



HAL
open science

Workplace Bullying and Post-Traumatic Stress Disorder Symptoms: a Double Mediation Model

Jale Minibas Poussard, Meltem Idig Camuroglu, Tutku Seckin Celik, Haluk Baran Bingol

► **To cite this version:**

Jale Minibas Poussard, Meltem Idig Camuroglu, Tutku Seckin Celik, Haluk Baran Bingol. Workplace Bullying and Post-Traumatic Stress Disorder Symptoms: a Double Mediation Model. *International Journal of Contemporary Economics and Administrative Sciences*, 2022, 10.5281/zenodo.6850489 . hal-03984553

HAL Id: hal-03984553

<https://hal.science/hal-03984553>

Submitted on 12 Feb 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

Workplace Bullying and Post-Traumatic Stress Disorder Symptoms: a Double Mediation Model

Jale MINIBAS POUSSARD ¹
Meltem IDIG CAMUROGLU²
Tutku SECKIN CELIK³
Haluk Baran BINGOL ⁴

Received: 07.03.2021, Accepted: 23.06.2022
DOI Number: 10.5281/zenodo.6850489

Abstract

The purpose of this study is to explore the interlinkage of emotion-focused coping and perceived stress in the relationship between workplace bullying and post-traumatic stress disorder (PTSD) symptoms. This study was a cross-sectional nationwide survey with sampling in ten cities across Turkey. The sample (N=257) is composed of employees who reported high exposure to bullying. The scales used are workplace bullying, PTSD symptoms, perceived stress and emotion-focused coping. Through a double mediation model, results demonstrate that the relationship between workplace bullying and PTSD symptoms is affected by the interaction between emotion-focused coping and perceived stress. This study contributes to fill the gap in the workplace bullying literature by focusing on person-related factors. To our knowledge, the mediator role of perceived stress and emotion-focused coping has not been studied together yet in the workplace bullying and PTSD research. Workplace bullying has important organizational and economic consequences as well as individual serious health problems. HRM implications are discussed to prevent victims to get into a vicious cycle.

Keywords: Workplace bullying; PTSD symptoms; perceived stress; emotion-focused coping.

¹ Professor, PhD, Institute of Management Research (IRG-EA2354), Université Paris-Est, UPEC, UPEM, Créteil, France, jale-hatice.minibas-poussard@u-pec.fr, <https://orcid.org/0000-0001-5927-5007>

² PhD, Private Practice, Ankara, Turkey, meltemcamur@gmail.com, <https://orcid.org/0000-0002-6414-2951>

³ PhD, Business Administration Dept., Istanbul Medeniyet University, Turkey, tutkuseckin@gmail.com, <https://orcid.org/0000-0002-8265-5259>

⁴ PhD, Global South Research Consortium, Atlanta, USA, hbaranbingol@gmail.com, <https://orcid.org/0000-0001-8352-953X>

1. Introduction

Researchers have identified bullying as an important psychosocial problem in the last decades. Although there are numerous definitions of workplace bullying, this study utilizes the definition from Einarsen, Hoel, Zapf, & Cooper (2011, p.22), which states that:

“Bullying at work means harassing, offending, socially excluding someone or negatively affecting someone’s work tasks. For the label bullying (or mobbing) to be applied to a particular activity, interaction or process it has to occur repeatedly and regularly (e.g., weekly) and over a period of time (e.g., about six months).”

Being exposed to bullying has job-related and health-related negative outcomes (Nielsen & Einarsen, 2012). A recent cross-sectional study (Verkuil, Atasayi, & Molendijk, 2015) highlighted the relationship between workplace bullying and mental health by showing positive associations between workplace bullying and symptoms of depression, as well as stress-related psychological complaints and anxiety. Leymann and Gustafsson (1996) reported that as anxiety becomes chronic during bullying process, victims illustrate chronic anxiety symptoms, such as muscular tension, autonomic nervous system hyperactivity, hypersensitivity, and post-traumatic stress disorder. In a recent meta-analysis Nielsen, Tangen, Idsoe, Matthiesen, & Mageroy (2015) reported the frequency of post-traumatic stress disorder (PTSD) symptoms as an average of 57% among victims of bullying. Despite the growing knowledge on the antecedents of workplace bullying, studies focusing on person-related factors are comparatively few. Some researchers (Hauge, Skogstad, & Einarsen, 2007, 2009; Nielsen, Hetland, Matthiesen, & Einarsen, 2012) shed light on the mutual relationship between bullying and stress, indicating a vicious cycle. Chosen coping mechanisms have crucial importance on the impact and effectiveness of given responses to stressors in life (Billings & Moos, 1981). In exposure to trauma, ineffective and maladaptive coping behavior may increase the risk of PTSD reactions (Cohn, Crane, & Hodson, 2011; Skeffington, Rees, & Mazzucchelli, 2016). Some researchers (Nielsen & Einarsen, 2012; Van den Brande, Baillien, De Witte, Vander Elst, & Godderis, 2016) underlined the crucial role of individual appraisal and coping behaviors in workplace bullying. In their chapter, Nielsen, Mikkelsen, Persson, & Einarsen (2020) demonstrated with several studies, mainly of cross-sectional designs, how individual dispositions related to coping may affect the impact of bullying on health outcomes. However, workplace bullying leads not only individual consequences but also organizational (Hoel, Cooper, & Einarsen, 2020) and socio-economic (Kline & Lewis, 2019) negative effects.

