DISSERTATION

BULLYING VICTIMISATION AND TRAUMATIC STRESS SEVERITY AMONG HIGH SCHOOL LEARNERS

Courtney Clarissa Meyer

213282992

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Supervisor: Mrs Lisa Currin

Co-Supervisor: Mr Johan Cronje

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ABSTRACT

Bullying victimisation is experienced extensively in international and South African schools and results in numerous serious consequences for the victim, traumatic stress being one of these, which has received limited attention in South African literature. This led to the study which had the overall aim to explore and describe the relationship between bullying victimisation and traumatic stress severity among high school learners in the Nelson Mandela Metropole. Seven hundred and thirty-five learners from grades eight through to twelve, from the two selected public high schools were sampled using stratified random sampling. A quantitative research design, which is exploratory, descriptive and correlational was followed. Four self-reported written administered questionnaires, namely a biographical questionnaire, the revised Olweus Bully/Victim questionnaire, the PTSD checklist for DSM-5 (PCL-5) questionnaire and an adapted version of part 1 of the Harvard Trauma questionnaire, were used as data collection measures in this study. The data was analysed and interpreted using descriptive statistics and multiple linear regression analysis. The findings portrayed that 20.95% of the learners from the two selected public high schools in the Nelson Mandela Metropole experienced bullying victimisation. It was also found that just under one third (31.21%) of the high school learners may be suffering from severe traumatic stress. When applying multiple linear regression analysis to the data, being exposed to bullying victimisation specifically in the form of verbal bullying, social exclusion/isolation bullying, emotional/psychological bullying and/or sexual bullying was seen to significantly contribute to the traumatic stress severity reported by the learners. Traumatic stress severity was however seen to depend on the frequency of bullying victimisation.

Keywords: Bullying Victimisation, Nelson Mandela Metropole, Public High Schools, Traumatic Stress Severity.

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LIST OF ABBREVIATIONS AND ACRONYMS

APBS	Adult post-bullying syndrome
BPsych	Bachelor of Psychology
CBITS	Cognitive Behavioural Intervention for Trauma in Schools
DAAD	Deutscher Akademischer Austrausch Dienst German Academic Exchange Service
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, 5th Edition
EMIS	Education Management Information System
HPCSA	Health Professions Counsel of South Africa
IQ	Intelligence Quotient
K-S	Kolmogorov-Smirnov
M	Median
MMTT	Multimodality Trauma Treatment
PCL-5	PTSD Checklist for DSM-5
PTSD	Posttraumatic stress disorder
REC-H	Research Ethics Committee (Human)
SA	South Africa
SD	Standard Deviation
STAC	‘Stealing the Show’, ‘Turning it Over’, ‘Accompanying others’ and ‘Coaching Compassion’
TF-CBT	Trauma-Focused Cognitive Behavioural Therapy
UCLA	University of California, Los Angeles
UCLIN	University Psychology Clinic
U.S.	United States
WHO	World Health Organisation

CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1.1 Introduction

This chapter will begin with a general orientation to the current study. A background of the study will be discussed followed by a discussion of what the value of the current study is. The problem statement will then be stated, followed by an outline of the overall aim and objectives of the current study. The chapter will conclude with a concise description of how the chapters will be outlined in the dissertation.

1.2 Background of the Study

School violence is not a new phenomenon, as it is seen to be a significant problem in many countries around the world and in South Africa. The World Health Organisation (WHO) defines school violence as ‘‘the intentional use of physical force or power, threatened or actual, (against oneself), another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation’’ (Krug, Mercy, Dahlberg & Zwi, 2002, p. 4).

School violence which comes in many forms, appears to be prevalent in public schools in many countries around the world (Garg, 2017) and in South Africa (Netshitangani, 2017). This becomes problematic when considering that, under section 29 of the South African Constitution, it states that basic education is a fundamental human right for everyone in South Africa (Mtuesi, 2013). Schools are thus meant to be seen as being a safe environment conductive of effective teaching, learning and socialisation (Harber & Mncube, 2013), which is essential to enhance our nations' children in becoming effective members of society.

Bullying which is of specific interest within this current study, is seen as being a form of school violence. When considering how to define bullying, three are three essential components which should be incorporated into the definition, namely that the aggressive

behaviour should be intentional, repetitive and a power imbalance between the parties involved should exist (Olweus, 1993). Bullying in a school context was found to be prevalent in many countries around the world (Ayenibiowo & Akinbode, 2011) and in South Africa (Ndebele & Msiza, 2014). A bullying rate of 56.4% for example was found in South African primary schools (Greeff & Grobler, 2008).

This form of school violence has been difficult to prevent and eliminate, because of the belief held by many South Africans' that it is a part of growing up (Harber & Mncube, 2013). Literature however suggests that bullying infringes on the child's fundamental human rights to human dignity, privacy, freedom and security (de Wet, 2005) and thus should be dealt with more appropriately by the various stakeholders within a school context.

Traditional and cyberbullying has shown to have a negative effect on the physical and psychological well-being, of all the role players in a bullying situation especially the victim (Victoria State Government, 2013). There are thus short-term and long-term consequences that follows the bullying, for all the role-players in a bullying situation. The consequences for the individual/individuals specifically playing the victim role, has shown to range from forming a low self-concept (Houbre, Tarquinio, Thuillier & Hergott, 2006) to more severe psychotic symptoms (Valmoggia et al., 2015).

