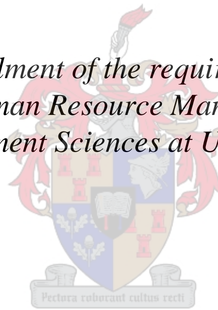
Development and Empirical Testing of an Explanatory Structural Model of Workplace Bullying in Healthcare

By

Kim Sparks



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Supervisor: Mrs Marietha De Wet

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Declaration

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Dedication

This thesis is dedicated to my daughter, Gracey Cassidy Sparks, who sacrificed so much while I was busy with my studies.

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Abstract

Background: Workplace bullying has negative implications for not only the victims and bystanders of this behaviour but also for the organisation as a whole. Workplace bullying is an area of interest on which limited research has been conducted, especially in South Africa. **Purpose:** The overall aim of the research paper is to assess the prevalence of post-traumatic stress disorder analogue symptomatology and reported symptoms of psychological ill-health among current and former victims of bullying at work to confirm the detrimental effects that workplace bullying has on the workforce. **Method:** The target population was all nurses employed at Private Hospitals in the Western Cape, and the sample size was 97 nurses. Various instruments were utilised to obtain the relevant information necessary for this research paper namely, the Negative Acts Questionnaire, the Work Harassment Questionnaire, the Depression Anxiety Stress Scale, the Impact of Events-Revised Scale, and the Sense of Coherence Scale. Statistica 14 was utilised to obtain the summary statistics and to obtain the results of the item analysis. SmartPLS 3 was used to conduct the PLS-SEM and to obtain such results. **Results**: The results show that there was a significant positive relationship between Post Traumatic Stress Disorder and Depression. It was also revealed that a significant positive relationship exists between workplace bullying and depression, Post Traumatic Stress Disorder and stress respectively. A significantly negative relationship exist between Sense of Coherence (SOC) and post-traumatic stress disorder (PTSD). SOC does not significantly moderate the relationship between workplace bullying and PTSD. It was also discovered that PTSD is a mediator between the exposure to workplace bullying and depression. **Conclusion:** Workplace bullying is prevalent amongst the nurses employed by Private Hospitals in the Western Cape who display symptoms of PTSD, stress and depression. The strong association between exposure to workplace bullying and PTSD, stress and depression respectively, indicates that workplace bullying is a significant source of mental ill-health.

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Chapter 1: Introduction

Workplace bullying is one of the fastest expanding spheres of workplace violence which is often not taken seriously or overlooked. Workplace bullying has serious long-term repercussions for the victims, observers, or witnesses as well as the organisation in which bullying takes place (Smith, 2014). A study by the University of Copenhagen found that victims of bullying are more likely to develop (1.59 times) a cardiac-related disease, like a stroke or heart disease. Incidence of heart-related problems increases by 59% (Xu et al., 2019). Bullying victims who have a recent history of bullying behaviour show a 1.46 times increased risk to develop Type 2 diabetes (Xu et al., 2019). As awareness of the problem increased, there has been increased interest in the potential long-term effects of bullying.

Most people perceive bullying to be a phenomenon that occurs in schools and on the playground, however, bullying also takes place in the workplace (Harvey et al., 2006). It may not always be physical but also damage the victims emotionally and psychologically (Leymann, 1996). Workplace bullying has a detrimental effect on the victims as well as the bystanders of bullying (Vartia, 1996). It affects the self-confidence of victims (Agervold & Mikkelson, 2004; Lee & Lim, 2019; Moayed et al., 2006), their performance at work (Baillien & De Witte 2009), their well-being (Chatziioannidis et al., 2018; Johnson, 2009; Quine, 2001), and their relationships (MacIntosh, 2005). Bullying affects every aspect of being human.

Bullying behaviour may lead to Post Traumatic Stress Disorder (PTSD) (Islamoska et al., 2018; Matthiesen & Einarsen, 2004; Tehrani, 2004) which in turn has detrimental effects on victims. PTSD not only has detrimental effects on victims' physical health, but it also affects their mental health. In terms of physical health, PTSD leads to general health complaints (e.g., fibromyalgia, arthritis pain, back pain, and headaches); cardio-respiratory health problems (e.g., asthma, heart disease, angina, and shortness of breath), and gastrointestinal health problems (Capsi et al., 2008; Kelly, 2010; Lauterbach & Rakow, 2005; Sareen et al., 2007). It also leads to depression, suicidal thoughts, suicidal attempts, and suicide (Groeblinghoff & Becker, 1996; Leach et al., 2016). A longitudinal study conducted

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by Einarsen and Nielsen (2014) proves that mental health problems and severe stress still occur five years after having been bullied. The study proves the long-term damage done to a victim of bullying.

Workplace bullying also affects the organisation in which it takes place. It impacts an organisation's reputation, productivity decline, increased financial cost, creates a toxic culture, and an increase in legal battles (Kline & Lewis, 2019). Kline and Lewis (2019) estimate that bullying and harassment cost the taxpayer in England, £2.281 billion per annum. In terms of productivity, workplace bullying leads to diminished work performance (Baillien & De Witte, 2009; Yildirim, 2009) and an increase in the absenteeism rate (Kivimäki et al., 2000) amongst victims. In particular, workplace bullying increases work-related errors (Paice & Smith, 2009), loss of creativity (MacIntosh, 2005), use of time spent on tasks, and unmet deadlines (Gardner & Johnson, 2001). Bullying leads to an increase in the victim's health problems (Chatziioannidis et al., 2018; Johnson, 2009; Quine, 2001), and subsequently, organisations report an increase in health plan costs and worker compensation claims (Garner & Johnson, 2001; MacIntosh, 2005). Bullying also results in increased staff resignations (Gardner & Johnson, 2001) which, in turn, may lead to increased costs incurred by companies for readvertising vacancies, marketing, recruiting, and training new employees. Bullying has detrimental effects on the victim’s relationships with their superiors and colleagues (MacIntosh, 2005). This has profound consequences for the organisation’s culture. Bullying also resulted in wrongful discharge lawsuits (Gardner & Johnson, 2001). Jointly, these variables confirm that workplace bullying detrimentally affects the organisation's reputation.

Human Resource Practitioners and organisations must first comprehend how workplace bullying is defined as well as its causes and consequences before they can implement mechanisms to reduce and ultimately diminish bullying in the workplace. Human Resource Practitioners and organisations can eliminate and prevent the occurrence of bullying if they recruit the correct employees, and if they counsel victims and bystanders on this phenomenon. The organisation can provide treatment such as group therapy to assist

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victims and perpetrators to work through issues that may cause individuals to bully and be bullied.

Bartlett and Bartlett (2011) proposed that organisations and HR Practitioners need to put in place policies that indicates formal methods that need to be followed to report workplace bullying. The policy should also include formal training which illustrates the detrimental impact of bullying on victims, organisations, and others indirectly. The HR Practitioners also need to assess the level of bullying and monitor bullying in the workplace to ensure that the organisation provides a safe work environment. It is of utmost importance that the organisations and HR Practitioners ensure that a process for corrective action is in place and that all the members of the organisation comprehend the steps and actions that should be taken if bullying occurs. Organisations also need to ensure that the actions are legal (Bartlett & Bartlett, 2011). Preventative measures are of critical importance to combat bullying behaviour (Einarsen & Nielsen, 2014).

Human Resource Practitioners must work together with individuals and the organisation to diminish workplace bullying to reach business objectives and provide a safe working environment in which all members are treated in a dignified and respectful manner without feeling threatened.

1.1 Context of the Study

Workplace bullying casts harmful effects on health care organisations and the health system, including patients. Workplace bullying is chronically rampant in nursing practice (Rutherford et al., 2018). The Joint Programme on Workplace Violence in the Health sector found that nurses are three times more likely on average to experience violence in the workplace than other occupational groups (International Council of Nurses, 2007). In a study conducted in Jordan, 90% of the nurses reported that they were victims (Al-Ghabeesh & Qattom, 2019). A study by Ekici and Beder (2014) on 201 physicians and 309 nurses in a hospital in Turkey indicates that 74% of the physicians and 82% of the nurses were experiencing bullying in their workplace. In this study (Ekici & Beder, 2014) the physicians and nurses indicate the most severe form of bullying they experienced, is humiliating and

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degrading. Thus, an attack on their professional status and personality. Bullying in nursing creates unhealthy practice environments in which nurses cannot be productive (Berry et al., 2012). Workplace bullying in nursing results in an increased rate of turnover of qualified nurses, a shortage in nurses, endangers patient safety, and a decline in quality patient care (ALBashtawy et al., 2015; Al-Ghabeesh & Qattom, 2019; Lin et al., 2018; Woolforde, 2019). There is also an increase in absenteeism and use of sick leave due to bullying (Al-Ghabeesh & Qattom, 2019).

A study conducted amongst Turkish nurses also revealed that victims of workplace bullying contemplate committing suicide (Yildirim & Yildirim, 2007). A person who is considering suicide as a result of bullying is at that point so discouraged and trapped in the situation that they see no other way out. Nursing staff is trained to preserve life and not to put an end to life. Nursing is a very stressful profession in South Africa due to the high number of trauma cases that need to be cared for daily by nursing staff and medical doctors. Thus, nursing staff should not be exposed to bullying behaviour. The next paragraph will give a glimpse of stressors in the life of South Africans, and thus an indirect effect on health care workers.

According to the Global Peace Index, the violence rate in South Africa is very high (Institute for Economics and Peace, 2018). The total amount of contact crime (crimes against the person) which includes murder, sexual offences, attempted murder, assault with the intent to inflict serious bodily harm, common assault, robbery with aggravating circumstances increased from 617 210 cases in 2018/2019 to 621 282 in 2019/2020. The total amount of sexual offences which includes rape, sexual assault, attempted sexual offences, and contact sexual offences increased from 52 420 in 2018/2019 to 53 293 cases in 2019/2020 (BusinessTech, 2020). According to the latest crime statistics, Western Cape is ranked third with regards to the total crime per province (73 7217 cases). The total amount of crime in the Western Cape consists out of assault with the intent to inflict grievous bodily harm (23 753 cases); attempted murder (3555 cases); common assault (38 992 cases);

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common robbery (11381 cases); murder (3975 cases); robbery with aggravating circumstances (24 549 cases); and sexual offences (7303 cases) (Crime Stats SA, 2021).

Western Cape also has a substantial amount of confirmed COVID-19 cases. Nurses must deal with the pressure as the number of patients admitted due to COVID-19 (there are currently 15,203 active COVID-19 cases in the Western Cape; COVID-19 Response, 2021) continues to elevate plus an increase in the non-COVID-19 related cases such as the cases related to the above-mentioned crimes as well as illnesses and injuries. Since they must deal with all these factors, organisations should at least create a safe work environment, one in which nurses are not subjected to workplace bullying, or create mechanisms to protect nursing personnel from major stressor.

Various studies provided evidence which substantiates that Sense of Coherence (SOC) in all likelihood protects nurses and medical health professionals against the effect of trauma. Individuals, such as nursing personnel, with a high Sense of Coherence, are more capable of dealing with everyday life stressors (such as COVID-19, crime-related injuries, and illnesses) in comparison to those with lower levels of Sense of Coherence (Gómez-Salgado et al., 2020). Gómez-Salgado et al. (2020) revealed that psychological distress and SOC are associated with the presence of COVID-19 symptoms and contact history[1]. Healthcare professionals with psychological distress displayed lower SOC. Healthcare professionals with high SOC had better health statuses, displayed more work engagement, and had fewer work-related family conflicts (Malagon-Aguilera et al., 2019). Midwives display a negative relationship between SOC and stress (Gebriné et al., 2019). López-Martínez et al. (2019) suggested that SOC positively impacts the mental health of health care workers since it is associated with quality of life and protects against anxiety, depression, and subjective burdens. SOC has been associated with the prevention of PTSD experienced by healthcare professionals (Ragger et al., 2019). Healthcare professionals with high SOC are also less prone to be detrimentally affected by workplace bullying. Some studies prove that a

[1] Contact history refers to direct or indirect contact with infected people or with people or materials suspected of being infected.

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Sense of Coherence can protect individuals against behaviours that cause harm (Francioli et al., 2015), but only in cases where individuals were exposed to low levels of bullying (Nielsen et al., 2008). If mechanisms can be learned to increase a Sense of Coherence, it is important to look at it, as it can be a mechanism to protect nursing staff against bullying.

It is for this reason that the research paper will focus on nursing personnel. Nursing is a critical job. Without nursing staff, the health care system would collapse. If nursing staff are mentally and psychologically healthy and safe at their workplace, productivity will improve as well as patient care.

1.2 Aim of the Study

The overall aim of the study is to assess the prevalence of PTSD analogue symptomatology and reported symptoms of psychological ill-health among current and former victims of bullying at work to confirm the detrimental effects that workplace bullying has on the workforce. Furthermore, the aim of the study is to establish whether Sense of Coherence moderates the relationship between workplace bullying and PTSD.

1.3 Research Initiating Question

Given the findings mentioned above, it is beneficial to focus on the problem of workplace bullying. The research question thus is:

What is the prevalence of PTSD analogue symptomatology and reported symptoms of psychological ill-health among current and former victims of workplace bullying, and does Sense of Coherence moderate the relationship between workplace bullying and PTSD?

1.4 Research Objectives

- To investigate the consequences of workplace bullying in terms of the victims.
- To determine whether bullying behaviour can cause PTSD and other psychiatric symptoms.
- To examine whether stress relates to workplace bullying.
- To investigate whether the relationship between workplace bullying and PTSD is moderated by a Sense of Coherence.
- To develop an explanatory structural model that explicates the relationship between workplace bullying and PTSD, stress, and depression respectively.

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- To test the model's fit; and
- To evaluate the significance of the hypothesised paths in the model.

1.5 Significance of the Study

This is a crucial study since it is one of the few quantitative studies on workplace bullying in the nursing profession in South Africa. The information that will be derived from the study will broaden our understanding of workplace bullying; the causes and consequences of bullying among the victims; and the level of psychiatric symptoms and PTSD symptoms among victims of workplace bullying. It will also provide organisations in South Africa with recommendations on how to eliminate workplace bullying in their organisations. The research study will encourage researchers to include additional variables in the structural model and to focus their research studies on additional aspects related to workplace bullying.

1.6 Chapter Summary

This chapter contained an introduction section followed by information pertaining to the content and aim of the study. The research initiating question(s) and research objectives were provided, and the significance of the study was discussed. In the following chapter, comprehensive definitions of bullying will be provided, and the concept of bullying will be explored. Second, the descriptive features of workplace bullying will be discussed. Third, witnessing of workplace bullying will be explored. Fourth, the gender and status of the perpetrator(s) will be discussed. Fifth, the types of bullying will be discussed. Sixth, the causes of bullying in terms of the victim will be discussed. Seventh, the consequences of bullying in terms of the victim will be discussed. Eight, the common characteristics of the victim will be discussed. Ninth, the concept of Post-Traumatic Stress Disorder, stress, depression, and Sense of Coherence will be explored. Tenth, post-traumatic stress disorder, stress and depression as consequences of workplace bullying will be discussed. Eleventh, the relationship between post-traumatic stress disorder and depression will be explored. Twelfth, Sense of Coherence as a moderator between workplace bullying and post-traumatic stress disorder will be explored. Thirteenth, the healthcare section, the Department of Health

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and Nursing in South Africa will be discussed. Lastly, the proposed structural model will be illustrated.

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Chapter 2: Literature Review

The aim of this chapter is to define workplace bullying; explore the concept of workplace bullying; the different types of bullying; the causes of workplace bullying; the impact of workplace bullying on the victim; and the common characteristics of the victim.The concepts of Post-Traumatic Stress Disorder, stress, depression, and Sense of Coherence will also be discussed. Furthermore, in this chapter the association between PTSD and workplace bullying, and the association between depression and workplace bullying will be explored. Additionally, stress as a consequence of workplace bullying, and Sense of Coherence as a Moderator between workplace bullying and PTSD will be discussed.

2.1 Definition and Different Labels of Workplace Bullying

Researchers struggle to get a universal definition of bullying, and different definitions are found in different jurisdictions (Bulutlar & Öz, 2009; MacIntosh et al., 2011). Authors even prefer to use their own definitions of bullying however, there seem to be similarities in the definitions use and a similar understanding of the concept in the international arena (Chappel & Di Martino, 2006; Yamada, 2004).

Bullying is labelled differently according to country and study. Workplace bullying was originally named ‘mobbing’ when it was identified in Sweden in the 1980s by Heinz Leymann (Einarsen et al., 2003). Researchers in the UK began to study these phenomena in the 1990s and labelled it as ‘bullying’ (Rayner & Keashly, 2005). Workplace bullying is also referred to as “work abuse”, “workplace aggression”, “workplace harassment” and “psychological harassment” (Bulutlar & Öz, 2009, p.274). In the nursing literature, bullying is often defined as ‘workplace aggression’ (Farrell et al., 2006), ‘verbal abuse’ (Rowe & Sherlock, 2005), or ‘lateral or horizontal violence’ (Curtis et al., 2007). It is difficult to compare study results and research from different occupational groups if there are no clear terms and definitions (Johnson, 2009).

2.2 Various Definitions of Workplace Bullying

Leymann (1990) developed the concept of “workplace bullying” which was abusive behaviour. He examined traumatised workers from a psychological perspective and realised

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that staff who were humiliated, excluded, or punished by the collective behaviours of their colleagues displayed severe damages. Leymann (1996, p.168) provided an operational definition of mobbing (bullying) as:

> Psychological terror or mobbing in working life involves hostile and unethical communication, which is directed in a systematic way, by one or a few individuals mainly towards one individual who, due to mobbing is pushed into a helpless or defenceless position, being held there by means of continuing mobbing activities. These actions occur on a very frequent basis (statistical definition: at least once a week) and over a long period of time (statistical definition: at least 6 months of duration).

Einarsen and Raknes defined (1999, p.17) bullying as: “All those repeated actions and practices that are directed to one or more workers, which are unwanted by the victim, which may be done deliberately or unconsciously, but clearly cause humiliation, offence, and distress, and that may interfere with job performance and/or cause an unpleasant working environment”. Matthiesen and Einarsen (2010) mentioned that bullying is a form of interpersonal aggression. Bullying is usually proactive and often involves a continuous process of badgering the victim (Rayner & Cooper, 1997).

Research conducted by the Namie's (2000) focuses on behaviour that is hostile and aggressive towards certain employees that are targeted systematically. This behaviour causes employees to feel stressed, offended, and humiliated. Namie describes workplace bullying as an employee who views themselves as victims who are vulnerable to the negative behaviour caused by one or more employees. Repetitive and persistent negative behaviours that occur due to inequality in power are seen by Vartia (1996), and Hoel and Cooper (2000) as workplace bullying. This behaviour, therefore, causes hostile work environments where a victim cannot defend himself/herself or retaliate.   .

Einarsen (2000, p.381) defined workplace bullying as “prolonged and repeated hostile behaviours conducted by at least one person toward one or more individuals when

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they are unable to resolve their workplace conflicts in non-hostile manners and can cause health problems for victims and affect their performance".

Bullying or mobbing refers to "situations in which someone is subjected to long-lasting, recurrent, and serious negative or hostile acts and behaviour that are annoying and oppressing" (Vartia, 2001, p.63). The individuals who are bullied are often incapable to defend themselves according to Vartia. Examples of negative acts of bullying are notably or unfavourably gazing at the victim; refusing to take notice of or acknowledge the victim; defaming, and laughing at or mocking the victim.

Workplace bullying is a social interaction in which the bully utilises verbal and/or non-verbal communication that is characterised by adverse and hostile elements directed towards the victim. Exposure to verbal aggression, physical bullying, being attacked on a personal or professional level, having one's work obstructed, being socially isolated from the rest of one's workgroup, having rumours spread about oneself, and being ridiculed by being subjected to verbal or physical acts of degradation and disparagement are typical examples of workplace bullying (Nielsen & Einarsen, 2012; Nielsen & Knardahl, 2015).

The central generally agreed upon components of workplace bullying are frequency, duration, and the fact that the negative acts negatively affect the targets. Rayner (1997) postulated that on average bullying takes place for less than one year, and Salin (2001) indicated that the duration of bullying is 2.7 years. For conflict to be coined as bullying it should occur at least once a week for at least six (6) months (Zapf, 1999). On the other hand, Einarsen et al. (2003) conceptualised workplace bullying to take place frequently, and over a long length of time. Workplace bullying is a chronic stressor that leads to the target being unable to protect themselves. On the contrary, it has also been asserted that bullying can be a single event or numerous events which are so severe that the suffering which the victim experiences are compatible with the suffering that a victim who is bullied frequently experiences (Capponecchaia & Wyatt, 2009).

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Workplace bullying refers to consistent adverse interpersonal behaviour through sabotaging and demeaning behaviour; character assassination; attacking the victim's competence and reputation, and attacks executed through work-related tasks. Bullying takes place when the bully deliberately causes harm to the victim by causing damage to the victim's health, career, and social life (Gordon, 2021).

Einarsen et al. (2003, p.13) defined workplace bullying as "harassing, offending, socially excluding someone or negatively affecting someone's work task. 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 some time (e.g., about 6 months)". This definition of workplace bullying is the most widely agreed-upon definition in the literature. Bullying is an escalation process in which the victim is left in a menial position and becomes a target of methodical adverse social actions. Conflict cannot be coined as bullying if it is a once-off occurrence or if bullying occurs between two individuals with equal levels of power (Einarsen et al., 2003).

Kalamdien (2013) defined workplace bullying as:

> one or more persons are subjected to persistent and repetitive harmful negative or hostile acts (excluding once-off isolated incidents) by one or more other persons within his or her working environment (excluding incidents where two equally strong individuals come into conflict), and the person feels helpless and defenceless in the situation. The victim should feel defenceless and helpless, as well as experiencing the harmful negative and hostile acts repetitively and persistently for at least six months and as offensive; the intentionality of the perpetrator is irrelevant.

Kalamdien's (2013) definition of workplace bullying was used to describe workplace bullying in the present research study.

The researcher defines workplace bullying as:

> Negative or hostile behaviour or actions directed at one or more individuals by at least one individual which leaves the victims feeling defenceless and helpless. The victim is

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subjected to this negative or hostile behaviour or actions repeatedly, frequently and over some time. The bully deliberately victimises the victim in order to damage their health, career and reputation.

2.2.1 Descriptive Features of Workplace Bullying

Although, there is no clear agreed upon definition of workplace bullying amongst researcher, the different definitions identifies five key elements linked to workplace bullying. These elements include negative or aggressive behaviour; the frequency of the behaviour; prolonged duration; power imbalances; and harmful effects. The different elements will be discussed in the following section in order to define workplace bullying more holistically.

2.2.1.1 Negative or Aggressive Behaviour. Aggression is perceived as an extreme form of assertiveness that is unwelcomed by the victim (Jacobson et al., 2014). It was also suggested that organisations that have a highly assertive culture tend to display aggressive behaviour, which encourages workplace bullying actions (Jacobson et al., 2014).

2.2.1.2 Frequency and Duration of the Behaviour. Frequency refers to the number of times that workplace bullying occurs, and duration refers to how long the negative or aggressive behaviour is experienced (Samnani & Singh, 2012). There is no agreed upon criterion among researchers for the frequency and duration for workplace bullying. Workplace bullying should occur at least once a week (Einarsen et al., 2011; Kalamdien, 2013; Leymann, 1996) because isolated incidents are typically excluded from being defined as workplace bullying (Branch & Murray, 2015; Einarsen et al., 2003; Einarsen et al., 2011) unless that single episode is continuous and poses a threat for the receiver (Branch and Murray, 2015). Additionally, Branch and Murray (2015) suggested that workplace bullying occurs when an individual experiences several negative behaviours repeatedly over a period of about six months.

2.2.1.3 Imbalances of Power. Power imbalance refers to the formal power structure of an organisation. Workplace bullying usually occurs in organisations with rigid hierarchy structures where it is highly probable that the perpetrator will be in a high and powerful position whereas the target would usually be in a lower ranked position (Bremert, 2021).

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However, this imbalance of power is not limited to power and authority (Branch et al., 2013). It can occur upwards, downwards (Branch et al., 2007, 2008, 2015), horizontally (Einarsen et al., 2011) or vertically (D'Cruz, 2012).

2.2.1.4 Harmful Effects. The intention of the perpetrator refers to whether the perpetrator's action was intended to cause harm (Bremert, 2021). The perpetrator may be unaware of the negative effects that their actions may have on others (Kalamdien, 2013). Kalamdien (2013) indicated that is crucial to focus on whether the behaviour is harmful and unwelcomed by the victim. Additionally, the intention of the perpetrator also depends on what the receiver perceived as bullying (Bremert, 2021).

2.3 Witnessing Workplace Bullying

Workplace bullying not only has implications for the victims but also for the witnesses or observers of workplace bullying (Smith, 2014). It was found that the witnesses of workplace bullying reported an increase in symptoms of stress and strain, poor emotional and physical well-being, lower levels of job satisfaction and performance, lower effective commitment to the organisation, and a higher intention to leave (Bentley et al., 2012; Sims & Sun, 2012). It was also found that the wellbeing of the witnesses are more likely to be affected if they lack optimism, lack social support from their colleagues or if their supervisors do not have a supportive leadership style (Sprigg et al., 2018). The perpetrator victimises its targets in front of others in order to convince the observers that they must be feared at all cost (Namie, 2003).

A nationwide study in the United Kingdom found that 46.5% of employees witnessed workplace bullying in the past five years (Hoel & Cooper, 2000). Likewise, Keashly and Neuman (2008) revealed that 41% of the US faculty members who partook in their study witnessed workplace bullying. Visagie et al. (2012) reported that 46.5% of the participants in a Southern African study based on the mining section had witnessed workplace bullying for a period of 5 years. Similarly, Kalamdien (2013) in a South African study revealed that 50% of the respondents reported that they witnessed others in the workplace being subjected to workplace bullying "now and then" during the last six months, whereas 12% reported

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witnessing workplace bullying on a “daily” basis, 9% “weekly”, and 3% “monthly”. Another 26% reported that they “never” witnessed others being subjected to workplace bullying. In a recent study (Bremert, 2021) which consisted out of 194 respondents, 162 identified themselves as witnesses of workplace bullying. About 51% of the witnesses reported that they witnessed workplace bullying on a “monthly” basis, 28% witnessed it on a “weekly” basis, and 10% witnessed workplace bullying behaviours “daily”. Furthermore, 6% preferred not to answer the question, and 5% “never” witnessed workplace bullying.

The above results reported provide alarming statistics of workplace bullying based on the witnesses accounts which confirms that workplace bullying indeed has profound implications for the targets and witnesses of bullying.

2.4 The Gender and Status of the Perpetrator(s)

Einarsen and Skogstad (1996) revealed that all employees are susceptible to workplace bullying. In other words, all employees are capable of being the perpetrator and/or the target of workplace bullying. Research also found that both men and women are equally capable of bullying although there may be some differences (Einarsen & Skogstad, 1996; Kalamdien, 2013). In a Norwegian study conducted by Einarsen and Skogstad (1996) 49% of the respondents reported being bullied solely by men, 30% reported being bullied solely by women, and 21% reported being bullied by both genders. In a recent study conducted by Kalamdien (2013) it was found that 80% of the respondents were bullied solely by men, whereas 4% were bullied exclusively by women. Additionally, 15% reported that they were bullied by both genders. In contrast, Du Toit (2013) found that 53% of the respondents in her study reported that their perpetrators were women, followed by men (7%), and 4% both men and women. The difference with regards to the gender of the perpetrators in Du Toit (2013) and Kalamdien’s (2013) research studies could be due to the differences in the working environment of the respondents. Du Toit’s (2013) respondents’ working environment is female dominant, and Kalamdien’s (2013) respondents’ working environment is male dominant. Much of the literature about men in nursing stresses that nursing remains a

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female dominant working environment (Australian College of Nursing, 2019; Du Toit, 2013; Olson, 2014; White, 2014).

Research conducted by Bremert (2021) revealed that the majority of the research participants reported that the perpetrator is a supervisor/manager (69%), followed by colleagues (35%), patients (24%) and other (7%). The findings of a study conducted by Kalamdien (2013) revealed that supervisors/managers were reported more frequently (69%) as the perpetrator, followed by colleagues/peers (34%), subordinates (7%), and clients (1%).

Although those in leadership positions are frequently reported as the perpetrator of bullying, the perpetrator could also be peers or subordinates. Hoel et al. (2001) concluded that 36.7% of the victims reported a peer as the perpetrator, whilst 6.7% reported that the bully was a subordinate. Glaso et al. (2011) found that 61.2% of the research participants reported to be victimised by peers. Ortega et al. (2011) found that 72.4% of the victims identified a peer as the bully and 16.2%, a superior.

2.5 Types of Bullying

The various types of bullying which manifest in organisations will be discussed in detail in this section. These types of workplace bullying cause major personal and organisational problems.

2.5.1 The Namie's Categories of Bullies

Namie and Namie (2004) identified four different types of bullying which are commonly found in the place of work namely, the Screaming Mimi, the Constant Critic, the Two-headed Snake, and the Gatekeeper. Later on, Namie and Namie (2009) identified four types of bullies namely, Chronic Bullies, Opportunist Bullies, Accidental Bullies, and Substance-abusing Bullies. This section will elaborate on these types of bullying in more detail.

2.5.1.1 The Screaming Mimi. The Screaming Mimi 'toxifies' the workplace by being outwardly rude, displaying mood swings, unpredictable displays of anger, and inducing fear. Their mission is to control the emotional climate of the workplace (Smith, 2014). The

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perpetrator humiliates its targets in front of others to convince the witnesses that they are to be feared (Namie, 2003).