The purpose of the paper is to analyze the role of perceived stress in the relationship between workplace bullying and PTSD symptoms, and to explore the role

of emotion-focused coping behavior in this interlinkage, and to demonstrate the vicious cycle bullying victims get into.

2. Workplace Bullying and PTSD Symptoms

PTSD is different than the other psychiatric diagnoses since it has two distinct processes: (1) The exposure to trauma; and (2) the development of a specific pattern of symptoms in temporal or contextual relation to the traumatic event. DSM-IV-TR contained a subjective component in the A1-criterion, stating: "personal response of intensive fear, helplessness or horror" (American Psychiatric Association, 2000, p. 463). While exposure to workplace bullying consists of a systematic exposure to a set of negative events or incidents over a prolonged time period, rather than a single traumatic event, the level of distress experienced by many of the victims reaches to a level of stress associated with traumatic experiences (Matthiesen & Einarsen, 2004; Tehrani, 2004). Although it is not exactly clear why the experience of bullying may lead to trauma (Mikkelsen & Einarsen, 2002), several researchers have shown the important role cognitions play in the development or preservation of PTSD (Clifton et al., 2019; Janoff-Bulman, 1992).

In their study, Mikkelsen and Einarsen (2002) found that while 76% of bullied employees displayed some PTSD symptoms, 29% of them carried out all the symptoms of PTSD when compared to the criteria of DSM-IV-TR. A recent meta-analysis revealed that on average 57% of bullied victims display PTSD symptoms above thresholds (Nielsen et al., 2015). Similarly, several studies found that targets of bullying show many symptoms of PTSD (Ahmad & Sheehan, 2017; Bjorkqvist, Osterman & Hjelt-back, 1994; Leymann & Gustafsson, 1996; Matthiesen & Einarsen, 2004; Tehrani, 2004). In their study comparing PTSD levels of bullied employees with other samples, such as war zone personnel, recently divorced people, parents of children in a fatal bus accident, and postal employees after an organizational downsizing, Matthiesen and Einarsen (2004) found that bullied employees especially demonstrate higher levels of stress and PTSD symptoms. Besides, a comprehensive longitudinal study on Norwegian workforces revealed that, even after five years following actual exposure, destructive mental health consequences of bullying persist (Einarsen & Nielsen, 2015). Moreover, individuals who were exposed to some specific behaviors, such as being mocked or ridiculed, being avoided or humiliated or shown as incapable due to age or gender, and being given extremely high or low levels of work, experienced PTSD symptoms at higher levels than the others (Matthiesen & Einarsen, 2004). Thus, in line with the literature, bullying at work is expected to be associated with PTSD symptoms:

H1: PTSD symptoms increase with exposure to bullying.

Workplace bullying, perceived stress and emotion-focused coping, and PTSD symptoms

As several authors (Leymann & Gustafsson, 1996; Vartia, 2001; Zapf & Gross, 2001) have suggested, bullying can be analyzed as an important type of social stressor. Leymann (1996) described the sources of stress in workplace bullying as biological reactions to poor psychosocial environments and stimulating feelings of frustration. Subsequently, these reactions turn into a social stressor through psychological processes. In other words, a stressful environment prepares grounds for bullying, while at the same time, bullying causes intensive stress in a vicious cycle (Hauge et al., 2007, 2009). Nielsen et al. (2012) also argues that exposure to workplace bullying activates psychological distress, which in turn leads to more workplace bullying exposure.

Cohen, Kamarck, and Mermelstein (1983) developed and defined the concept of perceived stress as the events which are considered as stressful by the individual. They define psychological stress as the extent to which persons appraise that their demands exceed their ability to cope. Coping with workplace bullying consists of a target's cognitive and behavioral efforts to encounter the demands created by stressful interactions (D'Cruz & Noronho, 2010). As opposed to other traumas, bullying is a personally motivated private event, and therefore bullied individuals generally do not share their psychological distress with the perpetrator or other colleagues. As a result, negative feelings and elevated stress eventually turn into serious health related problems such as PTSD (Tehrani, 2004). Therefore, the following hypothesis was formulated:

H2: Perceived stress mediates the relationship between exposure to bullying and PTSD symptoms.

Lazarus and Folkman's (1984) model covers the relationship between stress and coping styles. The authors suggest that individuals make two appraisals of events: (1) the assessment of whether events affect the individual's well-being; and (2) the evaluation of whether a threat surpasses the individual's coping capacity. Later, they (Folkman & Lazarus, 1985) defined two categories of coping strategies: problem-focused/active coping and emotion-focused/passive coping. While problem-focused coping is defined as efforts to directly address the source of the problem to decrease or eliminate the stressor, emotion-focused coping helps in reducing the individual's negative emotional response to a stressor. Whereas stressors perceived as uncontrollable elicit more avoidance strategies, Karasek and Theorell (1990) determined in the second appraisal that, if stressors are perceived as controllable, more proactive coping mechanisms are produced (Lazarus & Folkman, 1984).

Nielsen and Einarsen (2012) underlined the distinctiveness of the consequences of bullying, since each person's experiences can differ based on event characteristics, individual appraisal, and coping processes. Johannsdottir and Olafsson (2004) examined coping processes, especially in relation to bullying, and described four types: seeking help, assertiveness, avoidance and doing nothing. The authors underlined that exposure to workplace bullying is related to avoidance behaviors (e.g., taking sick-

leave or quitting the job) and doing nothing (e.g., ignoring the problem or hoping that the negative behavior stops). Workplace bullying is associated with increased mental and physical strain and with passive coping strategies, such as denial, and mental and behavioral disengagement from work tasks (Maidaniuc-Chirila, 2015; Reknes, Einarsen, Pallasen, Bjorvatn, Moen, & Mageroy 2016). Successful copers of bullying, on the other hand, applied psychosocial behaviors, such as searching for external support and other intrapersonal psychological strategies, in order to reach psychological equilibrium and distance themselves from the problem (Matthiesen, Aasen, Holst, Wie, & Einarsen 2003; Zapf & Gross, 2001).