This form of violence taking place in a school context, is seen to be detrimental to the country's economic stability as a whole and endangers the psychological and physical health of the nations' children, which are the future of South Africa. Having anti-bullying policies established and interventions in place is thus of vital importance, which according to literature are required to be enforced, according to the law in many counties around the world (Smith, Smith, Osborn & Samara, 2008) however appeared to be absent in a South African school context (Bowes, Boyes, Cluver, Ward & Badcock, 2014).

According to research conducted in many countries around the world, being the victim of bullying in a school context has shown to lead to the development of traumatic stress symptoms (Chen & Elklit, 2017). There were also learners whose scores were found to be within the clinical range for a posttraumatic stress disorder (PTSD) diagnosis (Chen & Elklit, 2017). Similarly, this has been found in only a few studies conducted in South Africa (Collings, Penning & Valjee, 2014) and none were able to be found which are within the Eastern Cape.

This becomes a pressing concern as posttraumatic stress disorder (PTSD) is an official psychiatric diagnosis, which requires strict diagnostic criteria to be met, as stipulated within the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5) (American Psychiatric Association, 2013). PTSD thus requires appropriate professional interventions in terms of treatment on either a short-term (Foa, 2009) or long-term basis (Gilman, Strawn & Keeshin, 2015). It was found that 38% of school children and adolescents were seen to suffer from PTSD (Suliman, Kaminer, Seedat & Stein, 2005). This research study thus partly explored whether bullying victimisation within a school context can be equated as being considered traumatic, to the extent that the victims suffer from symptoms similar to individuals who suffer from posttraumatic stress disorder (PTSD).

1.3 Value of the study

Highlighting this kind of link for policy makers may increase awareness and resources spent on eliminating and/or preventing the problem. When considering the rates of PTSD among learners in a South African school context which was mentioned above, namely 38% (Suliman, Kaminer, Seedat & Stein, 2005), the importance of filling the gap in the South African literature becomes even more pressing. Treating individuals who suffer from diagnosed mental disorders such as PTSD may be costly to not only the individuals but to the country as a whole.

It is difficult to estimate the costs of bullying for the country due to it not being seen as an excessive problem, which contrasts with domestic violence which costs the country R29 Billion-R42 Billion each year (Matiwane, 2016). This highlights that the consequences are not appreciated in the context. The present study aspires to fill the gap in the limited South African literature found to date, to allow schools to become aware of the consequences bullying victimisation can have on individuals and to the economic stability of the country as a whole.

1.4 Rationale

Despite the clear link between bullying and traumatic stress symptoms, there is however limited South African studies on this topic. Additionally, there were none found to date that were conducted within the Eastern Cape. The purpose of this study is thus to fill this gap in the literature and help create a greater awareness, which will be done by generating knowledge regarding the consequences that follow bullying victimisation. This study specifically explores the relationship between bullying victimisation and traumatic stress severity. The study focuses on sampling grade eight through to grade twelve learners from two public high schools within the Nelson Mandela Metropole.

1.5 Aim and Objectives of the study

The research study has the overall aim to explore and describe the relationship between bullying victimisation and traumatic stress severity among high school learners in the Nelson Mandela Metropole.

The study's objectives relating to the problem statement are

- To identify the bullying victimisation rates among high school learners in the Nelson Mandela Metropole.
- To identify the traumatic stress severity rates among the high school learners in the Nelson Mandela Metropole.

- To identify the degree to which general traumatic events are experienced by high school learners in the Nelson Mandela Metropole.
- To explore and describe the relative contribution of previous general traumatic experiences and bullying victimisation on the traumatic stress severity, among high school learners in the Nelson Mandela Metropole.

1.6 Chapter Outline

Chapter two will provide an overview of the literature, which will look at bullying within a school context. The concept of bullying victimisation will be defined, followed by a discussion on the various roles which exist in a bullying situation. The various theories found to explain bullying in a school context will then be identified. This is followed by a discussion on the different types of bullying, which are prevalent in a school context. The rates of bullying in international and South African schools will then be stipulated, followed by a discussion regarding ant-bullying policies and the effectiveness of bullying interventions. Information on the consequences of this phenomenon will thereafter be discussed.

Chapter three will provide an overview of traumatic stress in a school context. The concepts of traumatic stress and posttraumatic stress disorder (PTSD) will be defined, followed by a discussion on the different stages of traumatic stress development and the symptoms which accompany traumatic stress. Information on the PTSD diagnostic criteria will thereafter be provided, followed by a discussion of the various theories which explain the development and maintenance of PTSD. Factors which influence traumatic stress severity will then be explored, followed by a discussion on the general rates of PTSD, which are prevalent within a school context. Information on interventions for the prevention and treatment of PTSD will be provided, followed by a final overview of literature which looks at the relationship between bullying and traumatic stress within schools.

Chapter four will provide the methodological considerations taken to develop and carry out this research study. Chapter five will report on the results of this current study, which will be put into context, within the discussion sections after each objective. This will be done by referring back to past literature studies done by other authors. The conclusions reached, limitations and recommendations for future studies will then be provided in chapter six.