According to Namie and Namie (2004), this type of bully abuses workers and prevents their targets from attempting to intercede because of the fear of getting an earful of their own.

2.5.1.2 The Constant Critic. The Constant Critic is an overcritical nit-picker who obsesses over the performance of others (Namie & Namie, 2004). According to Namie (2003), the perpetrators pay attention to trivial details and obsesses over other's performance to mask their insecurities and inadequacies. This bully resorts to name-calling and fabricates victims' "errors" to disparage and to confuse them (Namie, 2003).

The Constant Critic frequently harasses or badgers their victims in private but are also prone to criticizing their targets in public. The goal of the perpetrator is to make the target believe that they are incompetent (Namie, 2003; Rayner & Hoel, 1997; Stancavage, 2008).

2.5.1.3 The Two-headed Snake. The Two-headed Snake is someone who damages the reputation of their victims through spreading rumours and devises schemes to climb the corporate ladder (Namie & Namie, 2004). Snakes defame the reputation of targets to boost their self-image and to turn the targets' co-workers against them. The bully's version of events is always believed while the target's perspective is discounted (Namie, 2003). This type of bully is usually the manager who acts as a friend when they are face-to-face with the target but attempts to get rid of the target behind their backs (Rayner & Hoel, 1997; Stancavage, 2008).

2.5.1.4 The Gatekeeper. The Gatekeeper is insecure and distributes resources such as information, time, and money in such a manner that guarantees the victim's failure. Thereafter, the bully has an excuse to complain about the performance problems of the victim(s) (Namie, 2003). The Gatekeeper is obsessed with power and control and ensures that the target fails (Namie & Namie, 2004).

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The next section is a discussion on the different types of bullies as identified by Namie and Namie (2009).

2.5.2 The Namie's Additional Categories of Bullies

2.5.2.1 Chronic Bullies. Chronic bullies use aggressive, dominating, and coercive strategies in most of their interactions within and outside of work. Chronic bullies utilise bullying to communicate with almost everyone or when they do not get their way according to Namie and Namie (2009).

2.5.2.2 Opportunist Bullies. Opportunist bullies suspend their competitive and aggressive behaviour when they are away from the workplace. They believe that their career is built by observing the cues in the competitive and political workplace (Namie & Namie, 2009). In a competitive environment, these bullies are willing to succeed at the expense of their victims and are willing to continue bullying if the organisation reinforces their behaviour (Namie & Namie, 2009).

2.5.2.3 Accidental Bullies. Accidental bullies coincidently victimize their targets however, they back off and/or apologise when confronted. These bullies do not realise that others perceive their behaviour negatively, and sometimes act regretfully when they learn about the interpretations of their behaviour. When confronted about their actions they are often surprised (Namie & Namie, 2003; Namie & Namie, 2009).

2.5.2.4 Substance-abusing Bullies. Substance-Abusing bullies do not act reasonably or logically, since they are under the influence of chemicals that interfere with their awareness, sensations, and perceptions. They tend to exhibit aggressive behaviours beyond reason, logic, or their control (Namie & Namie, 2009).

Einarsen (1999) categorised bullying as dispute-related and predatory which will be discussed in the section below.

2.5.3 Einarsen's Categories of Bullying

2.5.3.1 Dispute Related. Dispute-related bullying is preceded by a highly escalated interpersonal conflict and originates in conflict situations in the organisation (Einarsen, 1999;

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Namie & Namie, 2009). There are three kinds of dispute-related bullying: aggressive behaviours used as tactics in an interpersonal conflict, malingering as a tactic, and resentment to perceived wrongdoing or unfair treatment by one's adversary (Einarsen, 1999).

2.5.3.2 Predatory Bullying. Predatory bullying refers to scenarios where the victim has done nothing to provoke the 'predator' (Einarsen, 1999). The victim is coincidentally faced with the aggression and power abuse of the predator or predators (Einarsen, 1999). The bully abuses their power or the target is a victim of scapegoating processes within the group. The victim may be victimized because he or she forms part of a certain out-group, such as being the first woman in the local police force, or the victim may be bullied since they are seen as an easy target of frustration and stress caused by other factors. Predatory bullying may also be caused by destructive superiors and leadership styles, poor work environment, and prejudice (Einarsen, 1999).

Ross (1996) and Smit et al. (2012) divided bullying behaviours into two broad categories namely, direct and indirect (relational) bullying which will be discussed in the below section.

2.5.4 Direct/Overt Bullying vs. Indirect/Covert Bullying

Ross (1996) and Smit et al. (2012) stated that bullying behaviours can be split into two broad categories namely, direct and indirect (relational) bullying. According to Cunniff and Mostert (2012), direct bullying suggests that the victim experience threatening behaviour on a personal, relational level. Direct bullying includes acts of verbal abuse such as demeaning comments, publicly shamed, criticism, incorrect allegations, threatening behaviour, and intimidation (Einarsen et al., 2009).

Indirect or covert bullying is a more subtle concealed way of bullying and is usually not acknowledged as bullying (Rust, 2018). It aims to harm the victim on an emotional level and to manipulate relationships. Covert or indirect social bullying is to spread lies or rumours, belittle, demean, watch the victim in a contemptuous or intimidating manner,

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segregate or ostracise someone (Cunniff & Mostert, 2012; Einarsen et al., 2009; Harding, 2016). Acts of bullying such as failing to inform victims of decisions that could affect them directly, manipulating information that victims receive, and neglecting the working conditions of victims are examples of covert bullying (Cunniff & Mostert, 2012; Einarsen et al., 2009). Another example of indirect or covert bullying is the burnout of targets which are divided into two types namely, situational elements such as job demands and individual elements such as deficiency of resources and staff. Organisations can diminish these types of indirect bullying by being compliant with the resource demands (Desrumaux et al., 2018). In the workplace, both overt and covert bullying behaviour can be displayed by the victim's co-workers and /or supervisors (Cunniff & Mostert, 2012).

2.5.5 Sporadic vs. Once-off Bullying

For conflict to be perceived as bullying it must occur frequently and consistently (e.g., daily) and over a length of time (e.g., approximately 6 months) (Chappell & Di Martino, 2006; Einarsen et al., 2011). The researcher agrees with the above-mentioned research however, she believes that bullying can apply to a particular activity, interaction, or process over a short period if the incidence is extremely severe.

2.5.6 Work-related Bullying vs. Personal Bullying

Nielsen and his colleagues (2009) argue that researchers commonly refer to two types of bullying namely, work-related bullying and personal bullying. Work-related bullying includes absurd deadlines, unmanageable workloads, extreme monitoring, and withholding of essential information. Personal bullying is described as exposure to behaviours such as gossip, rude comments, excessive mocking, and persistent criticism.

In summary, there is various types of workplace bullying that rears its ugly head in organisations. Firstly, the Screaming Mimi is rude and obnoxious and victimises their victims in front of others to instil fear in their victims and observers. Secondly, the Constant Critic critizes their victims to make them feel inferior and incompetent. Thirdly, the Two-headed Snakes aim is to ruin the reputation of their victims. Fourthly, the Gatekeeper withholds

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critical information to ensure their victim's failure. Fifthly, the Chronic Bully deflects from his or her inadequacies, fear of failure, or incompetence. Sixthly, the Opportunistic Bully strives in competitive environments and is charming and supportive outside this environment (for instance, in church). Seventhly, the Accidental Bully bullies their targets coincidentally but backs off when confronted. Eighthly, Substance Abuse Bully is quite dangerous and threatening. They tend to have unpredictable mood swings. Einarsen also distinguished between Predatory Bullying and Dispute-related bullying. Dispute-related bullying refers to a scenario where the victim has done nothing to provoke the bullying and often forms part of what is classified as outgroups.[2] Furthermore, direct/overt bullying refers to a scenario where the victim is threatened face-to-face and is experienced on an interpersonal level whereas, indirect/covert bullying harms the target on an emotional level to manipulate relationships. Additionally, a particular activity is classified as bullying if it occurs repetitively, frequently, and over a period. Finally, work-related bullying includes micromanagement and constant criticism whereas person-related bullying includes isolating and belittling victims.

To prevent the different types of bullying from occurring one must investigate what the root cause of bullying is. For this reason, the following section will examine the various causes of workplace bullying.

2.6 Causes of Bullying in the Workplace

There are various causes of bullying in the workplace. In the following session, the antecedents will be discussed, namely organisational volatility, leadership styles, organisational hierarchy, the personality of the victim, and envy.

2.6.1 Organisational Volatility

Volatility is one of the features of the organisation that encourages bullying behaviour. The likelihood of the occurrence of bullying is higher when the workplace is downsized or restructured (Hutchinson et al., 2005). A study conducted in Australia revealed that the change process was used as a means to bully nurses and to conceal bullying

[2] An out-group is a social group with which an individual does not identified.

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(Hutchinson et al., 2005). Environments that contribute to workplace bullying are when organisations increase nursing staff workloads (Ekici & Beder, 2014), instead of hiring additional staff. With this action, organisations are trying to cut costs, but expect staff to still be productive. This climate is very suitable for bullying. Increased nursing workloads can lead to frustration which in turn can escalate into bullying (Farrell, 2001; Hutchinson et al., 2005; Lewis, 2006). A poor physical work environment increases the likelihood of bullying behaviour (Salin, 2015) through different mechanisms. Baillien et al. (2008) and Baillien et al. (2009) identified three routes through which poor physical work environments can increase the likelihood of bullying. First, a poor work environment can increase frustration which affects the bully and the victim's behaviour. Second, a poor work environment can lead to conflicts that in turn can escalate into bullying. Third, a poor work environment and destructive culture may permit or even create incentives for negative interpersonal behaviour (Baillien et al., 2008; Baillien et al., 2009).

Studies from occupations other than nursing have revealed that bullying flourishes in workplaces that are characterised by stressful and negative environments, role ambiguity, and role conflict (Balducci et al., 2018; Hoel & Salin, 2003; Rai & Agarwal, 2018). Organisational factors associated with a poorly organised work environment – such as poor working conditions, detrimental workloads, unrealistic demands, and resource deficit, role ambiguity, and role conflict – creates a substantial amount of stress and frustration amongst employees which can lead to workplace bullying (Balducci et al., 2018; Rai & Agarwal, 2018). Approximately 30 Irish victims of bullying expressed that their work is highly stressful and is characterised by a competitive environment. They described their working environment as containing interpersonal conflict, lacking respect and empathy, transformation in the workplace, and being governed by an autocratic leadership style (Seigne, 1998). In a Norwegian study, the targets and bystanders of bullying indicated that they were dissatisfied with their work environment. The participants complained of a lack of constructive leadership, a high level of role conflict, and a lack of possibilities to monitor and control their work tasks (Einarsen et al., 1994). Contradictory demands and expectations

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concerning duties and responsibilities may cause employees who work together to feel annoyed and stressed. This situation may lead to conflict, poor interpersonal relationships, and to individuals being scapegoated. In a Finnish survey, targets and bystanders of bullying described their work environment as being characterised by a lack of communication especially regarding goals and tasks, an authoritative way of resolving dissensions, and a lack of control over issues concerning oneself (Vartia, 1996). Many studies found a relationship between organisational changes and workplace bullying (Baillien et al., 2018).

2.6.2 Leadership Styles and Workplace Bullying

Poor organisational leadership styles impact employees' interaction negatively (Fox & Spector, 2002). Highly authoritarian and laissez-faire leadership styles are believed to produce an environment in which bullying flourishes (Glambek et al., 2018; Hoel & Salin, 2003). Leadership plays an important role when the victims develop concerns about their job security. This indicates that the depiction of passive-avoidant and non-responsive leadership elevates the rate by which the victims continue to be victimised over time (Glambek et al., 2018). As the victim attempts to explain their situation to their supervisor, they may be perceived to be the root of the problem which consequently leads to them losing support and protection from bullying. Bullying directed at those whose performance is poor is sometimes indirectly supported by the supervisors by being non-responsive (Glambek et al., 2018).

Olsen et al. (2017) argued that negligent leadership may cause stress in the work environment and divisive employee associations, such as isolating and excluding colleagues. In healthcare settings, employees with poor leaders are more susceptible to workplace bullying. In a research study conducted by Anderson (2015), it was evident that nurses who struggle with challenging work demands and poor leadership regularly frequently feel unsupported. This causes them to bully their colleagues to manage their workload and ease frustration.

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2.6.3 Organisational Hierarchy

In a study of nurses in the UK, 59% of the participants said that they were bullied by their managers (Quine, 2001). In other studies from USA, Australia, New Zealand, Norway, and UK it was also reported that sometimes managers or the direct bosses were the cause of bullying (Glambek et al., 2018; Gonçalves et al., 2020; Hutchinson et al., 2005; Lewis, 2006; Rowe & Sherlock, 2005). Employees in high positions were identified as the bully in a study conducted by Pooli and Monteiro (2018).

Management can also be a direct cause of bullying in the workplace. According to The Conference Board of Canada (2019), harassment by a brutal or belligerent supervisor in the workplace is the most prevalent type of workplace harassment. This finding was corroborated by other researchers who also confirmed that bullying is a common management style (Ironside & Seifert, 2003; Lutgen-Sandvik et al., 2007; Quine, 2001; Salin et al., 2019). In other studies from USA, Australia, New Zealand, Norway, and UK it was also reported that sometimes managers or the direct bosses were the cause of bullying (Glambek et al., 2018; Gonçalves et al., 2020; Hutchinson et al., 2005; Lewis, 2006; Rowe & Sherlock, 2005). Employees in high positions were identified as the bully in a study conducted by Pooli and Monteiro (2018).

The inherently hierarchical nature of the workplace causes the perpetrator to have authority over the victim. It also oppresses workers by eliminating workers' sense of control, consequently, making them impotent (Young, 1990). Managers and superiors utilise bullying as a means to control subordinates to create a more profitable and productive workforce (Hoel & Beale, 2006; Hutchinson et al., 2006; Ironside & Seifert, 2003; Lewis, 2006). Victims of bullying felt that they were bullied by managers who used organisational policies and management practices in an abusive manner (Hutchinson et al., 2005; Liefooghe & Davey, 2003). Employees stipulated that they were harassed whenever they spoke up during performance evaluations (Daiski, 2004; Liefooghe & Davey, 2003; McKenna et al., 2003; Quine, 2001). In the bureaucratic system, managers abuse their authority and power to bully their subordinates for their benefit (Wright, 2020). The victims are less likely to receive

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support in an organisation in which the perpetrator forms part of management (Hoel & Beale, 2006; Wright, 2020).

The hierarchical nature of nursing is believed to be one of the causes of bullying in this field of work (Curtis et al., 2007; Daiski, 2004; Farrel, 2001). Bullying behaviours can be utilised to reinforce standards and rules, and to get rid of nurses who do not conform to the status quo (Daiski, 2004; Hutchinson et al., 2006). Bullying is also used to manage and strengthen current power structures (Daiski, 2004; Hutchinson et al., 2006).

As seen from literature, bullies who are in authority or managerial positions tend to abuse their positions or association with individuals higher up in the corporate ladder to defame their victims and render them helpless in the work environment (Hoel & Beale, 2006; Wright, 2020). They tend to obtain a sense of satisfaction at the mere sight of the victim's self-confidence and self-worth deteriorating (Hogh & Dofradottir, 2001; Lee & Lim, 2019), and by destroying the victim's reputation (Gordon, 2021). The victim ends up feeling helpless (Hogh & Dofradottir, 2001), and their work performance continues to deteriorate (Baillien & De Witte, 2009). The bully who is in a managerial position continues to victimise the target until they are forced to resign voluntarily or until they are forced to leave involuntarily (Gardner & Johnson, 2001; Miller et al., 2019).

2.6.4 Personality of Victim

Victims of workplace bullying were portrayed as overachievers with impractical views of their resources and abilities, and the demands of their work tasks (Brodsky, 1976). If employees are perceived as annoying, it may cause others to be aggressive towards them (Felson, 1992).

Gandolfo (1995) conducted a study in the US that was based on victims of workplace bullying who were claiming worker's compensation in comparison to complainers who were not harassed. The targets of harassment were more dubious, infuriated, and hypersensitive than other claimants. Both groups displayed depressive symptoms. Victims of bullying also show signs of low self-esteem and anxiety in social settings (Einarsen, et al., 1994). Some researchers perceive victims as being conscientious, literal-minded, naïve (Brodsky, 1976),

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and with a tendency to neuroticism (Vartia, 1996). Einarsen et al. (1994) argued that the personality of the victim provokes aggression in others. Savaşan and Özgür (2018) mentioned the personality of the victim has a limited impact on workplace bullying. On the other hand, Leymann (1990; 1996) argued that personality is not a cause of bullying. Leymann and Gustafsson (1996) argued that the observations on personality are a consequence of bullying. Nielsen and Knardahl (2015) elaborate on the issue of personality in their study, they state that ‘personality traits may function as both predictors and outcomes of workplace bullying’ (p. 128).

In a Norwegian survey, 278 victims felt that their deficiency of self-efficacy and copying resources contributed to the problem. Only a few victims blamed factors external to the offender or victim themselves. Stressful work situations and the social climate at work are two examples of these external factors (Einarsen et al., 1994).

One cannot just look at the personality of victims to determine why bullying occurs. Researchers will have to look at the global picture to get answers.

2.6.5 Envy

There are two key aspects to the envy concept. First, envy involves “the relation to another who is perceived to be more fortunate or better off than oneself” (Stein, 1997, p.454). Second, envy involves “feelings of ill-will or mortification towards that other” (Stein, 1997, p.454). This refers to individual’s inner need to harm others or to be an eyewitness to it. It is as if an individual does not grant someone else something.

In an interview study conducted amongst 30 Irish victims of bullying, all the victims blamed the difficult personality of the bully (Seigne, 1998). Two out of three victims also felt that the bully was envious of them, more specifically their qualifications (Seigne, 1998). In a Finnish study conducted amongst 95 victims, 68 % perceived envy as an important reason for why they were bullied, and 278 victims in a Norwegian survey viewed envy as an important reason. Recent research conducted by Malik and Malhi (2020) revealed that hostile envy has a positive impact on traditional workplace bullying and cyberbullying.

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2.7 Consequences of Bullying in the Workplace

There are various consequences of bullying behaviours, some are positive and others negative. Workplace bullying has consequences on both organisational and individual levels. The consequences of workplace bullying related to the individual levels, more specifically the victims, will be concentrated upon.

2.7.1 Health Effects

Leymann (1996) stated that stress negatively affects health, and bullying is an extremely stressful situation that can cause permanent psychological and physical damage. Members of the workgroup who are witnesses of bullying, but are not directly bullied, also experience stress (Einarsen & Mikkelsen, 2003; Lutgen-Sandvik et al., 2007).

2.7.1.1 Psychological Damage. Exposure to bullying significantly increases rates of psychological distress. Some examples of psychological distress in this instance are low self-esteem, suicidal ideation, depression, increased levels of anxiety and fear, and believing that you are professionally incompetent (Agervold & Mikkelson, 2004; Einarsen & Mikkelsen, 2003; Lee & Lim, 2019; Moayed et al., 2006). Bullying is also the cause of severe mental health problems such as depression, post-traumatic stress disorder, and suicide (Islamoska et al., 2018; Leach et al., 2016; Nielsen et al., 2015; Rugulies et al., 2012).

Some researchers have proven that suicide is one of the numerous consequences of workplace bullying (Bartlett & Bartlett, 2011; Leach et al., 2016; Lee & Lim, 2019; Meek, 2004). In a study of Turkish nurses, 10% of the respondents revealed that they contemplated suicide because they were bullied at work (Yildirim & Yildirim, 2007).

Mikkelsen and Einarsen (2002b), Quine (2003) and Kivimäki et al. (2003) investigated psychological health problems respectively as a consequence of workplace bullying. Sickness absence was frequently reported as one of the consequences of workplace bullying. Kivimäki et al. (2003) concluded that targets of workplace bullying are more probable to have chronic diseases such as asthma and cardiovascular disease. They also discovered that continuous bullying was linked with the onset of cardiovascular disease. Vartia (2001) stated that there is a substantial difference between victims of bullying and

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non-victims in terms of general stress. Mikkelsen and Einarsen (2002b) and Quine (2003) discovered that there is a strong relationship between exposure to workplace bullying and psychological health complaints. There was also a strong correlation between psychosomatic complaints and workplace bullying (Mikkelsen & Einarsen, 2003). Quine (2013) revealed that doctors who were subjected to bullying reported lower job satisfaction in comparison to doctors who were not bullied.

2.7.1.2 Physical Damage. Workplace bullying also has a profound impact on the physical health of victims. A study conducted by MacIntosh (2005) in rural areas revealed that the physiological impact of bullying includes frequent headaches, tearfulness, gastrointestinal problems, sleep disturbances, exhaustion, dry throat, changes in body weight, diminishing energy, disturbed concentration, and hypervigilance. Many of these symptoms were causes for absenteeism (MacIntosh, 2005). Victims display more psychosomatic complaints such as sleeplessness, loss of appetite, anger, inability to concentrate, stomach pain, back pain, and increased chronic fatigue (Magee et al., 2017; Moayed et al., 2006; Yildirim & Yildirim, 2007). Ongoing bullying causes the onset of cardiovascular disease. To some degree, this effect explained the high rates of obesity found amongst targets of bullying (Kivimäki et al., 2000). The physical symptoms adversely affect the health of the targets and extend beyond the workplace (MacIntosh, 2005). A study by the University of Copenhagen found that targets of bullying are more likely to develop (1.59 times) a cardiac-related disease, like a stroke or heart disease. The incidence of heart-related problems increases by 59%. Bullying victims who have a recent history of bullying behaviour show a 1.46 times increased risk to develop Type 2 diabetes (Xu et al., 2019).

2.7.1.3 Mental or Emotional Symptoms. The victims are affected by mental or emotional symptoms. Many of the targets of bullying felt acquiescent, afraid, discouraged, lacked self-confidence, agitated, and depressed (MacIntosh, 2005; Magee et al., 2017). Higher levels of depression and hopelessness were established in the research of Miller et al. (2019). The targets experienced interpersonal effects which includes isolating them from others; destroying their credibility; and disregarding their work contributions. Most of the

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victims stipulated that they required counselling to cope with the bullying-related symptoms. They also indicated that they felt guilty because they were forced to leave and eventually quit their jobs. Tepper (2000) stated that targets of workplace bullying experienced more conflict at work and home.

Victims experience a drop in their self-esteem and self-confidence, suppress their ideas, and feel overwhelmed and inferior. This is supported by research revealing that targets experienced increased helplessness (Hogh & Dofradottir, 2001), increased feelings of insecurity (MacIntosh, 2005), and reduced self-esteem and self-confidence. Workplace bullying leads to a reduced display of innovation. Defensive silence is an example of one such effect of workplace bullying which results in a lack of innovation and neglected work behaviour (Rai & Agrawal, 2018). Some victims feel they became over-sensitive to the bully's actions while others feel they became desensitised to them (MacIntosh, 2005).

2.7.2 Social Effects

Workplace bullying affects the social health and well-being, both on a professional and personal level, of the victims. The victims of bullying end up feeling ostracised and socially isolated at work (Einarsen & Mikkelsen, 2003; Lewis & Orford, 2005; Suskind, 2020). The victim's personality can change, and they may exhibit inappropriate behaviour to cope with the bullying (Einarsen & Mikkelsen, 2003). The personal relationships of the victims suffer as they become preoccupied with workplace concerns, and they eventually feel that they exhaust their support networks (Lewis & Orford, 2005). Thus, victimisation at work due to workplace bullying may not only ruin the employees' mental health but also their career and social status (Einarsen & Mikkelsen, 2003; Suskind, 2020).

In a study conducted by MacIntosh (2005), targets indicated that they felt secluded and that they had no one to assist them with the bullying. Other studies conveyed that the targets lacked support and felt that no one understood them (Hogh & Dofradotir, 2001; Lewis et al., 2002; Zapf, 1999). The isolation was dire in workplaces where the only other employee is the bully. Numerous victims felt that they were unable to discuss the bullying with their partners or spouses because they were scared of being further misunderstood or

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further isolated. Exposure to bullying had a different impact on some victims. They became aggressive and bullied at home as a result of being bullied at work (MacIntosh, 2005).

2.7.3 Instrumental Concerns

Instrumental concerns include career and financial impacts on victims. MacIntosh (2005) reported that numerous victims spent money on counselling to cope with the bullying. Victims who felt that they were coerced into leaving their jobs endured financial stress and loss (Jacobs, 2019; MacIntosh, 2005; Segel, 2020). The targets sought legal remedies for workplace bullying (Jacobs, 2019; Sofield & Salmond, 2003; Sheehan, 1999). Victims tend to continue to fight to rectify bullying even after they left the workplace (Zapf, 1999) and incurred counselling-related costs (Sheehan, 1999). Lewis et al. (2002) asserted that counsellors should be more conscious of the impact that bullying has on the careers and mental health of the targets.

Participants in MacIntosh's (2005) study felt that part-time, casual and student employees were vulnerable because they lacked benefits and status. Instrumental concerns arose in association with career opportunities. Participants stated that feeling forced to leave a workplace jeopardised their careers in that field. They were scared that they will gain reputations for changing jobs often or for stirring trouble. This would risk their chances of working in that field or their community in the future (MacIntosh, 2005). Victims reported experiencing less satisfaction with their careers and work after being bullied (Mete & Sökmen, 2016; Tepper, 2000). Jacobs (2019) and Zapf (1999) reported that the victims felt forced to leave their workplaces, which lead to an increase in career implications and financial burdens.

2.8 Common Characteristics of the 'Victim' of Bullying

According to research, the targets of bullying generally have low self-esteem, which the bullies play on until these individuals are under their control. Victims of bullying may be passive, lack confidence, neurotic, vulnerable, submissive, non-confrontational, display anxiety in social environments, and not be well connected in the organisation (Harvey et al., 2006; Savaşan & Özgür, 2018; Segal, 2020). They are frequently considered to be part of

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the “outgroup”. Individuals who have little power or respect in the organisation because they are not accepted by key individuals are examples of individuals who belong to outgroups (Harvey et al., 2006). If others support the lack of status of these individuals in the organisation, the victims may experience learned helplessness. In this case, learned helplessness refers to when the victim expects to be bullied because of their lack of status and low self-esteem. They think it is only natural to be bullied according to Harvey et al. (2006).

According to Coyne and Seigne (2000), vulnerable individuals generally have a history of being targets of bullies both on the playground and in business organisations. Many individuals who are victims of bullying tend to be pessimistic. This contributes to them becoming or remaining targets of bullying. Negative affectivity allows the submissive individuals to have an expectancy of being victims of bullying, and perhaps even feel they deserve to be mistreated. This negative affectivity feeds back to the targets’ low self-esteem and a defeatist attitude (Olweus, 1978).

It is a fable that all victims of workplace bullying are vulnerable. Perpetrators often victimize individuals who are highly competent, successful, and intelligent. These traits make the perpetrator feel insecure or pose a threat to them. The target’s expertise, competence, integrity, fairness, and likableness might ensure that the bully’s incompetence and inadequacies become more transparent. Bullies may elevate their status within organisations by diminishing the status of the target (Segel, 2020).

In rare cases, the victim is the rival of the bully in the workplace. The target can be another strong individual who competes with the bully for control of the formal or informal organisation. The two strong rivals fight over control over the work setting. This is sometimes called “battle of the giants” or the “elephant fight”. Management who tries to alter organisational culture matches this classification. To maintain control, the perpetrator bullies the target continuously until the target feels defeated. This phenomenon is often seen

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amongst individuals employed in senior positions who compete for certain job titles (Morrill, 1992).

In the following section, comprehensive definitions of post-traumatic stress disorder will be provided, and the criteria of post-traumatic disorder will be discussed. Secondly, the association between PTSD, Type I trauma, and Type II trauma will be discussed. Thirdly, the association between post-traumatic stress disorder and acute stress disorder will be explored. Fourthly, the treatments associated with post-traumatic stress disorder will be stipulated. Lastly, the link between PTSD and workplace bullying will be discussed.

2.9 Post-Traumatic Stress Disorder

Post-traumatic stress disorder (PTSD) is a psychiatric disorder that affects one in 14 adults and adolescents at some time in their lives. It also affects one in 100 children before they start kindergarten. PTSD is considered a significant public health problem that affects millions of Americans. In South Africa, the lifetime prevalence for PTSD in the general population is estimated at 2.3% (Swain et al., 2016). Eight percent of Americans will experience PTSD at some point in their lives. Five percent of men and ten percent of women in America will experience PTSD. If PTSD is left untreated, numerous individuals will not recover (Schnurr, 1991).

2.9.1 Definition and Criteria of Post-traumatic Stress Disorder

Post-traumatic stress disorder is a psychiatric disorder that may take place in individuals who have experienced or observed a traumatic event such as a natural disaster or who have been threatened with death, sexual violence, or serious injury (American Psychiatric Association, 2013). According to Ford (2009, p.6) post-traumatic stress disorder refers to "persistent problematic biological and psychological adaptations following exposure to a traumatic stressor, including intrusive memories, avoidance and emotional numbing and hyperarousal and hypervigilance".