Emotion-focused coping strategies may, therefore, impair employee well-being because they are maladaptive patterns of coping style (Nielsen & Knardahl, 2014). Nevertheless, emotion-focused coping is one of the most employed coping behaviors against bullying, used increasingly as victims are exposed to bullying for longer periods (Forte, Przygodzki-Lionet, & Masclet, 2006). Some researchers well documented the negative results of avoidance (Zapf & Gross, 2001; Djurkovic, McCormack, & Casimir, 2005). Emotion-focused coping strategies can amplify the association between work stressors and exposure to bullying (Van den Brande et al., 2016). Targets who denied the presence of bullying can experience more health problems by trying to defeat their anxiety (Dehue, Bolman, Vollink, & Pouwelse, 2012). Such denial and silence contributed to the psychological tension that damages the individual's self-esteem (Salin, Tenhiala, Roberge, & Berdahl., 2014). Research also demonstrates that avoidance moderated the relationship between bullying and psychological well-being in a counterintuitive manner, exacerbating the negative impact of bullying on psychological well-being (Bernstein & Trimm, 2016). Another study revealed that avoidance type emotion-focused coping strategies increase the intensity of thoughts about the trauma, and thus escalate distress and trigger more avoidance behaviors, this in turn, leads to higher levels of PTSD symptoms (Skeffington et al., 2016). Thus, the following hypotheses are formulated:

H3: Emotion-focused coping mediates the relationship between exposure to bullying and PTSD symptoms.

H4: Emotion-focused coping and perceived stress both mediate the relationship between exposure to bullying and PTSD symptoms.

3. Method

3.1 Sample and Data Collection

The sample was collected from a cross-sectional national study. Data collection was carried out in 10 cities - Istanbul, Ankara, Izmir and 7 other big cities in Turkey. Of 1500 surveys delivered, 1003 of them were returned. The size of the sample collected from each city is close to the proportion of the total population of the city. Participants who volunteered to contribute to this study by responding to the questionnaire were assured of the confidentiality of their responses. To test our

hypotheses, we selected the data of the employees (N=257) who had high bullying score (one SD above the mean), since our aim was to prove the vicious cycle the bullying victims get in through stress they experience and emotion-focused coping strategies they use.

In the sample (N=257), the ages varied between 21 and 50 (57% were 21-30, 31% were 31-40, 10% were 41-50), and 40% were female. In terms of education, 52% had high school diplomas, 48% had undergraduate degrees. The sample was composed of participants selected across the organizational hierarchy (57% clerical workers, 23% experts, and 20% supervisors.), from private (79%) and public (21%) sectors which were: health (9%), education (10%), banking/finance (9%), auditing (8%), IT (9%), tourism (9%), transportation (8%) and marketing/sales (15%), importation/exportation (10%), and state institutions (10%).

3.2 Measures

The instruments of the study were translated into Turkish and then translated back into its original language (English) by two bilingual academics, as was suggested by Brislin's instructions (1986). The scales showed satisfactory psychometric properties. All instruments were rated on a Likert scale ranging from 1 to 5.

Workplace bullying. The scale is inspired from the instruments developed by Leymann (1996) and Neuman and Keashly (2004). The scale aims to evaluate the nature and severity of workplace bullying and is composed of 30 items (Cronbach's = 0.85). The scale contains five subscales: victim's communication, victim's maintaining social contacts, victim's personal reputation, victim's occupational reputation, and victim's physical health. The five subscales are validated by factor analysis (factor load $\geq .30$). Example items of each subscales respectively: "How often have you been prevented from expressing yourself (interrupting your speech, not being listened to)?", "How often have you been ostracized from your work environment (not being talked to, not being invited to meetings)?", "How often have you been not given any tasks, or have any tasks been withheld from you?", "How often have they talked behind your back or gossiped about you?", and "How often have you been threatened by physical harm (beating, injuring or killing)?"

Perceived stress. Developed by Cohen et al. (1983), the scale is based on Lazarus and Folkman's (1984) concept of cognitive stress. It contains 10 items (Cronbach's alpha = 0.78). Example items are: "How often have you felt nervous and stressed?", "How often have you been able to control irritations in your life?", and "How often have you been angry because of things that were outside of your control?"

Post-traumatic stress disorder symptoms. Eight items from Blake et al.'s (1990) scale for PTSD were adapted to work life by the authors (Cronbach's alpha = 0.82). The items are created to represent the essential b, c, d, and e criterion symptoms

of PTSD in DSM-V (APA, 2013). These symptoms are: (b) occurrence of intrusion symptoms associated with the traumatic events, (c) insistent avoidance of reminders associated with the traumatic events, (d) negative alterations in cognitions and mood associated with the traumatic events, and (e) significant changes in arousal and reactivity associated with the traumatic events. The scale aims to illustrate the effects of PTSD symptoms in work life. Example items include: “I keep feeling as if negative events were recurring, even when I am not at my workplace.” and “During work hours I frequently want to run away from my workplace.”