1.7 Conclusion

This chapter began with a general orientation to the current study. Where the concept of school violence was defined and briefly discussed, which lead to the discussion of a specific form of school violence namely bullying. Bullying has shown to be prevalent in many countries around the world and in South Africa and has appeared to be difficult to prevent and eliminate and violates various fundamental human rights of children/ adolescents. It additionally, has shown to have various consequences for all the roles players, in a bullying situation. In studies done in many countries around the world, the victims of bullying in a school context have seen to experience PTSD-like symptoms. This has been found in only a few studies conducted in South Africa and none in the Eastern Cape.

This lead into the discussion on the value of the current study and the problem statement. The research study's aim and objectives were thereafter stipulated, with the chapter ending in a discussion on how the chapters are outlined in the dissertation. An overview of the literature on bullying in schools will be discussed next in chapter two.

CHAPTER 2

BULLYING IN SCHOOLS

2.1 Introduction

International and South African literature will be reviewed regarding bullying in a school context. The chapter will begin with defining the concept of, bullying victimisation in schools. This will be followed by identifying and discussing the different roles, which are found within a bullying situation. The various theories found to explain bullying in a school context will then be identified, where thereafter the different types of bullying which are present in a school context, will be identified and explained. This will be followed by a discussion regarding the rates of bullying, in an international and South African school context.

A discussion will thereafter commence, regarding what is meant by an anti-bullying policy, as well as looking whether they are established and implemented, in international and South African schools. This will be followed by a discussion regarding the effectiveness of bullying interventions, in international and South African schools. The various consequences which are associated with bullying will thereafter be discussed.

2.2 Definition of Bullying

Bullying in schools is not a new phenomenon, as according to Prof Dan Olweus (1995) it received attention after the 1980's and early 1990's. Prof Dan Olweus (1995) is regarded as a pioneer and founding father in bullying research. When considering how to define bullying, there is no universal definition. Olweus (1995) defines being bullied or victimised when ''…he or she is exposed, repeatedly and over time, to negative actions on the part of one or more other students…there should also be an imbalance in strength (an asymmetric power relationship)'' (p. 133). Similarly, Neser et al. (2004) defined bullying as ''… intentional, repeated hurtful acts, words or other behaviour…committed by a child or children against

another child or children… an imbalance in perceived or real power must exist between the bully and the victim'' (p. 28).

When looking at defining bullying from a South African educational law perspective, according to de Wet (2016) it is ''unwelcome, harmful conduct which is persistent or serious and demeans, humiliates, intimidates, creates a hostile or intimidating environment, causes deliberate harm or is calculated to induce submission by actual or threatened adverse consequences" (p. 29). Although these definitions differ slightly, there are three components which are evident in each, which are essential for it to be considered as bullying or victimisation. According to Olweus (1993) and Minnesota Department of Education (2014) these components include that the aggressive behaviour must be intentional, repetitive and a power imbalance must exist between the parties. This form of violence may not start in a school context, however, is where it most commonly manifests (Pitso et al., 2014).

2.3 Bullying Roles

There are three different groups of students, who are seen to play different roles in the bullying situation (referred to as the bullying cycle/bullying circle which was identified by Dan Olweus, which will be discussed in detail later). These include the victims, the bullies and the bystanders (Knowledge Network, 2010). These three groups can then be further divided into subgroups. Students within these different subgroups are seen to share similar characteristics.

2.3.1 The victim(s)

The student/students playing the victim role, is the one to whom the bullying behaviour is targeted (Olweus, 2003) 2 or 3 times a month (Olweus & Solberg, 2003). The victim(s) are seen to share certain characteristics. These individuals appear to be more anxious, insecure, cautious, sensitive, quiet, have a low self-esteem and appear to have a negative view of themselves and their situation (Olweus, 1995). In South African literature, the best predictors

for becoming victimised in a bullying situation depends on gender, family situation, social identity and problem-solving style (Cassidy, 2009).

In literature on many countries around the world, there are seen to be various risk factors which predicts bullying victimisation. According to Kljakovic and Hunt (2016) risk factors such as prior victimisation, conduct problems, social problems and internalising problems were seen to predict bullying victimisation. In addition to the risk factors mentioned above, Mann et al. (2015) suggested disliking school, poor relationships with teachers and the feeling of normlessness also acted as such risk factors which predicted bullying victimisation. Normlessness refers to the situation, when ones' social norms which regulate an individual's behaviour, has gradually broken down (Mann, Kristiansson, Sigfusdottir & Smith, 2015). Other risk factors were seen to include early experiences of social anxiety (Acquah et al., 2016) and parental history of school bullying victimisation (Allison, Roeger, Smith & Isherwood, 2014).

In many countries around the world, there are also various protective factors which exist which may mask bullying victimisation. According to Mann et al. (2015) these protective factors include parental support, time spent with parents and intergenerational closure. Intergenerational closure essentially refers to, the situation where a child's parents know the parents of the child's friends (Mann, Kristiansson, Sigfusdottir & Smith, 2015).

There are three types of victims, namely the passive/submissive victim(s) (Olweus, 1995), the provocative victim(s) also known as bully-victims or aggressive victims, which is the less common type (Neser et al., 2004; Olweus, 1995) and the relational victim (Franke, 2010). The passive/submissive victim(s) won't fight back if targeted and is perceived as being insecure, anxious and worthless (Olweus, 1995). The passive/submissive victim(s) are also seen as being withdrawn, cautious, shy, have poor peer relations, have a low self-esteem and are more likely to suffer from depression and suicidal ideation (Olweus, 2003).