According to Tehrani (2004, p.359) "post-traumatic stress disorder is classified as an anxiety disorder that is defined by three clusters of symptoms (re-experience, avoidance,

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and arousal) which must persist for at least a month in the victims of traumatic exposure". In contrast to other psychological disorders, a diagnosis is only feasible if the traumatic event meets specific criteria. Individuals exposed to such events can experience a repeated and painful reliving of the event in the form of dreams, intense distress, and flashbacks whenever exposed to reminders. The American Psychiatric Association criterion for Post-traumatic stress disorder omits individuals who are exposed to events such as domestic violence, bullying, and terminal illness (Tehrani, 2004). According to DSM-IV-TR (DSM) definition, PTSD can occur after childhood sexual abuse or a single trauma threatening life or safety. Nevertheless, it is becoming more apparent that symptoms of PTSD can arise from multiple less severe traumas ('microtraumas'), which can be the outcome of a history of long-lasting emotional neglect, embarrassment, or erroneous ascription of blame. The DSM should contemplate adapting the criteria to incorporate multiple microtraumas that can lead to PTSD symptoms and may even be more destructive to psychological health (Seides, 2010).

The World Health Organisation (2016) defined PTSD as a deferred or protracted psychological reaction to a stressful situation or event marked by an uncommonly dangerous or destructive nature and becomes apparent within weeks or months after the trauma. According to Shalev et al. (2017) they identified the core features of PTSD as "the persistence of intense, distressing, and fearfully avoided reactions to reminders of the triggering event, alterations of mood and cognition, a pervasive sense of imminent threat, disturbed sleep, and hypervigilance (p.2459).

The four clusters of symptoms of PTSD namely, re-experiencing, avoidance, negative cognitions and mood, and arousal form part of the syndrome as defined in the DSM-5 (American Psychiatric Association, 2013).

The APA first recognised the syndrome of PTSD in 1983. The criteria whereby the disorder was defined was revisited by APA in DSM-III-R in 1987 and once again in DSM-IV in 1994. The tenth revision of ICD took place in 1993. Thus, by the early 1990s, PTSD was defined and recognised internationally (Yule, 1999). The APA published the 5th edition (DSM-5) of the criteria in 2013. It took them seven years of planning, six years of work group

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activity and a year to finalise (Pai et al., 2017; Substance Abuse and Mental Health Services Administration, 2017).

The DSM-5 diagnostic criteria of PTSD identifies the trigger of PTSD as “exposure to actual or threatened death, serious injury or sexual violation”. “The exposure must result from one or more of the following scenarios, in which the individual directly experiences the traumatic event (A1); witnesses the traumatic event in person (A2); learns that the traumatic event occurred to a close family member or close friend (with the actual or threatened death being either violent or accidental) (A3); or experiences first-hand repeated or extreme exposure to aversive details of the traumatic event (not through media, pictures, television or movies unless work-related) (A4)” (American Psychiatric Association, 2013).

After being exposed to a traumatic event, the person must also experience at least one of five (Cluster B) intrusion symptoms; one of two of the (Cluster C) symptoms of avoidance; two or more of the seven (Cluster D) symptoms of negative cognitions and mood, and two or more of the six (Cluster E) symptoms of change in arousal or reactivity. The duration of the disturbance (symptoms in Criteria B, C, and D) must be more than one month and must cause clinically significant distress or impairment (American Psychiatric Association, 2013).

2.9.2 Type I Trauma, Type II Trauma, and PTSD

Traumatic events take many forms. Terr (1994) differentiated between ‘Type I’ single incident trauma and ‘Type II’ complex or repetitive trauma. Type I trauma is an “event that is ‘out of the blue’ and thus unexpected, such as a traumatic accident or a natural disaster, a terrorist attack, a single episode of abuse or assault, witnessing violence” (Ford & Courteis, 2013, p.15). These events are single, catastrophic, unpredicted experiences (Williams & Poijula, 2002). These Type I traumatic events are also called critical incidents (Terr, 1994). Type II trauma refers to, for example, “ongoing abuse, domestic violence, community violence, war or genocide” (Ford & Courteis, 2013, p.15).

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Type II trauma normally entails a fundamental betrayal of trust in primary relationships since someone related or known to the victim betrays the victim's trust (Ford & Courteis, 2013).

There are differing viewpoints regarding whether Type I or Type II trauma has the highest propensity to develop PTSD. Ford and Courteis (2013) believe that Complex or Type II trauma is linked with a much higher risk for the development of PTSD than Type I trauma. Type II trauma also may compromise or modify a person's psychobiological and socio-emotional development when it occurs at critical developmental periods (Ford & Courteis, 2013). On the other hand, William and Poijula (2002) believe that the likelihood of PTSD to be a reaction to experiencing or witnessing Type I traumatic events is much higher than Complex trauma. If you experienced a Type I trauma, you regularly have a detailed, clear memory of what took place. Your memories remain alive unless you work through them. The individual experiencing Type I traumatic event may frequently search for a way to explain what occurred or a way they could have prohibited what happened (Williams & Poijula, 2002).

2.9.3 Post-traumatic Stress Disorder and Acute Stress Disorder

Both post-traumatic stress disorder and acute stress disorder (ASD) were reclassified from Anxiety Disorders to the new category of Trauma-and Stressor-Related Disorder (American Psychiatric Association, 2013). Both disorders no longer require an intense subjective peritraumatic reaction (i.e., fear, helplessness, or horror) (Meiser-Stedman et al., 2017). Like post-traumatic stress disorder, DSM-5 defines acute stress disorder (ASD) as a disorder that follows being subject to actual or threatened death, severe injury, or sexual violation (criterion A). Furthermore, the exposure must result from one or more of the following scenarios, in which the individual experiences the traumatic event directly; witnesses the traumatic event as it happened to someone else; learns about the traumatic event where a close friend or relative experienced an actual or threatened violent or accidental death; or experiences repeated or extreme exposure to distressing particulars of the traumatic event (American Psychiatric Association, 2013; Tull, 2021).

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Whereas PTSD reflects disturbance that lasts for more than one month, ASD must last for a minimum of 3 days and a maximum of one month after the stressor (American Psychiatric Association, 2013; Brewin et al., 1999; Elklit & Brink, 2004; Bryant, 2018).

ASD symptoms are similar to the symptoms of PTSD. The DSM-5 ASD diagnostic algorithm ignores symptom clusters. An individual has to exhibit nine or more symptoms from a broad list of intrusion, negative mood, dissociation, avoidance, and arousal categories. On the other hand, PTSD still retains its cluster-based algorithm and included an additional cluster covering negative changes in cognition and mood (American Psychiatric Association, 2013; Meiser-Stedman et al., 2017). The number of symptoms that must be identified depends on the cluster (American Psychiatric Association, 2013; Meiser-Stedman et al., 2017).

Not everyone who displays ASD develops PTSD. People who never exhibit ASD sometimes develop PTSD at a later stage (Bryant, 2011). Most people with ASD are at much greater risk to develop PTSD than those who do not develop ASD (Australian Centre for Posttraumatic Mental Health, 2013; Bryant, 2016; Elklit & Brink, 2004).

2.9.4 Treatment of Posttraumatic Stress Disorder

There are a reasonable number of treatments for post-traumatic stress disorder available. In 2017, the American Psychological Association and the Veterans Health Administration, and the Department of Defense (VA/DoD) each published treatment guidelines for PTSD. These treatment guidelines consist out of a set of recommendations for providers who treat patients with PTSD (Watkins et al., 2018). Both guidelines strongly recommend the implementation of prolonged exposure (PE), cognitive processing therapy (CPT), and trauma-focused cognitive behavioural therapy (CPT) (Watkins et al., 2018). The American Psychological Association (2017) also strongly recommended cognitive therapy (CT), and the VA/DoD (VA/DoD Clinical Practice Guideline Working Group, 2017) eye movement desensitization and reprocessing (EMDP), brief eclectic psychotherapy (BEP), narrative exposure therapy (NET) and written narrative exposure.

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Brainworking recursive therapy (BWRT) is a new model of psychotherapeutic intervention. It is a process that has proven to be effective in decreasing numerous symptoms of negative emotions and lessening the negative effects. The therapy is solution-focused and client-centred, working with the client's thought processes, without the need to disclose or participate in lengthy discussions. The therapy does not require the client to disclose intimate details or events that they would like to keep private (Marsay, 2020).

Because of the scope of the research paper, the researcher is not going to go into depth in the treatment of PTSD. The following section will discuss the relationship between workplace bullying and PTSD.

2.9.5 PTSD and Workplace Bullying

Much of the research on the association between bullying and PTSD has focussed on workplace bullying in adults. It has been argued that symptoms found among targets of workplace bullying are compatible with symptoms of post-traumatic stress (Tehrani, 2004). Leymann and Gustafsson (1996) revealed that the majority of workplace bullying targets self-reported PTSD symptoms almost identical to those found in rape, war, and jail experiences. They found that PTSD was harsher in scenarios where bullying takes place over an extended period (Leymann & Gustafsson, 1996). Leymann and Gustafsson (1996) also revealed that bullying results in severe psychological trauma and in a prolonged stress condition that threatens the victim's socio-environmental existence. Workplace bullying and PTSD symptoms are seen as occupational hazards for healthcare professionals such as nurses (Laschinger & Nosko, 2015). Nonetheless, there are limited research regarding the association between PTSD and workplace bullying in nurses employed in highly stressful work environments (Mealer et al., 2012). Laschinger and Nosko (2015) revealed that workplace bullying significantly related to PTSD symptomology for both new and experienced nurses. More frequent exposure to bullying was associated with higher levels of PTSD amongst nurses (Laschinger & Nosko, 2015).

Mikkelsen and Einarsen (2002a) reported that there is a positive relationship between the severity of bullying and the degree of trauma the targets experienced. They

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proposed a diathesis-stress model in which exposure to trauma in the past may increase the chances that they develop PTSD in response to bullying. Furthermore, employees tormented by negative events that occurred in the past may be more susceptible to become victims of bullying and consequential PTSD.

A study by Matthiesen and Einarsen (2004) revealed similar findings and discovered a strong association between the personality dimension of negative affectivity and PTSD symptoms in targets of bullying. They discovered that personality plays a significant role in the development of PTSD in workplace bullying. Matthiesen and Einarsen (2004) study consisted out of 102 targets of bullying of which 75% reported levels of symptoms of post-traumatic stress above the recommended cut-off thresholds. These findings correspond with previous findings (Björkqvist et al., 1994; Leymann & Gustafsson, 1996; Tehrani, 2004). Another study revealed that, even 5 years after bullying ended, 65% of the targets of bullying had symptoms associated with post-traumatic stress (Einarsen et al., 1999).

A study conducted by Islamoska et al. (2018) revealed that workplace bullying is a stressor regardless of the educational level of the target. The researchers could find no indication that the association between bullying and PTSD symptoms depends on educational level. Furthermore, those who experienced workplace bullying did not report PTSD differently across educational levels. It is not likely that those with low educational levels are more prone to report the effects of workplace bullying compared to those with medium to high educational levels (Islamoska et al., 2018).

Rodríquez-Muñoz et al. (2010) the gender differences in PTSD of the victims of bullying. They revealed women are more likely to report PTSD symptoms even though the bullying levels of men and women are not different. Researchers have not reached a consensus in terms of an explanation of the gender differences in PTSD symptoms. A possible cause of the differences in PTSD is the propensity of women to experience diverse types of traumatic events. Crick and Grotpeler (1995) discovered that relational aggression is more common amongst women and that overt aggression is more common amongst men. Another possible explanation for the gender differences relates to the negative appraisal

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observed in women. Studies reveal that women are more inclined to report traumatic experiences and possess greater self-report biases (Belicki, 1992; Ptacek et al., 1999). Women have a tendency to blame themselves for traumatic events (Foa et al., 1999). Moreover, women and men differ in their memory of the traumatic event (Cahill et al., 2004; Canli et al., 2002), particularly in the processing of strong emotional memories (Spitzer et al., 2003).

Recent research studies indicate that there is a significant association between exposure to workplace bullying and PTSD symptoms (i.e. anger, repeatedly re-experiencing the memories of workplace bullying, recurrent nightmares, recurrent flashbacks; distressing and intrusive thoughts) and that the symptoms alleviate as time goes on (Maidaniuc-Chirilă & Duffy, 2017; Tatar & Yüksel, 2019). It was also discovered that workplace bullying predicts PTSD (Sun et al., 2018; Tatar & Yüksel, 2019), and psychological capital mediates the association between workplace bullying and PTSD (Sun et al., 2018).

2.10 Stress

Stress can mean different things to different people. The following section will focus on the concept of stress. Firstly, concise definitions of stress will be provided. Secondly, different types of work stressors will be discussed. Thirdly, the relationship between job stressors and workplace bullying will be unravelled. Fourthly, stress as a consequence of workplace bullying will be discussed. Lastly, the association between organisational change and workplace bullying will be discussed.

2.10.1 Definition of Stress

From a layperson's perspective, stress can be described as feeling tense, anxious, or worried. The Mental Health Foundation (2021) defined stress as the feeling of being overwhelmed or not capable of dealing with mental and emotional pressure. Stress is often activated when we experience something new, unforeseen or that jeopardizes our sense of self, or when we notice that we have limited control over a situation. According to Gibson et al. (2009) and Robert (2018), stress can be defined as either a stimulus or a response. The stimulus definition views stress as a characteristic or event that leads to devastating

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outcomes. In the response definition, stress is seen to some extent as a response to a certain stimulus called stressors. A stressor is an event or situation that is possibly detrimental or portentous (Gibson et al., 2009). In a response definition, stress is the outcome of the interaction between the stressor and the individual's response.

Three key factors determine whether an experience is likely to result in stress. These factors are importance, uncertainty, duration (Gibson et al., 2009). Importance relates to how significant the event is to the individual. For example, an individual is facing a job layoff. The more significant that layoff is to the individual, the more likely they will find it stressful. The layoff will be more stressful if that job is the individual's only income (Gibson et al., 2009). Uncertainty is a situation in which you do not know what will happen. Rumours concerning pending retrenchments are more stressful in comparison to knowing for certain that you will be retrenched (Gibson et al., 2009). Last but not least, duration is an important factor. The longer excessive demands are placed on people, the more stressful they will find the situation (Gibson et al., 2009).

Nart and Batur (2014) defined job stress as elevated tension that arises when employees are unable to meet workplace and family-related demands. Job stress normally results in injuries, industrial accidents, and high absenteeism (Nart & Batur, 2014). Job stress is also known as occupational stress which results from workplace tasks and factors related to it (Yongkang et al., 2014). Job-related stress is caused by factors such as organisation culture, bad management policies, dangerous hierarchal pressures, vague roles and responsibilities, insufficient support, and comfort level in working environments (Robert, 2018).

2.10.2 Work Stressors

Stressors are events and conditions in your surroundings that place special demands on individuals. There is a variety of stressors since any occurrence can place special demands on individuals (Gibson et al., 2009).

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2.10.2.1 Factors Intrinsic to the Job. Shift work, long hours, new technology, and work overload are some intrinsic factors to the job causing stress in the workplace. These intrinsic factors will be discussed in the following sections.

2.10.2.2 Shift Work. Studies have revealed that shift work is a common occupational stressor that affects the metabolic rate, blood temperature, mental efficiency, work motivation, and blood sugar levels; shift work also influences family and social life and sleep patterns (Cartwright & Cooper, 1997). It was also revealed that shift work increases the risk of excessive sleepiness, chronic sleep disturbances, insomnia, depression, poor work performance, and causes health problems. Shift work also increases road and occupational accidents (Savic et al., 2019).

2.10.2.3 Long Hours. Some jobs require that employees work longer working hours which may result in major health problems in employees and lower efficiency at work (Cartwright & Cooper, 1997). A research study conducted by Park et al. (2020) revealed that an increase in working hours, especially those that are unintentional or unwanted, leads to higher stress levels. Stress due to longer working hours is one of the main causes of health deterioration and it leads to unhealthy behaviours such as an increase in bad smoking habits and alcohol consumption. Longer working hours also increases the risk of depression and suicidal ideation (Park et al., 2020).

2.10.2.4 Pace of Change. The unrelenting pace of change that is part of life today is an individual stressor. Radical restructuring, mergers, acquisitions, new technologies, emergence and demise of dot-com firms, downsizing, and financial scandals are some examples of this change (Gibson et al., 2009). Keeping up with new technology can be particularly stressful for management and workers. It requires them to continually adapt to new equipment, systems, and ways of working (Cartwright & Cooper, 1997).

2.10.2.5 Work Overload. There are two types of work overload namely, quantitative and qualitative overload. Qualitative overload takes place when individuals feel like they do not have what it takes to complete a job or that the performance standards cannot be reached. Quantitative overload takes place when one has too many tasks to perform or

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when you do not have enough time to complete a task (Gibson et al., 2009; Stewart et al., 2019). Employees are often overloaded with work which detrimentally affects their work performance as well as the productivity of the organisation. Employees tend to be involved in multiple tasks due to a shortage of labour within the organisation (Ukwadinamor & Oduguwa, 2020).

2.10.2.6 Role in the Organisation. Stress is elevated when an individual's role in the organisation is not clearly defined and misunderstood and when the expectations place on the individual is unclear and conflicting. Role ambiguity, role conflict, and the degree of responsibility for others are seen as major sources of stress (Kapusuz, 2019; Stewart et al., 2019).

According to Gibson et al. (2009, p.201) role conflict occurs when an "individuals compliance with one set of expectations conflicts with compliance with another set of expectations". Stewart et al. (2019) stipulated that role conflict occurs when an individual is placed in a situation where contradictory demands are placed upon them. It is when two (or more) sets of expectations are placed on an individual concurrently. Complying with one set of expectations will make it difficult to comply with the other. An example is balancing the demands of one's work and family roles (Gibson et al., 2009). Role ambiguity occurs when an individual is uncertain about what they should do or accomplish (Palomino & Frezatti, 2016). They are uncertain about what actions should be taken to accomplish individual goals (Rogalsky et al., 2016). Stewart et al. (2019) indicated that individuals experience role ambiguity when they have insufficient information about their roles. Uncertainty over job-related roles includes being unaware of performance expectations, how to meet these expectations, and the outcome of job behaviour.

Responsibility for people and things such as budgets, equipment, and buildings are two organisational role stressors. Managers are often caught between the two responsibilities of minimizing personal costs and looking after the wellbeing of subordinates in terms of job security and stability (Cartwright & Cooper, 1997).

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2.10.2.7 Relationships at Work. Relationships with other people encountered at work can be a major source of stress. There are three critical relationships at work namely, those with subordinates, those with superiors, and those with co-workers or colleagues (Cartwright & Cooper, 1997, Nappo, 2020). Interpersonal work relationships may cause stress if a conflict arises between colleagues. Conflict may occur as a result of various reasons such as organisational (institutional policies) or intra-individual nature (this type of conflict takes place when employees' values clash with the job demands) and can involve role conflict. Stress can also develop from interpersonal work relationships when employees experience team pressure and when their sentiments differ from that of their co-workers (Nappo, 2020). Research revealed that workers who perceive their bosses as being inconsiderate and unfriendly experience more job pressure than those who perceive their bosses as being considerate and friendly (Nappo, 2020). How managers supervises the work of others can be a major source of stress. If a manager, who is not people-oriented, has been working with subordinates daily it can be particularly stressful for both parties. Stress among co-workers can arise from competition and personality conflicts (Cartwright & Cooper, 1997).

2.10.2.8 Career Development. Many issues can act as potential stressors throughout one’s working life. Fear of job loss, retirement, or obsolescence; lack of job security; lack of promotional prospects, under promotion or over-promotion, and numerous performance appraisals can create strain and pressure (Cartwright & Cooper, 1997; Leka et al., 2003).[3]

Being frustrated because you reached the career ceiling can also stimulate extreme stress (Cartwright & Cooper, 1997).

2.10.2.9 Organisational Structure and Climate. Research indicates the organisational climate is significantly and negatively associated with role stress. This

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[3] Under promotion is when someone is not given responsibility corresponding with their ability level. Over-promotion is when someone reached the pinnacle of their capacities with minuscule chance of further advancement and is given responsibility exceeding their capacity. It is when someone is promoted to a job for which they are unqualified.

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proposes that a positive climate could buffer role stress in staff members (Pecino et al., 2019). According to Cartwright and Cooper (1997), just being part of an organisation can present threats to a person's sense of freedom and autonomy. A sense of not belonging, a lack of adequate opportunities to participate at work, feelings of behaviour being unduly restricted, and not being included in office communication and consultation are some issues that cause significant job-related stress for employees (Cartwright & Cooper, 1997).

2.10.2.10 Non-work Factors. Non-work stressors are those caused by factors outside the organisation. Taking care of elderly people, partaking in tertiary courses, and balancing work and family life are examples of non-work stressors. The stress created outside the workplace can affect individuals' work performance and work behaviour (Gibson et al., 2009). Non-work stressors, such as divorce or separation, burglaries, illness or injury of a close family member or friend, and the death of a family member, may also lead to mental health issues, psychological distress, and Post Traumatic Stress Symptoms (Kyron et al., 2019).

2.11 Stress as Consequence of Workplace Bullying

According to a study conducted by Agervold and Mikkelsen (2004), a work environment in which bullying is prevalent can harm the target's health and well-being. Victims of bullying experienced higher levels of stress than their non-bullied counterparts. Bullied individuals exhibit higher levels of psychological stress, mental fatigue and use more sick leave. A longitudinal study conducted by Vartia (2003) revealed that both victims and observers of bullying reported a high incidence of stress and job dissatisfaction than employees from workplaces in which no bullying occurred. In 2001 a study conducted by Vartia found that non-bullied employees from workplaces where bullying occurs, in other words, witnesses of bullying, report significantly more mental stress and general stress reactions than employees from workplaces free of bullying.

Gender has a significant correlation with stress symptoms among prison personnel. The male prison employees, whether victims, observers, or unexposed to violence in prisons, reported more job dissatisfaction and stress than female employees (Vartia, 2003).

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Previous research conducted by Vartia and Hyyti (cited in Vartia, 2003) substantiates these findings. They showed that inmates more often expose male prison employees to violence than female employees.

More recent literature revealed that workplace bullying positively correlates with job stress. In other words, the job stress of employees who were victims of workplace bullying was significant (Akar, 2013; Cullinan et al., 2019). They also displayed higher burnout levels in comparison to somatic complaints and anxiety (Akar, 2013).

Visinskaite (2015) discovered that victims of workplace bullying displayed lower levels of satisfaction with life, higher stress levels, and lower levels of self-esteem. These results corroborate prior research conducted on traditional workplace bullying which illustrated a lack of self-esteem and high levels of stress among targets (Mikkelsen & Einarsen, 2002a; O'Moore & Kirkham, 2001). The findings also highlights that there is a possible relationship between traditional workplace bullying and stress as well as between cyberbullying and stress. That is to say if the victim is bullied more frequently and severely their stress levels will be higher (Cullinan et al., 2019; Visinskaite, 2015). These findings are in line with previous literature involving children/adolescents/adults (Staude-Müller et al., 2012).

2.11.1 Job Stressors and Workplace Bullying

Baillien and De Witte (2009) and Robert (2018) revealed that there is a significant relationship between all stressors and workplace bullying. More specifically, role conflict, job insecurity (Glambek et al., 2018), workload, role ambiguity, and frequency of conflict had a positive link to exposure to bullying acts. On the other hand, social support from colleagues and social leadership had a negative link to bullying.

Studies from occupations other than nursing have revealed that bullying flourishes in workplaces that are characterised by stress and a negative environment, role ambiguity, and role-conflict (Hoel & Salin, 2003). Approximately 30 Irish victims of bullying expressed that their workplace is highly stressful and is characterised by a competitive environment. They described their working environment as containing interpersonal conflict, lacking respect and

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empathy, transformation in the workplace, and being governed by an autocratic leadership style (Seigne, 1998). In a Norwegian study, the targets and bystanders of bullying promulgated that they were dissatisfied with their work environment. The participants also reported a lack of opportunities to monitor and control their work tasks, lack of constructive leadership, and specifically a high level of role conflict. In a Finnish survey, victims and observers of bullying described their work unit as resolving disagreements in an autocratic manner, and where communication is poor especially related to goals and duties. (Vartia, 1996).

As mentioned previously, a sense of not belonging can be a work stressor. In some cases, the victim is attacked since they form part of an out-group, for example by being the first female in a local police force. Victims may also be bullied by being an easy target of frustration and stress (Einarsen, 1999).

Akar (2013) revealed that perceived job stressors affect workplace bullying positively and that the health employees who partook in the study mostly perceived work-overload as a job stressor when exposed to workplace bullying. Role ambiguity was perceived as the second highest job stressor, role conflict as the third highest job stressor, and work-family conflict as the least likely to be a job stressor.

2.11.2 Organisational Change as a Job Stressor and Workplace Bullying

Although organisational change has often been cited as a significant cause of workplace bullying; only a few studies have investigated this association (e.g., McCarthy & Sheehan, cited in Einarsen, 1999). Organisational change, directly and indirectly, encourages workplace bullying (Baillien & de Witte, 2009).

2.11.3 Direct Relationships with Workplace Bullying

A study conducted by Baillien and De Witte (2009) indicates a direct, modest relationship between organisational change and workplace bullying. They revealed that organisational change elicits various negative emotions and directly encourages workplace bullying.

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Baron and Neuman (1996) revealed that there is a positive significant correlation between organisational change and workplace aggression. In particular, salary deductions, management changes, utilising temporary employees, and budgetary reductions were associated with elevated work aggression. Rayner (1997) discovered that the majority of workplace bullying occurrences were due to organisational change and management changes. A study conducted by O'Moore et al. (1998) inferred that the majority of the victims perceived the promotion of the bully and the appointment of a new manager as the source of bullying.

A more recent study conducted by D'Crux et al. (2014) revealed that organisational change upsurges the risk of being subjected to workplace bullying. Specifically, during organisational change staff are more likely to be targeted by work-related and person-related negative acts at work.

2.11.4 Indirect Relationship with Workplace Bullying

Various researchers verified that there is an indirect association between organisational change and workplace bullying (Hoel & Salin, 2003). It was also postulated that managers use autocratic and authoritarian leadership styles to bring about change. This may lead to employees feeling that they are being victimised by their managers (Hoel & Cooper, 2000; Salin & Hoel, 2011). Furthermore, by setting the wrong example, the supervisor may encourage bullying from others, i.e., colleagues. According to Greenglass and Burke (2000), downsizing and restructuring may result in the removal of numerous positions, competition, job insecurity, and increased workload. This, in turn, may lower thresholds for harassment and bullying.

Baillien and De Witte (2009) discovered that the relationship between organisational change and workplace bullying is mediated by job insecurity, increased workload, and role conflict. Organisational change is linked to higher scores of job insecurity and role conflict, which, in turn, leads to higher exposure to workplace bullying. In a nutshell, workers experience higher levels of bullying when they go through the negative results of organisational change. Spagnoli and Balducci (2017) recently confirmed these findings.

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They also revealed that high workload during organisational change interventions causes exposure to workplace bullying via psychological strain.

Recently Baillen et al. (2019) recently conducted a research study in which it was revealed that there is an indirect association between organisational change and being a perpetrator of workplace bullying. That is, exposure to organisational change triggers being a perpetrator of workplace bullying through perceptions of psychological contract breach

2.12 Depression and Workplace Bullying

Before the association between depression and workplace bullying can be unravelled, it is of utmost importance that the concept of depression is defined. It is also imperative that the symptoms of depression should be provided. This information will be provided in the following section.

2.12.1 Definition and Criteria of Depression

Depressive syndromes refer to ‘dysphoric mood’ which entails a profound state of feeling depressed, anxious, agitated, melancholy, and/or despair. Depressive disorders are depicted by shame, melancholy, fatigue, regret, and moods which have a profound impact on the daily behaviour of individuals (Cochran & Rabinowitz, 2000).

Bowden et al. (2020) characterised depression as experiencing a prolonged period of low spirits that can greatly impact everyday lives, relationships, and sense of purpose of meaning. Individuals experience depression differently but it might include alterations in sleep patterns and appetite, feeling a void, feelings of guilt, irritability, agitation, feeling trapped, low self-esteem, suicidal thoughts, and feeling that the future is filled with no hope.

There are several symptoms related to clinical depression which distinguish it from other states, such as sadness or stress. If an individual has all or nearly all of these symptoms, they are likely to have clinical depression (Cantopher, 2006). The symptoms of depression include loss of appetite, stamina, zeal, focus, self-confidence, and love. The person who is suffering from depression is unable to focus during a depressive episode, and thus cannot absorb information properly. The information is not stored in the memory bank and is not available to recall when needed at a later stage (Cantopher, 2006).

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To be diagnosed with major depression, an individual must meet the criteria outlined in the DSM-5. The individual must experience five or more of the following symptoms during the same 2-week period: depressed mood most of the day, nearly every day; noticeable decline in the interest in pleasure in all, or nearly all, activities most of the day and nearly every day; change in appetite or losing (when not dieting) or gaining weight every day; sleeping too much (hypersomnia) or not sleeping well (insomnia) nearly every day; psychomotor agitation or retardation nearly every day; fatigue or loss of energy nearly every day; feeling worthless, extreme guilt and hopeless; declined ability to think or concentrate, or indecisiveness nearly every day; and frequent thoughts of death. At least one of the symptoms should be either depressed mood or loss of interest or pleasure. These symptoms must cause significant distress or impairment in social, occupational, or other important areas of functioning (American Psychiatric Association, 2013).

2.12.2 Workplace Bullying and Depression

Mental health is a major concern at the workplace because of the high prevalence of mental disorders, especially depression (Niedhammer et al., 2006). A study conducted by Niedhammer et al. and 143 occupational physicians (2006) revealed that workplace bullying was a strong risk factor for depressive symptoms for men and women. It revealed that past exposure to bullying had an impact on mental health even when this exposure stopped, and that the more frequent the exposure to bullying, the stronger the risk of depressive symptoms. A study conducted by Kivimäki et al. (2003) substantiates these findings. Their study revealed that the longer the exposure to bullying, the greater the risk of depression. Vartia (2003) also came to the same conclusion. Observing someone else being bullied constituted a risk factor for depressive symptoms and increased the risk of depressive symptoms further still for women who were already exposed to bullying (Niedhammer et al., 2006).

