, psychological distress, post-traumatic stress disorder and burnout. Studies focusing on the mental health effects of witnessing bullying and examining reverse causation (i.e. the impact of mental health on the exposure to workplace bullying) will be also reviewed. The chapter will then move on to the available research on individual and work-related moderators of the relationship between workplace bullying and mental health. In the concluding section, the main gaps in current knowledge will be summarized, followed by a discussion of the future research directions needed to enhance our understanding of the link between workplace bullying and mental health.

1 Introduction

Over the last two decades, there has been a growing research interest in the negative health effects of workplace bullying. This is not surprising, given that workplace bullying represents a powerful stressor and a severely traumatic experience, being characterized, according to a commonly accepted definition, by a frequent and persistent exposure to negative acts which the targets are unable to defend themselves against (Einarsen, Hoel, Zapf, & Cooper, 2011; Nielsen, Gjerstad, Jacobsen, & Einarsen, 2017b; Nielsen, Hoel, Zapf, & Einarsen, 2016). Among health outcomes, special research attention has been paid to the mental health consequences of workplace bullying. Disorders of the psychological sphere constitute a severely disabling group of diseases (Wittchen et al., 2011). Evidence shows that a fraction of mental health problems can be attributable to adverse psychosocial working conditions (Niedhammer et al., 2014). In particular, a recent systematic review of cost-of-illness studies revealed that workplace aggression bears substantial costs to both the individual and society (Hassard, Teoh, Visockaite, Dewe, & Cox, 2018). In light of this picture, it is of utmost importance to examine the effects on mental health due to the exposure to specific psychosocial factor at work, including extreme stressors such as workplace bullying. This knowledge is essential to set priorities for preventive measures at different levels (international, national and local) aiming at the safeguard and enhancement of mental health among the population.

The goal of this chapter is to summarize the most robust international scientific evidence available on the relationship between workplace bullying and mental health. The evidence was collected through a search of the existing international literature performed on two databases (PubMed and PsycINFO). The chapter begins

with an overview of the main theoretical approaches used to uncover the link between workplace bullying and mental health. In the central part of the chapter, the available evidence on the relationship between workplace bullying and different categories of mental health problems will be reviewed. In the final section, future research needs will be discussed in light of the limitations present in the current research.

2 Theoretical Approaches

The transactional theory of stress and coping (Lazarus & Folkman, 1984) is one of the most influential theoretical frameworks adopted to shed light onto the psychological mechanisms underlying the relationship between stressors—including negative workplace encounters such as workplace bullying—and mental health. Central to this theoretical approach is the notion that strain outcomes arise when there are insufficient coping resources available to the person to deal with the stressor at hand. Given the inability to cope is a crucial element of bullying, the transactional theory of stress and coping seems particularly suitable to understand why the targets may develop mental health problems in response to bullying. The inability to cope has strong ties with the concept of control, which is a pivotal element in the cognitive activation theory of stress (CATS; Ursin & Eriksen, 2010). CATS has been proposed by several researchers to discern the mechanisms behind the negative effects of bullying on health status (Reknes et al., 2016). According to this theory, psychological and physiological stress reactions are elicited by a person's negative expectations about his/her ability to deal with a given stressor. If an individual feels a certain situation is uncontrollable, as it typically occurs in workplace bullying situations, negative expectations about his/her chances to effectively handle the situation will emerge (Reknes et al., 2016). The feeling of unpredictability is exacerbated during the escalation of bullying, wherein a target typically endures repeated failures while attempting to deal with the negative encounter. This, in turn, may lead to learned helplessness (Nielsen, Gjerstad, Jacobsen, & Einarsen, 2017b) and eventually result in impaired mental health (Abramson, Alloy, & Metalsky, 1989).

The felt lack of control ensuing from the inability to handle an adverse event such as workplace bullying is in sharp contrast with the fulfilment of basic human needs, such as perceiving that one's surrounding world is controllable and predictable (Einarsen & Nielsen, 2015; Janoff-Bulman, 1989). As predicted by the cognitive trauma theory (Janoff-Bulman, 1992), basic cognitive schemas about the world and the self can be deeply shattered when a person faces traumatic circumstances, such as a prolonged exposure to negative behaviours (Rodríguez-Muñoz, Moreno-Jiménez, Vergel, & Garrosa Hernández, 2010). These basic assumptions are the backbone of an individual's sense of being capable to effectively operate in life, without fearing that the world will bring harm to him/her (Einarsen & Nielsen, 2015). When these basic assumptions are jeopardized by the experience of repetitive traumatic events, the individual will start feeling vulnerable, which in the long run may impinge on his/her mental resources and lead to the development of mental health problems.

That workplace bullying is a factor adversely affecting the mental health of those targeted through its adverse impact on basic human expectations is also implied in one of the basic tenets of self-determination theory (SDT; Deci & Ryan, 2008). According to SDT, human beings are characterized by three basic psychological needs, namely, autonomy, competence and relatedness, which have to be fulfilled if one is to maintain optimal levels of functioning and well-being. As hypothesized by Trépanier, Fernet and Austin (2015), workplace bullying is likely to hinder the satisfaction of these basic needs: indeed, bullying consists of behaviours that may thwart the need for autonomy (e.g. coercive behaviours that restrain a person's control over the situation), competence (e.g. denying access to significant information to accomplish important work-related tasks) and relatedness (e.g. isolating or stigmatizing an employee). Trépanier, Fernet and Austin (2015) were able to empirically support the hypothesized mechanism, by finding that the exposure to negative behaviours predicted subsequent burnout through their negative impact on basic need satisfaction.

In sum, the main theories emphasize the critical role played by loss of control, and the ensuing repeated coping failures, in the development of mental health problems that may result from workplace bullying. Indeed, the latter is, by definition, characterized by a pervasive lack of control, where the target finds it increasingly difficult to effectively cope despite countless attempts to manage the predicament. This situation has the potential of breaching individuals' basic expectations about their ability to effectively function in the surrounding world, ending up in a deeply traumatic and health-endangering experience for those targeted.

3 The Evidence

In this section, the available scientific evidence with regard to the association between workplace bullying and mental health will be summarized. The review will consider primarily studies employing a longitudinal design, given their clear methodological advantage when it comes to establishing the causal direction of the relationship between workplace bullying and mental health. Cross-sectional studies will, however, be also included whenever the available longitudinal evidence is meagre or lacking.