The provocative victim(s) are seen to represent a percentage of learners who have been seriously bullied themselves (Olweus, 1978). They react aggressively when being bullied by another student, thus play an active role in provoking the bullying behaviour (Olweus, 1978). The relational victim may be excluded or isolated from peer groups and may be the targets for lies and rumours (Franke, 2010).

2.3.2 The bully(s)

The student/students playing the bully role is the one who is directing aggressive behaviour towards his/her peers (Olweus, 2003) 2 or 3 times a month (Olweus & Solberg, 2003). The bully(s) is seen to be aggressive towards peers and adults (parents/guardians and teachers) (American Psychological Association, 2004). They appear to lack empathy, be impulsive, have a strong need to dominate others and be physically stronger (in the case of boys) (American Psychological Association, 2004; Olweus, 1995), According to Morin, (2018) bullies appear to have anger management problems, become frustrated easily, place the blame on the victim, have a positive view of violence and are disrespectful towards rules and authority figures. According to Olweus (1994) and Rigby (2002) there are an additional subgroup known as passive bullies (often referred to as followers or henchmen) and they tend to participate in the bullying behaviour at a later stage, but do not to initiate any behaviour on their own (Olweus,1994).

In literature on many countries around the world, there are seen to be various risk factors which may result in bullying perpetration. Kljakovic and Hunt (2016) suggested risk factors such as age, conduct problems, social problems and school problems. According to Morin (2018) factors such as anxiety, oppositional defiant disorder and prior past trauma experiences also act as risk factors which may result in bullying perpetration.

There are also additional family circumstances, which appear to act as possible risk factors for bullying perpetration which include absence of warmth and involvement of the

child/adolescent's parents/caregivers and excessive permissive parenting (Morin, 2018). In addition to the family circumstances mentioned above, absence of parental supervision and enforcement of physical punishment as a discipline style, by parents/guardians also appears to act as possible risk factors for bullying perpetration (Morin, 2018).

2.3.3 The bystander(s)

The bystander(s) observe the bullying behaviour, they are not directly involved in the bullying situation (Salmivalli et al., 1996) and can be grouped as reinforcers, outsiders or defenders (Salmivalli et al., 1996). The reinforcers provide support for the bully/bullies, the outsiders are seen to remain uninvolved with the bullying situation and the defenders support the victims in the situation (Salmivalli et al., 1996). The defenders of the victim's behaviour are seen to be associated with characteristics such as self-esteem and problem-solving ability (Yang & Kim, 2017).

According to literature there are certain reasons why bystanders decide to not intervene during a bullying situation. These include fear of becoming the next target, lack of assistance by adults in prior bullying situations and the perception that their involvement will be unnoticed (Franke, 2010).

It was found that there are certain factors which influence the defending behaviour of bystanders (Song & Oh, 2017). If other bystanders are present during the bullying situation then the individuals prior experience as the bully, anti-social behaviour, degree of harm, his/her relationship to the victim and his/her popularity status, has an influence on the decision to engage in behaviour to defend the victim (Song & Oh, 2017). On the other hand, if other bystanders were absent during the bullying situation then the individual's prior bullying victimisation experience, degree of empathy and the individual's perceived control has an influence on the decision to engage in behaviour to defend the victim (Song & Oh, 2017).