Depression forecasts new occurrences of bullying. In pressured hospital work, workers who suffer from psychiatric disorders that restrains their ability to work productively may be more susceptible to bullying (Quine, 1999). Psychiatric disorders may also cause

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employees to view others actions as hostile (Quine, 1999). Mental health, in other words, depression, can be a result of workplace bullying, and simultaneously it can increase the vulnerability to bullying (Vartia, 2003).

According to a study conducted by Butterworth et al. (2013), research participants who were subjected to workplace bullying were more prone to display a profound amount of depression symptoms in comparison to those with no prior exposure to bullying. Those who were previously bullied but who are not currently bullied are more likely to display quite a profound number of depressive symptoms in comparison to those with no history of workplace bullying (Butterworth et al., 2013). More than 40% of the participants who indicated that they are currently bullied at work displayed significant depressive symptoms in comparison to approximately 14% of those who reported they were never subjected to workplace bullying (Butterworth et al., 2013).

Gullander et al. (2014) studied the potential link between self-labelled and witness-reported bullying and the risk of new onset of depression. Their research revealed that regular self-labelled bullying predicts the development of depression. However, a work environment with numerous employees witnessing bullying does not forecast the development of depression (Gullander et al., 2014).

Research conducted by XO et al. (2020) on nurses revealed that depression was significantly associated with work-related bullying and person-related bullying which was not the case with physical-intimidating bullying. These findings were consistent with previous findings which focussed on the association between workplace bullying and psychological responses such as depression (Bardakçı & Günüşen, 2016; Wright & Khatri, 2015). Research conducted by Tatar and Yüksel (2019) also revealed that 75.5% of the victims of workplace bullying in their research study suffer from major depression disorder (MDD). In the following section, the relationship between PTSD and depression will be dealt with.

2.12.3 PTSD and Depression

Depression and PTSD usually occur after traumatic events. Individuals who experienced traumatic events may feel emotions associated with depression, such as misery

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and PTSD symptoms such as flashbacks and night terrors (Armenta et al., 2019; Ndungu et al., 2020; Tull, 2021). People who have had PTSD at some point in their life are approximately three (3) to five (5) times as likely as people without PTSD to also have depression (Tull, 2021).

Quite a few possible causal pathways may explain this association between PTSD and depression following traumatic exposure (Breslau et al., 2000). Research reveals that the occurrence of PTSD may escalate the risk for the first onset of major depression (Breslau et al., 1997; Kessler et al., 1995) and, contrarily, pre-existing major depression may cause individuals to be more susceptible to PTSD in the aftermath of trauma (Bromet et al., 1998).

Various research studies based on accident victims revealed that individuals who were not diagnosed with PTSD reported high levels of depression (Mayou & Bryant, 2001; Schnyder et al., 2001). The results were confirmed by Shalev and his colleagues (1998) inferred that trauma survivors who were diagnosed with major depression did not have comorbid PTSD. They deduced that major depression and PTSD may be independent aftermaths of traumatic events. Breslau and her colleagues (Breslau et al., 2000; Breslau et al., 1997) asserted the contrary. They discovered that the risk of developing major depression after being exposed to trauma elevates in individuals who develop PTSD. The risk of developing major depression did not elevate in those who were exposed to trauma but did not develop PTSD.

According to Lockwood and Forbes (2014), PTSD is complex and has high rates of comorbidity with substance use, depression, and anxiety disorders (cited Van Dusen et al., 2015). More specifically, PTSD has high comorbidity with MDD (Armenta et al., 2019; Van Dusen et al., 2015; Rosen et al., 2020). Research conducted by Roberts et al. 2020 found that women with high PTSD and co-occuring probable depression are at increased risk of death in comparison to women without these disorders. More specifically, women with PTSD and depression have nearly fourfold greater risk of early death than women who did not have depression and did not experience a traumatic event (Roberts et al., 2020).

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A research study conducted by Jin et al. (2018) revealed that individuals who reported more severe PTSD symptoms experienced more negative life events. They also found that those who experienced more negative life events in the prior year reported more depressive symptoms. Moreover, it was also found that negative life events mediate the association between PTSD and major depressive disorder to some degree. Previous studies have revealed that people with PTSD and depression recall events differently. Individuals who suffer from depression tend to have an overgeneral memory, and individuals who suffer from PTSD often revisit traumatic events (Janssen et al., 2015).

This research paper will reveal whether there is indeed a relationship between PTSD and major depression amongst individuals after being exposed to workplace bullying (traumatic event).

In summary, there are various common characteristics of victims of workplace bullying. Some of these are that they have low self-esteem, are passive, have little power or respect in the organisation, and they are generally pessimistic. There are various causes of bullying namely, organisational volatility; highly authoritarian and laissez-faire leadership styles; managers bullying employees; bullying amongst social equals who are members of oppressed groups; the personality of the victims; and the bully being envious of the victim. Workplace bullying has various consequences related to the victim namely, negative health effects; effects on social health and well-being; mental or emotional symptoms such as dropped self-esteem and self-confidence; and instrumental concerns including career and financial impacts on victims. Research indicates the longer the exposure to workplace bullying, the greater the risk for depression, stress, and the more severe PTSD.

2.13 Sense of Coherence

In the following section Sense of Coherence will be defined, and it will be discussed whether it has a mediating and moderating effect on the relationship between PTSD symptoms and workplace bullying.

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2.13.1 Definition of Sense of Coherence

To explain the relationship between health and life stresses Antonovsky (1979, p.132) defined Sense of Coherence (SOC) as “a global orientation that expresses the extent to which one has a pervasive, enduring, though dynamic, feeling of confidence that one’s internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected”. Antonovsky (1987) postulated that people with a strong SOC will be more resilient to stress and healthier than people with low SOC. Hence, individuals with a strong SOC should adapt and react in a different way to bullying than individuals with a low SOC. Eriksson and Lindström (2005) defined SOC as a “global orientation to view the world and the individual environment as comprehensible, manageable, and meaningful, postulating that the way people view their life has a positive influence on their health” (p. 460).

SOC is a complex disposition consisting out of three central components: comprehensibility; manageable; and meaningful. Comprehensibility is the sense that stimuli are foreseeable and structured. Francioli et al. (2015) refer to it in a way that people understand what is happening with them. Manageability is the sense that resources at one’s disposal are enough to handle the demands of the environment (stimuli). Meaningfulness is the sense that the demands are notable and worthwhile to invest in (Antonovsky, 1987), or the person find meaning in the situation (Francioli et al., 2015).

Antonovsky (1987) postulated that individuals with a high SOC experience less stress, have greater well-being, and have better general health than individuals with low SOC. The higher a person’s SOC, the healthier the person will be and the more rapidly that person will recuperate their health and stay healthy. A high SOC permits an individual to react flexibly to demands. Thus, the individual can activate the suitable resources necessary to cope in an array of specific situations. On the contrary, individuals with a weak or undeveloped SOC will react more strongly and rigidly to demands since they perceive themselves as possessing fewer coping resources (Bengel et al., 1999). Francioli et al.

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(2015) state that employees with a low SOC are less resistant and do not have enough resources to cope with difficult working conditions.

2.13.2 Sense of Coherence as a Moderator between Workplace Bullying and PTSD

It was found that Sense of Coherence (SOC) is negatively correlated to PTSD symptoms, indicating that individuals with high SOC displays a low symptom score for PTSD or less severe PTSD symptoms in the aftermath of a traumatic or stressful life event (Frommberger et al., 1999; Schäfer et al., 2019). Research conducted by Albertsen and his colleagues (2001) indicate that SOC has both mediating and moderating effects on the relationship between various work-related stressors and indicators of well-being.

Antonovsky (cited in Nielsen et al., 2008) argued that SOC should have a moderating effect on the association between bullying and PTSD symptoms. Since individuals with a high SOC are supposed to regain health and stay healthy after experiencing stressors, SOC should have a protective, or buffering, effect on the victims of bullying. Seeing those individuals with high SOC have the tendency to perceive the world as manageable and meaningful, they may be less prone to be threatened by aggressive behaviour such as bullying, less susceptible after it has taken place, and more capable to deal with potential future attacks (Høgh & Mikkelsen, 2005). Thus, targets with a high SOC may exhibit less symptoms of PTSD than individuals with a weak SOC.

Research conducted by Nielsen (2008) showed that low levels of bullying have a stronger effect on victims with a low SOC than for victims with higher SOC. On the other hand, increased levels of bullying have a greater relative effect on victims with a mean and high SOC than on victims with a low SOC. Therefore, their findings propose that SOC provides the most protective benefits when bullying is mild; despite this, the benefits lessen as bullying becomes harsher.

Individuals with high SOC have better health status, their quality of life is better, and they are more resilient to stress than those with low SOC (Antonovsky, 1987; Eriksson & Lindström, 2007; Super et al., 2014). High SOC was previously seen as a protective mechanism against PTSD symptoms amongst individuals who were bullied occasionally but

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not for victims of severe bullying (Nielsen, et al., 2008; Reknes et al., 2016). Those exposed to bullying use negative coping styles when dealing with stressful scenarios. Individuals with lower levels of SOC are more likely to indicate that they are being bullied. (Francioli et al., 2016).

2.14 The Healthcare Section and the Department of Health

The Department of Health (DoH) obtains its directive from the National Health Act of 2003, which requires that the DoH provides a framework for a structured and uniform health system in South Africa (South African Government, 2022).

The health system consists out of the public sector, which is run by the government, and the private sector. The public health services are divided into primary, secondary and tertiary through health facilities that are managed by the Provincial Department of Health (Mahlathi & Dlamini, 2015). The majority of South African access health services through government-run public clinics and hospitals. The government does not fund private healthcare, so citizens have to purchase their own private insurance in order to receive treatment at a private healthcare facility (Young, 2016).

2.15 Nursing in South Africa

Nurses are a critical part of the healthcare system in South Africa, and are known as the heartbeat of healthcare (Botha, 2014). The nursing profession is regulated through the Nursing Act No. 33 of 2005 (Mahlathi & Dlamini, 2015). The main purpose of this act is for" public protection against nurses not practicing safe patient care, with the outcome of rendering high standard of nursing care by qualified, competent nurses" (Ruiters, 2020, p.27). The practice of nursing is a dynamic process that "provides and maintains the care of individuals, groups and communities that are faced with actual or potential health problems" (Mahlathi & Dlamini, 2015, p.7). The main purpose of the nursing function is to provide safe, individualised, extensive and effective care to patients through execution of the nursing process. Nurses play a pivotal role in providing the community with widespread and comprehensive healthcare. Nursing includes the promotion of health, prevention of illness, and the care of sick, disabled and dying individuals (Oyetynde & Ofi, 2013). The scope of

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practice of the Registered or Professional Nurse, Staff Nurse, Auxillary Nurse and Midwives are discussed in detail in the Government Gazette (Mahlathi & Dlamini, 2015).

2.16 Proposed Structural Model

According to the literature, exposure to workplace bullying has various detrimental effects on the victims. The theoretical argument from the literature study culminates into the explanatory structural model (Figure 1) that hypothesizes the relationships between the various latent variables. The proposed structural model, which serves as the basis of this study, proposes that exposure to workplace bullying causes nurses employed at Private Hospitals in the Western Cape to display symptoms of depression, stress and post-traumatic stress disorder. Moreover, it postulates that post-traumatic stress disorder leads to the nurses displaying depression symptoms. It also proposes that Sense of Coherence moderates the relationship between exposure to workplace bullying and post-traumatic stress disorder.

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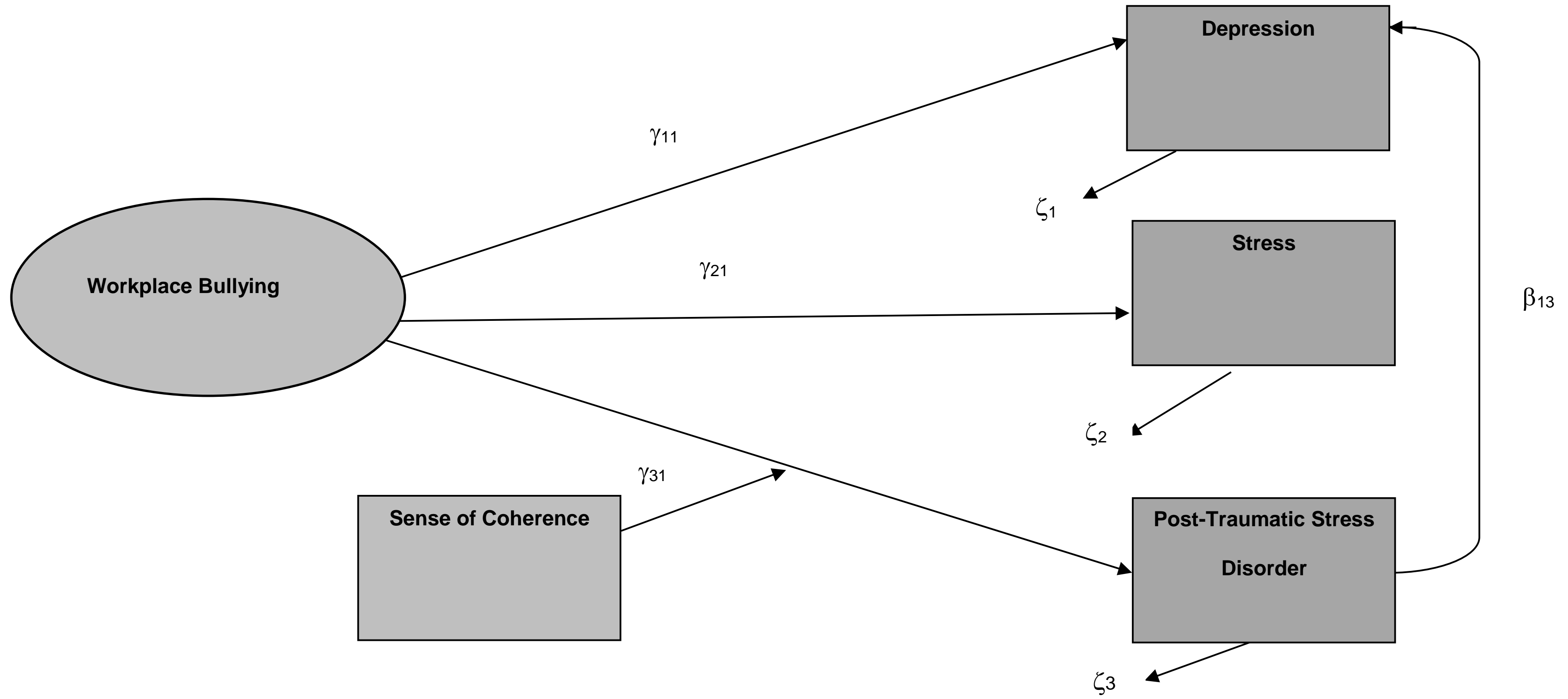
Figure 1

Explanatory Structural Model



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2.17 Chapter Summary

In this chapter, comprehensive definitions of bullying was provided, and the concept of bullying was explored. Second, the descriptive features of workplace bullying was discussed. Third, witnessing of workplace bullying was explored. Fourth, the gender and status of the perpetrator(s) was discussed. Fifth, the types of bullying was discussed. Sixth, the causes of bullying in terms of the victim was discussed. Seventh, the consequences of bullying in terms of the victim was discussed. Eight, the common characteristics of the victim was discussed. Ninth, the concept of Post-Traumatic Stress Disorder, stress, depression, and Sense of Coherence was explored. Tenth, post-traumatic stress disorder, stress and depression as consequences of workplace bullying was discussed. Eleventh, the relationship between post-traumatic stress disorder and depression was explored. Twelfth, Sense of Coherence as a moderator between workplace bullying and post-traumatic stress disorder was discussed. Thirteenth, the healthcare section, the Department of Health and Nursing in South Africa was discussed. Lastly, the proposed structural model was illustrated. In the following chapter details about the methodology that was utilised to answer the research question will be discussed. The chapter contains information on the research design and research method, the population, the sample and sampling method, the measurement instruments, and the statistical techniques.

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Chapter 3: Research Methodology

In this section the research hypothesis, research design, method of sampling, measurement instruments, and statistical analysis will be used to test the proposed conceptual model and the hypothesised paths or relationships.

3.1 Introduction

The research paradigm which will be utilised in this research study is the quantitative research paradigm. Different researchers provide different definitions of quantitative research. Creswell (2009) gave a very concise definition of quantitative research as a means for analysing objective theories by assessing the association between variables. These variances can be measured, normally on instruments, to analyse numerical data by utilising procedures (Creswell, 2009). This research study is quantitative since it focuses on the level of PTSD symptoms and psychological ill-health symptoms amongst former and current victims of workplace bullying. In this study, this phenomenon will be explained by collecting numerical data which will be analysed utilising statistics and structural equation modelling.

3.2 Research Design

The overarching substantive research hypotheses formulated under section 3.3 make specific claims concerning the proposed structural model in Figure 1. The proposed structural model as depicted in Figure 1 hypothesizes specific structural relations between the various latent variables contained in the model.

To empirically test the value of the structural relations hypothesized by the proposed behaviour of the bully structural model requires a plan or strategy that will guide the gathering of empirical evidence to test the operational hypotheses. The research design constitutes this plan or strategy (Kerlinger & Lee, 2000). Research design is a “plan or blueprint of how you intend conducting the research” (Babbie & Mouton, 2006, p.74). Specifically, the research design lays out the procedures on the required data, the techniques to be applied to collect and analyse the data, and how the empirical data will be utilised to answer the research question (Grey, 2014).

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Exploration, description, and explanation are three of the most useful and common purposes. The purpose of this research study is both exploratory and descriptive. Exploration is the effort to “develop an initial, rough understanding of some phenomenon” (Babbie & Mouton, 2001, p.105). The purpose of this study is exploratory since workplace bullying is a relatively new interest in South Africa, and not much research is conducted on the topic. Babbie and Mouton (2001, p.105) defined descriptive research as the “precise measurement and reporting of the characteristics of some population or phenomenon under study”. The purpose of this research study can also be classified as descriptive since the researcher will observe and then describe what was observed (Babbie & Mouton, 2001).

This study utilises an ex post facto correlational design to test the overarching substantive research hypothesis. This is mainly because the variables in the structural model cannot be manipulated. In terms of the logic of the ex post facto correlational design, the researcher obtains measures on the observed variables and calculates the observed covariance matrix (Kerlinger & Lee, 2000). An *ex post facto* study observes an empirical relationship between variables and subsequently proposes an explanation for that relationship (Babbie, 2010).

3.3 Research Problems

- Whether there is a significant positive relationship between *exposure to workplace bullying* and *post-traumatic stress disorder*.
- Whether a significant positive relationship exists between *exposure to workplace bullying* and *depression.*
- Whether a significant positive relationship exists between *exposure to workplace bullying* and *stress.*
- Whether a significant positive relationship exists between *post-traumatic stress disorder* and *depression.*
- Whether the effect of *workplace bullying* on *post-traumatic stress disorder* is moderated by *Sense of Coherence*.

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3.4 Substantive Research Hypotheses

There is an assortment of research design strategies that can be utilised to provide answers to an empirical problem. It is crucial to look at the purpose of this study to obtain a comprehensive understanding of the appropriate approach.

The objective of this study is to prove that the hypotheses, provided below, is true. The study focuses on the level of psychiatric symptoms and PTSD symptoms among current and former victims of bullying. The resultant structural model was depicted in **Figure 1.**

In accordance with the aim of this study, the findings of previous as elaborated on in the literature review, and the proposed model, the following research hypotheses are formulated:

Hypothesis 1: A significant positive relationship exists between *exposure to workplace bullying* and *depression.*

Ho1: $\mathbf{g}11 = 0$

Ha1: $\mathbf{g}11 > 0$

Hypothesis 2: A significant positive relationship exists between *exposure to workplace bullying* and *stress.*

Ho2: $\mathbf{g}21 = 0$

Ha2: $\mathbf{g}21 > 0$

Hypothesis 3: A significant positive relationship exists between *exposure to workplace bullying* and *post-traumatic stress disorder.*

Ho3: $\mathbf{g}31 = 0$

Ha3: $\mathbf{g}31 > 0$

Hypothesis 4: A significant positive relationship exists between *post-traumatic stress disorder* and *depression.*

Ho4: $\mathbf{b}13 = 0$

Ha4: $\mathbf{b}13 > 0$

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Hypothesis 5: It is hypothesized that ξ_2 moderates the effect of ξ_1 on $\eta 3$. Therefore, $\xi_1 * \xi_2$ interaction effect on $\eta 3$ is hypothesized.

Ho5: f diff= 0

Ha5: f diff > 0

3.5 Population and Sample

3.5.1 Population

The population was defined by Field (2009, p.136) as "the total number of research subjects who share the same characteristics and for which research conclusions will be drawn". The target population is the group to which the researcher would like to generalise their findings, and from which the sample is selected (Babbie & Mouton, 2002).

The target population of the research study was nurses who are employed at Private Hospitals in the Western Cape. The methodological ideal would be to study the entire target population but this is not practical. For this reason, a sample population was selected in the research study.

3.5.2 Sample and Sampling Method

Sampling refers to taking a sub-set or segment of the population and using it as representative of that population (Bryman & Bell, 2003; Turner, 2020). Babbie and Mouton (2012) defined sampling as "the selection of research material from an entire body of data" (p. 164).

The ideal sample size was 200 nurses employed by eight (8) Private Hospitals in the Western Cape. Two of the Private Hospitals had to opt-out of the research study due to them dealing with various projects when the data was collected. The actual sample size who completed the research questionnaires ended up consisting out of 97 nurses employed by six (6) Private Hospitals situated in Cape Town.

The aim was to select 25 nurses from each of the private hospitals. The convenience or availability sampling method was utilised to gather the data from the research participants. This sampling method was appropriate since nurses work in a highly pressurised

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environment which limited the amount of time they had at their disposal to complete the questionnaires (Du Toit, 2013). The sample was drawn from each private hospital and comprised of nurses who were on duty on the particular day on which the Researcher collected the data.

One of the main concerns in sampling is the size of the sample (Terreblanche & Durrheim, 1999). The sample size must be sufficient for inferences to be made about the population from the research findings. Bryman and Bell (2003) claimed that the absolute rather than the relative sample size is what increases validation, and therefore the sample must be as big as possible.

Research provided guidelines about an appropriate sample size when performing Structural Equation Modelling (SEM). Hair et al. (1998) and Kline (2005) believed that a sample size of less than 100 would be classified as small. Furthermore, a sample size between 100 and 200 is medium-sized, and a sample size that is over 200 can be classified as a large sample. Haenlein and Kaplan (2004) recommended the Partial Least Squares (PLS) is suitable for small samples. The sample size consisted of 97 participants which dictated that the PLS be applicable in the current research study.

In the next section the measuring instruments, which will be utilised to measure the variables in the structural model, will be discussed in detail.

3.6 The Research Instrument

The prevalence of workplace bullying was measured using a specified definition of the concept. Specific questions were then asked which were linked to the definition provided. Workplace bullying was also measured through utilising the Negative Acts Questionnaire and the Work Harassment Scale. Psychological ill-health was measured using the Depression, Anxiety and Stress Scale (DASS-21), and the symptoms of PTSD were measured utilising the Impact of Events Scale-Revised. SOC was measured using the Sense of Coherence Scale. Please note that all the above-mentioned Scales are in the public domain hence it was not required for the Researcher to acquire permission to utilise the scales.

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3.6.1 Demographics

The demographic was inserted as the first section of the questionnaire. This section of the questionnaire consists of questions regarding the demographical profile of the sample under study (including gender and age).

3.6.2 Prevalence of Workplace Bullying

The research participants were provided with a same definition of workplace bullying after which they were requested to answer specific questions. Workplace bullying was defined as follows: “situations where one or more persons are subjected to persistent and repetitive harmful negative or hostile acts (excluding once-off isolated incidents) by one or more other persons within his or her working environment (excluding incidents where two equally strong individuals come into conflict), and the person feels helpless and defenceless in the situation. The victim should feel defenceless and helpless, as well as experiencing the harmful negative and hostile acts repetitively and persistently for at least 6 months and as offensive; the intentionality of the perpetrator is irrelevant”.

After being presented with the above definition, the research participants asked whether they consider themselves to be a victim of bullying. The participants were given two options namely,” Yes” and “No”. If the answer to this question was “Yes”, the participants were asked to indicate how frequently they were bullied during the last 6 months through selecting one of the following categories: “Now and then”; “Daily”; “Weekly”; and “Monthly”. They were also asked whether they witnessed or observed others being bullying within the work environment over the last 6 months through asking them to select one of the following categories: “No, never”; “Yes, now and then”; “Yes, daily”; “Yes, weekly”; and “Yes, monthly”. These questions were also used to estimate the prevalence of workplace bullying in the research study.

In addition, all the participants were asked to select the gender and status of the bully (i.e., supervisor/manager, colleagues, subordinates or customers/clients). Moreover, the participants were asked to indicate whether bullying was addressed in their organisation.

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The research participants were also asked whether they consider themselves to be the perpetrator of workplace bully and not the victim and were provided with the following response categories: “No”; “Yes”; “Both”; “Maybe the perpetrator”; and “Maybe both”.

3.6.3 Negative Acts Questionnaire-Revised (NAQ-R)

The NAQ is a self-report questionnaire, which measures the frequency of exposure to a variety of negative acts and behaviours that can be considered typical of bullying during the past 6 months. Einarsen and Raknes (1997) developed the NAQ, which consisted out of 29 items. They later reduced it to 22 items with a 5-point Likert scale: 1 = never, 2 = now and then, 3 = monthly, 4 = weekly, 5 = daily (Jiménez et al., 2007). Two of the items included in the NAQ-R are (a) Someone withholding information which affects your performance (Item 1), and (b) being humiliated or ridiculed in connection with your work (Item 2).

Two components or dimensions are a component related to personal bullying behaviours, and a component of work-related bullying behaviours (Einarsen & Hoel, 2001). After conducting a factor analysis, Einarsen et al. (2009) found that the questionnaire has three components namely, personal bullying, work-related bullying and physical forms of bullying.

The internal consistency of the NAQ ranges between.87 and.93 (Einarsen & Raknes, 1997; Hoel et al., 2001). Correlations have been found with psychosomatic complaints (*r*=.32), psychological health (*r*=-. 31 to - .52), and job satisfaction (*r*=- .24 to - .44) (Jiménez et al., 2007). The Cronbach’s alpha for the 22-items in the NAQ-R (Revised version of NAQ) was .90, signifying exceptional internal consistency and suggesting that it may be a reliable instrument (Einarsen et al., 2009). Previous South African studies on the prevalence of workplace bullying in South African organisations, reported reliability coefficients of the NAQ-R of .93 (Kalamdien, 2013) and .97 (Durr, 2019) respectively. A South African study conducted by Durr (2019) reported that the Cronbach alpha of the work-related bullying (α = .88), the person-related bullying (α = .95), and the physically intimidating bullying subscales (α = .85) were above the threshold of .70. There is evidence supporting the construct, convergent and discriminant validity of the NAQ-R (Gupta et al., 2017). Furthermore, there is

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evidence supporting the convergent validity of the NAQ-R in a South African study (Durr, 2019). Based on this psychometric information, one can argue that the NAQ-R was psychometrically sound and satisfactory to use in this study.

3.6.4 Work Harassment Scale (WHS)

The Work Harassment Scale (WHS) (Bjorkqvist et al., 1994) was utilised to assess the levels of aggression among employees. The questionnaire consists of 24 items, Cronbach alpha of .95 for reliability. Two of the items included in the WHS are (a) unduly reduced opportunities to express yourself (Item 1), and (b) lies about you told to others (Item 2).The respondents were assessed on a five-point scale: never, seldom, occasionally, often, and very often. They were assessed concerning their experience and exposure to the 24 types of oppressing and undignified behaviours by other employees in the organisation during the last 6 months (Bjorkqvist et al., 1994; Kalamdien, 2013).

The WHS have a reported internal consistency reliability ranging from .71 to .92 (Austrauskaité et al., 2010). The internal consistency reliability of the WHS in South African studies were .94 (Kalamdien, 2013), and .95 (Du Toit, 2013) respectively. Furthermore, South African research conducted by Du Toit (2013) and Kalamdien (2013) revealed that the validity of this instrument was acceptable. Thus, one can argue that the WHS was psychometrically sound and acceptable to use in this research study.

3.6.5 The Depression Anxiety Stress Scale (DASS)

The Depression Anxiety Stress Scale (DASS) (Lovibond & Lovibond, 1995) is a self-administered questionnaire that consists of a 42-items version and a 21-items version. The DASS was designed to examine the level of three negative emotional states namely, depression, anxiety, and stress. The Depression scale focuses on reports of low mood, motivation, and self-esteem. The Anxiety scale focuses on fear, perceived panic, and physiological arousal. The Stress scale focuses on irritability and tension. Respondents are asked to utilise the 4-point scales to rate the extent to which they have experienced each state over the past week (Lovibond & Lovibond, 1995).

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The shorter, 21-item version of the DASS (DASS-21), takes 5 to 10 minutes to complete and was utilised during this research study. Two of the items included in the DASS-21 are (a) I found it hard to wind down (Item 1), and (b) I was aware of dryness of my mouth (Item 2).The subscale scores from the shorter questionnaire are converted to the DASS normative data by multiplying the total scores by 2 (Lovibond & Lovibond, 1995).