Emotion-focused coping behaviors. Inspired by Vitaliano, Russo, Carr, Maiuro, & Becker (1985) study, our scale measures ways of coping with bullying. Emotion-focused coping scale is composed of six items (avoidance, guilt, waiting for a miracle, blaming others, expecting help, and denial). Example items include: “I tried to avoid bullies.” and “I waited for a miracle, to get out of what had happened.” (Cronbach's alpha = 0.78)

4. Results

The analysis of means, standard deviations and correlation coefficients between the variables are illustrated in Table 1.

Table 1. Means, Standard Deviations and Correlation Coefficients

	M	SD	1	2	3
1. Bullying	72.70	18.16			
2. PTSD symptoms	25.62	6.64	.16*		
3. Emotion-focused coping	15.29	2.89	.12*	.45**	
4. Perceived stress	32.13	6.38	.23**	.31**	.22**

*Correlation is significant at the 0.05 level (2-tailed)

** Correlation is significant at the 0.01 level (2-tailed)

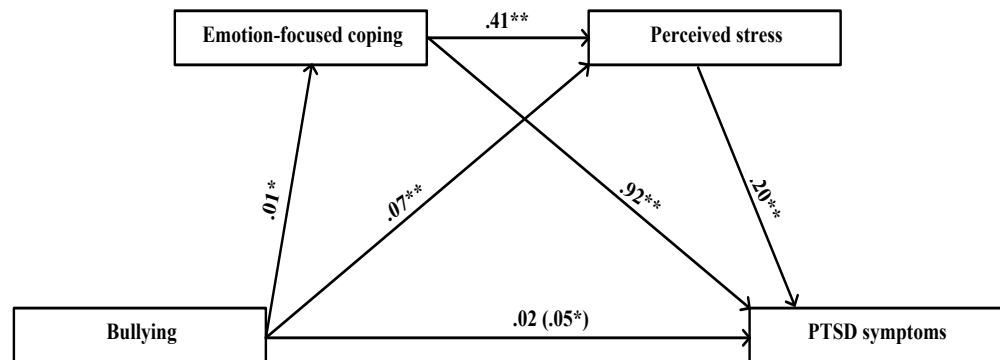
As expected in H1, PTSD symptoms increase with exposure to bullying ($r = .16, p \leq .01$).

To test the simple mediation hypotheses, first we computed a series of regression equations as prescribed by Baron and Kenny (1986). According to this approach, three relationships between the target variables must be demonstrated to establish a basis for testing mediation.

Bullying had a significant and positive effect on perceived stress ($R = .23$, $R^2 = .05$, $F = 14.89$, $p \leq .001$), and PTSD symptoms ($R = .16$, $R^2 = .02$, $F = 6.63$, $p \leq .01$). A third regression analysis established that perceived stress was a significant predictor of PTSD symptoms ($R = .31$, $R^2 = .09$, $F = 26.80$, $p \leq .001$). Finally, when PTSD symptoms were regressed onto both bullying and perceived stress ($R = .32$, $R^2 = .10$, $F = 14.57$, $p \leq .001$), the effect of bullying was reduced and did not remain a significant predictor of PTSD symptoms ($\beta = .09$, $t = 1.48$, $p = .13$), whereas perceived stress remained significant in the equation ($\beta = .28$, $t = 4.68$, $p \leq .001$). In conclusion, perceived stress mediated the relationship between exposure to bullying and PTSD symptoms (H2). This result was confirmed with a Sobel test ($z = 2.13$, $p \leq .05$).

Bullying also had a significant and positive effect on emotion-focused coping ($R = .12$, $R^2 = .01$, $F = 4.06$, $p \leq .05$), and PTSD symptoms ($R = .16$, $R^2 = .02$, $F = 6.63$, $p \leq .01$). A third regression analysis established that emotion-focused coping was a significant predictor of PTSD symptoms ($R = .45$, $R^2 = .20$, $F = 65.15$, $p \leq .001$). Finally, when PTSD symptoms were regressed onto both bullying and emotion-focused coping ($R = .46$, $R^2 = .21$, $F = 33.76$, $p \leq .001$), the effect of bullying was reduced and did not remain as a significant predictor of PTSD symptoms ($\beta = .09$, $t = 1.70$, $p = .09$), whereas emotion-focused coping remained as significant in the equation ($\beta = .44$, $t = 7.76$, $p \leq .001$). In conclusion, emotion-focused coping mediated the relationship between exposure to bullying and PTSD symptoms (H3). This result was confirmed with a Sobel test ($z = 1.94$, $p \leq .05$).

Secondly, a double mediation model is accomplished by using process macro (Preacher & Hayes, 2008). This model (see Figure 1) shows how the relationship between exposure to bullying and PTSD symptoms is affected by the relationship between emotion-focused coping and perceived stress ($R = .49$, $R^2 = .24$, $F = 27.49$, $p \leq .001$). Thus, our H4 was justified.



** Unstandardized coefficient is significant at the 0.01 level (2-tailed)

* Unstandardized coefficient at the 0.05 level (2-tailed)

Figure1. Mediating effect of emotion-focused coping and perceived stress on the relationship between workplace bullying and PTSD symptoms

4. Discussion

The aim of the present study was to investigate the effect of emotion-focused coping and perceived stress on the relationship between workplace bullying and PTSD symptoms using a double mediation model.