The structure of this section will be as follows. First, the available meta-analyses will be reviewed. Second, the extant evidence will be scrutinized in relation to specific mental health problems. Note that, with a few exceptions only, the studies already included in the meta-analyses will not be presented individually. The third part will focus on the available evidence about the relationship between witnessing bullying and mental health. Fourth, the studies examining the effects of mental health on the exposure to workplace bullying (reverse causation) will be reviewed. The fifth and final part of this section will summarize the existing evidence on the role of potential individual and work-related moderators in the association between workplace bullying and mental health.

For the present review, the available meta-analytic findings were complemented by a literature search covering recent studies published from the beginning of 2015 up to October 2017. The literature search was performed, with the support of a student assistant, on two databases (PubMed and PsycINFO), using the following search terms: ("bullying" OR "harassment" OR "mobbing" OR "emotional abuse") AND ("mental disorder" OR "mental disease" OR "mental health" OR "depression" OR "depressive symptoms" OR "anxiety" OR "anxiety symptoms" OR "phobia" OR "post-traumatic stress" OR "stress" OR "distress" OR "burnout" OR "emotional exhaustion" OR "psychotropic drug" OR "psychopharmaceuticals"). To identify additional relevant studies, the reference lists of the identified studies were hand-screened and the authors' personal literature archives searched. (For a review of studies examining the association between workplace bullying and suicidal ideation and behaviour, see chapter ▶ "Long-Term Consequences of Workplace Bullying, Emotional Abuse and Harassment for Organizations and Society".)

3.1 Meta-analytic Evidence

Over the last few years, a number of meta-analyses and systematic reviews have been published summing up the existing knowledge on the association between workplace bullying and mental health (Bowling & Beerh, 2006; Hershcovis & Barling, 2010; Nielsen & Einarsen, 2012; Nielsen, Magerøy, Gjerstad, & Einarsen, 2014; Theorell et al., 2015; Verkuil, Atasay, & Molendijk, 2015). The meta-analytic evidence deriving from these studies was recently summarized in a meta-review by Harvey et al. (2017), with the latest meta-analysis included covering studies published up until February 2015 (Verkuil, Atasay, & Molendijk, 2015). Out of the meta-analyses reviewed, two (Theorell et al., 2015; Verkuil, Atasay, & Molendijk, 2015) were rated as "moderate quality" by Harvey et al. (2017). Based on these two meta-analyses, the authors concluded that there is, to date, moderate-level evidence for workplace bullying being a significant risk factor for the development of common mental health problems. Specifically, Theorell et al. (2015), which considered only studies examining depressive symptoms as outcome, showed an effect of workplace bullying of a relatively large magnitude (weighted OR [odds ratio] 2.82, 95% CI [confidence interval] 2.21–3.59). The meta-analysis of Verkuil, Atasay and Molendijk (2015) found an overall aggregated weighted r (correlation score) of 0.21 (95% CI 0.13–0.29) for the prospective relationship between workplace bullying and a broader spectrum of mental health problems (depression, anxiety and stress-related complaints). A significant relationship between workplace bullying and mental health problems was also confirmed by the other four meta-analyses included in Harvey et al.'s (2017) meta-review (Bowling & Beerh, 2006; Hershcovis & Barling, 2010; Nielsen, Mageroy, Gjerstad, & Einarsen, 2014; Nielsen & Einarsen, 2012). In conclusion, the meta-analytic evidence available so far provides consistent support for a significant role of workplace bullying as a risk factor for decreased mental health among the targets.

3.2 Depression, Anxiety and Psychological Stress

Depression and anxiety are common mental disorders with a high prevalence in the population. According to the World Health Organization (WHO, 2017), depression is the single largest factor contributing to global disability, while anxiety is ranked sixth. In addition, depression is the leading cause of death by suicide in the population. In the extant literature, depression represents one the most frequently examined outcomes of workplace bullying. As mentioned previously, the meta-analysis by Theorell et al. (2015) found moderately strong evidence for an association between workplace bullying and depressive symptoms. This finding was confirmed by Verkuil, Atasay and Molendijk (2015), who found meta-analytic evidence supporting a significant prospective relationship between workplace bullying and depression (weighted r of 0.36, 95% CI 0.17–0.56). Later studies, not included in these meta-analyses, further strengthen this conclusion. In a three-wave study on a sample of junior physicians in Germany, Loerbroks et al. (2015) found that workplace bullying at baseline was associated with an increase in depressive symptoms both 1 and 3 years later. Notably, three recent prospective studies, based on large samples of workers from different sectors in Denmark, assessed depression through interview-based diagnoses, instead of using self-reported symptom inventories (Bonde et al., 2016; Gullander et al., 2014; Hogh et al., 2016). In particular, in the studies by Gullander et al. (2014) and Bonde et al. (2016), bullying was measured with the self-labelled method, which consists of a single-item question asking participants to report how frequently (e.g. "never", "now and then", "monthly", "weekly" and "daily") they have experienced bullying over a period of at least 6 months. In contrast, Hogh et al. (2016) adopted the behavioural experience method, according to which participants are asked to report whether, and how frequently, they have been exposed to a set of negative acts that are assumed to reflect bullying behaviours, again over a period of at least 6 months. In the study by Gullander et al. (2014), self-labelled occasional (exposed "now and then" or "monthly") and frequent bullying (exposed "weekly" or "daily") were associated, in a dose-response fashion, with newly onset depression at the 2-year follow-up. Bonde et al. (2016) found that self-labelled workplace bullying was related to persistent diagnosis of depression up to 4 years after baseline, even when adjusting for changes in bullying status during follow-up. The association was significant among those reporting being bullied on a "daily, weekly or monthly" basis (frequent bullying), while it was not among those who reported being bullied "now and then" (occasional bullying). On the contrary, Hogh et al. (2016) did not find a significant association between occasional and frequent exposure to four different types of bullying behaviour at baseline (work-related negative acts, direct harassment, isolation and intimidation) and diagnosis of depression 2 years later, after adjusting for sense of coherence (SOC) and depressive symptoms at baseline. One possible explanation for the different findings is that the behavioural experience method neither captures the individual's feeling of being a victim of bullying nor a target's inability to defend himself/herself from the negative behaviours. Both are central elements of bullying, playing a substantial role in the adverse effect of bullying on

mental health (Conway et al., 2018). Covering these two aspects may be therefore particularly important when examining the impact of workplace bullying on clinically relevant mental disorders such as depression.