The Cronbach alpha of the overall DASS-21 in a research study conducted by Makara-Studzińska et al. (2022) was .93. The Cronbach alpha of this scale was .92 in the present study. The internal consistency of each of the subscales of the 21-item and 42-item versions of the questionnaire is normally high (e.g. Cronbach alpha for Depression is from .96 to .97, for Anxiety is from .84 to .92, and the Cronbach Alpha for Stress is from .90 to .95) (Antony et al., 1998; Brown et al., 1997; Clara et al., 2001; Lovibond, 1995; Page et al., 2007). The Cronbach alpha of the Depression, Anxiety and Stress subscales were .86, .84, and .85 respectively (Makara-Studzińska et al., 2022). The internal consistency reliability for the subscales in the present study are high (i.e. the internal consistency for the depression subscale is .90, for anxiety is .89, and the internal consistent reliability for stress is .90). There is evidence for construct (Lovibond, 1995) and convergent (Crawford & Henry, 2003) validity for the anxiety and depression subscales of both the long and short versions of the DASS. The evidence of construct validity, discriminant validity and convergent validity for the DASS-21 was strong in a South African study (Dreyer et al., 2019). The psychometric properties of the DASS-21 indicates that it is a valid and reliable instrument for measuring depression, anxiety, and stress in the workplace.

3.6.6 Impact of Event Scale-Revised (IES-R)

The Impact of Event Scale-Revised (IES-R) is a 22-item self-report measure (for DSM-IV) that assesses the subjective distress caused by traumatic events (Weiss & Marmar, 1996). It is a revised version of the 15-item IES (Horowitz et al., 1979). The IES-R contains 7 additional items related to the hyperarousal symptoms of PTSD, which were excluded from the original IES. The IES-R responses were adapted so that the responders were asked to report on the degree of distress rather than the frequency of the symptoms

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(Motlagh, 2010). Respondents are asked to identify a specific stressful life event and then specify how much they were distressed or bothered during the past 7 days by each "difficulty" listed (Weiss & Marmar, 1996).

The 22-item scale consists of 3 subscales representative of the major symptom clusters of post-traumatic stress namely intrusion, avoidance, and hyperarousal (American Psychiatric Association, 1994). The hyperarousal subscale includes 6 items associated with trouble focusing, fury and touchiness, hypervigilance, and psychophysiological arousal upon exposure to reminders. The avoidance subscale includes 8 items associated with evasion of situations, ideas, and feelings. The intrusion subscale includes 8 items related to intrusive thoughts, intrusive feelings, nightmares, and images related to the traumatic event (Motlagh, 2010). Two of the items included in the IES-R are (a) any reminder brought back feelings about it (Item 1), and (b) I had trouble staying asleep (Item 2).

Items are rated on a 5-point scale ranging from 0 ("not at all") to 4 ("extremely"). The IES-R yields a total score (ranging from 0 to 88), and subscale scores can also be calculated for the Intrusion, Avoidance, and Hyperarousal subscales (Weiss & Marmar, 1996). There are no cut-off scores for the IES-R but higher scores represent greater distress. Increased overall scores on all subscales may indicate the need for further evaluation (Motlagh, 2010).

The test-retest reliability (r= - .89 to .94) and internal consistency (Cronbach alpha) for each subscale (intrusion = .87 to .94, avoidance = .84 to .97, hyperarousal = .79 to .91) are acceptable (Creamer et al., 2003). The internal consistency of the overall IES-R scale (α = .95) and for each subscale (intrusion = .92, avoidance = .85, and hyperarousal = .91) in another research study was high (Rash et al., 2008). The Cronbach's alpha coefficient for the overall IES-R of a South African study was .90, and the Cronbach's alpha coefficient of each of the subscales were .90 respectively (Engelbrecht et al., 2021). The IES-R scale scores have moderate to strong correlations with one another (r= .52 to .87) (Beck et al., 2008). Correlations have also been found to be high between those of the IES-R and the original IES for the intrusion (r= .86) and avoidance (r= .66) subscales which support the concurrent validity of both measures (Beck et al., 2008). There is evidence of acceptable

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convergent (Rash et al., 2008), concurrent and discriminative validity (Beck et al., 2008). Based on the psychometric properties of the IES-R, this instrument is the ideal instrument for measuring PTSD.

3.6.7 Sense of Coherence Scale (SOC)

The SOC scale is utilised to measure how people manage stressful situations and stay well (Eriksson & Lindström, 2005). The SOC scale consists of 29 five-facet items; respondents are asked to select a response, on a seven-point semantic differential scale with two anchoring phrases. There are 10 manageability, 8 meaningfulness, and 11 comprehensibility items. Thirteen of the items are formulated ‘negatively’ and have to be reversed in scoring so that a high score always expresses a strong SOC. The published scale makes it possible to use a short form of 13 of the 29 items. Unless ‘SOC-13’ is specified, reference is always to SOC-29 (Eriksson & Lindström, 2005).

The SOC-13 was utilised during this research study. Two of the items included in the SOC-13 are (a) do you have the feeling that you don’t really care about what goes on around you (Item 1), and (b) has it happened in the past that you were surprised by the behaviour of people whom you thought you knew well (Item 2).The completion of the SOC-29, whether in an interview or self-completion, takes 15 to 20 minutes, and the SOC-13 takes 5 minutes less. The SOC scale has been used in 14 languages namely, Afrikaans, Czech, Dutch (Flemish), English, Finnish, German, Hebrew, Norwegian, Rumanian, Russian, Serbian, Spanish, Swedish, and Tswana (Antonovsky, 1993).

The SOC scale is a valid, reliable, and cross-culturally applicable instrument. In 26 studies conducted by Antonovsky (1993) the Cronbach alpha of internal consistency of the SOC-29 ranged from .82 to .95. In 124 studies by Eriksson and Lindström (2005) the Cronbach alphas of the SOC-29 ranged from .70 to .95. Antonovsky and Sagy (2001) revealed that the alphas of the SOC-29 range from .83 to .88. The above-mentioned researchers also utilised the SOC-13. In 16 studies conducted by Antonovsky (1993) the Cronbach alphas of the SOC-13 ranged from .74 to .91. In 127 studies the alpha values of the SOC-13 ranged from .70 to .92, and in 60 studies utilising a modified SOC scale the

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alphas ranged from .35 to .91 (Eriksson & Lindström, 2005). Recent studies also indicated high internal consistencies of .75 (Getnet & Alem, 2019) and .76 (Malfa et al., 2021) for the SOC-13 respectively. The Cronbach alpha of the SOC-13 in South African studies was .62 (Johnson et al., 2013) and 0.795 (Ndidiamaka, 2015) respectively.

There are studies providing evidence for the acceptable construct validity (Mafla et al., 2021), convergent validity, and divergent validity (Getnet & Alem, 2019) of SOC-13. A South African study conducted by Ndidiamaka (2015) provided evidence of the construct validity of SOC-13.

The test-retest correlation showed stability and ranged from .69 to .78 (1 year), .64 (3 years), .42 to .45 (4 years), and .59 to .67 (5 years) to .54 (10 years). The means of SOC-29 range 100.50 (SD 28.50) to 164.50 (SD 17.10) points, and SOC-13 from 35.39 (SD 0.10) to 77.60 (SD 13.80) points. After 10 years SOC seems to be comparatively stable (Eriksson & Lindström, 2005). Based on the reliability and the validity of the SOC-13, it is deemed suitable to measure Sense of Coherence.

3.7 Procedure for Data Collection

Survey research was utilised to gather information. Surveys are appropriate for this research study since there is a significant probability that it will be strategically impossible to reach all the respondents at once. Thus, the questionnaires enabled the researcher to elicit detailed information from the respondents who may be accessible. Surveys provide an advantage in terms of economy and a large amount of data can be collected. Surveys, especially self-administered questionnaires, make large samples feasible. (Babbie & Mouton, 2001).

The completion of the survey instrument was voluntary. The initial data collection approach was to let the research participants complete the informed consent form after which the researcher was going to sort through the forms to decipher how many nurses in each department provided their consent. Based on this, the researcher planned to schedule a meeting with the Nursing Manager of the various Private Hospitals to find out how many nurses from each department could complete the questionnaires at a set time. Thereafter,

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the Researcher planned to schedule different timeslots during which the participants were going to complete the questionnaires and communicate the appropriate session to each participant in each department. Reminders of the sessions were meant to be sent to the participants via SMS. However, this approach was not feasible due to the busy schedule of the nurses.

Instead, the Nursing Manager informed the various departments about the research study and provided them with the date and various timeslots in which they could participate in the research study. The nurses would slot into the timeslots during which they were available.

During the data collection sessions the researcher explained the following to the nurses:

- Purpose of the study;
- The fact that participation in the study is voluntary;
- The potential risks and discomfort some respondents might experience;
- The contact information of the support services who would be available to assist those who experience distress and require professional assistance;
- The consent form; and
- The structure and layout of the questionnaires.

The researcher handed the Informed Consent Form to each of the research participants who were allowed to ask questions. After the research participants completed the Informed Consent Form, the researcher collected the completed questionnaires and placed the form into a sealed box situated close to the exit of the venue. Thereafter the researcher handed out the questionnaires which took the participants between 30 and 40 minutes to complete. The questionnaires did not contain the details of the participants nor did they require them to indicate their identity on the questionnaire. In this way, no one was able to identify which questionnaire belongs to a specific participant nor could anyone link the consent form directly to the questionnaire since the Researcher collected the consent

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form before handing out the questionnaires. This method of collecting the data ensured that the participants' right to confidentiality and to remain anonymous was protected.

3.8 Data Analysis and Interpretation

The raw data obtained through administering the questionnaires were captured in an excel sheet. The reversed scored items were recorded. The gathered data, the explanatory structural model, and the hypotheses were analysed by utilising various statistical techniques. The techniques that were utilised included descriptive statistics, item analysis, and partial least squares structural equation modelling (PLS-SEM). The following section will justify the selection of specific data analysis techniques and discuss the preliminary statistical analyses procedures which were implemented.

3.8.1 Preliminary Statistical Analyses Procedures

Specific statistical analyses must be implemented before performing PLS-SEM. The statistical analyses include item analyses and the treatment of missing values which provided insight on the psychometric properties of the measurement tools which was used in the current research study.

3.8.2 Missing Values

Missing values normally occur during data collection due to non-response or staff absenteeism. Missing values can detrimentally impact the efficiency of the indicator variables if it is not dealt with prior to commencing the analysis (Mels, 2003). Missing values may also compromise the sample's representativeness of the intended population (Field, 2009). Various techniques can be used to resolve missing values. These values include "list-wise deletion, pairwise deletion, imputation by matching and multiple imputation" (Mels, 2003, p.46). Since there were no missing values present during the data collection process rectifying missing values is not deemed necessary in this research study.

3.8.3 Item Analysis

Item analysis was carried out on each of the instruments used in this research study before testing the structural model with Partial Least Square (PLS) modelling. A separate

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item analysis procedure was conducted with Statistica 14 for each instrument to assess the internal consistency of the respondents' responses to measurement items. Statistica 14 was also used to obtain the summary statistics.

Item analysis is a method that researchers utilise to determine whether the items consistently represent the latent variable and whether the item explains a significant proportion of the variance in the latent variable (Field, 2009). Item analysis assesses the reliability of the measurement instrument using identifying items that are deemed 'poor' and that do not contribute to the internal consistency of the scale (Hanly, 2019). The *item-total correlation*, and *Cronbach Alpha if an item is deleted* for specific items within the scale and the subscales, were the item statistics that were utilised to determine if an item is 'poor'. The item analysis results were utilised to determine whether a problematic item(s) should be deleted or not (Hanly, 2019). The PLS model was fitted to the revised data set after the necessary items were removed from the scales.

There are various instruments that can be utilised to test the latent variables. The implementation of an item analysis provides more insight with regards to the validity and reliability of tests (Langenhoven, 2015). It is of utmost importance that individual tests should be assessed to comprehend why certain tests display specific levels of validity and reliability in comparison to other tests (Tabachnick & Fidell, 2013).

3.8.4 Partial Least Square Analysis (PLS-SEM)

Partial least squares were used in this research study since it is suitable for prediction-orientated research, due to its exploratory qualities since the sample size is small, and since it assists researchers to focus on the explanation of endogenous constructs (Henseler et al., 2009). SmartPLS 3 was used to conduct the PLS-SEM and to obtain such results.

The PLS-SEM path model consists out of two layers:

1. an inner model (referred to as a structural model) which shows the relationships (paths) between the latent variables;

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2. an outer model (also referred to as a measurement model) which shows the relationships (paths) between the latent variables and their observed variables (Hair et al., 2011; Henseler et al., 2009).

PLS-SEM uses the applicable data set to estimate path relationships by maximising the variance explained in the endogenous variables and minimising the error terms (Hair et al., 2011).

According to Henseler et al. (2009), researchers use PLS-SEM for the following reasons:

- It provides latent variable scores which can be measured by one or more manifest variables.
- It is ideal for explanatory research.
- It tests reflective and formative measurement models.
- It is ideal if the research study is an extension of an existing structural theory.
- This method can estimate extremely complex models with numerous latent and manifest variables.
- PLS-SEM can be applied to smaller sample sizes and therefore provides estimates of parameters of very small datasets.
- PLS-SEM path modelling makes less meticulous presuppositions about the distribution of variables and error terms.

3.9 Ethical Consideration

Ethical conventions of the research was achieved by obtaining ethical clearance and adhered to the standard operating procedure of the Research Ethics Committee for Human Research (REC) at Stellenbosch University. Authorisation for data collection was obtained from the relevant authorities at the Private Hospital.

The research participants were provided with the relevant information needed to make an informed decision regarding whether they would voluntary participate in the research study. The research participants were required to provide their written consent by

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completing an informed consent form which was anonymous. The research participants were reassured that the information provided in the informed consent form and the questionnaires was treated confidentially. They were also reassured that their identities as well as that of the Private Hospital was not going to be revealed in the study.

In the following sections the degree of risk of the research study as well as the procedures that were implemented in order to ensure that the ethical standards were followed will be discussed in detail.

3.9.1 Degree of risk as classified by the Research Ethics Committee

According to the DESC (Departmental Ethics Screening Committee) there are four risk categories that indicates the degree of risk. The risk categories are minimal, low, medium or high risk. There is a medium to high degree of risk for the research participants in the current study. Medium risk is defined as “research in which there is a potential risk of harm or discomfort, but where appropriate steps can be taken to mitigate or reduce overall risk” (Stellenbosch University, 2012, p.3). High risk is defined as “research in which there is a real and foreseeable risk of harm and discomfort, which may lead to a serious adverse event, if not managed in a responsible manner” (Stellenbosch University, 2012, p.3).

This research study focuses on the sensitive topic of workplace bullying, and may lead to emotional or psychological discomfort. The researcher ensured that the research was managed in a responsible manner by ensuring that the identity of the respondents as well as the Private Hospitals were concealed. The researcher will also ensure that the information obtained in the present research study does not land in the wrong hands.

Since the topic of workplace bullying is a sensitive topic it might cause a certain level of discomfort. In the event that the research participants experience discomfort or trauma the researcher provided the details of a registered psychologist who would engage in debriefing.

3.9.2 Procedures followed to meet ethical standards

This section will entail a discussion pertaining to the steps or procedures that were followed in order to meet the ethical standards.

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3.9.2.1 Informed consent and Debriefing. A written informed consent form was given to the research participants. The form was also forwarded to the Private Hospital in order to obtain consent for participation. The informed consent form contained information related to the purpose of the study, procedures that would be followed, potential risks and discomforts, potential benefits to participants and society, payment for participation, confidentiality, participation and withdrawal, identification of the investigators, as well as the research subject's rights.

In the event that the participants experience any form of discomfort or trauma whilst participating in the research study, the participant had telephonic access to debriefing. Debriefing involves informing respondents of the use of deception, and its rationale at the end of the research participation (Miller et al., 2008).The informed consent and debriefing explanation were made clear before the commencement of the study.

3.9.2.2 Voluntary Participation and Withdrawal. As part of the informed consent form, the participants was informed that they have the right to refuse to answer any questions in the survey. They were informed that participation in the research study is completely voluntary, and the participants may withdraw from the study at any time without any consequence.

3.9.2.3 Privacy. The personal data of the research participants have been protected from unauthorized access. The research data is stored on the researcher's personal computer as well as her Supervisors' personal computer, which will be password-protected. The researcher also back upped the information on her hard drive to which only the researcher has access.

Hard copies of the questionnaires, informed consent forms and any other documents related to the research study is stored in a locked cupboard to which only the researcher has access too. Only the researcher, and the supervisor has access to the raw results obtained from the surveys.

3.9.2.4 Anonymity and Confidentiality. As indicated on the informed consent form, all the information was kept confidential to preserve the anonymity of the respondents and the

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private hospital. The information was also kept confidential to minimize the risk to the respondents.

3.9.2.5 Mitigation of potential risk. As mentioned in section 3.9.1 the current research study might have a medium to high risk for the research participants. According to the DESC checklist and the guidelines set out by the DESC (Stellenbosch University, 2012), if the likelihood of risk is medium or high, mitigation of risk of harm to respondents is an appropriate step that must be taken.

To ensure that the research participants do not suffer from psychological damage due to the study, the contact details of researcher's supervisor who is a registered psychologist (S0095605) with the Health Professions Council of South Africa was made available. The supervisor is trained in debriefing and in dealing with psychological phenomena such as workplace bullying.

3.10 Chapter Summary

This chapter contained details about the methodology that was utilised to answer the research question. The chapter contained information on the research design and research method, the population, the sample and sampling method, the measurement instruments, and the statistical techniques. The following section presents and discusses the research findings derived from the statistical analyses.

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Chapter 4: Presentation and Discussion of the Research Results

In this chapter the results obtained from the questionnaires and the various analyses that were performed in this research study will be presented and discussed. The research findings of the present study must be interpreted in the context of the previous literature. The findings should also be explored in terms of how they relate to the research aim and question.

Firstly, demographical information will be provided. Secondly, the results of the questionnaire which dealt with the prevalence of workplace bullying was presented and discussed. Thirdly, the results of the reliability (item) analysis of the items and the subscales or the measurement instruments were discussed. The item analysis was used to find the reliability of the different measurements that were used to measure the latent variables (workplace bullying, depression, stress, PTSD, and Sense of Coherence. Fourthly, the PLS-SEM results which assessed the reliability of the latent variables were discussed. The PLS-SEM was utilised to support the reliability of the different measurements and to confirm the fit of the measurement model. Lastly, the path coefficients in the structural model were interpreted. The PLS-SEM was utilised to analyse and investigate the relevant paths between the variables in order to confirm the structural model fit.

4.1 Introduction

The main research questions are: What is the prevalence of PTSD analogue symptomatology and reported symptoms of psychological ill-health among current and former victims of workplace bullying? Does Sense of Coherence moderate the relationship between workplace bullying and PTSD? In order to answer these research questions the researcher created the following research objectives for the present study:

- To investigate the consequences of workplace bullying in terms of the victims.
- To determine whether bullying behaviour can cause PTSD and other psychiatric symptoms.
- To examine whether stress relates to workplace bullying.

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- To investigate whether the relationship between workplace bullying and PTSD is moderated by a Sense of Coherence.
- To develop an explanatory structural model that explicates the relationship between workplace bullying and PTSD, stress, and depression respectively.
- To test the model's fit; and
- To evaluate the significance of the hypothesised paths in the model.

4.2 Demographical Information

The questionnaire was completed by 97 participants and consisted of the following categories of nurses:

- 48 Registered or Professional Nurses
- 20 Enrolled Nurses
- 21 Enrolled Auxiliaries
- 8 other nursing participants

Five nursing participants were employed on a part-time basis and ninety-two were employed on a full-time basis. In terms of the level of responsibility, 60% of the participants indicated that they have no formal responsibility and 22% classified their responsibility as a Team Leader. Additionally, 5% indicated that they were Supervisors, 12% Managers, and 1% Owners. Most of the participants were employed by the private hospital for longer than 20 years (30%), followed by those who were employed from 6 – 10 years (21%), 18% were employed between 11 and 15 years, 13% were employed between 6 months and one year, 11% were employed between 1 and 5 years, and 7% between 16 and 20 years .

4.2.1 Gender

Most the sample group consists out of female participants (94%) and the minority consists of male participants (6%).

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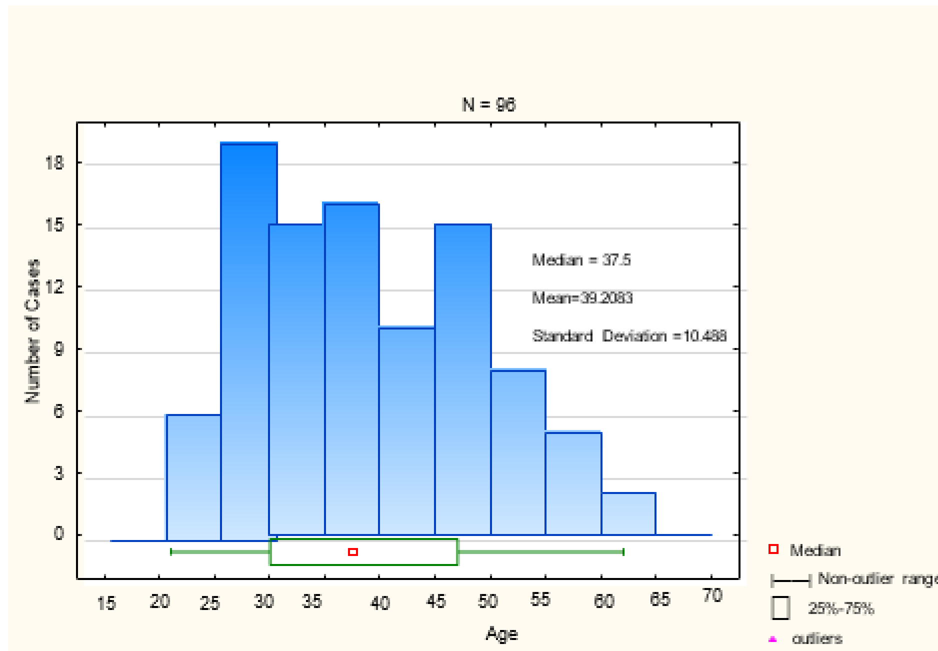
4.2.2 Age

The age range of the sample group extends from the age of 21 to 62. The median age is 37.5, the mean age is 39.2, and the standard deviation is 10.5. The age range of the sample group is depicted in figure 2.

Figure 2

Age of the Sample Group



4.2.3 Marital Status

The majority of the sample group is married (48%) followed by those who are single (29%), divorces (9%), living together (6%), widowed (5%), and separated (2%).

4.2.4 Ethnic Group

The majority of the sample group is coloured (50%), followed by white (28%), African (17%), and individuals forming part of other (5%) ethnic groups.

4.2.5 Highest Level of Education

The majority (51%) of the participants have other levels of education besides those illustrated in the Figure 3. This is followed by those whose highest level of education is an Advanced University Diploma in Nursing (16%) and those who passed Grade 12 (15%). The highest level of education of the sample group is found in figure 3.

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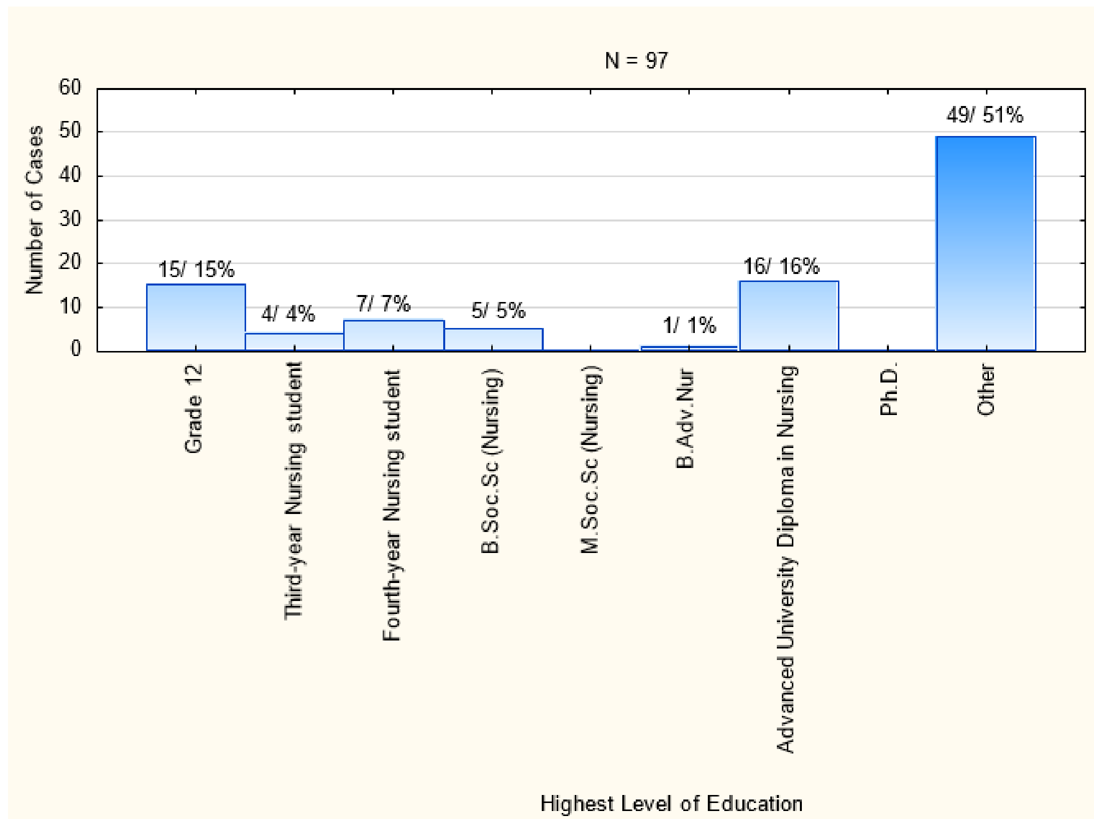
Figure 3

Highest Level of Education of the Sample Group



In summary, most of the sample group consisted out of females. The majority reported age group is between 25 and 30 years old, and the sample group is predominantly in the coloured race category. Furthermore, most of the participants reported to have other levels of education besides those listed in section 4.2.5.

4.3 Prevalence of Workplace Bullying

In this section, the data collected in terms of the prevalence of workplace bullying will be discussed. The prevalence of workplace bullying of nurses in Private Hospitals in the Western Cape was determined by exploring the following: the biographical demographics of the sample group, the frequency of workplace bullying acts, the reported gender and position of the perpetrator, and the research participants' perception of whether workplace bullying is addressed in their organisation.

The participants were provided with a concise definition of workplace bullying after which they had to complete the questionnaire focussed on the prevalence of workplace

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bullying. The prevalence of workplace bullying was measured “subjectively”, by providing the research participants with a definition of workplace bullying. The definition of workplace bullying as defined by Kalamdien (2013) was used in this research study. Kalamdien (2013) defined workplace bullying as situations where one or more victims are exposed to persistent and repetitive harmful negative or hostile actions by one or more perpetrators in the workplace for at least six months. The victim is left defenceless and helpless. Kalamdien (2013) also stipulated that workplace bullying excludes one-off isolated incidents and incidents where two equally strong individuals come into conflict.

Based on the definition, the researcher asked the participants whether or not they consider themselves to be victims of workplace bullying. In the present research study, 57% of the research participants self-identified themselves as victims of workplace bullying. This is slightly higher than the prevalence rate of 44% which was found in a South African study conducted by Kalamdien (2013), but considerably lower than the prevalence rates reported in other international studies, with rates of 90% (Al-Ghabeesh & Qattom, 2019) and 82% (Ekici & Beder, 2014) reported amongst nurses respectively.

4.4 Frequency and Witnessing of Workplace Bullying

There is no agreed upon criterion amongst researchers in the literature review pertaining to the frequency of bullying acts. In order to determine the frequency of the bullying act, in terms of the victim, the researcher asked the victims how often they were bullied during the last 6 months. The research results illustrated in Figure 4 reveal that those who consider themselves to be victims of bullying (71 participants), reported that the bullying occurred mostly “now and then” during the last 6 months (61%) as well as on a “daily” (15%) and “weekly” basis (15%). This finding is consistent with those who classified themselves as witnesses/observers of workplace bullying. Of those who indicated that they witnessed workplace bullying (91%) over the last 6 months, the majority (59%) indicated that they did so “now and then”, 16% indicated that they did so “daily”, 12% did so on a “weekly” basis, and 3% indicated that they witnessed others being bullied “monthly”. Whereas, 9% indicated

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that they "never" witnessed someone being bullied in the workplace. These results are illustrated in Figure 5.

As indicated in the literature review, 74% of the respondents in a South African study conducted by Kalamdien (2013) indicated that they witnessed workplace bullying during the last six months. Of the 74% of the witnesses, 50% indicated they witnessed others in the workplace being subjected to workplace bullying "now and then", 12% reported that they witnessed workplace bullying on a "daily" basis, 9% "weekly", and 3% "monthly". Another 26% reported that they "never" witnessed bullying in their workplace. In a recent South African study (Bremert, 2021) 84% identified themselves as witnesses of workplace bullying. About 51% of the witnesses reported that they witnessed workplace bullying on a "monthly" basis, 28% witnessed it on a "weekly" basis, and 10% witnessed workplace bullying behaviour "daily". Furthermore, 6% preferred not to answer the question, and 5% "never" witnessed workplace bullying. The results clearly indicate that workplace bullying is a noticeable and prevalent issue in the modern workplace. In the following section the gender and position of the perpetrator will be discussed.

Figure 4

How Often have the Victims been Bullied During the Last 6 Months?