2.3.4 The bullying circle

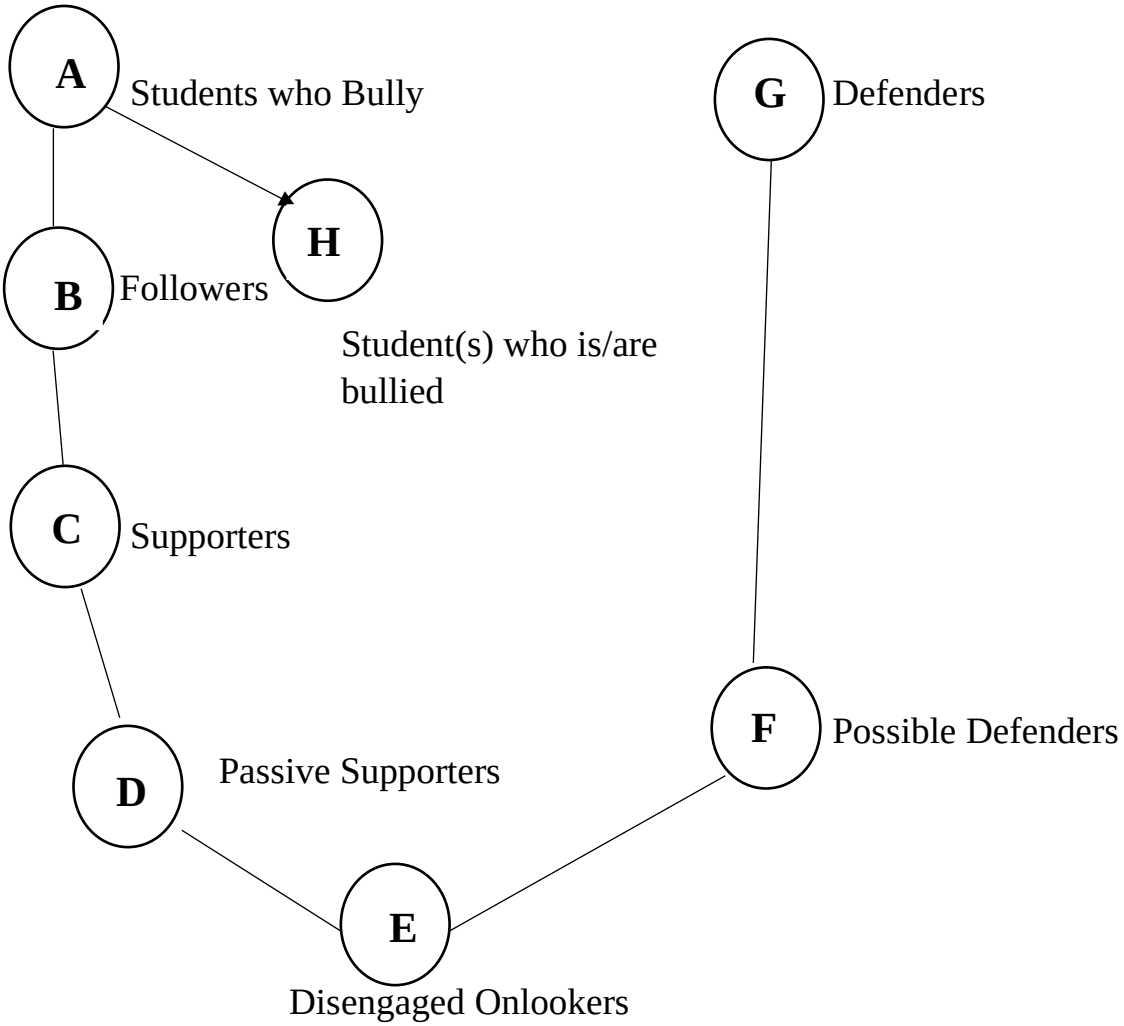


Figure 2.1

A representation of the bullying circle

(Olweus bullying prevention program, 2014)

As previously mentioned, Dan Olweus proposed that three individuals/groups must be present for the bullying cycle to occur (Knowledge Network, 2010). These include the bully(s), the victim(s) and the bystander(s) (Knowledge Network, 2010). Each are seen to play a vital role, which has an impact on the victim(s) of bullying (Knowledge Network, 2010). The different roles found in the bullying cycle include the bully/bullies (A), the followers/henchman (B), the supporters/passive bullies (C), the passive supporters/possible bullies (D), the disengaged onlookers (E), the possible defenders (F), defenders of the victim (G) and the victim(s) (H) (Olweus, 2003).

The bully/bullies (A) are where the bullying cycle is said to begin, as they take a leader role in the bullying cycle (Olweus bullying prevention program, 2014). These individuals share certain characteristics such as intent to harm, induce threat of further aggression, hold an imbalance in power and induce terror or fear (Knowledge Network, 2010). The individual playing the victim role (H) is found in the centre of the bullying cycle and is the one to whom the bullying behaviour is targeted (Olweus, 2003). The victim(s) is also able to start the bullying cycle as the bully, in the case of the bully-victim (Knowledge Network, 2010). The individual/individuals in this case, unintentionally evokes others to bully him/her repeatedly (Knowledge Network, 2010). This is done by reacting emotionally to the bullying behaviour, he/she may have similar difficulty controlling his/her response, thus retaliating (Knowledge Network, 2010).

The followers/henchmen (B) stand positively with the bullying behaviour and engage in it (Olweus bullying prevention program, 2014). The supporters/passive bullies (C) are seen to stand positively with the bullying behaviour, but do not engage directly in it (Olweus bullying prevention program, 2014). The passive supporters/possible bullies (D) believe in the bullying behaviour taking place, but do not show their opinions openly (Olweus bullying prevention program, 2014). The disengaged onlookers (E) stay neutral in the bullying situation and simply watch the bullying behaviour occur (Olweus bullying prevention program, 2014). The possible defenders (F) disagree with the bullying behaviour, but do not act on the victim(s) behalf to stop it (Olweus bullying prevention program, 2014). The defenders (G) disagree with the bullying behaviour taking place and take action to assist the victim(s) in the situation (Olweus bullying prevention program, 2014).

The bystander(s) which were described above, are a substantial part of the bullying cycle, and are not innocent in the situation, as they may either assist to create a situation where the victim becomes stuck in his/her role where he/she feels isolated or alone, feeling a

lack of control over the bullying process (B to E) (Knowledge Network, 2010). They may on the contrary, assist the individuals being targeted, by disagreeing with the bullying behaviour (F) and actively assist to stop it (G). The majority, specifically 81% of the individuals are seen to be the bystanders in a bullying situation (Knowledge Network, 2010). For the present study, only the victim role was focussed on in terms of its relation to traumatic stress severity.