With regard to anxiety, in their meta-analysis Verkuil, Atasay and Molendijk (2015) obtained a weighted r square of 0.17 (95% CI 0.08–0.25) for the prospective association between workplace bullying and symptoms of anxiety. A positive association between exposure to negative acts and subsequent symptoms of anxiety was confirmed in a later longitudinal study by Reknes et al. (2016) including a Norwegian sample of nurses. No prospective studies could be identified examining diagnosis of anxiety disorder as outcome of workplace bullying. In a cross-sectional study, Nolfe, Petrella, Zontini, Uttieri and Nolfe (2010) performed DSM (Diagnostic and Statistical Manual of Mental Disorders) IV-based psychiatric diagnoses on patients presenting to a service for work-related mental health problems in Italy. The authors found that, among patients diagnosed with an anxiety disorder, about 56% presented a severe exposure to workplace bullying, representing the second highest prevalence after depressive disorders, which were associated with a severe exposure to bullying for about 81% of people diagnosed as depressed.

Other studies have used, instead of specific categories of mental health problems, self-reported inventories measuring symptoms of psychological distress (e.g. combined symptoms of depression and anxiety), including, for instance, the Hopkins Symptom Checklist (Derogatis, Lipman, Rickles, Uhlenhut, & Covi, 1974), the 12-item General Health Questionnaire (GHQ-12; Goldberg, 1972) and the Mental Health Inventory (Davies, Sherbourne, & Peterson, 1988). In some of these studies (e.g. Einarsen & Nielsen, 2015; Lahelma, Lallukka, Laaksonen, Saastamoinen, & Rahkonen, 2012; Nielsen, Hetland, Matthiesen, & Einarsen, 2012), validated cut-off points were applied on the continuous scale scores to identify groups of participants with a high probability of showing clinically relevant mental disorders. The meta-analysis by Verkuil, Atasay and Molendijk (2015) found a weighted r of 0.15 (95% CI 0.10–0.20) for the longitudinal relationship between workplace bullying and stress-related psychological complaints. Two recent prospective studies, conducted in a large sample of public employees from a Danish region (Grynderup et al., 2016; Nabe-Nielsen et al., 2017), further supported a significant link between baseline exposure to workplace bullying and subsequent psychological distress, measured 2 years later by means of Cohen's perceived stress scale (Cohen, Kamarck, & Mermelstein, 1983). In a prospective study of workers employed in welfare facilities in Japan, Taniguchi, Takaki, Hirokawa, Fujii and Harano (2016) examined how stability or change in bullying exposure status (chronic, remission, onset, never) was related to psychological distress, measured at follow-up with the Brief Job Stress Questionnaire (Shimomitsu, Iwata, & Nakamura, 2000). They found that both onset and chronic exposures to person-related negative acts were significantly associated with an elevated risk of reporting psychological stress reactions 2 years later. Beyond long-term effects, exposure to bullying behaviours may also impact on psychological distress in the short term. This was supported in a diary study on a sample of Spanish workers from a variety of occupations (Rodríguez-Muñoz, Antino, & Sanz-Vergel, 2017), wherein the authors found that daily negative acts were predictive of

same-day increase in affective distress, measured before going to bed with the Job-related Affective Well-being Scale (Van Katwyk, Fox, Spector, & Kelloway, 2000).

Workplace bullying was also examined in connection with psychotropic drug consumption (Lallukka, Haukka, Partonen, Rahkonen, & Lahelma, 2012; Niedhammer et al., 2011). In particular, in a prospective study on a sample including 40–60-year-old employees from Finland, Lallukka et al. (2012) found that both current and earlier exposures to bullying were associated, among both women and men (except for earlier exposure to bullying, which was not significant for women in the fully adjusted model), with register-based prescription of psychotropic medication (e.g. anxiolytics and antidepressants) up to 5 years after baseline, even after adjusting for age and prior psychotropic medication.

In summary, the available evidence is consistent with a significant role played by exposure to self-labelled workplace bullying and negative acts on the onset or increase of mental health problems, including depression, symptoms of anxiety and psychological distress, as well as psychotropic medication as indicator of poor mental health.

3.3 Post-traumatic Stress Disorder

Post-traumatic stress disorder (PTSD) is a mental condition defined by three symptomatic areas, namely, re-experiencing of the traumatic event (e.g. flashbacks and nightmares), avoidance of places and people which are reminders of the trauma and high levels of psychophysiological arousal. Although bullying does not constitute a single traumatic event but is characterized, by definition, by a frequent and prolonged exposure to negative events, victims of bullying have been shown to report symptomatic patterns similar to those observed in victims of other traumatic exposures (e.g. threats of death or serious injury; Leymann & Gustafsson, 1996; Nielsen, Tangen, Idsoe, Matthiesen, & Magerøy, 2015). It has been also shown that a significant relationship between workplace bullying and PTSD symptoms remains even after controlling for exposure to other recent traumatic events (Balducci, Fraccaroli, & Schaufeli, 2011). The impact of workplace bullying on PTSD may be understood in light of the cognitive theory of trauma (Janoff-Bulman, 1992), positing that an event can be conceived as traumatic insofar as it shatters people's basic assumptions about themselves and the world. Workplace bullying may qualify as such an experience, given that it may devastate a person's innate cognitive schemas about the world as a benevolent and controllable place (Mikkelsen & Einarsen, 2002).

In a recent meta-analysis, Nielsen, Tangen, Idsoe, Matthiesen and Magerøy (2015) reviewed the available literature, published up until October 2014, on the association of both school and workplace bullying with PTSD. Based on the existing evidence, the authors concluded that, to date, a cause–effect relationship between workplace bullying and PTSD cannot be established. This conclusion stems from major methodological limitations present in the current research, especially the lack

of longitudinal studies and of studies employing diagnostic clinical interviews. In an attempt to overcome this gap, Nielsen, Birkeland, Hansen, Knardhal and Heir (2017a) conducted a prospective study, based on a Norwegian sample of governmental employees, examining whether being exposed to workplace bullying after a workplace terror attack was related to a later increase in PTSD symptoms. It was found that, among employees exposed to the terror attack, those bullied at baseline (10 months after the attack) presented higher levels of PTSD symptoms than their non-bullied counterparts, both at baseline and at follow-up (22 months after the attack). Against the authors' expectations, however, PTSD symptoms did not result as more temporally stable among those bullied than among the non-bullied. In addition, Nielsen, Birkeland, Hansen, Knardhal and Heir (2017a) results could not support a significant role of victimization from workplace bullying on subsequent levels of PTSD symptoms. This may be attributed, at least partially, to the fact that being exposed to an overwhelming event such as a terror attack may have reduced the potential differential impact of workplace bullying on PTSD symptoms. In addition, as recognized by Nielsen et al., their study presents a series of methodological limitations that may have determined the null findings. In particular, the 1-year time lag between the baseline and follow-up measures may have been too short for a change in PTSD symptoms to occur. Accordingly, further studies, employing longitudinal designs with different time intervals, are needed before more reliable conclusions about workplace bullying as a significant risk factor for PTSD can be drawn.