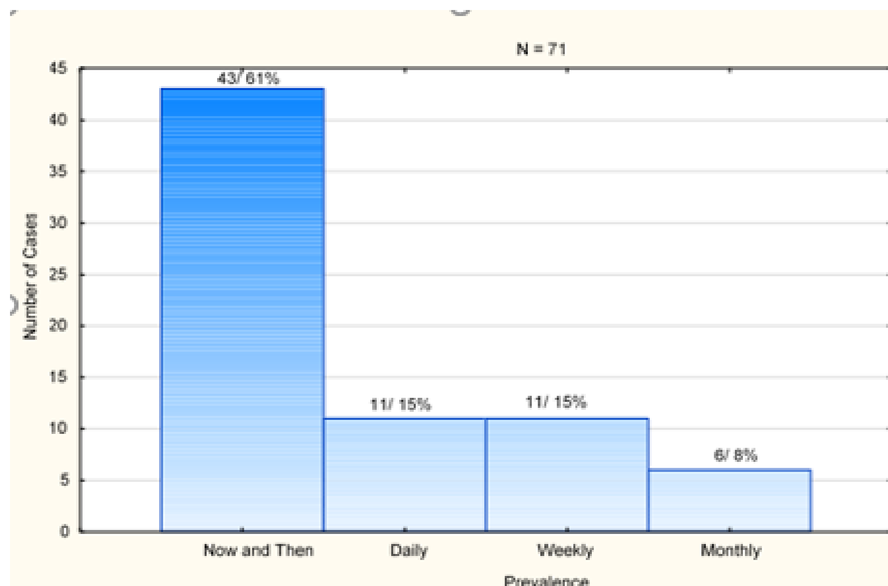

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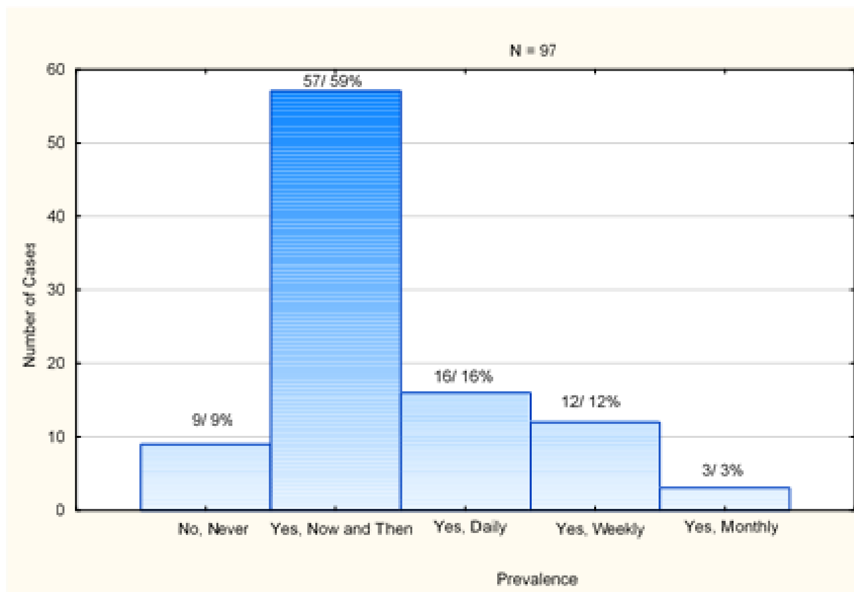
Figure 5

Witnesses or Observers of Bullying within the Work Environment over the Last 6 Months



4.5 Reported Gender and Status of Perpetrator

All employees are susceptible to workplace bullying in the form of being a victim, so are they capable of being the perpetrator either solely or simultaneously, whilst being a target (Einarsen & Skogstad, 1996). The research participants were asked whether they consider themselves to be the perpetrator and not the victim or both. The majority of the respondents indicated that they do not classify themselves as perpetrators followed by 13% who indicated that they may be both the perpetrator and the victim of bullying. Furthermore, 2% indicated that they are maybe the perpetrators, 2% indicated that they are the perpetrators, and 2% indicated that they are both the perpetrator and the victim of bullying.

The literature indicates that both genders are equally capable of bullying although some differences may exist (Einarsen & Skogstad, 1996; Kalamdien, 2013). In a Norwegian study 49% of the participants reported being bullying by men exclusively, 30% reported being bullied by women exclusively, and 21% reported being bullied by both men and women (Einarsen & Skogstad, 1996). A more recent South African study revealed that 80% of the participants reported being bullied by men exclusively, whereas 4% reported women exclusively as the perpetrator. Moreover, 15% reported both men and women as

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perpetrators (Kalamdien, 2013). On the other hand, a recent study conducted by Du Toit (2013) found that 53% of the research participants reported that the perpetrators are women, followed by men (7%), and 4% both men and women. When asked by whom the participants or others were bullied in the workplace, the 87% of the research participants in the present research study indicated that the perpetrators are women and 38% indicated that the perpetrators are men.

The findings of the present study contradicts the findings of Einarsen and Skogstad (1996), and Kalamdien (2013). However, it agrees with the findings of Du Toit (2013) in that more women than men are exclusively being reported as the perpetrator in the present study. This could be due to the fact that the working environment in Kalamdien's (2013) research study is male dominant, whereas the working environment in Du Toit (2013) and the present study is female dominant. Much of the literature about men in nursing stresses that nursing remains a female dominant working environment (Australian College of Nursing, 2019; Du Toit, 2013; Olson, 2014; White, 2014). The results clearly indicate that both genders are capable of being the perpetrator of workplace bullying, and that neither men nor women are immune from becoming a perpetrator (Kalamdien, 2013).

With regards to the gender of the perpetrator, a more recent research conducted by Bremert (2021) revealed that the majority of the research participants reported that the perpetrator is a supervisor or manager (69%), followed by colleagues (35%), patients (24%) and others (7%). The findings of a study conducted by Kalamdien (2013) revealed that supervisors/managers were reported more frequently (69%) as the perpetrator, followed by colleagues or peers (34%), subordinates (7%), and clients (1%). One of the plausible explanations for leadership positions frequently being reported as the perpetrator is since they abuse legitimate authority and power. Individuals who are in leadership positions often have control over things such as the allocation of resources and major decision making, which may be used as tools to victimise others. Those who are dependent on the resources and decision making power of the leader might allow the bullying to occur, in order to ensure

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a favourable allocation of resources and decision making by the supervisor (Kalamdien, 2013).

Although those in leadership positions are frequently reported as the perpetrator of bullying, the perpetrator could also be peers or subordinates. Hoel et al. (2001) concluded that 36.7% of the victims reported a peer as the perpetrator, whilst 6.7% reported that the bully was a subordinate. Glaso et al. (2011) found that 61.2% of the research participants reported to be victimised by peers. Ortega et al. (2011) found that 72.4% of the victims identified a peer as the bully and 16.2%, a superior. The results of the present research study reveal that colleagues were reported more frequently (48%) as the perpetrator, followed by supervisors or managers (46%), customers or clients (28%), and subordinates (6%). The total of the percentages are above 100% since the participants were allowed to select more than one source of bullying in the workplace as the perpetrator.

Even though research indicate that those in leadership positions are the most frequent source of workplace bully, the results also reveal that none of the status groups are immune to being the perpetrator of workplace bullying. The results of the present study indicate that the perpetrators can also be a colleague, subordinate or client.

4.6 Responses to Episodes of Workplace Bullying

When asked whether workplace bullying is being addressed in the workplace (see Figure 6), 54% of the sample group verified that bullying is “never” being addressed in their workplace, and 36% indicated that workplace bullying is being addressed “now and then”. Another 9% verified that it is “always” being addressed. The results of the present study reveal that most of the participants deem incidents of workplace bullying as being left unaddressed in the Private Hospitals.

There could be a number of reasons for this conclusion. Firstly, it might be that incidence of workplace bullying is rarely reported within the organisation (Kalamdien, 2013) due to a sense of embarrassment by employees if they report incidents of workplace bullying (Ostvik & Rudmin, 2001), and due to fear of further victimisation and intimidation (Hutchinson & Hurley, 2012). Victims might not report victimisation because of the power of

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the perpetrator or the organisation. Many target accounts reveal fear of repercussion, retaliation, fear of being labelled as a nuisance or a snitch, fear of looking foolish or fear of losing one's job (Hodgins et al., 2018; Mannix McNamara et al., 2017).Secondly, managers or Human Resource Managers might see the targets account of the situation as just interpersonal conflict (Jenkins, 2011; Klein & Martin, 2011), personality difficulties (Vickers, 2012), or the victim's defensive reaction to managers questioning their performance (Harrington et al., 2015). Employers might misinterpret bullying as management just doing their jobs, and the victims is simply resisting being managed. Thirdly, sometimes the perpetrator is being protected due to their performance at work (Hodgins et al., 2020). In some cases the bully is found guilty after intense investigation but is not reprimanded or does not receive any form of punishment (Catley et al., 2016). In this way, management's response to bullying tactics can lead to employees being silent (MacMahon et al., 2018). Fourthly, the responsibility of dealing with the bullying allegation might be passed back and forth between management and HR, or between HR and the target. Management might not see managing how bullying is resolved as their responsibility but HRs, and HR might see their role as merely providing the policy or directing managers to the policy and that managers were responsible for implementing it. Managers might not be willing to deal with having the difficult conversation in hope of it resolving itself (Hodgins et al., 2018). The reliability and validity of the research instruments utilised in the present study will be discussed.

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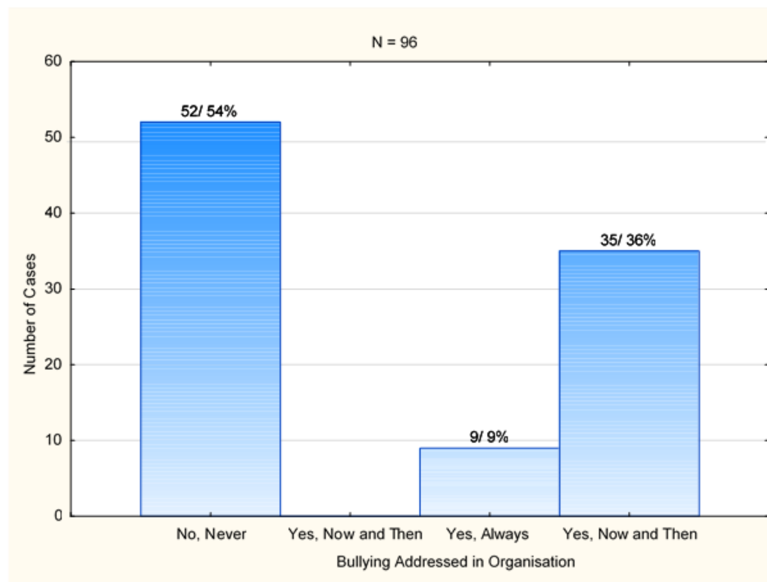
Figure 6

Bullying Address or not Addressed in the Organisation



4.7 Reliability Analysis

Item analysis was conducted to assess the internal consistency amongst the subscales and the items of the different scales which was utilised to measure the latent variables. There are various reasons for conducting an item analysis. Firstly, item analysis allows the researcher to scrutinize the homogeneity of the sub-scales. Secondly, item analysis indicates the reliability of the indicators of each latent variable. Thirdly, it allows the researcher to identify poor items that do not contribute to the internal consistency of the measure. Fourthly, item analysis allows for the screening of items before including them in the composite item parcels that represents the latent variables (Nzimande, 2020).

Poor items are identified by checking the Cronbach's Alpha, and the inter-item correlation to assess if certain items should be removed. The closer the Cronbach's Alpha is to 1, the higher the inter-item correlation. The Cronbach's Alpha indicates the reliability of the scale (Nzimande, 2020). According to various researchers, the Cronbach's Alpha coefficient should exceed .70 for an item to be deemed as reliable (Kerlinger & Lee, 2000). Some researchers view a Cronbach's Alpha of .60 as acceptable (Hair et al., 2014). Additionally, it

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was also decided that a Cronbach's Alpha value of .60 is acceptable. In this study, a Cronbach's Alpha coefficient of .60 or higher was regarded as satisfactory.

Item correlations are the subtype of internal consistency reliability. Item correlations evaluate the consistency between items. Values between 1.00 and .50 are considered excellent whereas, values between .50 and .00 indicates acceptable reliability (Tabachnick & Fidell, 2013). The corrected item-total correlation was also examined, which indicates the degree to which each item correlates with the total score. Values lower than .20 may indicate variance in the items (Pallant, 2007). A summary of the items measuring each sub-dimension of the constructs can be found in Table 1. The item analysis summary includes the mean, standard deviation, Cronbach's Alpha, average inter-item correlation and alpha if deleted of all the scales and subscales.

Table 1

Reliability and Item Analysis of the Scales and Subscales

Latent Variables	Subscales	Number of items	Mean	SD	α	Inter-Item Correlation	Alpha if deleted
Negative Acts Questionnaire		22	4.91	1.86	.88	.71	
	Work-related bullying	7	12.40	5.32	.81	.79	.81
	Person-related bullying	12	19.96	8.21	.88	.82	.78
	Physical intimidating bullying	3	4.41	1.89	.59	.70	.88
Workplace Harassment Scale		24	4.27	5.10	.93	.72	
	Social Isolation	3	2.35	3.06	.76	.80	.92
	Indirect Social Manipulation	5	2.98	4.59	.88	.77	.93
	Verbal Aggression	6	4.39	4.97	.83	.88	.91
	Rational Appearing Aggression	4	3.35	4.21	.87	.84	.92
	Nonverbal Aggression	4	3.00	4.10	.85	.88	.91
	Degrading Behaviours	2	1.13	2.05	.86	.67	.94

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Table 1 (continue)

Reliability and Item Analysis of the Subscales

Latent Variables	Subscales	Number of items	Mean	SD	α	Inter-Item Correlation	Alpha if deleted
Depression Anxiety Stress Scale		21	2.91	2.31	.92	.80	
	Depression	7	6.60	5.93	.90	.81	.91
	Anxiety	7	5.99	5.53	.89	.85	.88
	Stress	7	7.75	5.93	.90	.87	.86
Impact of Events Scale		22	3.41	3.06	.92	.90	
	Intrusion	8	9.02	8.68	.94	.94	.92
	Hyperarousal	6	6.62	6.12	.87	.93	.93
	Avoidance	8	9.41	8.55	.92	.88	.97
Sense of Coherence		13	13.29	3.02	.79	.55	
	Meaningfulness	4	19.78	4.61	.45	.64	.70
	Comprehensibility	5	21.07	6.19	.59	.61	.73
	Manageability	4	16.52	4.88	.51	.70	.70

Reliability analysis was conducted between the scales and the subscales utilised during this research study. The Cronbach alpha of each of the scales is higher than the .70 reliability limit which means that the internal consistency of each of the scales is high. However, not all subscales have Cronbach's Alphas equal or higher than .70. The physical intimidating bullying subscale of the NAQ-R achieved a low Cronbach alpha of .59. The meaningfulness subscale of the SOC-13 fell within the unacceptable range (.45). The comprehensibility and manageability subscales of the SOC-13 achieved low Cronbach alpha's of .59 and .51 respectively. The remainder of the subscales showed internal consistency as the Cronbach's alphas ranged from .76 to .94

The inter-item correlations of the various scales and subscales indicated that the item correlations ranged between .61 and .94 which indicates excellent reliability. It is evident that all of the items consistently measured the same construct.

The NAQ-R contained 22 items and obtained the reliability coefficient Cronbach's alpha of .88, which indicates high internal consistency reliability. The internal consistency

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was supported by an average inter-item correlation of .71. The individual inter-item correlation ranged from .70 to .82. These results show that the NAQ-R measures what it is supposed to measure. The Cronbach's Alphas of the work-related bullying and person-related bullying subscales were satisfactory (work-related bullying = .81 and person-related bullying is .88). The Cronbach's Alpha of the physical intimidating bullying subscale was slightly below .60 (α = .59), but since it was very close to .60, physical intimidating bullying can critically be assumed to be satisfactory reliable as well. These results show that the NAQ-R measures what is supposed to measure. The removal of subscales will not lead to a higher Cronbach alpha hence none of the items was removed.

The WHS contained 24 items and obtained a Cronbach alpha of .93, which is significantly high. The internal consistency was supported by an average inter-item correlation of .72 which is higher than the acceptable limit. The individual inter-item correlation ranged from .67 to .88. The Cronbach's Alphas of all the subscales were also satisfactory. These results show that the WHS measures what it is supposed to measure. Furthermore, the results also suggested that the Cronbach alpha of the WHS scale will improve slightly to .94 upon the removal of the degrading behaviour subscale. The researcher retained this subscale since the Cronbach Alpha of .93 is high and acceptable in terms of reliability.

The DASS-21 contained 21 items and obtained a Cronbach alpha of .92, which indicates high internal consistency reliability. The individual inter-item correlation ranged from .81 to .87. The Cronbach's Alphas of the subscales were also significantly high as all three were above .60 (depression = .90, anxiety = .89; stress = .90). These results show that the DASS-21 measures what it is supposed to measure. He removal of subscales will not lead to a higher Cronbach alpha hence the removal of subscales were not considered.

The IES-R contained 22 items and obtained a reliability coefficient Cronbach's alpha of .92, which is excellent. The internal consistency was supported by an average inter-item correlation of .90 which is excellent reliability. The individual inter-item correlation ranged from .88 to .94. The Cronbach's Alphas of the subscales were also acceptable as all three

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were above .60 (intrusion = .94, hyperarousal = .87, avoidance = .92). These results reveal that the IES-R measures what it is supposed to measure. If the hyperarousal subscale or the avoidance subscale is removed the Cronbach alpha would be slightly higher (.93 and .97 respectively). The researcher retained these subscales since the Cronbach alpha of .92 is highly acceptable in terms of reliability.

The SOC-13 contains 13 items and obtained a Cronbach alpha of .79, which indicates excellent internal consistency reliability. The internal consistency was supported by an average inter-item correlation of .55 which was satisfactory, indicating that the subscales correlated with one another when measuring the same construct. The Cronbach Alpha of the comprehensibility subscale was slightly below .60 (α = .59), but since it was very close to .60, comprehensibility can critically be assumed to be satisfactory reliable. The individual inter-item correlation of this subscale was .61 indicating excellent reliability. On the other hand, the Cronbach's Alphas of the meaningfulness and manageability subscales was not satisfactory, with a score of .45 and .51 respectively. However, the individual inter-item correlation of these subscales was above .50 (meaningfulness = .64; manageability = .70), indicating that the subscales correlated with one another when measuring the same construct. The removal of subscales will not be considered since the removal of subscales will not lead to a higher Cronbach alpha.

In summary, the Cronbach alpha of the subscales of the instruments is high except for the Sense of Coherence Scale however, the individual inter-item correlation of the SOC-13 subscales was above .50 indicating excellent reliability. Even if the items were to be removed from the SOC-13 the Cronbach alpha would still be low. Further investigation into this is recommended. The Cronbach alpha of all the instruments is significantly high including that of the Sense of Coherence Scale, for this reason, removal of subscales or items will not be considered in this research study.

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4.7.1 Item Analysis of the Negative Acts Questionnaire-Revised Subscales

The three NAQ-R subscales (work-related bullying, person-related bullying, and physical intimidating bullying) item analysis results are found in Table 2 to Table 4.

The work-related bullying subscale obtained a good Cronbach Alpha score of .81 indicating a high level of internal consistency (Table 1). The corrected item-total correlation values range from .43 to .63 (Table 2). It is also revealed that if any questions or items were removed from the subscale it would result in a lower Cronbach's alpha hence, we will not consider removing any of these items.

Table 2

Item Statistics of the Work-related Bullying Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 1	.55	.78
Item 3	.45	.79
Item 14	.56	.78
Item 16	.63	.77
Item 18	.63	.76
Item 19	.43	.80
Item 21	.55	.78

The person-related bullying subscale obtained a high Cronbach Alpha score of .88 (Table 1) which indicates that the internal consistency of this scale is favourable. The individual inter-item correlation ranges from .47 to .75 (Table 3). The item statistics for this subscale revealed that the item-total correlation values were all in a reasonable range of each other, with item 20 holding the lowest item-total correlation of .47 and item 11 holding the highest item-total correlation value of .75. Furthermore, based on the item statistics the removal of any items will not improve the Cronbach Alpha of the subscale.

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Table 3

Item Statistics of the Person-Related Bullying Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 2	.60	.87
Item 4	.58	.88
Item 5	.53	.88
Item 6	.60	.88
Item 7	.64	.87
Item 10	.50	.88
Item 11	.75	.87
Item 12	.68	.87
Item 13	.53	.88
Item 15	.49	.88
Item 17	.68	.87
Item 20	.47	.88

The physically intimidating bullying subscale achieved a low Cronbach alpha of .59 (Table 1). The item-total correlation ranges from .25 to .53. The removal of item 22 will improve the alpha value to .67 however since the Cronbach Alpha score is close to .60 it was indicated that the items should be retained for further analysis (Table 4).

Table 4

Item Statistics of Physically Intimidating Bullying Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 8	.51	.32
Item 9	.53	.26
Item 22	.25	.67

4.7.2 Item Analysis of the Work Harassment Scale Subscales

The Work Harassment Scale was used to assess the level of aggression amongst employees. This scale is normally also utilised to measure Workplace Bullying however, it will not be utilised to assess the latent variables found in the structural model.

The social isolation subscale obtained a good Cronbach Alpha score of .76 indicating a high level of internal consistency (Table 1). The corrected item-total correlation values

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range from .56 to .63 (Table 5). If any questions or items were removed from the subscale it would result in a lower Cronbach's Alpha. Removal of any of the items was not considered.

Table 5

Item Statistics for Social Isolation Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 1	.61	.68
Item 7	.63	.65
Item 16	.56	.72

The indirect social manipulation subscale Cronbach Alpha is .88 which is high (Table 5). The inter-item correlation ranges from .60 to .81. The scale's Cronbach's alpha value would only slightly improve if item 24 (.89) were to be removed from the subscale. To retain the integrity of the subscale item 24 will be retained in the item pool (Table 6).

Table 6

Item Statistics of Indirect Social Manipulation Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 2	.68	.87
Item 6	.81	.84
Item 8	.78	.85
Item 20	.76	.85
Item 24	.60	.89

The verbal aggression subscale's Cronbach Alpha is .83 which is high (Table 1). The inter-item correlation ranges from .53 to .68. It is revealed that if any of the items were to be removed from the subscale the Cronbach Alpha will be slightly lower. Removal of any of the items will not be considered (Table 7).

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Table 7

Item Statistics of Verbal Aggression Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 3	.59	.81
Item 4	.53	.82
Item 9	.64	.81
Item 11	.68	.79
Item 17	.62	.80
Item 21	.64	.80

The rational appearing aggression subscale Cronbach Alpha is .87 which is high (Table 1). The inter-item correlation ranges from .68 to .78. If any items were to be removed the Cronbach Alpha of the subscale would be lower hence all the items were retained for further analysis (Table 8).

Table 8

Item Statistics of Rational Appearing Aggression Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 5	.69	.84
Item 14	.68	.84
Item 22	.72	.83
Item 23	.78	.80

The nonverbal aggression subscales' Cronbach Alpha is .85 which is high (Table 1). The inter-item correlation ranges from .66 to .75. If any of the items are removed the Cronbach Alpha of this subscale will be lower hence the removal of any items will not be considered (Table 9).

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Table 9

Item Statistics of Nonverbal Aggression Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 10	.67	.81
Item 12	.75	.78
Item 13	.66	.82
Item 15	.67	.81

The degrading behaviours subscales' Cronbach Alpha is .86 which is high (Table 1). The inter-item correlation of each item is .78 (Table 10). Since the Cronbach Alpha of the subscale is acceptable, the removal of items was not considered.

Table 10

Item Statistics of Degrading Behaviours Subscale

Variable	Item-Total Correlation
Item 18	.78
Item 19	.78

4.7.3 Item Analysis of the Depression Anxiety Stress Scale Subscales

The Depression, Anxiety Stress Scale (DASS-21) was used to measure depression and stress in the structural model. Although anxiety did not form part of the structural model, the results of the item analysis will also be provided.

The depression subscale obtained a significantly high Cronbach Alpha score of .90 indicating a high level of internal consistency (Table 1). The corrected item-total correlation values range from .63 to .81. If any questions or items were removed from the subscale it will not result in a higher Cronbach's Alpha (Table 11). Removal of any of the items was not considered.

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Table 11

Item Statistics of the Depression Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 3	.69	.89
Item 5	.74	.89
Item 10	.75	.89
Item 13	.72	.89
Item 16	.67	.90
Item 17	.81	.88
Item 21	.63	.90

The anxiety subscale obtained a good Cronbach Alpha score of .89 indicating a high level of internal consistency (Table 1). The corrected item-total correlation values range from .58 to .77 (Table 12). If any questions or items were removed from the subscale it would result in the same or a lower Cronbach’s alpha. Removal of any of the items was not considered.

Table 12

Item Statistics of the Anxiety Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 2	.69	.88
Item 4	.58	.89
Item 7	.63	.89
Item 9	.77	.87
Item 15	.70	.88
Item 19	.75	.87
Item 20	.74	.87

The stress subscale obtained a significantly high Cronbach Alpha of .90 (Table 1). The corrected inter-item correlation ranges from .62 to .80 (Table 13). If any of the items were to be removed from the subscale it would not result in a higher Cronbach Alpha, for this reason, the removal of any items was not considered.

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Table 13

Item Statistics of the Stress Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 1	.62	.90
Item 6	.66	.89
Item 8	.73	.88
Item 11	.80	.87
Item 12	.80	.87
Item 14	.67	.89
Item 18	.66	.89

4.7.4 Item Analysis of the Impact of Event Scale Subscales

The Impact of Event Scale was used to measure Post-traumatic stress disorder in the structural model. The item analysis of the Impact of Events scale is found in Table 14, 15, and 16.

The Cronbach Alpha of the intrusion subscale is significantly high (.94) (Table 1). The corrected inter-item correlation ranges from .62 to .87 (Table 14). The removal of items will not lead to a higher Cronbach Alpha hence none of the items will be removed.

Table 14

Item Statistics of the Intrusion Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 1	.87	.92
Item 2	.67	.94
Item 3	.86	.92
Item 6	.83	.93
Item 9	.83	.93
Item 14	.81	.93
Item 16	.77	.93
Item 20	.62	.94

The Cronbach Alpha of the hyperarousal subscale is significantly high (.87) (Table 1). The corrected inter-item total correlation ranges from .64 to .71 (Table 15). If any of the items or questions were removed the Cronbach Alpha would be lower. The removal of items was not considered.

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Table 15

Item Statistics of the Hyperarousal Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 4	.65	.85
Item 10	.64	.85
Item 15	.66	.85
Item 18	.71	.84
Item 19	.66	.85
Item 21	.69	.84

The Cronbach Alpha of the avoidance subscale is high (.92) (Table 1). The corrected inter-item correlation ranges from .67 to .82 (Table 16). The removal of any items will not result in a higher Cronbach Alpha, for this reason, all items were retained.

Table 16

Item Statistics of the Avoidance Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 5	.82	.91
Item 7	.72	.92
Item 8	.77	.91
Item 11	.74	.91
Item 12	.80	.91
Item 13	.75	.91
Item 17	.70	.92
Item 22	.67	.92

4.7.5 Item Analysis of the Sense of Coherence Scale Subscales

The Sense of Coherence scale was used to measure Sense of Coherence in the structural model. The item analysis of the Sense of Coherence scale is found in Table 17 to 19.

The Cronbach Alpha of the meaningfulness subscale is low (.45) (Table 1). The corrected inter-item correlation ranges from .12 to .36 (Table 17). If any of the items or questions were removed the Cronbach Alpha would still be low. The removal of items was not considered.

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Table 17

Item Statistics of the Meaningfulness Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 1 (reversed)	.29	.34
Item 4	.25	.38
Item 7 (reversed)	.12	.49
Item 12	.36	.27

The Cronbach Alpha of the comprehensibility subscale is low (.59) but will be accepted since it is close to .60 (Table 1). The item-total correlation ranges from .07 to .57. If any of the items or questions were removed the Cronbach Alpha would be lower except for the reverse scoring of item 2 (Table 18). The removal of items was not considered.

Table 18

Item Statistics of the Comprehensibility Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 2 (reversed)	.07	.68
Item 6	.28	.58
Item 8	.34	.55
Item 9	.56	.41
Item 11	.57	.42

The manageability subscale's Cronbach Alpha is .51 which is low (Table 1). If any of the items were to be removed the Cronbach Alpha would be lower (Table 19). The removal of items was not considered.

Table 19

Item Statistics of the Manageability Subscale

Variable	Item-Total Correlation	Alpha if deleted
Item 3 (reversed)	.25	.49
Item 5	.33	.42
Item 10 (reversed)	.36	.39
Item 13	.28	.46

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The Cronbach Alpha across all the subscales of the SOC-13 is low. Further investigation of this occurrence should be considered.

In summary, the Cronbach Alpha of the subscales of all the instruments is high except for the Sense of Coherence Scale. Even if the items were to be removed from the Sense of Coherence Scale the Cronbach Alpha would still be low. Further investigation into this is recommended. The Cronbach Alpha between the subscales of all the instruments is significantly high including that of the Sense of Coherence Scale, for this reason, removal of subscales or items will not be considered in this research study.

4.8 PLS Results without moderator: Validating the Measurement (Outer) Model

The outer model results without the moderator will be discussed and evaluated in the below sections.