As hypothesized, we found that participants with high levels of workplace bullying reported higher levels of PTSD symptoms. In alignment with other studies (Andersen, Høgh, Biering, & Gadegaard 2018; Balducci, Alfano & Fraccaroli, 2009; Bond, Tuckey & Dollard, 2010; Islamoska, Grynderup, Nabe-Nielsen, Høgh, & Hansen, 2018; Laschinger, Nosko & Wong, 2013; Leymann & Gustafsson, 1996; Malinauskienė & Einarsen, 2014; Matthiesen & Einarsen, 2004; Nielsen et al., 2015; Mikkelsen and Einarsen 2002; Tehrani, 2004; Rodriguez-Munoz, Moreno- Jimenez, Vergel, & Hernandez, 2010, Tehrani, 2004), our findings confirm the link between exposure to bullying and PTSD symptoms.

Stress emerged as the main factor in the processes of bullying. Since stress lays the ground for bullying, bullying also causes stress in a circular movement. Previous research yielded that exposure to workplace bullying was related to psychological and physiological stress response (Høgh, Hansen, Mikkelsen, & Persson, 2012). On the other hand, the effects of bullying differ between individuals depending on the interrelationship between event characteristics, individual appraisal, and coping processes (Nielsen & Einarsen, 2012). A recent study highlighted the role of perceived stress in the relationship between bullying and negative health consequences

(Grynderup et al., 2016). Our analysis indicated a similar trend on the mediation of perceived stress between exposure to bullying and PTSD symptoms.

We examined the mediating role of emotion-focused coping in relation to perceived stress and exposure to workplace bullying. Research supports (Maidaniuc-Chirila & Constantin, 2015; Maidaniuc-Chirila & Treadway, 2016) our results, as emotion-focused coping strategies (e.g., denial, mental, and/or behavioral disengagement) increase in the bullying process, they lead victims into less efficient and more strained states.

This study also aims to fill the gap in the literature on the mediating role of emotion-focused coping and perceived stress on the relationship with bullying and PTSD symptoms. Our double mediation model highlights the cognitive mechanism. In other words, when bullied persons appraise that demands of a specific situation exceed their ability to cope, they demonstrate more PTSD symptoms, as parallel to the results of Nielsen and Einarsen (2012). However, the relationship between bullying and perceived stress is mediated by emotion-focused coping. When victims employ more emotion-focused coping strategies, their perceived stress levels increase. The impact of interaction between two mediators explains the vicious cycle. In the same vein, findings of other studies also show that emotion-focused coping strategies exacerbate the psychological functioning of the individual (Billing & Moos, 1981; Nielsen & Knardahl, 2014; Skeffington et al., 2016).

Workplace bullying is a social, organizational, and economic threat, as well as being an individual one. Absenteeism, turnover, and productivity reductions cause huge financial costs and loss in organizations (Hoel, Cooper & Einarsen, 2020; Kline & Lewis, 2019). Although there is not any study examining cost of workplace bullying in Turkey, we can estimate that it is relatively high, (Minibas-Poussard & Idig-Camuroglu, 2016; Zapf et al., 2020) taking into consideration the fact that exposure rates are higher than European countries. In addition, Turkish Labor Law does not have a direct regulation to protect employees from bullying; still there are some related articles (Bayat & Baykal, 2016). Nevertheless, organizational health and safety law and other labor laws are not enough for prevention of workplace bullying, specific regulations are necessary to define the psychosocial risk factors (Tunc, 2017).

The results of this study have some HRM implications. Research shows that bullying and harassment behaviors are mostly ignored by organizations, until they start to affect employee productivity or profitability of the organizations and employees and supervisory staff had minimal practical skills or training on how to cope efficiently with workplace bullying (Van Rooyen & McCormack, 2013). According to Salin (2020), HRM has a great responsibility to handle bullying cases besides preparing anti-bullying policy, raising awareness and introducing robust conflict management. Intervention programs should be combined on both individual and organizational levels to be most effective and mutually reinforcing (Zapf & Vartia, 2020). Collective

efficacy plays a major role in the management of stressful events (Esnard & Roques, 2014). HR professionals can help create a culture in which employees feel comfortable to share their experiences, make formal complaints when needed and does not allow aggressive behaviors by preparing formal statements and training programs (Duffy, 2009). In addition, Proctor and Tehrani (2001) stated some organizational support sources such as a phone helpline, information/advice, secret supporter, official process supporter, training, mediator/conciliator, and counselling process.

Zapf and Vartia (2020) underlined the vital importance of stress management and self-assertiveness trainings to enable coping with bullying. Grynderup et al. (2016) showed that interventions aimed at decreasing perceived stress levels of workplace bullying victims may prevent sickness absence as well. In the same vein, Van den Brande et al. (2016) disclosed that in some cases, using effective coping strategies may inhibit workplace bullying. Reknes et al. (2016) underlined that victims of bullying tend to cope more negatively with stressful events than do non-victims. As Wilton, Craig and Pepler (2000) stated, maladaptive emotional regulation processes in bullying may lead individuals into chronic victimization.

As our aim was to demonstrate the effect of perceived stress and emotion-focused coping in the relationship between exposure to bullying and PTSD symptoms, the results of this study cannot be generalized as the cause and effect relationship between workplace bullying and PTSD. Mikkelsen et al. (2020) underlined that cross-sectional studies contributed to the understanding of causality as a first step by analyzing the associations between workplace bullying and the indicators of psychological distress reactions although they have shortfalls in explaining the direction of cause and effect. Future longitudinal and qualitative studies would contribute to explain this causality better in terms of getting into a vicious cycle.