2.4 Theories used to explain Bullying Behaviour

There are many different theories and models which exist, that have been used in isolation or in combination with others, to explain bullying behaviour within a school context. In terms of studies done in many countries around the world, various theories have been used to explain bullying behaviours such as the social identity theory and the intergroup emotions theory (Jones, Manstead & Livingston, 2008).In addition to the above mentioned theories, the ripple effects of bullying model (Sullivan, 2000) and the sociocultural theory (Maunder & Crafter, 2018) were also used to explain bullying behaviour. According to a study done by Evans and Smokowski (2016) a combination of four theories namely the social capital theory, the social dominance theory, the theory of humiliation and the organisational culture theory were used to explain bullying behaviour within a school context.

From the South African literature found, the eco-systemic theory of development and the contextual theory (Darney, 2009) were used to explain bullying behaviour. The abovementioned theories and model will now be discussed separately and briefly below.

The social identity theory was developed by Tajfel and Turner (Tajfel & Turner, 1979). The theory is based on the idea that an individuals' social identity which forms part of his/her self-concept, is formed by belonging and identifying with a specific group (Jones, Manstead & Livingston, 2008). The members in the group are seen to differentiate themselves from outsiders, whom are those not within their group and tend to favour their own group and its specific members (Jones, Manstead & Livingston, 2008). The group is seen as having its own

specific norms that it sets and conforms to, which depicts how the individuals within the group are expected to think and behave (Jones, Manstead & Livingston, 2008).

The intergroup emotions theory was developed by Mackie, Devos and Smith (Mackie, Devos & Smith, 2000). The theory denotes that intergroup emotions are emotions felt by individuals, which derive from their membership in the group (Jones, Manstead & Livingston, 2008).

The ripple effects of bullying model was founded by Sullivan in 2000 and is based on the ecological systems theory (Darney, 2009). There are five levels to this model, where bullying within one level has a dynamic influence on the levels which are surrounding it (Darney, 2009). The first level comprises of the victim and the second level comprises of the parents and family members (Darney, 2009). The third level comprises of the observers at school, the fourth level comprises of the other individuals at school and the final fifth level comprises of the wider community (Darney, 2009).

The sociocultural theory was developed by Vygotsky in 1978 (Cherry, 2018). This theory emphasises the fact that social interaction with peers and adults within a specific culture, influences an individual's learning and development, which is later integrated into the individual's mental structure (Cherry, 2018). Thus, when considering bullying behaviour from this perspective, the focus is moved away from the individual bully and victim relationship and rather emphasises the influence contextual and institutional systems have on this behaviour (Maunder & Crafter, 2018).

The social capital theory according to Putnam (2000) focuses on the benefits that an individual gain from social relationships, as social networks are seen to be investments. The absence of social capital experienced by the victim of bullying, results in him/her remaining in their role as a victim, which in turn denies him/her the opportunity to gain social status in the group (Evans & Smokowski, 2016).

The social dominance theory developed by Sidanius and Pratto in 1999, is an integrative ‘‘multi-level theory of how societies maintain group-based dominance’’ (Christie, 2012, p. 1). ‘‘Societies recognise the legal rights of dominants and portray their way of living as virtuous and characteristic of the whole society, whereas subordinates receive little social recognition and are even stigmatised’’ (Christie, 2012, p. 1). Adolescents thus engage in bullying behaviour from this theoretical perspective, to gain social dominance on both a group and individual level, which is further maintained by chronic bullying (Evans & Smokowski, 2016).

The theory of humiliation was developed by Dr Lindner and proposes that all living persons hold the desire to be respected and recognised by others, which is a fundamental human right (Lindner, 2007). Humiliation is seen to destroy that right, which results in broken social relationships (Lindner, 2007). The control exercised by the bully over a victim in a bullying situation, results in a sense of humiliation, which has long-lasting effects on such victims (Evans & Smokowski, 2016).

The organisational culture theory was first introduced by Edgar Schein in 1980 (Aleixandre, 2018). The theory proposed that each individual institution develops its own culture, which is why individuals behave differently in various organizations (Aleixandre, 2018). From this perspective if bullying behaviour is taking place in a specific school (institution), then the whole organisational culture must be relooked at (Evans & Smokowski, 2016). The whole organisational culture must also be changed, to eradicate the bullying problem (Evans & Smokowski, 2016).

The eco-systemic approach on human behaviour development is derived from Von Bertalanffy’s general systems theory (Darney, 2009). Eco-systemic approach suggests the individual is a system within other larger systems, and an individual’s behaviour is developed and maintained through interactional processes with these larger systems (Darney, 2009). The

interpersonal system, family/small group system, community system and the physical environment system are the larger systems (Darney, 2009).

The contextual theory proposes that the time, space and place within which the human interaction or behaviour occurs, plays a vital role in the process (Darney, 2009). When considering how bullying behaviour effects the specific victim, it is influenced by the specific time, space and place within which the bullying behaviour took place (Darney, 2009).

2.5 Bullying Types

Bullying is divided into two groups, traditional/conventional bullying or cyberbullying (which is also referred to as internet aggression, internet bullying or digital harassment). Traditional bullying is committed physically, and the perpetrator is perceived to be more powerful than the target/victim (Orpinas & Horne, 2006). Cyberbullying is seen to be prevalent in South African schools (Hymel & Swearer, 2015). According to Chukwuere and Chukwuere (2017) cyberbullying is ‘‘bullying via electronic media that is a deliberate act or behaviour carried out by a group or an individual, primarily most victims have no knowledge of the person responsible for their act, such victims are more likely to be females’’ (p. 9983-9984). Authors have argued that cyberbullying is a technological extension of physical bullying (McQuade et al., 2009) and relational bullying (Gladden, Vivolo-Kantor, Homburger et al., 2014; Waasdorp & Bradshaw, 2014).