4.8.1 Composite Reliability

The composite reliability score measures the reliability of the latent variable scales. A reliability coefficient of .70 or higher is regarded as satisfactory (Hulland, 1999; Gu et al., 2019). Table 20 shows that the reliability scores of the latent variables were found to be >.70 and thus satisfactory.

Table 20

Composite Reliability Values

Variables	Composite reliability	95% lower	95% upper
Depression	.92	.90	.94
Post-traumatic stress disorder	.97	.96	.98
Sense of Coherence	.87	.79	.91
Stress	.92	.89	.94
Workplace bullying	.93	.89	.95

4.8.2 Average Variance Extracted (AVE)

In this section the Average Variance Extracted (AVE) will be reported. The AVE value measures the amount of variance in the items explained by the latent variables. An AVE

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value that is greater than .50, is an indication that the measurement questions better reflect the characteristics of each research variable in the model (Gu et al., 2019).

The AVE results of the instruments that were utilised in this research study are illustrated in Table 21. Based on the results it is evident that all the measurement instruments displayed acceptable convergent validity (i.e. acceptable AVE values exceeding .50).

Table 21

Average Variance Extracted (AVE) Results of the Instruments

Variables	AVE	95% lower	95% upper
Depression	.64	.56	.71
Post-traumatic stress disorder	.93	.90	.95
Sense of Coherence	.69	.56	.76
Stress	.63	.54	.69
Workplace bullying	.81	.73	.87

4.8.3 Discriminant Validity

Discriminant validity must be established to check whether the latent variables discriminate from each other by comparing them in a pairwise manner. The Heterotrait-monotrait ratio (HTMT) was utilized to assess discriminant validity (Henseler et al., 2015), and it is evident that this method is more reliable than other methods when it is detecting the lack of discriminant validity. According to Hanseler et al. (2015, p.121) “if the indicators of two constructs ξi and ξj exhibit an HTMT value that is smaller than one, the true correlation between the two constructs is most likely different from one, and they should differ”. A HTMT value that is less than 1 indicates that the true correlations with the constructs differ. There is a lack of discriminant validity if the HTMT value exceeds this threshold (Alarcón & Sánchez, 2015).

The discriminant validity results calculated based on the Heterotrait-Monotrait ratio are present in Table 22. The results revealed that all the measurement instruments met the criteria of discriminant validity.

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Table 22

Discriminant Validity (Heterotrait-Monotrait Ratio)

Variable 1	Variable 2	Ratio	95% lower	95% upper	Discriminate
PTSD	Depression	0.74	0.57	0.85	Yes
SOC	Depression	0.68	0.52	0.81	Yes
SOC	PTSD	0.48	0.30	0.63	Yes
Stress	Depression	0.87	0.78	0.94	Yes
Stress	PTSD	0.75	0.59	0.87	Yes
Stress	SOC	0.54	0.35	0.69	Yes
Workplace bullying	Depression	0.53	0.36	0.70	Yes
Workplace bullying	PTSD	0.54	0.39	0.68	Yes
Workplace bullying	SOC	0.34	0.15	0.52	Yes
Workplace bullying	Stress	0.45	0.26	0.63	Yes

Note. PTSD refers to Post-traumatic stress disorder, and SOC refers to Sense of Coherence.

4.8.4 Evaluating the Outer Loadings

This section will analyse the outer loadings at either subscale or item level. The PLS bootstrap analysis was utilised to determine the significance of the item or subscale loadings of the outer model. The factor loadings were evaluated by analysing the 95% confidence interval. The factor loadings would be classified as statistically significant if zero did not fall within this range. On the contrary, the factor loading will be classified as statistically insignificant if the results revealed the contrary (Langenhoven, 2014). The outer loadings should preferably be 0.70 or more.

The outer loading results of the stress construct and its related subscales are presented in Table 23.

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Table 23

PLS-SEM Outer Loadings of the Stress: Item Level

Scale	Subscales/ Items	Outer loading	95% lower	95% upper	Significance from CI	P-value from T-test
DASS (Stress)	Item 1	0.70	0.51	0.82	Yes	<0.001
	Item 6	0.73	0.59	0.83	Yes	<0.001
	Item 8	0.80	0.65	0.88	Yes	<0.001
	Item 11	0.87	0.80	0.91	Yes	<0.001
	Item 12	0.87	0.78	0.92	Yes	<0.001
	Item 14	0.78	0.66	0.86	Yes	<0.001
	Item 18	0.78	0.64	0.87	Yes	<0.001

As shown in Table 23 all the items' outer loadings were significant with the values of the outer loading ranging from 0.70 (item 1) to 0.87 (item 11 and 12).

Table 24

PLS-SEM Outer loadings of Depression: Item Level

Scale	Subscales/ Items	Outer loading	95% lower	95% upper	Significance from CI	P-value from T-test
DASS (Depression)	Item 3	0.78	0.67	0.86	Yes	<0.001
	Item 5	0.82	0.71	0.89	Yes	<0.001
	Item 10	0.82	0.73	0.89	Yes	<0.001
	Item 13	0.80	0.69	0.88	Yes	<0.001
	Item 16	0.76	0.65	0.85	Yes	<0.001
	Item 17	0.87	0.81	0.92	Yes	<0.001
	Item 21	0.72	0.54	0.84	Yes	<0.001

Note. DASS refers to the Depression Anxiety Stress Scale

Table 24 reveals the outer loading of the DASS items related to depression. It can be inferred from Table 38 that the outer loadings of all the items are significant with the outer loading ranging from 0.72 (item 21) to 0.87 (item 17).

The outer loading results of the post-traumatic stress disorder construct and its related subscales are presented in Table 25. For simplicity's sake and due to the relatively small sample, it was decided that subscales should be used as items for measuring the full scale.

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Table 25

PLS-SEM Outer Loadings of Post-traumatic Stress Disorder (PTSD): Subscale level

Scale	Subscales/ Items	Outer loading	95% lower	95% upper	Significance from CI	P-value from T-test
IES (PTSD)	Avoidance	0.95	0.92	0.97	Yes	<0.001
	Hyperarousal	0.97	0.94	0.98	Yes	<0.001
	Intrusion	0.98	0.96	0.98	Yes	<0.001

Note. IES refers to the Impact of Events Scale.

The outer loadings results of the IES and its respective subscales are illustrated in Table 25. All three subscales loaded significantly on the latent construct of Post-traumatic stress disorder. The outer loading subscales ranged from 0.95 (Avoidance) to 0.98 (Intrusion).

Table 26

PLS-SEM Outer Loadings of Workplace Bullying: Subscale Level

Scale	Subscales/Items	Outer loading	95% lower	95% upper	Significance from CI	P-value from T-test
NAQ-R (Workplace Bullying)	Person-related bullying	0.93	0.89	0.96	Yes	<0.001
	Physically intimidating bullying	0.84	0.73	0.91	Yes	<0.001
	Work-related bullying	0.92	0.87	0.95	Yes	<0.001

Note. The NAQ-R refers to the Negative Acts Questionnaire-Revised (NAQ-R)

Table 26 reveals the outer loading of the workplace bullying construct and its related subscales. It can be inferred from Table 26 that outer loading across all three subscales loaded significantly on the latent construct of workplace bullying. All the subscales achieved highly significant outer loading value scores which range from 0.84 (physically intimidating bullying) to 0.93 (person-related bullying).

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Table 27

PLS-SEM Outer Loadings of Sense of Coherence (SOC): Subscale Level

Scale	Subscales/Items	Outer loading	95% lower	95% upper	Significance from CI	P-value from T-test
SOC	Manageability	0.91	0.86	0.97	Yes	<0.001
	Meaningfulness	0.80	0.58	0.89	Yes	<0.001
	Comprehensibility	0.78	0.54	0.88	Yes	<0.001

Table 27 reveals the outer loading of the Sense of Coherence construct and its related subscales. It can be inferred from Table 37 that outer loading across all three subscales of Sense of Coherence is loaded significantly on the latent construct of Sense of Coherence. All the subscales achieved highly significant outer loading value scores which range from 0.80 (Meaningfulness) to 0.91 (Manageability).

4.9 PLS Results: Validating the Structural (Inner) Model

The structural model was evaluated to assess the quality of the proposed relationships between the latent variables. Therefore, the model fit was assessed. The PLS structural model analysis was implemented to determine the extent to which the variables are related to one another.

The structural model analysis, also known as the inner model, consisted out of evaluating the R-squares, testing for multicollinearity, and the evaluating and interpreting of the path coefficients effects.

4.9.1 Evaluation and Interpretation of the R Square Values

The R square value determines the amount of variance in the endogenous variables that can be explained by the exogenous variables in the model (Langenhoven, 2014).

Table 28

Structural/inner Model R Square Values

	R Square	R Square Adjusted
Depression	.50	.49
Post-traumatic stress disorder	.35	.34
Stress	.17	.16

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The constructs in the model and their respective R square values are presented in Table 28. The R^2 values ranges from .17 (stress) to .50 (depression). The depression score was .50 and the post-traumatic stress disorder score was .35. This means that 50% of the variance in depression can be explained by the effect of exogenous variables and that 35% of the variance in Post-traumatic Stress can be explained by the effect of exogenous variables. The lowest R^2 value was achieved by stress which accounted for 17% of the reported variance in the model. The low score is an indication that there is a probability that there are other variables that may have had an impact on the endogenous variables that were not assessed during this research study (Langenhoven, 2015).

4.9.2 Evaluation and Interpretation of Multicollinearity

When regression analysis is conducted it is assumed that the predictors are uncorrelated. Multicollinearity is a statistical phenomenon in which two or more predictors in a regression model are highly correlated (Daoud, 2017). Variance Inflation Factor (VIF) was used to ascertain whether multicollinearity is present. The VIF assesses whether predictors are correlated to each other, and reveals the quantity of correlation between them during the analysis.

A VIF of 5 indicates further investigation is required, and a VIF of 10 indicates high multicollinearity. A VIF that is closer to 1 indicates that the model is much stronger. This means that the predictors are not impacted by correlation with other predictors (Hair et al., 2017; Henseler et al., 2009).

Since all the VIF scores in the study were close to 1, it was determined that no problems of multicollinearity exist in the model as indicated in all the scores for VIF in the study were within limits. Therefore, it was determined that no problems of multicollinearity exist in the models as shown in Table 29.

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Table 29

Variance Inflation Factors (VIF)

	Depression	PTSD	Stress
Depression			
PTSD	1.34		
SOC		1.12	
Stress			
Workplace bullying	1.34	1.12	1.00

Note. PTSD refers to post-traumatic stress disorder, and SOC refers to Sense of Coherence

4.9.3 Evaluation and interpretation of Path Coefficients

It is crucial to bear in mind that the purpose of PLS path modelling is to facilitate prediction (Henseler et al., 2009). The path coefficients were assessed to establish the significance and strength of the hypothesised relationships or paths in the structural model (Langenhoven, 2015). The bootstrapping method was utilised to determine the significance of the relationships between variables. This method entails the estimation of the 95% confidence interval and the p-value to test the null hypothesis (Boos, 2003). The bootstrapping method indicates that when zero falls in the 95% confidence interval, the corresponding coefficient will not be seen as statistically significant. On the other hand, the corresponding coefficient would be deemed as statistically significant if zero did not fall within the 95% confidence interval (Nzimande, 2020).

The 5 hypothesised paths found in Table 40 were tested through the PLS analysis. The significance of the hypothesised paths is depicted in Table 30. It can be noted that all the paths were found to be statistically significant.

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Table 30

Path Coefficients Without Moderator

	Path Coefficients	95% lower	95% upper	Significant from CI	p-value from t-test
PTSD -> Depression	0.61	0.41	.77	Yes	<0.001
SOC ->PTSD	-0.33	-0.47	-.20	Yes	<0.001
Workplace bullying -> Depression	0.17	0.01	.36	Yes	0.051
Workplace bullying -> PTSD	0.39	0.25	.55	Yes	<0.001
Workplace bullying -> Stress	0.41	0.29	.60	Yes	<0.001

Note. PTSD refers to post-traumatic stress disorder and SOC refers to Sense of Coherence.

Based on the content of Table 30 all the paths were found to be statistically significant. Figure 7 illustrates the Structural Equation Model which excludes the moderator.

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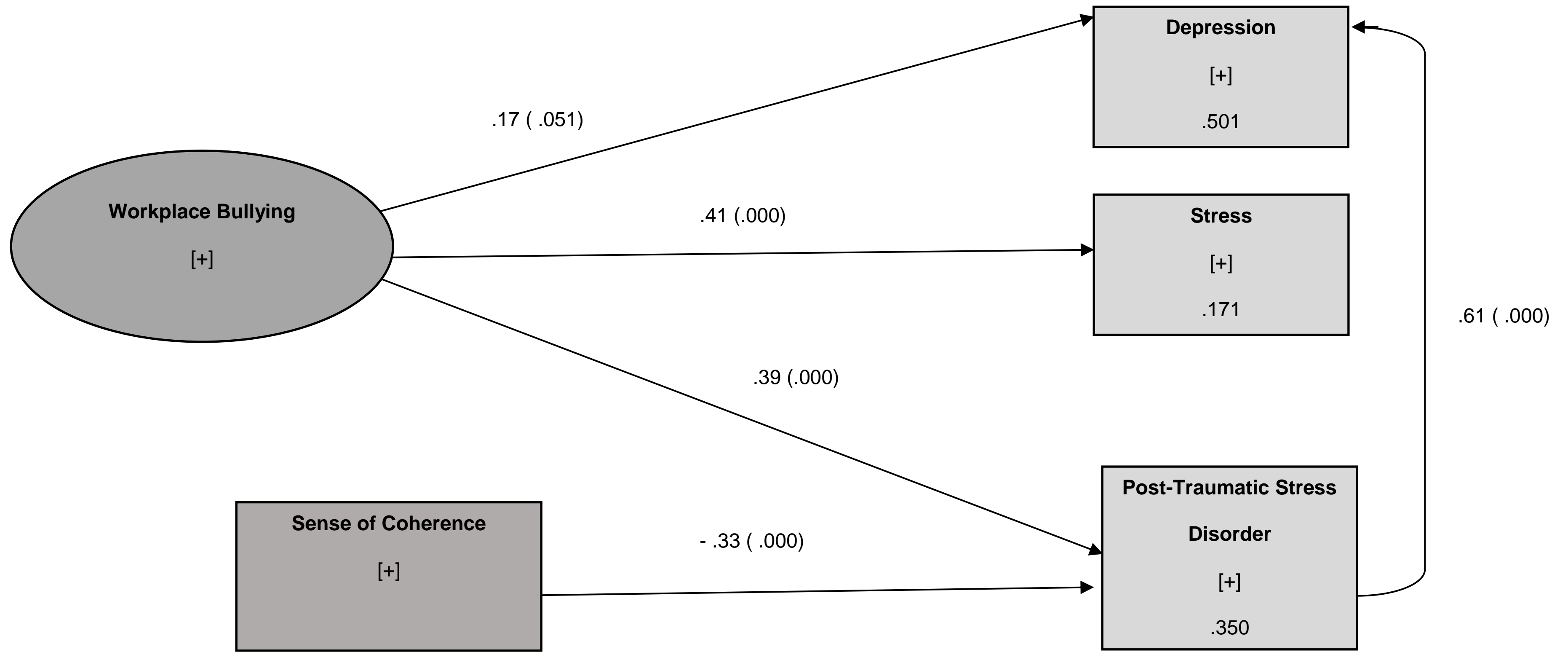
Figure 7

The Structural Equation Model which Excludes the Moderator



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4.10 PLS Results: Validating the Measurement (Outer) Model with Moderator

The inner model results with the moderator will be discussed and evaluated in the following sections.

4.10.1 R Square Values

The constructs in the model and their respective R square values are presented in Table 31.

Table 31

Structural/Inner Model R Square Values with Moderator Included

	R Square	R Square Adjusted
Depression	.50	.49
Post-traumatic stress disorder	.35	.33
Stress	.17	.16

The R^2 values ranges from .17 (stress) to .50 (depression). The lowest R^2 value was achieved by Stress which accounted for 17% of the reported variance in the model. Post-traumatic stress disorder retained a R^2 value of .35 which accounted for 35% of the reported variance in the model. Depression retained the highest R^2 value of .50 which accounted for 50% of the reported variance in the model.

4.10.2 Multicollinearity

Table 32 indicates the Variance Inflation Factor (VIF) scores. Since the scores are within limits, it is determined that no problems of multicollinearity exist in the model even though the moderator is present.

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Table 32

Variance Inflation Factors (VIF)

	Depression	PTSD	Stress
Depression			
PTSD	1.34		
SOC		1.20	
Stress			
Workplace bully*SOC		1.10	
Workplace bullying	1.34	1.18	1.00

Note. PTSD refers to post-traumatic stress disorder, and SOC refers to Sense of Coherence.

4.10.3 Path Coefficients with Moderator

The 6 hypothesised paths found in Table 33 were tested through the PLS analysis, and the significance of the hypothesised paths are illustrated in the Table. It can be noted that all the paths were found to be statistically significant except for the interaction path which indicates a non-significant moderating effect.

Table 33

Path Coefficients With Moderator

	Path Coefficients	95% lower	95% upper	Significant from CI	p-value from t-test
PTSD -> Depression	0.61	0.40	0.76	Yes	<0.001
SOC ->PTSD	-0.33	-0.47	-0.18	Yes	<0.001
Workplace bullying*SOC-> PTSD	0.02	-0.17	0.20	No	.867
Workplace bullying -> Depression	0.17	0.02	0.34	Yes	.046
Workplace bullying -> PTSD	0.40	0.26	0.57	Yes	<0.001
Workplace bullying -> Stress	0.41	0.28	0.58	Yes	<0.001

Note. PTSD refers to post-traumatic stress disorder, and SOC refers to Sense of Coherence.

Table 33 indicates that 5 of the 6 paths were found to be statistically significant. Figure 8 illustrates the Structural Equation Model which includes the moderator.

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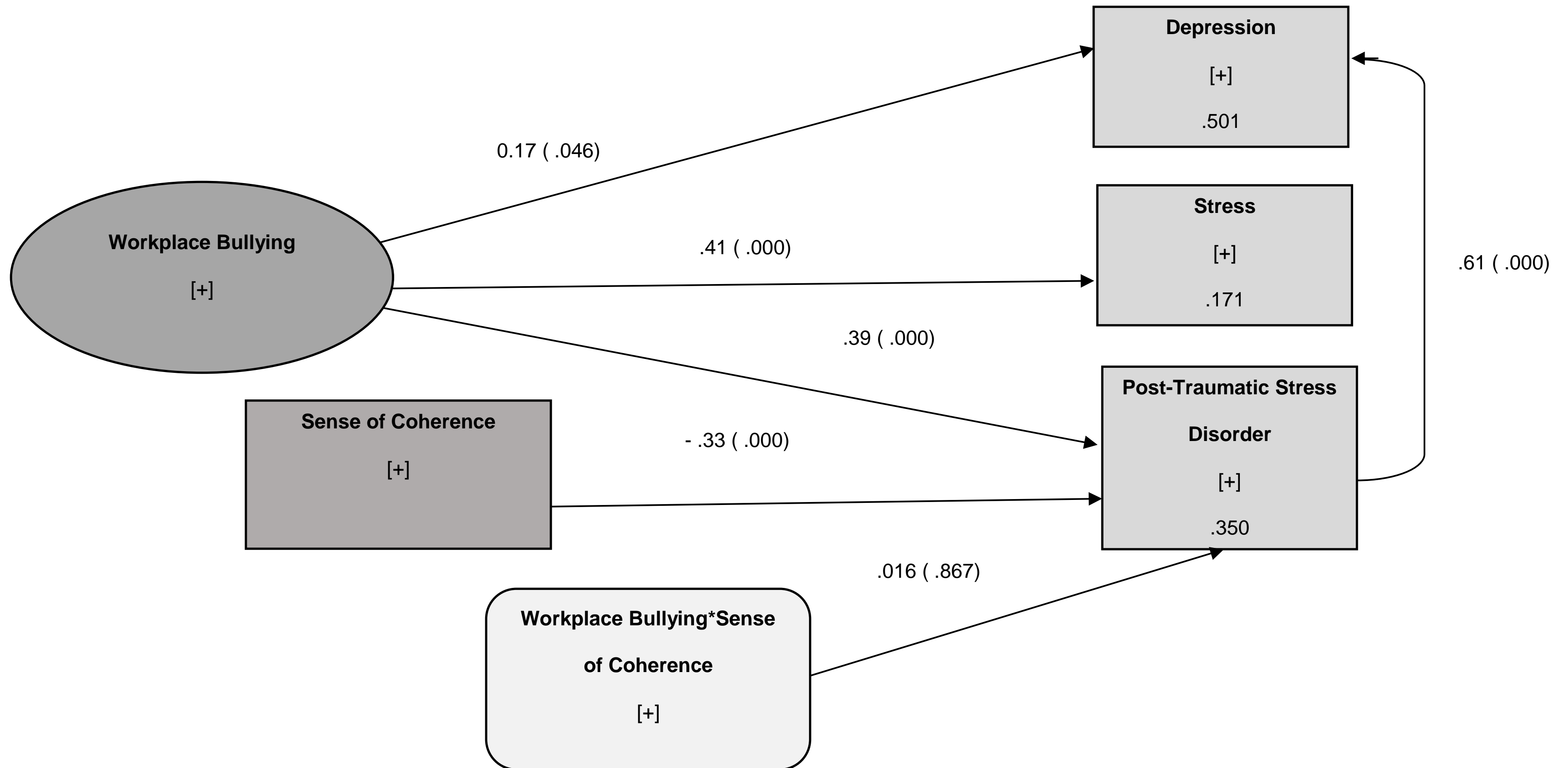
Figure 8

Structural Equation Model which Includes the Moderator



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4.10.4 Interpreting the Proposed Hypotheses

The results of all the path coefficients are presented in the following paragraphs.

Hypothesis 1: A significant positive relationship exists between *exposure to workplace bullying* and *depression.*

In the proposed Workplace Bullying structural model, it is hypothesised that workplace bullying positively influences depression. This means that the higher the exposure of nurses to workplace bullying the higher the likelihood that they will display depression symptoms. The hypothesised relationship between workplace bullying and depression was established by the research study. These findings corroborate previous research studies (Niedhammer et al., 2006; Kivimäki et al., 2003; Vartia, 2003) which revealed that the longer the exposure to bullying, the greater the risk of depression. The PLS path coefficient was 0.17, with zero not falling within the 95% confidence interval. This means that exposure to workplace bullying positively influences depression. This finding supports the hypothesis that exposure to workplace bullying influences depression.

Hypothesis 2: A significant positive relationship exists between *exposure to workplace bullying* and *stress.*

In the proposed Workplace Bullying structural model, it is hypothesised that workplace bullying positively influences stress. The longer the nurses are exposed to workplace bullying the higher the likelihood that they will undergo stress. The hypothesised relationship between workplace bullying and stress was established in this research study. The PLS path coefficient was 0.41, with zero not falling within the 95% confidence interval. This means that exposure to workplace bullying positively influences stress. As discussed in the literature review, this research finding was supported by various previous research studies (Agervold & Mikkelsen, 2004; Akar, 2013; Cullinan et al., 2019; Samnani & Singh, 2012; Visinskaite, 2015). Research in the nursing field also supports this finding (Yamada et al., 2018) indicating that nurses experience stress as a result of being victimised or observing working bullying. This finding supports the hypothesis that exposure to workplace bullying influences stress.

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Hypothesis 3: A significant positive relationship exists between *exposure to workplace bullying* and *post-traumatic stress disorder.*

The Workplace Bullying structural model hypothesised that there is a significant relationship between workplace bullying and post-traumatic stress disorder. That is, exposure to workplace bullying positively elevates the likelihood that nurses will undergo post-traumatic stress disorder. The PLS path coefficient was 0.40, with zero not falling within the 95% confidence interval. This means that the hypothesised relationship between exposure to workplace bullying and post-traumatic stress disorder was established as being significant. As indicated in the literature review, this research finding agrees with previous research findings (Einarsen et al., 1999; Laschinger & Nosko, 2015; Matthiesen & Einarsen, 2004; Tatar & Yüksel, 2019; Tehrani, 2004) which revealed that bullying may lead to Post Traumatic Stress Disorder which detrimentally affects the victims. Exposure to workplace bullying positively influences the likelihood that nurses will undergo post-traumatic stress disorder. Research also reveal that this finding is evident in the nursing field (Bambi et al., 2018; Laschinger et al., 2013; Sun et al., 2018). This find supports this hypothesis proposed in the Workplace Bullying structural model.

Hypothesis 4: A significant positive relationship exists between *post-traumatic stress disorder* and *depression.*

In the proposed Workplace Bullying structural model, it is hypothesised that post-traumatic stress disorder positively influences depression. The PLS path coefficient was 0.61, with zero not falling within the 95% confidence interval. This means that post-traumatic stress disorder positively influences the likelihood that nurses will display depression symptoms. This finding coincides with previous research findings (Gullander et al., 2014; Niedhammer et al., 2006; Tatar & Yüksel, 2019; Vartia, 2003) which revealed that the presence of PTSD may escalate the risk for the first onset of major depression, and supports this hypothesis. Previous research which focusses on nurses also corroborates this research finding (Fang et al., 2020; Karatza et al., 2016, 2017; Lu et al., 2019; Lei Shi et al., 2020; Trépanier et al., 2016). The association between bullying and depression is toxic since

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it can have long term impacts on nurses as well as individuals forming part of other professions. Individuals who suffer from depression caused by workplace bullying are more susceptible to struggling with how to deal with tough times. This is problematic since it can drive victims who suffer from depression to partake in dangerous coping mechanisms such as abusing drugs and alcohol (Seunagal, 2021).Research conducted by Roberts et al. 2020 that women with high PTSD and co-occuring probable depression are at increased risk of death in comparison to women without these disorders. More specifically, women with PTSD and depression have nearly fourfold greater risk of early death than women who did not have depression and did not experience a traumatic event (Roberts et al., 2020). Bearing this in mind, the researcher finds it of utmost importance that organisations put in place mechanisms that will prevent PTSD and depression from taking place. Organisations should also ensure that treatment for PTSD and depression is made available to nurses.

Hypothesis 5: It is hypothesized that *Sense of Coherence* moderates the effect of exposure to *workplace bullying* on *post-traumatic stress disorder*.

In the proposed Workplace Bullying structural model, it is hypothesised that Sense of Coherence moderates the effects of exposure to workplace bullying on post-traumatic stress disorder. It proposes that the targets of workplace bullying with a high Sense of Coherence may exhibit fewer symptoms of post-traumatic stress disorder in comparison to individuals with a weak Sense of Coherence. The PLS path coefficient was 0.02, with zero falling within the 95% confidence interval. The path coefficient of hypothesis 5 is statistically insignificant, and therefore no support was evident for hypothesise indicating that Sense of Coherence moderates the relationship between workplace bullying and post-traumatic stress disorder. This finding contradicts previous research findings (Antonovsky cited in Nielsen et al., 2008; Høgh & Mikkelsen, 2005) which confirms that Sense of Coherence moderates the effects of exposure to workplace bullying on post-traumatic stress disorder. The results may differ from previous research findings due to the small sample size of the present study. It was unintentionally discovered that post-traumatic stress disorder serves as a mediator between workplace bullying and depression. This means that Workplace Bullying affects depression

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mainly through its influence on post-traumatic stress disorder. A relatively small direct effect (0.169) was found from workplace bullying and depression, and the indirect path coefficients appeared to be larger which supports the mediating finding. Further research on this mediating relationship between the independent and dependent variables should be conducted.

Additionally, it was found that a significant negative relationship exists between Sense of Coherence and post-traumatic stress disorder. That is nurses with a high Sense of Coherence display lower symptom scores for post-traumatic stress disorder and vice versa. This finding was corroborated by previous research conducted by Schäfer et al., (2019) which revealed that Sense of Coherence is negatively correlated to PTSD symptoms. The PLS path coefficient was -0.33, with zero not falling within the 95% confidence interval.

4.11 Chapter Summary

The purpose of this chapter was to report on and discuss the results of this research study. The biographical demographics, and the prevalence of workplace bullying of nurses employed in the Western Cape was interpreted and discussed. The measurement model was validated by performing item analyses on each subscale of each instrument in order to determine the reliability of the measurement instrument's items. Thereafter, PLS-SEM was used to support the reliability of the different measurements and to confirm the fit of the measurement model. The structural model was analysed to determine the quality of the relationships between the latent variables. Lastly, the final scores and hypothesised relationships were interpreted.

Cronbach alpha of the subscales of the instruments is high except for the Sense of Coherence Scale however, the individual inter-item correlation of the SOC-13 subscales was above .50 indicating excellent reliability. Even if the items were to be removed from the SOC-13 the Cronbach alpha would still be low. Further investigation into this was recommended. The Cronbach alpha of all the instruments is significantly high including that of the Sense of Coherence Scale, for this reason, removal of subscales or items was not considered in this research study. Subscales and items were also not removed in order to

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interpret the results precisely as they were collected by the research questionnaires. The researcher wanted to refrain from influencing the results.

The results revealed that all the hypothesis findings were supported by the results of the study except the hypothesis referring to the interaction path which indicates a non-significant moderating effect. The hypothesis postulating that Sense of Coherence moderates the relationship between exposure to workplace bullying and post-traumatic stress disorder was found to be not significant. The results indicated that exposure to workplace bullying leads to depression, stress and post-traumatic stress disorder. Exposure to workplace bullying positively influences the likelihood that the nurses will experience depression, stress and post-traumatic stress disorder. It was also revealed that post-traumatic stress disorder can lead to depression, and that there is a significant negative relationship between Sense of Coherence and post-traumatic stress disorder. Furthermore, it was discovered that post-traumatic stress disorder is a mediator between exposure to workplace bullying and depression. Chapter 5 provides a general conclusion by assessing the achievement of the research objectives in addressing the aim of the research study. Furthermore, the limitations of the research study will be discussed, the practice implications for Human Resource Managers in hospitals will be provided, and recommendations for future research will be discussed.