3.4 Burnout

While the potential outcomes of workplace bullying reviewed so far encompass mental health problems that can emerge in every life context, burnout represents a form of mental ill health that may occur in response to negative conditions specifically arising in the workplace. According to a common definition, burnout is a form of chronic stress characterized by emotional exhaustion, which is considered as the core feature of burnout, cynicism and a sense of reduced professional efficacy (Maslach & Jackson, 1981). Although originally studied among healthcare workers as a specific reaction to prolonged taxing human interactions, burnout has been shown to occur as a response to adverse working conditions also in other occupational sectors, not involving continuous interactions with others (Bakker, Demerouti, & Sanz-Vergel, 2014).

The meta-analysis by Verkuil, Atasay and Molendijk (2015) obtained a weighted r of 0.51 (95% CI 0.39–0.62) for the association between workplace bullying and burnout. Such positive association was confirmed by the meta-analysis of Nielsen and Einarsen (2012), who found a mean r of .27 ($p < .001$) based on 10 correlations. As they derive from studies using a cross-sectional design, these meta-analytic coefficients cannot, however, prove the causal direction of the examined relationship. As opposite to this, three studies, using a longitudinal design, were able to provide more robust evidence of a cause–effect link between workplace bullying and burnout (Laschinger & Fida, 2014; Nabe-Nielsen et al., 2017; Tuckey & Neall,

2014). In more detail, in a two-wave study examining retail workers in Australia, Tuckey and Neall (2014) found that baseline exposure to negative acts was predictive of increased levels of emotional exhaustion 6 months later, after controlling for baseline levels of the outcome. In a similar vein, in a study by Laschinger and Fida (2014) on a sample of new graduate nurses from Canada, it was found that negative acts predicted both increased emotional exhaustion and cynicism at the 1-year follow-up, again after controlling for initial levels of the respective outcome. Finally, Nabe-Nielsen et al. (2017), examining a large sample of civil servants from the public sector in Denmark, found that baseline workplace bullying was a significant predictor of personal burnout 2 years later, after initial burnout levels were adjusted for.

The available evidence is therefore indicative of a significant impact of both self-labelled workplace bullying and exposure to negative acts on emotional exhaustion and, in one study (Laschinger & Fida, 2014), also on cynicism.

3.5 Mental Health Consequences of Witnessing Bullying

To date, the vast majority of studies have focused on the mental health effects of workplace bullying from the target's perspective (Nielsen & Einarsen, 2013). Yet, witnessing bullying may as well be regarded as an event that can have a significant impact on the mental well-being of the observers (e.g. Emdad, Alipour, Hagberg, & Jensen, 2013; Vartia, 2001). Bystanding to others being bullied may indeed engender in witnesses' fears and negative expectations about their workplace (e.g. fearing of becoming the next target; Cooper, Hoel, & Faragher, 2004), adversely affecting their mental health as a result (Lutgen-Sandvik, Tracy, & Alberts, 2007). A prospective study by Emdad, Alipour, Hagberg & Jensen (2013), conducted in a sample of industry workers in Sweden, found that witnessing bullying was associated with an elevated risk of developing depressive symptoms 18 months later. In another study, including a representative sample of the working population in Finland (Lallukka, Haukka, Partonen, Rahkonen, & Lahelma, 2012), observing bullying was associated with subsequent psychotropic medication among both women and men. In a diary study, Totterdell, Hershcovis, Niven, Reich and Stride (2012) showed that witnessing unpleasant behaviours at work increased emotional depletion in a sample of employees from a UK (United Kingdom) hospital department. In a prospective study examining work unit-level exposure to workplace bullying in a Danish sample of workers from different sectors, however, Gullander et al. (2014) could not find any significant relationship between the percentage of employees witnessing bullying and diagnosis of depression at the 2-year follow-up.

In a critique to Emdad, Alipour, Hagberg, & Jensen (2013) study, Nielsen and Einarsen (2013) raised concerns about the very possibility to build substantive theoretical arguments supporting witnessed bullying as a predictor of mental health. Specifically, they refer to previous research demonstrating that the negative impact of bullying on mental health is largely attributable to a victim's self-perceived inability to defend himself/herself. Those who observe others being bullied,

however, do not experience such inability, which limits the chance that witnessing bullying may per se be an antecedent of mental health problems. In this line of reasoning, Nielsen and Einarsen (2013) argued that the negative effect of being a bystander on depressive symptoms can be explained by the observers' own exposure to bullying, which Emdad, Alipour, Hagberg and Jensen (2013) failed to control for in their analysis. The same limitation of not adjusting for direct exposure to bullying applies also to previous studies finding a significant association between witnessing bullying and mental health. Backing up their criticism empirically, Nielsen and Einarsen (2013) found, in a representative sample of the Norwegian working population, that the observed significant 2-year prospective association between being a bystander to bullying and subsequent psychological distress disappeared after controlling for bystanders' own exposure to workplace bullying. Based on both Nielsen and Einarsen's (2013) findings and their theoretical considerations, it seems therefore crucial, in order to establish if witnessing bullying is a risk factor for mental health, that in future studies researchers include a bystander's own exposure to bullying as a confounding variable in multivariate analytical models.

3.6 Reverse Causation

Over the past few years, a growing research interest has emerged with regard to the effect of mental health problems on the exposure to job stressors. This type of relationship is commonly examined within the theoretical framework of reverse causation, according to which employees with lower mental health are expected to be at a higher risk of experiencing negative working conditions (Tang, 2014). Among job stressors, recent studies have focused specifically on the impact of mental health on the exposure to workplace bullying. Such a reverse type of relationship may occur, for example, because employees with poor mental health are less able to tolerate aggressive behaviours, being, as a result, more inclined to interpret others' behaviour as aggressive (Nielsen, Hoel, Zapf, & Einarsen, 2016). In addition, people with poor mental health may enact behaviours (e.g. poor performance and breaches of social norms) with the potential of triggering aggressive reactions by the others (Nielsen, Hoel, Zapf, & Einarsen, 2016).