REFERENCES

- Ahmad, S., & Sheehan, M. J. (2017). Understanding the lived experience of bullying in Australian workplaces: An interpretative phenomenological analysis. *Journal of Workplace Behavioral Health*, 32 (2), 74-98.
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual of Mental Disorders (4th ed.)*. Text Revision: DSM-IV-TR. Washington, DC: American Psychiatric Publishing Inc.
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders. DSM-5*. Arlington, VA: American Psychiatric Association.
- Andersen, L. P., Høgh, A., Biering, K., & Gadegaard, C. A. (2018). Work-related threats and violence in human service sectors: The importance of the psychosocial work environment examined in a multilevel prospective study. *Work*, 59 (1).
- Balducci, C., Alfano, V., & Fraccaroli, F. (2009). Relationships between mobbing at work and MMPI-2 personality profile, post-traumatic stress symptoms, and suicidal ideation and behavior. *Violence and Victims*, 24(1), 52–67.

- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistic considerations. *Journal of Personality and Social Psychology*, 51 (6), 1173-1182.
- Bayat, I., & Baykal, B. (2016). Within the framework of national and international regulations a case of psychological harassment in the workplace (mobbing). *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 17 (3), 196-218.
- Bernstein, C., & Trimm, L. (2016). The impact of workplace bullying on individual wellbeing: The moderating role of coping. *SA Journal of Human Resource Management*, 14 (1), 1-12.
- Billings, A. G., & Moos, R. H. (1981). The role of coping responses and social resources in attenuating the stress of life events. *Journal of Behavioral Medicine*, 4 (2), 139-157.
- Bjorkvist, K., Osterman, K., & Hjelt-Back, M. (1994). Aggression among university employees. *Aggressive Behavior*, 20, 173-184.
- Blake, D. D., Weathers, F. W., Nagy, L. M., Kaloupek, D. G., Klauminzer, G., Charney, D. S., & Keane, T. M. (1990). A clinician rating scale for assessing current and lifetime PTSD: the CAPS–1. *The Behavior Therapist*, 13, 187-188.
- Bond, S. A., Tuckey, M. R., & Dollard, M. F. (2010). Psychosocial safety climate, workplace bullying and symptoms of post-traumatic stress. *Organization Development Journal*, 28 (1), 37-56.
- Brislin, R. W. (1986). The wording and translation of research instruments. In W. J. Lonner & J. W. Berry (Eds.), *Cross-cultural research and methodology series*, 8. *Field methods in cross-cultural research*, Thousand Oaks, CA, US: Sage Publications, Inc., pp.137-164.
- Clifton, J. D. W., Baker, J. D., Park, C. L., Yaden, D. B., Clifton, A. B. W., Terni, P., ... & Seligman, M. E. P. (2019). Primal world beliefs. *Psychological Assessment*, 31 (1), 82-99.
- Cohen S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24 (4), 385-396.
- Cohn, A., Crane, M. F., & Hodson, S. E. (2011). Psychological resilience training in the Australian Defense Force. In K. M. Gow & M. J. Celinski (Eds.), *Wayfinding through life's challenges: Coping and survival*, New York, NY: Nova Science Publishers, pp. 297-312.
- D'Cruz, P., & Noronha, E. (2010). The exit coping response to workplace bullying: The contribution of inclusivist and exclusivist HRM strategies. *Employee Relations*, 32 (2), 102-120.
- Dehue, F., Bolman, C., Vollink, T., & Pouwelse, M. (2012). Coping with bullying at work and health related problems. *International Journal of Stress Management*, 19 (3), 175-197.
- Djurkovic, N., McCormack, D., & Casimir, G. (2005). The behavioral reactions of victims to different types of workplace bullying. *International Journal of Organization Theory & Behavior*, 8 (4), 439-460.

- Duffy, M. (2009). Preventing workplace mobbing and bullying with effective organizational consultation, policies, and legislation. *Consulting Psychology Journal: Practice and Research*, 61(3), 242-262.
- Einarsen, S., Hoel, H., Zapf, D., & Cooper, C. L. (2011). The concept of bullying and harassment at work: The European tradition. In S. Einarsen, H. Hoel, D. Zapf & C. L. Cooper (Eds.), *Bullying and harassment in the workplace: Developments in theory, research, and practice*. London: Taylor & Francis, pp. 3-30.
- Einarsen, S., & Nielsen, M. B. (2015). Workplace bullying as an antecedent of mental health problems: a five-year prospective and representative study. *International Archives of Occupational and Environmental Health*, 88 (2), 131-142.
- Esnard, C. & Roques, M. (2014). Collective efficacy: A resource in stressful occupational contexts. *Revue Européenne de Psychologie Appliquée*, 64 (4) 203-211.
- Folkman, S., & Lazarus, R. S. (1985). If it changes it must be a process: A study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48, 150-170.
- Forte, M., Przygodzki-Lionet, N., & Masclet, G. (2006). De la victimisation aiguë à la victimisation chronique : Approche socio-cognitive d'un seuil de tolérance différentiel [From acute victimization to chronic victimization: A socio-cognitive approach of a differential tolerance threshold]. *L'Encéphale*, 32(3), 356-368.
- Grynderup, M. B., Nabe-Nielsen, K., Lange, T., Conway, P. M., Bonde, J. P., Francioli, L., & Hogh, A. (2016). Does perceived stress mediate the association between workplace bullying and long-term sickness absence? *Journal of Occupational and Environmental Medicine*, 58(6), 226-230.
- Hauge, L. J., Skogstad, A., & Einarsen, S. (2007). Relationships between stressful work environments and bullying: Results of a large representative study. *Work & Stress*, 21(3), 220-242.
- Hauge, L. J., Skogstad, A., & Einarsen, S. (2009). Individual and situational predictors of workplace bullying: Why do perpetrators engage in the bullying of others? *Work & Stress*, 23(4), 349-358.
- Hoel, H.; Cooper, C.L.; Einarsen, S. (2020). Organizational effects of workplace bullying. In S. Einarsen, H. Hoel, Zapf, D. & Cooper, C.L.(Eds), *Bullying and harassment in the workplace. Developments in theory, research, and practice* (3rd ed.), Boca Raton, FL: CRC Press. Taylor and Francis Group, pp. 209-234.
- Hogh, A., Hansen, A. M., Mikkelsen, E. G., & Persson, R. (2012). Exposure to negative acts at work, psychological stress reactions and physiological stress response. *Journal of Psychosomatic Research*, 73(1), 47-52.
- Islamoska, S., Grynderup, M., Nabe-Nielsen, K., Hogh, A., & Hansen, A. M. (2018). Does the association between workplace bullying and post-traumatic stress symptoms differ across educational groups? *Journal of European Psychology Students*, 9, 1-9.
- Janoff-Bulman, R. (1992). *Shattered assumptions. Towards a new psychology of trauma*. New York, NY: The Free Press.