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Chapter 5: Limitations, Recommendations and Conclusion

In this chapter a general conclusion will be provided by assessing the achievement of the research objectives in addressing the aim of the research study. Furthermore, the limitations of this research study will be discussed, practical implications for Human Resource Managers in hospitals will be provided, and recommendations in terms of prospective studies will be stipulated.

5.1 Limitations

The following limitations were discovered during the research study which should be taken into consideration:

Firstly, the population may not be representative since the sample of 97 participants was too small. A larger sample size would have increased the credibility of the results and study. The researcher aimed to use 200 participants however, only 97 participants partook in the research study. This could be due to the sensitive nature of this research topic as well as the busy schedule of the research participants. The possibility of generalising was therefore limited. The nature of the occupations of the nurses as well as that of the work environment was taken into consideration as a factor that would make it difficult for respondents to find the time to complete the questionnaires. The results of the study still yielded valuable data regarding the prevalence of workplace bullying and its consequences at the private hospitals in the Western Cape.

Secondly, the research study was undertaken in six (6) Private Hospitals in the Western Cape which forms part of one (1) Private Hospital group. The probability of generalising the research findings of the present study to other Private Hospitals in the Western Cape, and South Africa, are limited. One can possibly expect that workplace bullying behaviours are being implemented by bullies in Private Hospitals; however, one cannot conclude that similar frequencies reported in this research study would be found across all Private Hospitals in the Western Cape.

Thirdly, one of the limitations of this research study is linked to how the data was collected from the research participants. The data collection method was a self-report

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method of gathering data from research participants. Response bias is one of the disadvantages associated with self-report questionnaires. Response bias takes place if the respondents responded to the questionnaires in a socially desirable manner but also if they engaged in extreme and acquiescent responding (Paulhus, 2017; Paulhus & Vazire, 2007; Sallis & Saelens, 2015). Social desirability is the propensity to underreport bad or undesirable behaviour and to over-report more desirable behavior (Latkin et al., 2017). Social desirability bias consists of two components. The first component is impression management which refers to purposefully presenting self in a manner that pleases an audience or to fit into a situation. The second component is self-deception, which may be unconscious and done to maintain a positive self-concept (Paulhus, 1984). Social desirability is often motivated by a desire to avoid embarrassment and repercussions from disclosing sensitive information (Tourangeau & Yan, 2007). Acquiescent bias (also known as agreement bias, agreement tendency, or yea-saying) is the tendency to agree rather than to disagree with questions, irrespective of the question content. Extreme response bias refers to the tendency to choose extreme response categories on rating scales (e.g., the 1 and/or 5 on a 5-point Likert scale) (Paulhus, 1991; Greenleaf, 1992). According to Avey (2014), exclusively using self-report questionnaires as a means of data gathering can inflate the correlations between predictors. It would be recommended that future researchers should contemplate utilising objective measures for latent variables.

Lastly, there is a probability of a disproportionate participation of victims, bullies and non-victims of workplace bullying from the Private Hospitals in this research study. Perhaps mainly victims of workplace bullying volunteered to partake in this research study in order to find an outlet for their frustrations, whereas the majority of non-victims may have opted not to partake in the present study since they might have felt that they are not affected by workplace bullying (Kalamdien, 2013). The perpetrators might have opted not to participate in the present study out of fear of being exposed even though the questionnaires were completely anonymous. Despite these limitations, the researcher still believes that the present study added value to the field of Industrial Psychology.

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5.2 Practical Implications for Human Resource Managers in Hospitals

The research study provided statistics on the prevalence and consequences of workplace bullying. Based on the statistics various recommendations are made to the leaders of the private hospitals to manage and ultimately diminish workplace bullying in their respective workplaces.

Firstly, it is of utmost importance that every single member of the workforce should be educated about workplace bullying, and its consequences. This will enable them to identify behaviour linked to workplace bullying.

Secondly, the present study found that those in leadership positions (i.e. Managers and Supervisors) are frequently being reported as the perpetrators. It is of utmost importance that those in leadership positions lead by example, and not abuse their positions or level of authority. Those in leadership positions should partake in regular leadership or management training sessions which should also include training on how to be fair and supportive and to work as a cohesive unit to reduce the likelihood of workplace bully and to empower employees to feel confident enough to report workplace bullying. Managers should also acknowledge bullying as a serious issue in the institution and must support workplace bullying interventions or training programmes for it to be successful.

Thirdly, it was revealed that it is frequently reported that colleagues are perpetrators of bullying. It is recommended that the antibullying policy should be communicated to employees regularly. Awareness training is crucial for all employees to assist employees to translate policies and procedures into everyday workplace behaviours. Training should also be provided that raises awareness of people's interpersonal impact on organisations which may foster a civilized working environment. Training should also be conducted which provides employees with mechanisms to cope with stressors and to manage or regulate their emotions in the workplace. This may lead to a reduction in bullying incidence.

Fourthly, based on the research findings, the majority of the participants indicated that the private hospital does not address bullying in the workplace. For this reason, it is recommended that an antibullying policy should be created and implemented in the

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institution. Workplace bullying should be clearly defined as well as the implications for the victims, witnesses of bullying as well as the organisation. The antibullying policy should also provide clear procedures for reporting and dealing with bullying incidents. The policy should also provide clear standards of acceptable and unacceptable behaviour. It should also stipulate the procedures that will be followed if a perpetrator is found guilty of bullying others (such as issuing warnings, suspending, or dismissing perpetrators.

Fifth, an antibullying policy and guidelines should be imposed on every single organisational level irrespective of personal relationships with the perpetrator, their level of authority, or position. This may encourage victims or bystanders of bullying to be keen to disclose workplace bullying incidents.

Sixth, since workplace bullying is a sensitive subject, victims and witnesses of bullying might be reluctant to disclose the fact that they are victims in fear of being embarrassed or being seen as sensitive or weak. The organisation should allocate personnel (e.g. HR Practitioners or Counsellors) with who victims of workplace bullying can share their experiences within a safe and confidential environment.

Seventh, the organisation should make treatment (such as peer counselling, group therapy, and psychological debriefing) readily available to victims, witnesses or bystanders, and perpetrators of bullying.

5.3 Recommendations for Future Research

Based on the literature and the findings of the present study on workplace bullying, some topics that were not dealt with in the present study have been identified for prospective research.

Firstly, the focus of the research study is on victims subjected to workplace bullying. Future research should focus on other role players within the workplace bullying cycle, such as the bully, the bystanders, and the family of the role players.

Secondly, the sample was obtained from private hospitals and thus cannot be generalised to other industries. Future research should collect data from participants employed in other industries in order to generalise these findings.

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Thirdly, in the present study no evidence was found that supports the hypothesis which stipulates the Sense of Coherence moderates the effect of exposure to workplace bullying on post-traumatic stress disorder. It is recommended that future research be done on the Sense of Coherence as a moderator. Prospective studies could examine the moderating role of other personal resources, such as psychological capital or coping strategies in the relationship between workplace bullying and PTSD.

Fourthly, the research study only focuses on depression, stress, and PTSD as consequences of workplace bullying. Future research should focus on other consequences of workplace bullying as well as other variables which moderate the relationship between workplace bullying and the consequences thereof, such as climate for conflict management as the moderator in the relationship between workplace bullying and work engagement (Einarsen et al., 2016).

Fifthly, prospective research could examine the mediator role of variables, such as depression and anxiety in the relationship between workplace bullying, and physical and psychological negative symptoms as outcomes (Presti et al., 2019).

Sixthly, the research study only focuses on the consequences of workplace bullying. Future research could focus on the variables that cause workplace bullying as well as the mediators in the relationship between workplace bullying and its causes. An example would be the relationship between task conflict and workplace bullying which is mediated by relationship conflict (Baillien et al., 2016; Leon-Perez et al., 2015).

Sevently, future research should also be conducted, in terms of, a reliability analysis on the Sense of Coherence Scale since the Cronbach alpha was low.

Lastly, it was unintentionally discovered in the present study that the relationship between exposure to workplace bullying and depression is mediated by post-traumatic stress disorder. It would be beneficial if future research is conducted on this finding.

5.4 Conclusion

As discussed in the Chapter 1 of this research study, the main aim of this study is to assess the prevalence of PTSD analogue symptomatology and reported symptoms of

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psychological ill-health among current and former victims of bullying at work to confirm the detrimental effects that workplace bullying has on the workforce. The main aim of the study is also to establish whether Sense of Coherence moderates the relationship between workplace bullying and PTSD. The results revealed that workplace bullying is prevalent amongst nurses employed by Private Hospitals in the Western Cape. It can be inferred from the research results of this study that victims of workplace bullying displayed symptoms of stress, depression and post-traumatic stress disorder. It was also revealed that PTSD leads to depression, and that PTSD acts as a mediator between workplace bullying and depression. Furthermore, the research study failed to confirm that Sense of Coherence acts as a moderator between workplace bullying and PTSD which is contrary to the literature. However, it was confirmed that nurses with higher levels of SOC displayed lower symptoms of PTSD and vice versa. The results provided insight into the strength and direction of the relationships between the latent variables based on the current sample of the research study. The measurement instruments provided useful and meaningful path estimates for this research sample.

The results allow other researchers to consider other factors which influence the relationships and the possible interventions that can diminish workplace bullying and its consequences within Private Hospitals. The implementation of such interventions may be time-consuming or costly for the private hospitals but it will lead to long-term benefits for the organisation, leaders, and employees.

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Appendix A

NOTICE OF APPROVAL

REC: Social, Behavioural and Education Research (SBER) - Initial Application Form

11 December 2019

Project number: 8192

Project Title: Development and empirical testing of bullying in the workplace: An explanatory structural model

Dear Miss Kim Sparks

Your response to stipulations submitted on 29 November 2019 was reviewed and approved by the REC: Humanities.

Please note the following for your approved submission:

Ethics approval period:

Protocol approval date (Humanities)	Protocol expiration date (Humanities)
2 July 2019	1 July 2020

GENERAL COMMENTS:

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (8192) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

Included Documents:

Document Type	File Name	Date	Version
Proof of permission	Mediclinic - Letter of Permission	22/10/2018	Version 1
Informed Consent Form	Stellenbosch University - Informed Consent Form	15/03/2019	Version 2
Data collection tool	Questionnaires	15/03/2019	Version 2
Default	Modification Required - Response	15/03/2019	Version 1
Research Protocol/Proposal	Research Proposal - 18.03.2019	18/03/2019	Version 2

If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.

Sincerely,

Clarissa Graham

REC Coordinator: Research Ethics Committee: Human Research (Humanities)

National Health Research Ethics Committee (NHREC) registration number: REC-050411-032.
The Research Ethics Committee: Humanities complies with the SA National Health Act No.61 2003 as it pertains to health research. In addition, this committee abides

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Appendix B

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jou kennisvennoot • your knowledge partner

Consent to participate in research

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CONSENT TO PARTICIPATE IN RESEARCH

Development and empirical testing of the bullying in workplace structural model: An Explanatory Structural Model.

You are invited to take part in a study conducted by Kim Sparks, from the Department of Industrial Psychology at Stellenbosch University. You were approached as a possible participant because your organisation was selected as a population in this study since it forms part of the public sector, you are in the services sector within the Western Cape and, since international research indicates a strong occurrence of bullying within the nursing field.

1. PURPOSE OF THE STUDY

The overall aim of the study is to assess the prevalence of PTSD analogue symptomatology and reported symptoms of psychological ill-health among current and former victims of bullying at work in order to confirm the detrimental effects that workplace bullying have on the workforce.

2. WHAT WILL BE ASKED OF ME?

If you agree to take part in this study, you will be asked to:

- Complete and sign this document in order to provide consent to participate in the research study.
- You will be allocated a session during a specific time during which you need to complete five questionnaires and a document, which requires demographical information. The investigator will hand out these documents after she collects the

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informed consent form. It will take between 30 – 40 minutes to complete the questionnaires in a secure environment.

- Place the completed questionnaires in a locked box which will be found at the exit of the venue to ensure confidentiality and to ensure that you will remain anonymous.

3. POTENTIAL RISKS AND DISCOMFORTS

Talking about the trauma experienced can be the first step towards healing. Research usually involves some risk to participants. If you decide to take part in this research, you may expect to experience a minimal risk if any at all. The researcher will attempt to lower the risk by protecting your identity as well as the identity of the organisation. In the event that you experience any flashbacks, it is normal for up to 6 weeks however; if the flashbacks persists after 6 weeks, you need to consult your General Practitioner (GP).

In the event that you feel uncomfortable or experience trauma the researcher will:

- allow you to have a telephonic conversation with her Supervisor, Marietha De Wet, who will be “on standby” or;
- refer you to your own General Practitioner (GP) or Clinical Psychologist. The cost will be of your own accord or;
- refer you to the organisations Employee Assistance Programme (EAP).

You can also stop your participation at any time should you feel uncomfortable, without consequences.

4. POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO THE SOCIETY

The participants will obtain a greater personal awareness, knowledge and understanding of their experience of workplace bullying. The research study will provide some comfort in knowing that others have recognized the phenomenon. Society and organisations will be aware of the detrimental effects of workplace bullying and will put in place mechanisms to deal with or deter bullying from taking place, and assign affected employees, bystanders and the victim’s families for treatment. The study will also enable

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future researchers to delve into different topics related to bullying which will create awareness of the phenomenon in South Africa especially since limited research has been conducted in the country.

5. PAYMENT FOR PARTICIPATION

Participation is strictly voluntary and no compensation will be received. You may request the results of the overall study from the researcher at sparkskim14@gmail.com .

6. CONFIDENTIALITY

Any information you share with the researcher during this study and that could possibility identify you as a participant will be protected. The researcher will not reveal your identity or the identity of the organisation in which you work.

The research data will be stored on the researcher's personal computer as well as her Supervisors' personal computer, which will be password-protected. The researcher will also backup the information on her hard drive to which only the researcher will have access too.

Hard copies of the questionnaires, informed consent forms and any other documents related to the research study will be stored in a locked cupboard to which only the researcher has access too.

The researcher will store the information, by following the above mentioned procedures, for a minimum of 5 years after the completion of the project, after which the hard copies will be shredded and the soft copies will be deleted.

The research findings will be disseminated through her thesis, and to the hospital group who is hosting the research. The researched with be shared as group data and the identity of the hospital and the participants will not be revealed.

Furthermore, since the researcher will be collecting this form prior to handing out the questionnaires, which will not require you to indicate your identity on it, no one will be able to identity which questionnaire you completed. If you decide to withdraw your participation in

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the study, the researcher will shred your questionnaires and associated documents to ensure confidentiality.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you agree to take part in this study, you may withdraw at any time without any consequence. You may also refuse to answer any questions you don't want to answer and still remain in the study. The researcher may withdraw you from the study if circumstances arise which warrant doing so.

8. RESEARCHERS' CONTACT INFORMATION

If you have any questions or concerns about this study, please feel free to contact the Principle Investigator Kim Sparks or her Supervisor Marietha De Wet.

Kim Sparks	Marietha De Wet
Cell: 082 633 8156	Cell:082 514 4798
Email:sparkskim14@gmail.com	Email:mdew@sun.ac.za

9. RIGHTS OF RESEARCH PARTICIPANTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

DECLARATION OF CONSENT BY THE PARTICIPANT

I have read and understand the information provided above and voluntarily consent to participate in the research under the conditions described in this questionnaire. Hereby I voluntary provide my consent to partake in this research study.

By signing below, ________________________________ (name of participant) agree to take part in this research study. I also confirm that I am a ____________________________________ (job title of participant) and that I work in the __________________________ department. Please feel free to sms me on

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______________________ (contact number) in order to remind me of the session during which I will be completing the questionnaires.

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Appendix C

Questionnaires

Part 1: Demographic information

Part 2: Prevalence of Workplace Bullying

Part 3: Negative Acts Questionnaire

Part 4: Work Harassment Scale

Part 5: Depression Anxiety and Stress Scale

Part 6: Impact of Event Scale-Revised

Part 7: Sense of Coherence Scale

General information on answering this questionnaire

This questionnaire consists out of 16 pages (page 5 – page 22) which will take approximately 45 minutes to complete.

- The identity of yourself and your organisation will not be revealed nor will the information provided by you be disclosed to anyone other than the researcher and her Supervisor.
- The content of the questionnaire will be utilised, for no other reason than for research purposes.
- Your participation in the study and honest response is greatly appreciated.

PART 1

DEMOGRAPHIC INFORMATION

Only one option under each question may be selected. Select the appropriate answer to each question by ticking the box.

1. Gender: Male ☐ Female ☐
2. Age:

   ☐ Specify: ______________________________________

3. What's your ethnic group?

   ☐ African

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☐ Coloured

☐ White

☐ Other, specify: ________________________________

4. What is your marital status?

☐ Divorced

☐ Living together

☐ Married

☐ Separated

☐ Single

☐ Widow (er)

5. What's your highest level of education?

☐ Grade 12

☐ Third-year Nursing student

☐ Fourth-year Nursing student

☐ B.Soc.Sc (Nursing)

☐ M.Soc.Sc (Nursing)

☐ B.Adv.Nur

☐ Advanced University Diploma in Nursing

☐ Ph.D.

☐ Other

6. What's your current employment status?

☐ Part-time, Specify tenure: __________________________

☐ Full-time

7. Under which categories of nurses do you fall:

☐ Registered/professional nurses and midwives

☐ Enrolled nurses and midwives

☐ Enrolled nurse auxiliaries

☐ Other, specify: _____________________________

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8. What is the level of your responsibility in the company?

☐ No formal responsibility

☐ Team Leader

☐ Supervisor

☐ Manager

☐ Executive

☐ Owner/Partner

9. How long have you been working in the company?

☐ 6 months to one year

☐ 1 – 5 years

☐ 6 – 10 years

☐ 11 – 15 years

☐ 16 – 20 years

☐ Longer than 20 years

PART 2

PREVALENCE OF WORKPLACE BULLYING

During this part of the questionnaire workplace bullying will be defined. You will then be asked to keep the definition, as given below, in mind when responding to the questions under this section. Workplace bullying (Kalamdien, 2013, p. 180) is defined as:

> situations where one or more persons are subjected to persistent and repetitive harmful negative or hostile acts (excluding once-off isolated incidents) by one or more other persons within his or her working environment (excluding incidents where two equally strong individuals come into conflict), and the person feels helpless and defenceless in the situation. The victim should feel defenceless and helpless, as well as experiencing the harmful negative and hostile acts repetitively and persistently for at least six months and as offensive; the intentionality of the perpetrator is irrelevant.

Given the above definition please indicate the following (*tick in the boxes below*):

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1. Do you consider yourself to be a victim of bullying?

   ☐ Yes

   ☐ No

2. If you consider yourself to be a victim of bullying how often have you been bullied during the last 6 months?

   ☐ Now and then

   ☐ Daily

   ☐ Weekly

   ☐ Monthly

3. Have you witnessed or observed others being bullied within the work environment over the last 6 months?

   ☐ No, never

   ☐ Yes, now and then

   ☐ Yes, daily

   ☐ Yes, weekly

   ☐ Yes, monthly

4. What is the gender of the person who bullied you or others in the workplace? (*You may tick both if it is both*).

   ☐ Men

   ☐ Women

   By whom were you or others bullied in the workplace?

   ☐ Supervisor/Manager

   ☐ Colleagues

   ☐ Subordinates

   ☐ Customers/Clients

5. Is bullying being addressed in your organization?

   ☐ No, never

   ☐ Yes, no and then

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- ☐ Yes, always

6. According to the definition above, in your own opinion do you consider yourself to be the perpetrator and not the victim, or both?
   - ☐ No
   - ☐ Yes
   - ☐ Both
   - ☐ Maybe the perpetrator
   - ☐ Maybe both

PART 3

Negative Acts Questionnaire-Revised

(Einarsen, Hoel & Notelaers, 2009; Einarsen & Raknes, 1997)

The following direct and indirect behaviours are often seen and regarded as negative behaviour in the workplace that's associated with workplace bullying. How often have you been subjected and /or experienced the following negative acts at work?

Please cross out the number that best describe and correspond with your experience (left-hand column). If you choose any number from 2 until 5 (2, 3, 4 or 5) please state in the two columns on the right-hand, for each type of bullying listed how long it has been going on in months and years.

1 Never **2 Now and then** **3 Daily** **4 Weekly** **5 Monthly**		**Months**	**Years**
1 Someone withholding information which affects your performance	1 2 3 4 5		
2 Being humiliated or ridiculed in connection with your work	1 2 3 4 5		
3 Being ordered to do work below your level of competence	1 2 3 4 5		
4 Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks	1 2 3 4 5		

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5	Spreading of gossip and rumours about you	1 2 3 4 5		
6	Being ignored, excluded or being 'sent to Coventry'	1 2 3 4 5		
7	Having insulting or offensive remarks made about your person (i.e. habits and background), your attitudes or your private life	1 2 3 4 5		
8	Being shouted at or being the target of spontaneous anger (or rage)	1 2 3 4 5		
9	Intimidating behaviour such as finger-pointing, invasion or personal space, shoving, blocking/barring the way	1 2 3 4 5		
10	Hints or signals from others that you should quit your job	1 2 3 4 5		
11	Repeated reminders of your errors or mistakes	1 2 3 4 5		
12	Being ignored or facing a hostile reaction when you approach	1 2 3 4 5		
13	Persistent criticism of your work and effort	1 2 3 4 5		
14	Having your opinions and views ignored	1 2 3 4 5		
15	Practical jokes carried out by people you don't get on with	1 2 3 4 5		
16	Being given tasks with unreasonable or impossible targets or deadlines	1 2 3 4 5		
17	Having allegations made against you	1 2 3 4 5		
18	Excessive monitoring of your work	1 2 3 4 5		
19	Pressure not to claim something which by right you are entitled to (e.g. sick leave, holiday entitlement, travel expenses)	1 2 3 4 5		
20	Being the subject of excessive teasing and sarcasm	1 2 3 4 5		
21	Being exposed to an unmanageable workload	1 2 3 4 5		

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22 Threats of violence or physical abuse or actual abuse	1 2 3 4 5		

PART 4

Work Harassment Scale

(Bjorkqvist, Osterman & Hjelt-Back, 1994).

How often have you been exposed to degrading or oppressing activities by supervisors, colleagues, subordinates or customers at work? The activities clearly must have been experienced as a means of bullying/harassment, not as normal communication, or as exceptional occasions.

Please cross out the number that best describe and correspond with your experience (left-hand column). If you choose any number from 1 until 4 (1, 2, 3 or 4) please state in the two columns on the right-hand, for each type of bullying listed how long it has been going on in months and years.

0 Never **1 Seldom** **2 Occasionally** **3 Often** **4 Very often**		**Months**	**Years**
1 Unduly reduced opportunities to express yourself?	0 1 2 3 4		
2 Lies about you told to others?	0 1 2 3 4		
3 Being unduly disrupted?	0 1 2 3 4		
4 Being shouted at loudly?	0 1 2 3 4		
5 Being unduly criticized?	0 1 2 3 4		
6 Insulting comments about your private life?	0 1 2 3 4		
7 Being isolated?	0 1 2 3 4		

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8	Having sensitive details about your private life revealed?	0 1 2 3 4		
9	Direct threats?	0 1 2 3 4		
10	Insinuative glances and/or negative gestures?	0 1 2 3 4		
11	Accusations?	0 1 2 3 4		
12	Being sneered at?	0 1 2 3 4		
13	Refusal to speak with you?	0 1 2 3 4		
14	Belittling of your opinions?	0 1 2 3 4		
15	Refusal to hear you?	0 1 2 3 4		
16	Being treated as non-existent?	0 1 2 3 4		
17	Words aimed at hurting you?	0 1 2 3 4		
18	Being given meaningless tasks?	0 1 2 3 4		
19	Being given insulting tasks?	0 1 2 3 4		
20	Having malicious rumors spread behind your back?	0 1 2 3 4		
21	Having your work judged in an incorrect and insulting manner?	0 1 2 3 4		
22	Having your sense of judgement questioned?	0 1 2 3 4		
23	Accusations of being mentally disturbed?	0 1 2 3 4		

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PART 5

Depression Anxiety and Stress Scale (DASS21)

(Lovibond & Lovibond, 1995)

Please read each statement and cross out the number which indicates how much the statement applies to you. There is no right or wrong answers. Do not spend too much time on any statement.

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

Statement				
1. I found it hard to wind down	0	1	2	3
2. I was aware of dryness of my mouth	0	1	2	3
3. I couldn’t seem to experience any positive feeling at all	0	1	2	3
4. I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5. I found it difficult to work up the initiative to do things	0	1	2	3
6. I tended to over-react to situations	0	1	2	3
7. I experienced trembling (e.g. in the hands)	0	1	2	3
8. I felt that I was using a lot of nervous energy	0	1	2	3
9. I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10. I felt that I had nothing to look forward to	0	1	2	3
11. I found myself getting agitated	0	1	2	3
12. I found it difficult to relax	0	1	2	3

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13. I felt down-hearted and blue	0 1 2 3
14. I was intolerant of anything that kept me from getting on with what I was doing	0 1 2 3
15. I felt I was close to panic	0 1 2 3
16. I was unable to become enthusiastic about anything	0 1 2 3
17. I felt I wasn't worth much as a person	0 1 2 3
18. I felt that I was rather touchy	0 1 2 3
19. I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)	0 1 2 3
20. I felt scared without any good reason	0 1 2 3
21. I felt that life was meaningless	0 1 2 3

PART 6

Impact of Event Scale-Revised

(Weiss & Marmar, 1997)

Below is a list of difficulties people sometimes have after stressful life events (being bullied). Please read each item, and then indicate how distressing each difficulty has been for you with respect to the event you experienced. How much were you distressed or bothered by these difficulties?

Please cross out the number that best describes the difficulties you have had.

	0 **Not at all**	**1** **A little bit**	**2** **Moderately**	**3** **Quite a bit**	**4** **Extremely**
1 Any reminder brought back feelings about it.	0	1	2	3	4
2 I had trouble staying asleep.	0	1	2	3	4
3 Other things kept making me think about it.	0	1	2	3	4

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4	I felt irritable and angry.	0 1 2 3 4
5	I avoided letting myself get upset when I thought about it or was reminded of it.	0 1 2 3 4
6	I thought about it when I didn't mean to.	0 1 2 3 4
7	I felt as if it hadn't happened or wasn't real.	0 1 2 3 4
8	I stayed away from reminders about it.	0 1 2 3 4
9	Pictures about it popped into my mind.	0 1 2 3 4
10	I was jumpy and easily startled.	0 1 2 3 4
11	I tried not to think about it.	0 1 2 3 4
12	I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0 1 2 3 4
13	My feelings about it were kind of numb.	0 1 2 3 4
14	I found myself acting or feeling as though I was back at that time.	0 1 2 3 4
15	I had trouble falling asleep.	0 1 2 3 4
16	I had waves of strong feelings about it.	0 1 2 3 4
17	I tried to remove it from my memory.	0 1 2 3 4
18	I had trouble concentrating.	0 1 2 3 4
19	Reminders of it caused me to have physical reactions, such as sweating, difficulty in breathing.	0 1 2 3 4
20	I had dreams about it.	0 1 2 3 4
21	I felt watchful and on-guard.	0 1 2 3 4
22	I tried not to talk about it.	0 1 2 3 4

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PART 7

Sense of Coherence Scale

(Antonovsky, 1987)

Please cross out the number which best expresses your answer. Each question has 7 possible answers, with number 1 and 7 as extreme answers. Please answer every question and give only one answer per question. Some of the questions are very similar but you should still answer all of them.

1	Do you have the feeling that you don't really care about what does on around you?							
Seldom or never	1	2	3	4	5	6	7	Very often

2	Has it happened in the past that you were surprised by the behaviour of people whom you thought you knew well?							
Never happened	1	2	3	4	5	6	7	Always happened

3	Has it happened that people whom you counted on disappoint you?							
Never happened	1	2	3	4	5	6	7	Always happened

4	Until now your life has had:							
No clear goals or purpose at all	1	2	3	4	5	6	7	Very clear goals and purpose

5	Do you have the feeling that you're being treated unfairly?							
Very often	1	2	3	4	5	6	7	Seldom or never

6	Do you have the feeling that you are in an unfamiliar situation and don't know what to do?							
Very often	1	2	3	4	5	6	7	Seldom or never

7	The things you do every day are: and satisfaction or a source of pain and boredom							
A source of deep pleasure and satisfaction	1	2	3	4	5	6	7	A source of pain and boredom

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8	How often are your feelings and ideas mixed-up?							
Very often	1	2	3	4	5	6	7	Seldom or never

9	Do you sometimes have feelings you would rather not have?							
Very often	1	2	3	4	5	6	7	Seldom or never

10	Many people – even those with strong character - sometimes feel unlucky in certain situations. How often have you felt this way in the past?							
Seldom or never	1	2	3	4	5	6	7	Very often

11	When something happened, do you in your opinion usually:							
Overestimated or underestimated its importance	1	2	3	4	5	6	7	Saw things in the right proportion

12	How often do you have feelings of which you’re not sure if you can control them?							
Very often	1	2	3	4	5	6	7	Seldom or never

13	How often do you have feeling of which you’re not sure if you can control them:							
Very often	1	2	3	4	5	6	7	Seldom or never

THANK YOU FOR PARTICIPATING IN THIS STUDY