In the available literature, there are several studies indicating a positive relationship between mental health and subsequent exposure to workplace bullying. The meta-analysis by Nielsen, Magerøy, Gjerstad and Einarsen (2014) observed significant prospective associations between mental health problems and subsequent exposure to workplace bullying (OR 1.74, 95% CI 1.44–2.12). This finding was also confirmed in the meta-analysis by Verkuil, Atasay and Molendijk (2015) with regard to specific mental health problems, including anxiety (weighted r 0.15, 95% CI 0.04–0.26) and stress-related complaints (weighted r 0.22, 95% CI 0.12–0.31). Verkuil, Atasay and Molendijk (2015) could not observe, however, a statistically significant meta-analytic evidence for a prospective association between depression and workplace bullying (weighted r 0.13, 95% CI −0.02 to 0.28). Yet, two recent studies, not included in Verkuil, Atasay and Molendijk's (2015) meta-analysis,

found that depressive symptoms were significant predictors of workplace bullying at follow-up (Hogh et al., 2016; Loerbroks et al., 2015). In more detail, in a sample of junior doctors in Germany, Loerbroks et al. (2015) found that depressive symptoms at baseline were associated, among initially non-bullied participants, with an elevated risk of being bullied at the 3-year follow-up. Moreover, Hogh et al. (2016), in a sample of workers from different economic sectors in Denmark, found that employees with depression at baseline had a higher risk of exposure to two types of bullying behaviour (direct harassment and intimidation) 2 years later, after adjusting for baseline levels of the respective behaviour.

Further recent studies have examined the reverse association between different types of mental health indicators at baseline and subsequent exposure to workplace bullying, with mixed findings. In another study by Nielsen, Birkeland, Hansen, Knardhal and Heir (2017a), based on a Norwegian sample of governmental employees, it was found that employees with post-traumatic stress symptoms had an increased risk of being targets of workplace bullying 1 year later, even after controlling for baseline levels of bullying exposure. In a study on retail workers from Australia, Tuckey and Neall (2014) found that a reverse causality model including a time-lagged 6-month relationship between emotional exhaustion and workplace bullying fitted the data well. Other prospective studies, however, failed to find significant associations between mental health and later exposure to bullying. Specifically, in two prospective studies of public sector employees from a Danish region, perceived stress (Grynderup et al., 2016; Nabe-Nielsen et al., 2017) and burnout (Nabe-Nielsen et al., 2017) did not significantly predict exposure to workplace bullying 2 years later.

Nielsen and Einarsen (2013) examined reverse causation in the context of the relationship between mental health and bystanding to bullying in a representative sample of Norwegian employees. They found that, after controlling for bystanders' own exposure to bullying and being a bystander to bullying at baseline, baseline symptoms of psychological distress predicted witnessing bullying 2 years later. The authors explained this finding by invoking the gloomy perception mechanism (de Lange, Taris, Kompier, Houtman, & Bongers, 2005), which predicts that distressed employees have a higher tendency of perceiving their work environment as negative. Accordingly, employees with poorer mental health may be more prone to interpret observed negative interpersonal encounters as instances of bullying.

In conclusion, despite some null findings, the increasing number of prospective studies testing the reverse causation hypothesis points to a positive link between poor mental health and subsequent exposure to workplace bullying. This relationship may reflect either an actual exposure or, according to a perception mechanism, a higher tendency of employees with poorer mental health to experience others' behaviours as aggressive.

3.7 Moderators

When examining the impact of workplace bullying on mental health, an important issue to consider is whether this effect may change depending on individual

characteristics and contextual factors (Nielsen, Gjerstad, Jacobsen, & Einarsen, 2017b). Answering this question is important from both the theoretical and the practical point of view, as it may reveal for which groups of people, and under which circumstances, workplace bullying poses more serious threats to mental health. In the upcoming section, the current evidence about potential moderators of the relationship between workplace bullying and mental health will be reviewed. It must be noted that, with only a few exceptions (e.g. gender), studies including analyses of moderators are predominantly cross-sectional. For this reason, the present review will also consider studies employing a cross-sectional design.

3.7.1 Individual Moderators

Gender

A number of studies have examined the potential moderating role of socio-demographic factors such as gender, age and ethnicity in the relationship between workplace bullying and mental health. The expectation that the impact of workplace bullying on mental health may be a function of gender is supported by evidence indicating that the risk of developing mental health problems as a result of job stressors may vary between men and women (Attel, Kummerow Brown, & Treiber, 2017; Rodríguez-Muñoz et al., 2010; Theorell et al., 2015). In their meta-analysis, Theorell et al. (2015), drawing on a limited number of studies, did not observe any significant gender differences in the prospective relationship between workplace bullying and depressive symptoms. With regard to mental health outcomes other than depressive symptoms, two studies found no gender differences in the association between workplace bullying and subsequent common mental disorders (Lahelma, Lallukka, Laaksonen, Saastamoinen, & Rahkonen, 2012) and psychotropic medication (Lallukka, Haukka, Partonen, Rahkonen, & Lahelma, 2012). Specifically, in the study by Lahelma et al. (2012), involving a sample of municipal employees in Finland, although workplace bullying predicted higher GHQ-12 scores in both genders, this effect was stronger among men than women: the authors, however, did not perform any formal test of interaction between bullying and gender, and hence it was not possible to draw conclusions about the existence of a moderating effect. In the 5-year follow-up study by Einarsen and Nielsen (2015) on a representative sample of the Norwegian working population, after controlling for a series of relevant confounders, workplace bullying resulted as a significant predictor of psychological distress among men only. As discussed by the authors, however, the credibility of this finding may be limited by methodological shortcomings such as the few numbers of targets in the sample, reducing the statistical power of the analysis, and the fact that women may be more likely to drop out from studies because of a higher tendency to take long-term sick leave or disability benefits in response to the unfavourable working conditions. Using diagnostic interviews, Nolfe et al. (2010) found that the association between workplace bullying and psychiatric diseases was stronger among men than women. Although the existing evidence provides some indications that the impact of workplace bullying on mental health may be more detrimental for men, drawing conclusions about the role of

gender is, to date, limited due to a number of methodological drawbacks in the available research.

Other Socio-demographic Factors

Studies examining the moderating role of socio-demographic characteristics other than gender are sporadic and mainly cross-sectional in nature. Age was considered in one cross-sectional study including a sample of US (United States) registered nurses between 22 and 47 years old (Berry, Gillespie, Fisher, Gormley, & Haynes, 2016). The authors found that, among targets of bullying, respondents aged 30 years or older had a higher median score of post-traumatic stress symptoms than their younger counterparts. This can be explained, according to the authors, by the fact that a cumulated exposure to workplace bullying may exacerbate post-traumatic stress symptoms. In another study on a sample of healthcare administration staff in Australia, Rodwell, Demir, Parris, Steane and Noblet (2012) did not observe any age-related differences in the relationship between workplace bullying and psychological distress.