- Johansdottir, H. L., & Olafsson, R. F. (2004). Coping with bullying in the workplace: The effect of gender, age and type of bullying. *British Journal of Guidance and Counselling*, 32 (3), 319-333.
- Karasek, R., & Theorell, T. (1990). *Health work: Stress, productivity, and the reconstruction of life*. New York, NY: Basic Books.
- Kline, R., & Lewis, D. (2019). The price of fear: Estimating the financial cost of bullying and harassment to the NHS in England. *Public Money & Management*, 39(3), 166-174.
- Laschinger, H. K. S., & Nosko, A. (2015). Exposure to workplace bullying and post-traumatic stress disorder symptomology: The role of protective psychological resources. *Journal of Nursing Management*, 23(2), 252-262.
- Laschinger, H. S., Nosko, A., & Wong, C. (2013). Nurses' exposure to workplace bullying and PTSD symptomology: The protective role of intrapersonal resources, *European Psychiatry*, 28 (Suppl. 1), 1.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- Leymann, H. (1996). *La persécution au travail [The persecution at work]*. Paris: Editions du Seuil.
- Leymann, H., & Gustafsson, A. (1996). Mobbing at work and the development of post-traumatic stress disorders. *European Journal of Work and Organizational Psychology*, 5 (2), 251-275.
- Maidaniuc-Chirila T. (2015). Longitudinal relationships between workplace bullying and coping strategies. *International Journal of Original Research*, 1 (1), 11-20.
- Maidaniuc-Chirila, T. & Constantin, T. (2015). Testing three mediation models of the relationship between workplace bullying, coping strategies, and Romanian employees' strain. *Swift Journals of Social Sciences and Humanity*, 1 (1), 1-7.
- Maidaniuc-Chirila, T., & Treadway, D. C. (2016). Longitudinal relationships between workplace bullying, passive coping strategies and strain: Testing three crosslagged mediation models. *Journal of Educational Sciences and Psychology*, 6 (2), 58-70.
- Malinauskiene, V., & Einarsen, S. (2014). Workplace bullying and post-traumatic stress symptoms among family physicians in Lithuania: An occupation and region-specific approach", *International Journal of Occupational Medicine and Environmental Health*, 27 (6), 919-932.
- Matthiesen, S. B., Aasen, E., Holst, G., Wie, K., & Einarsen, S. (2003). The escalation of conflict: A case study of bullying at work. *International Journal of Management and Decision Making*, 4 (1), 96-112.
- Matthiesen, S. B., & Einarsen, S. (2004). Psychiatric distress and symptoms of PTSD among victims of bullying at work. *British Journal of Guidance & Counselling*, 32, 335-356.
- Mikkelsen, E. G., & Einarsen, S. (2002). Basic assumptions and symptoms of post-traumatic stress among victims of bullying at work. *European Journal of Work and Organizational Psychology*, 11 (1), 87-111.