According to Solberg and Olweus (2003), traditional bullying is subdivided into relational bullying (e.g. spreading rumours or lies about a peer), physical bullying (e.g. hitting a peer) and verbal bullying (e.g. teasing or picking on a peer) (in Waasdorp & Bradshaw, 2014). According to Smit (2015) physical bullying, verbal bullying and relational bullying are the types of traditional bullying which are found in a South African school context. Neser et al. (2004) similarly indicated the three types mentioned previously, however added emotional and sexual bullying to the types of traditional bullying found, in a South African

school context. Emotional bullying usually includes acts such as terrorising, extorting, humiliating, blackmailing and rating of personal characteristics (Neser et al., 2004). Sexual bullying usually includes acts such as sexual positioning and sexual harassment (Neser et al., 2004).

As in the case of traditional bullying, cyberbullying is also subdivided into different types. According to Imran (2014) cyberbullying types include posting/backstabbing, coercing and masquerading. Posting or backstabbing usually involves posting pictures of friends or peers online (Imran, 2014). Coercing for example involves editing a picture or video to expose another friend or peer online (Imran, 2014). Masquerading involves for example bullying by remaining anonymous, or by faking someone's identity (Imran, 2014). In many countries around the world, traditional school bullying is seen to be more prevalent than cyberbullying (Kljakovic, Hunt & Jose, 2015). According to Schneider et al. (2012) the majority of cyberbullying victims are also seen to be traditional bullying victims.

2.6 Bullying Rates

In many counties around the world, from the learners' perspective, peer-on-peer bullying is extensively experienced (Ayenibiowo & Akinbode, 2011; Forero, Mclellan, Rissel & Bauman, 1999; Owusu, Hart, Oliver & Kang, 2011; Schneider, O'Donnell, Stueve & Couter, 2012). This is also seen from the perspectives of the parents whose children were involved (Sawyer, Mishna, Pepler & Wiener, 2011). An international study found a bullying victimisation rate of 20.6% (Analitis et al., 2009). Rates are seen to vary from examples in high income countries, which indicate rates as low as 5,3% (Arseneault et al., 2011), to examples in low income countries, which indicate rates as high as 42,9% (Ayenibiowo & Akinbode, 2011).

In many countries around the world, bullying rates seem to be context, gender and age specific (Flemming & Jacobsen, 2009). High school students when being compared to

primary school students, show higher bullying victimisation prevalence rates (Moore & Woodcock, 2017). In terms of gender, boys bullying victimisation (Flemming & Jacobsen, 2009) and/or perpetration rates (Ndibalema, 2013) specifically for traditional bullying (Hemphil, Tollit & Kotveski, 2012) are higher than for girls (Forero, Mclellan, Rissel et al., 1999; Zych, Ortega-Ruiz & Del Rey, 2015). This is true for both private and public-school contexts (Ayenibiowo & Akinbode, 2011). Cassidy (2009) on the contrary, found that adolescent girls have a greater bullying victimisation rate when compared to their male counterparts (Hemphil, Tollit & Kotveski, 2012). Hemphil, Tollit and Kotveski (2012) reported similar findings, in the case of both traditional and cyberbullying victimisation (Hemphil, Tollit & Kotveski, 2012). When considering age, bullying behaviour in general appears to decrease with increasing age (Flemming & Jacobsen, 2009; Gruber & Fineran, 2007).

In many countries around the world the most dominant type of bullying found in a school context, differs from study to study. Physical bullying (Ndibalema, 2013), relational bullying (Hemphil, Tollit & Kotveski, 2012) and verbal bullying (Owens, Skrzypiec & Wadham, 2014; Thomas et al., 2016) have all been suggested as being the most dominant type of bullying prevalent within a school context. In another study, relational bullying was found to be the second most prevalent type of bullying in a school context (Khamis, 2014). Owens, Skrzypiec and Wadham (2014) on the contrary, found indirect and physical bullying as being the second and third most dominant types of bullying within a school context.

Bullying is seen to be a pressing problem in South African schools, from the learner's perspective (Burton & Mutongwizo, 2009; de Wet, 2005; Greeff & Grobler, 2008; Liang, Flisher & Lombard, 2007; Mlisa, Ward, Flisher & Lombard, 2008; Ndebele & Msiza, 2014). Educators have similarly reported witnessing the bullying of pupils at school (de Wet, 2006; de Wet & Jacobs, 2013). The rates of bullying victimisation rates in a school context include

19.3% (Liang, Flisher & Lombard, 2007) and 16.69% (Mlisa, Ward, Flisher & Lombard, 2008). In addition to the two bullying victimisation rates mentioned above, a chronic bullying victimisation rate of 26% was found among grade eight learners in a high school context (Darney, 2009). In terms of bullying victimisation severity rates among grade eight learners in a school context, 33% indicated low severity, 8% indicated intermediate severity and 12% indicated severe chronic bullying (Darney, 2009).