A few studies considered the role of ethnicity. Berry et al. (2016) did not find differences related to ethnicity in the reporting of post-traumatic stress symptoms among targets of workplace bullying. In a representative cross-sectional sample of working individuals aged 50 years and older in the USA, Attell, Kummerow Brown and Treiber (2017) found that the correlation between workplace bullying and levels of anxiety and hopelessness was significant only among white workers, while it was not among persons of colour. In a study on a sample of workers from different sectors in New Zealand, Gardner et al. (2013) found that Pacific Island, Asian/Indian and Māori respondents, despite reporting a stronger exposure to bullying, experienced lower levels of psychological strain than New Zealand Europeans. This finding was attributed by the authors to the somewhat higher levels of supervisor support reported by Pacific Island, Asian/Indian and Māori respondents. The level of support received from the supervisor may thus influence whether the association between exposure to workplace bullying and lower mental health is stronger in minority groups. The study by Berry et al. (2016) examined also education as a potential moderator and found that the relationship between workplace bullying and post-traumatic stress symptoms did not change depending on whether the nurses had obtained an associate's or a bachelor's degree. Given the paucity of research, whether factors such as age, ethnic background and education are significant moderators of the link between workplace bullying and mental health still remains an open issue.

Individual Dispositions

Some studies have also considered the role played by individual dispositions (personality, personal resources and coping styles) in the relationship between workplace bullying and mental health. According to the aforementioned transactional theory of stress and coping (Lazarus & Folkman, 1984; Samnani & Singh, 2015) and the CATS (Ursin & Eriksen, 2010), these personal attributes are central in determining if, and to what extent, the exposure to stressors will affect people's

mental health. A personality trait that has received some attention is negative affectivity, which refers to a marked individual tendency to experience negative emotions related to themselves, the others and the world (Watson & Clark, 1984). To date, studies have not observed significant moderating effects of negative affectivity in the relationship between workplace bullying and indicators of mental health, such as post-traumatic stress symptoms (Matthiesen & Einarsen, 2004) and psychological distress (Djurkovic, McCormack, & Casimir, 2006). According to Hogh, Mikkelsen and Hansen (2011), these findings may indicate that negative affectivity should be regarded more as a mediator than a moderator of the relationship between workplace bullying and mental health.

Another dispositional factor considered is SOC (Antonovsky, 1987), which is conceived as a positive individual orientation towards the world that equips individuals with stronger resistance resources when confronted with external stressors. In a cross-sectional sample including members of two Norwegian support associations for targets of bullying at work, Nielsen, Matthiesen and Einarsen (2008) found that SOC was protective against post-traumatic stress symptoms, but only among targets exposed to low levels of workplace bullying. Unexpectedly, the authors also found that bullying was more strongly related to post-traumatic stress symptoms among individuals with medium to high SOC. Nielsen et al. (2008) gave two interpretations for these findings. On the one hand, bullying may be more detrimental for those individuals having a better perception of the world, such as those characterized by high SOC, given that an enduring exposure to negative behaviours clashes with their expectations about the world being a meaningful, comprehensible and manageable place. On the other hand, the findings may also indicate that being exposed to high levels of bullying behaviours may be a traumatic experience for anyone affected, independently from their personal dispositions. Workplace bullying reflects an uncontrollable situation whereby the target develops a feeling of helplessness as a consequence of repeated coping failures. Hence, even among people possessing better resistance resources against stress, the experience of bullying may lead to negative consequences for the targets' mental health. These interpretations were confirmed by Sartain (2013), who, in a replication study on a small US sample of licensed professional counsellors, could not find support for a protective role of SOC in the relationship between workplace bullying and post-traumatic stress symptoms.

Despite this, a few studies lent support to a significant moderating effect of personal characteristics in the association between workplace bullying and mental health. Mikkelsen and Einarsen (2002), examining a Danish sample of victims of bullying, found that generalized self-efficacy, which refers to global and stable beliefs about one's own ability to cope with stressful conditions, significantly buffered the relationship between workplace bullying and psychological health complaints. Furthermore, in a study by Spence Laschinger and Nosko (2015) on experienced hospital nurses from Canada, self-efficacy cushioned the positive association between workplace bullying and post-traumatic stress symptoms. In a Spanish study on a sample of people presenting to associations or support groups for victims of bullying, Moreno-Jiménez, Muñoz, López and Garrosa (2007) found a stronger association between workplace bullying and depressive symptoms among

individuals characterized by high levels of social anxiety. Nielsen, Glasø, Matthiesen, Eid and Einarsen (2013), however, in a study examining a sample of employees in the Norwegian offshore oil and gas industry, did not find support for the hypothesized moderating effect of another stress resistance resource, namely, global self-esteem, in the relationship between bullying behaviours and symptoms of anxiety.

Other studies have focused on the role played by coping styles in the association between workplace bullying and mental health. In a longitudinal study by Reknes et al. (2016) on a Norwegian sample of nurses, it was found that adopting an active goal-oriented coping style was protective against anxiety at follow-up, but only when exposure to bullying behaviours was very low. As bullying severity increased, the protective role of general coping styles disappeared. In a cross-sectional study including a random sample of the working population in the Netherlands, Dehue, Bolman and Völlink (2012) found that adopting a positive attitude towards the problematic situation as a coping strategy strengthened the positive relationship between workplace bullying and both depressive symptoms and psychological distress; in a similar vein, denying the situation amplified the positive association between workplace bullying and depressive symptoms. Both these coping styles are emotion-focused and passive, which previous research has found in association with worse mental health (Folkman, Lazarus, Gruen, & DeLongis, 1986).

In conclusion, the available evidence on individual moderators is heavily dependent on cross-sectional studies and provides a mixed picture with regard to the role of individual differences as moderators of the relationship between workplace bullying and mental health. Yet, there are indications in the literature that the moderating role of personal characteristics may depend on the level of severity of the bullying situation. As bullying becomes more serious, individual attributes seem to play a lower role in buffering the negative impact of bullying on mental health (Nielsen, Hoel, Zapf, & Einarsen, 2016).