- Mikkelsen, E.G., Hansen, Å.M., Persson, R., Fosgrau, M. & Høgh, A. (2020). Individual consequences of being exposed to workplace bullying. In S. Einarsen, H. Hoel, Zapf, D. & Cooper, C.L.(Eds), *Bullying and harassment in the workplace. Developments in theory, research, and practice* (3rd ed.), Boca Raton, FL: CRC Press. Taylor and Francis Group, pp. 163-208.
- Minibas-Poussard, J., & Idig-Çamuroglu, M. (2016). Mobbing in a cross-sectional national sample: the Turkish case, *Australian Journal of Business and Management Research*, 5 (6), 24-34.
- Neuman, J. H., & Keashly, L. (2004). Development of workplace aggression research questionnaire (WAR-Q): Preliminary data from workplace stress and aggression project. In R. J. Bennet & C. D. Crossley (Chairs), *Theoretical advancements in the study of antisocial behavior and work*, Symposium conducted at the meeting of Society for Industrial and Organizational Psychology, Chicago, IL.
- Nielsen, M. B., & Einarsen, S. (2012). Outcomes of exposure to workplace bullying: A meta-analytic review. *Work & Stress*, 26 (4), 309-332.
- Nielsen, M. B., Hetland, J., Matthiesen, S. B., & Einarsen, S. (2012). Longitudinal relationships between workplace bullying and psychological distress. *Scandinavian Journal of Work, Environment and Health*, 38, 38-46.
- Nielsen, M. B., & Knardahl, S. (2014). Coping strategies: A prospective study of patterns, stability, and relationships with psychological distress. *Scandinavian Journal of Psychology*, 55 (2), 142-150.
- Nielsen, M.B., Tangen, T., Idsoe, T., Matthiesen, S., & Mageroy, N. (2015). Post-traumatic stress disorder as a consequence of bullying at work and at school. A literature review and meta-analysis. *Aggression & Violent Behavior*, 21, 17-24.
- Nielsen, M.B., Mikkelsen, E.G., Persson, R. & Einarsen, S.V. (2020). Coping with bullying at work: How do targets, bullies and bystanders deal with bullying? In S. Einarsen, H. Hoel, Zapf, D. & Cooper, C.L. (Eds), *Bullying and harassment in the workplace. Developments in theory, research, and practice* (3rd ed.), Boca Raton, FL: CRC Press. Taylor and Francis Group, pp.563-592.
- Preacher K.J., Hayes A.F., (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*. 40 (3), 879-891.
- Proctor, B. & Tehrani, N. (2001). Issues for counsellors and supporters (p.165-184). In N. Tehrani (Eds), *Building a culture of respect: Managing bullying at work*. Taylor & Francis: London and New York.
- Reknes, I., Einarsen, S., Pallasen, S., Bjorvatn, B., Moen, B. E., & Mageroy, N. (2016). Exposure to bullying behaviors at work and subsequent symptoms of anxiety: The moderating role of individual coping style. *Industrial Health*, 54 (5), 421-432.
- Rodriguez-Munoz, A., Moreno-Jimenez, B., Vergel, A. I. S., & Hernandez, E. G. (2010). Post-traumatic symptoms among victims of workplace bullying: Exploring gender differences and shattered assumptions. *Journal of Applied Social Psychology*, 40 (10), 2616-2635.

- Salin, D., Tenhiala, A., Roberge, M., & Berdahl, J. L. (2014). I wish I had... : Target reflections on responses to workplace mistreatment. *Human Relations*, 67(10), 1189-1211.
- Salin, D. (2020). Human resources management and bullying. In S. Einarsen, H. Hoel, Zapf, D. & Cooper, C.L.(Eds), *Bullying and harassment in the workplace. Developments in theory, research, and practice (3rd ed.)*, Boca Raton, FL: CRC Press. Taylor and Francis Group, pp. 521-535.
- Skeffington, P. M., Rees, C. S., & Mazzucchelli, T. (2016). Trauma exposure and post-traumatic stress disorder within fire and emergency services in Western Australia. *Australian Journal of Psychology*, 69 (1), 20-28.
- Tehrani, N. (2004). Bullying: A source of chronic post-traumatic stress? *British Journal of Guidance and Counselling*, 32, 358-366.
- Tunc, Y. (2017). Mobbing in Turkish labor law. *Press Academia Procedia (PAP)*, 3, 409-422.
- Van den Brande, W., Baillien, E., De Witte, H., Vander Elst, T., & Godderis, L. (2016). The role of work stressors, coping strategies, and coping resources in the process of workplace bullying: A systematic review and development of a comprehensive model. *Aggression and Violent Behavior*, 29, 61-71.
- Van Rooyen, J., & McCormack, D. (2013). Employee perceptions of workplace bullying and their implications. *International Journal of Workplace Health Management*, 6(2), 92-103.
- Vartia, M. A. (2001). Consequences of workplace bullying with respect to the well-being of its targets and the observers of bullying. *Scandinavian Journal of Work, Environment & Health*, 27(1), 63-69.
- Verkuil, B., Atasayi, S., & Molendijk, M. L. (2015). Workplace bullying and mental health: A meta-analysis on cross-sectional and longitudinal data. *PloS One*, 10 (8), 1-16.
- Vitaliano, P. P., Russo, J., Carr, J. E., Maiuro, R. D., & Becker, J. (1985). The ways of coping checklist: Revision and psychometric properties. *Multivariate Behavioral Research*, 20, 3-26.
- Wilton, M. M., Craig, W. M., & Pepler, D. J. (2000). Emotional regulation and display in classroom victims of bullying: Characteristic expressions of affect, coping styles and relevant contextual factors. *Social Development*, 9(2), 226–245.
- Zapf, D., Escartín, J., Scheppa-Lahyani, M., Einarsen, S. V., Hoel, H., & Vartia, M. (2020). Empirical findings on the prevalence and risk groups of bullying in the workplace. In S. V. Einarsen, H. Hoel, D. Zapf, & C. L. Cooper (Eds.), *Bullying and harassment in the workplace: Theory, research, and practice (3rd ed.)*, Boca Raton, FL: CRC Press, pp. 105-162.
- Zapf, D., & Gross, C. (2001). Conflict escalation and coping with workplace bullying: A replication and extension. *European Journal of Work and Organizational Psychology*, 10(4), 497-522.

Zapf, D., & Vartia, M. (2020). Prevention and treatment of workplace bullying: An overview. In S. V. Einarsen, H. Hoel, D. Zapf, & C. L. Cooper (Eds.), *Bullying and harassment in the workplace: Theory, research, and practice* (3rd ed.), Boca Raton, FL: CRC Press, pp. 457-496.