3.7.2 Work-Related Moderators

Social Support at Work

Some studies, mainly cross-sectional, have also examined situational characteristics of the workplace that can potentially moderate the relationship between workplace bullying and mental health. Among these, social support at work has been the most frequently considered moderator. In the previously cited study of Attell, Kummerow Brown and Treiber (2017), the authors found that workplace bullying was related to higher psychological distress among women and persons of colour because the latter could benefit less from the protective effect of co-worker social support. The role of co-worker social support as a significant moderator was also confirmed in earlier studies including workers from different economic sectors such as healthcare (Quine, 1999) and white-collar (Bilgel, Aytac, & Bayram, 2006) workers. In the study by Gardner et al. (2013) on a multisector sample of employees from New Zealand, a significant but small moderating effect of both social support from co-workers and supervisors was observed. As noted earlier, higher levels of support

from supervisors could explain why Pacific Island, Asian/Indian and Māori respondents, despite reporting more workplace bullying than their New Zealand European colleagues, suffered less psychological strain than the latter. The important role of the supervisor as a moderator was supported also by Warszewska-Makuch, Bedynska and Zolnierczyk-Zreda (2015), who found, in a sample of office workers from different Polish organizations and sectors, that authentic leadership significantly buffered the positive relationship between workplace bullying and psychological distress.

Psychosocial Safety Climate

Two studies (Bond, Tuckey, & Dollard, 2010; Law, Dollard, Tuckey, & Dormann, 2011) examined the moderating role of psychosocial safety climate, a facet-specific component of organizational climate that indicates to what extent work organizations care for their employees' psychological health and safety. Both studies, based on samples of workers in Australia, found support for the hypothesized moderating effect; specifically, the relationship between workplace bullying and outcomes including psychological distress, emotional exhaustion and post-traumatic stress symptoms was less pronounced among employees reporting higher levels of psychosocial safety climate.

Other Work-Related Factors

Rodwell and Demir (2012) and Rodwell, Demir, Parris, Steane and Noblet (2012) examined employment type (i.e. full-time vs. part-time) as a potential moderator of the relationship between workplace bullying and psychological distress. Specifically, in an Australian sample of hospital and aged care nurses, Rodwell and Demir (2012) found that full-time workers reported greater psychological distress linked to bullying than part-time aged care nurses, who reported similar levels of psychological distress, regardless of their level of exposure to bullying. According to the authors, this finding may be explained by the fact that part-time workers may not identify with their work as much as full-timers do, and they may also have more time to rebuild their self-esteem and recover from bullying. In the other study, however, including a sample of healthcare administration staff from Australia, Rodwell, Demir, Parris, Steane and Noblet (2012) could not replicate this finding as full-time employees remained relatively higher on psychological distress independent of bullying, while their part-time colleagues experienced more distress if bullied. The high levels of psychological distress among full-time workers may have determined a ceiling effect, potentially explaining the null finding.

Tepper (2000) examined the moderating role of perceived job mobility, which refers to the extent a person feels he/she can find another comparable job if he/she is quitting the present one, on the relationship between abusive supervision and mental health, relying on a longitudinal sample of residents in a medium-size city in the USA. The author found that the correlations between abusive supervision at baseline and both depression and burnout at follow-up were stronger among those participants perceiving less job mobility. According to Tepper's (2000) interpretation, individuals with low perceived job mobility may dwell upon their adverse situation,

while those seeing opportunities to change their job situation may have more psychological resources to detach themselves from the negative consequences of abusive supervision.

The Role of the Perpetrator

An under-researched question in the literature is whether the impact of workplace bullying on mental health changes according to the perpetrator of the negative behaviours. To bridge this gap, recently Török et al. (2016) examined, in two large cross-sectional samples of the general working population in Denmark, differences in the relationship between workplace bullying and depressive symptoms according to perpetrator type (i.e. leader, subordinates, clients/customers/patients/students and colleagues). In one of the samples, the authors found that those participants who reported bullying from leaders had a higher mean score of depressive symptoms than those who reported bullying from colleagues. In the other sample, depressive symptoms were higher among those bullied by leaders than those bullied by clients. According to the authors, these results may point to the importance of the existing imbalance of power between the target and the perpetrator in determining a target's inability to defend himself/herself against bullying, which represents an important mechanism behind the negative effects of bullying on mental health (Reknes et al., 2016).

In sum, as with individual moderators, the available research investigating the moderating role of work-related characteristics is also limited by its reliance on cross-sectional studies mainly. Nevertheless, the existing evidence suggests that contextual features of the workplace, for instance, the amount of social support provided by colleagues and the commitment of the organization to employees' psychological safety, may be important resources to mitigate the detrimental effect of bullying on mental health.

4 Conclusion and Future Research Needs

The present review of the available international literature reveals the existence of a substantial body of research focusing on the relationship between workplace bullying and mental health. Overall, the most robust research available to date (i.e. studies employing prospective studies and controlling for baseline mental health levels) provides compelling evidence that workplace bullying is a significant risk factor for depression, anxiety and psychological distress. The current studies additionally show that this effect may develop in the short term, but it can also stretch over longer time periods. Positive associations between workplace bullying and mental health have been found both in representative samples of the working population and across occupational groups, pointing to the generalizability of the findings (Nielsen, Mageroy, Gjerstad, & Einarsen, 2014). In addition, the current evidence is consistent with the contention that poor mental health may pose a risk for future exposure to workplace bullying. Finally, some studies show that there are a number of moderating factors, at both the individual and the work level, that can modify the quality

and the strength of the association between workplace bullying and mental health. Despite the expanding evidence and the increasing quality thereof, however, there are still a number of methodological gaps in current research that need to be addressed if one is to gain a fuller understanding of the relationship between workplace bullying and mental health.

First, while theoretically plausible, a significant cause–effect relationship between workplace bullying and PTSD cannot be yet established, given the paucity of studies employing a prospective design (Nielsen, Tangen, Idsoe, Matthiesen, & Magerøy, 2015). Second, with a few exceptions only (e.g. Bonde et al., 2016; Loerbroks et al., 2015; Nielsen, Tangen, Idsoe, Matthiesen, & Magerøy, 2015), most extant longitudinal research has adopted follow-up studies with only two waves of measurement. While this design may give indication about the direction of the association, two-wave studies have limited power in disclosing temporal dynamics in the relationship between workplace bullying and mental health. Studies including three or more waves of measurement may, however, enable researchers to shed light onto the stability and duration of the mental health effects of workplace bullying and whether stability/change in bullying status is associated with increased or decreased levels of mental health. In addition, studies employing three or more waves of measurement may help clarify the dynamics of the reverse and reciprocal relationships between mental health and exposure to workplace bullying. Again, multi-wave designs can allow testing more complex causal chains where workplace bullying is examined as an intermediate variable between a stressful psychosocial work environment, which is a well-documented antecedent of bullying (Salin & Hoel, 2011), and the subsequent effects on mental health. With regard to the experimental approach, which is the gold standard for demonstrating causality, Nielsen, Hoel, Zapf and Einarsen (2016) pointed to a few studies (e.g. Eisenberg, Lieberman, & Williams, 2003) on social exclusion that, by using milder, non-health-endangering forms of verbal aggression, indicate a possible ethical way of employing experimental studies also in the research on workplace bullying.

A third limitation relates to how the variables are measured in studies focusing on the relationship between workplace bullying and mental health. The measurement issues surrounding the assessment of workplace bullying are addressed in Volume 1, Section B, and will not be treated further in this chapter. Regarding mental health outcomes, most of the existing studies rely on symptoms measured through self-report questionnaires (Harvey et al., 2017). Except for depression, which has been recently examined in a number of prospective studies employing interview-based clinical diagnoses, there is a lack of research examining the prospective association between workplace bullying and other diagnoses, such as anxiety disorders and PTSD. The availability of mental health outcomes that are not measured with the same instruments used to assess workplace bullying (e.g. self-reports) may prevent the risk of common method bias as a threat to the internal study validity (Harvey et al., 2017). To bridge this gap, future research is strongly needed adopting clinical assessments of mental disorders based on validated diagnostic criteria. This can be done by performing clinical assessments, as done in recent studies employing the Schedules for Clinical Assessment in Neuropsychiatry (SCAN; Bonde et al., 2016;

Gullander et al., 2014; Hogh et al., 2016), or by relying, whenever possible, on register data stored in national archives. For example, the latter approach has been recently adopted in a number of Danish studies to measure potential outcomes of workplace bullying such as long-term sickness absence (e.g. Hansen et al., 2018; Nabe-Nielsen et al., 2016) and turnover (e.g. Clausen et al., 2016; Nabe-Nielsen et al., 2017).

A fourth limitation is that the current understanding of the mechanisms (moderators and mediators) underlying the relationship between workplace bullying and mental health is constrained by the predominantly cross-sectional nature of the available studies (Nielsen, Hoel, Zapf, & Einarsen, 2016). For example, while the transactional theory of stress and coping has been used repeatedly by researchers to unpack the moderating role of individual dispositions and resources in the relationship between workplace bullying and mental health, very rarely variables indicating such dispositions have been tested in a prospective framework (for exceptions, see, e.g., Reknes, Einarsen, Pallesen, Bjorvatn, Moen, & Mageroy, 2016; Tepper, 2000). Other theories, such as the CATS (Ursin & Eriksen, 2010) and the cognitive theory of trauma (Janoff-Bulman, 1992), point to plausible mechanisms which, however, still need to be systematically tested in the literature. One exception is SDT (Deci & Ryan, 2008), which was empirically verified in a recent longitudinal study by Trépanier, Fernet and Austin (2015), focusing on the psychological mechanisms behind the adverse impact of negative acts on different outcomes including burnout. Further prospective studies are also needed to shed light onto the role of socio-demographic factors such as gender, age, job seniority, ethnic background and education, as well as the role of work-related factors such as working time, social support, leadership and organizational culture and climate, as potential moderators of the relationship between workplace bullying and mental health.

A fifth and final limitation is the current scarcity of methodologically robust research on the impact of workplace cyberbullying on mental health. Given the dominant role played by information and communication technologies (ICTs) in today's work life, over the last few years, online forms of bullying have become a major concern for organizations and employees (Snyman & Loh, 2015). Workplace cyberbullying can be conceived as "a situation where over time, an individual is repeatedly subjected to perceived negative acts conducted through technology (e.g. phone, email, web sites and social media) which are related to their work context. In this situation the target of workplace cyberbullying has difficulty defending him or herself against these actions" (Farley, Coyne, Axtell, & Sprigg, 2016; p. 295). Given its characteristics (e.g. being on the receiving end of repeated unwanted and aggressive online behaviours, being exposed to the public and being unable to defend oneself), cyberbullying is likely to bear significant negative effects on the health and well-being of the targets. Supporting this, a few quantitative cross-sectional studies have found that workplace cyberbullying is significantly linked to higher perceived stress (Snyman & Loh, 2015) and general mental strain (Coyne et al., 2017; Farley, Coyne, Sprigg, Axtell, & Subramanian, 2015). This relationship has been confirmed also in qualitative studies, where participants reported mental distress as a result of their exposure to cyberbullying (D'Cruz & Noronha, 2013,

2018). The lack of longitudinal studies, however, does not allow drawing of definite conclusions about cause–effect relationships. Prospective studies are therefore needed to shed light onto the role of workplace cyberbullying in affecting targets' mental health.

Spending additional research efforts to enhance the current knowledge of the relationship between workplace bullying and an array of mental disorders is imperative given the well-documented adverse impact of bullying on common mental disorders such as depression and anxiety. Providing high-quality research is an ethical demand as research findings may influence the development of regulations and policies at different levels aiming at contrasting the bullying phenomenon and mitigating the negative consequences for those exposed. In addition, improving the methodological quality of studies examining moderators (individual and contextual) is crucial in order to adequately identify groups at risk and precipitating unfavourable situations and set up targeted preventive measures accordingly.

5 Limitations of This Chapter

The conclusions made in this chapter about the relationship between workplace bullying and mental health should be treated with caution, given some limitations in the literature review performed. In particular, the present review was based on a literature search performed on two databases only and covered studies published up to October 2017. This means that some important and more recent papers may have been missed, potentially affecting the validity of some of the conclusions drawn in this chapter.

6 Cross-References

- ▶ Health Consequences of Workplace Bullying: Physiological Response and Sleep
- ▶ Long-Term Consequences of Workplace Bullying, Emotional Abuse and Harassment for Organizations and Society
- ▶ New Directions in Reciprocal Influences: The Cases of Role Stressor–Workplace Bullying and Interpersonal Conflict–Workplace Bullying Linkages
- ▶ Surviving Workplace Bullying, Emotional Abuse and Harassment
- ▶ Targets of Workplace Bullying and Mistreatment: Helpless Victims or Active Provocateurs?
- ▶ The Moderating Effects of Coping Mechanisms and Resources in the Context of Workplace Bullying, Emotional Abuse and Harassment
- ▶ The Role of Bystanders in Workplace Bullying
- ▶ The Role of Personality in Workplace Bullying Research
- ▶ The Role of Therapists in Treating Parties to Workplace Bullying: Similarities, Differences and Integration

7 Cross-References to Other Volumes

► Diagnosis and Treatment: Repairing Injuries Caused by Workplace Bullying, Vol. 3

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