In South African literature bullying is seen to be prevalent specifically in rural schools, where gender is seen to play a role in the bullying situation (Mlisa, Ward, Flisher & Lombard, 2008; Ndebele & Msiza, 2014). Boys' prevalence rates in terms of bullying victimisation and perpetration are higher than for girls (de Wet, 2005; Liang, Flisher & Lombard, 2007). Van der Westhuizen and Maree (2009) however found the opposite to be true, when looking at the situation from an educators' perspective, for cyberbullying specifically (Burton & Mutongwizo, 2009; Tustin, Zulu & Basson, 2014). Race has also been reported to play some role, as black learners' cyberbullying prevalence rates were higher in a school context, than for learners from other ethnic groups (Burton & Mutongwizo, 2009).

In South Africa, verbal bullying (de Wet, 2005) and physical bullying (de Wet, 2006) were found to be the most dominant types of bullying taking place in a school context, for both learner-on-learner and teacher-on-learner bullying (de Wet, 2006). Relational bullying was seen to be the second most dominant type of learner-on-learner bullying victimisation, prevalent in a school context (Darney, 2009).

In South Africa, according to de Wet (2010) in addition to verbal and physical bullying, learners also experience teacher-on-learner targeted non-verbal and psychological bullying during and after school hours. Verbal learner-on-teacher targeted bullying was additionally found to be prevalent in public high schools (de Wet, 2006; Woudstra, 2015). Cyberbullying

alternatively was found to be the least prevalent type of bullying victimisation experienced among grade eight learners in a South African school context (Darney, 2009).

Given bullying rates as high as 56.4%, specifically in South African primary schools (Greeff & Grobler, 2008), it is not surprising that only 23% of learners, feel safe in their school environment (Harber & Mncube, 2013). This behaviour may not start in a school environment but is where it most commonly manifests (Harber & Mncube, 2013; Pitso et al., 2014). In the Eastern Cape, bullying is similarly seen as being a prevalent phenomenon (Ndebele & Msiza, 2014) which is occurring in a school context (Kang'ethe, Manomano & Ndonga, 2016; Pitso et al., 2014).

2.7 Anti-bullying Policy and Intervention Effectiveness

In many countries around the world, public schools are required by law, to have an anti-bullying policy incorporated in the schools' code of conduct (Smith, Smith, Osborn & Samara, 2008). An anti-bullying policy creates a shared understanding of the concept of bullying in a school context for all the relevant stakeholders (Colorado Department of Education, 2016). Within an anti-bullying policy, one should be able to find a formal definition of bullying and the preventative measures that have been established and implemented at the school to intercept a bullying situation (Colorado Department of Education, 2016). A description of the steps that will be taken to deal with the bullying situation, when/if it occurs in the school context, should also be included in an anti-bullying policy (Colorado Department of Education, 2016).

In South Africa, some schools do have anti-bullying policies established, which have been implemented to create an anti-bullying culture (Matthews, 2015). Most of the South African literature reviewed has however, leaned towards proposing that most South African schools do not have such anti-bullying policies established. It was stipulated that the school(s) need to adopt a clear anti-bullying policy, which is effectively implemented and

rigorously evaluated (Bowes, Boyes, Cluver, Ward & Badcock, 2014; de Wet & Jacobs, 2006, 2013; Harber & Mncube, 2013). Educators in schools have been seen to distance themselves from the problem, making it an individual rather than a societal problem (de Wet & Jacobs, 2013). Children's rights have been argued in literature to neither be promoted nor protected in certain South African schools (Prinsloo, 2005).

In most countries around the world, there has been an elevated interest investigating interventions adopted by schools, for the purpose of preventing or reducing school-based bullying behaviour (Silva, Oliveira, Mello, Andrade, Bazon & Silva, 2017). It was found that if a whole-school comprehensive prevention program was adopted, the bullying victimisation and perpetration rates decreased by 50% (Collier, 2011).

When considering the various interventions that have been adopted by schools to reduce bullying and cyberbullying, the whole-school focused intervention has been found to be the most effective (Catone et al., 2015; Silva et al., 2017). Interventions delivered via classroom curriculum, computer-based intervention, intervention through social skills training (Catone, Piras, Vellante, Danielsdottir, D' Aloja, Lesinskiene, Angermeyer, Carta & Bhugra, 2015), as well as the STAC program, which is a bullying bystander intervention (Johnston, Midgett, Doumas & Moody, 2018) are however examples of other interventions that exist.

The Olweus bullying prevention program is an example of a comprehensive school-wide program (Olweus & Limber, 2010). It has shown to reduce bullying involvement and antisocial behaviour among learners (Olweus & Limber, 2010). Such a prevention program includes interventions on at school-wide level, classroom level and individual level and requires full cooperation from students, teachers, parents and all school staff (Olweus et al., 1999).

The Olweus bullying prevention program was found to be built on four important principles that aim to create a school climate characterised by: (1) warmth, interest and

participants of caregivers; (2) solid level on unacceptable behaviour; (3) consistent application of discipline procedures on behaviour which breaks the code of conduct and; (4) positive role modelling played by the adults (American Psychological Association, 2004). The goal of the program is to alter the opportunities and rewards that are incorporated in bullying behaviour (American Psychological Association, 2004).

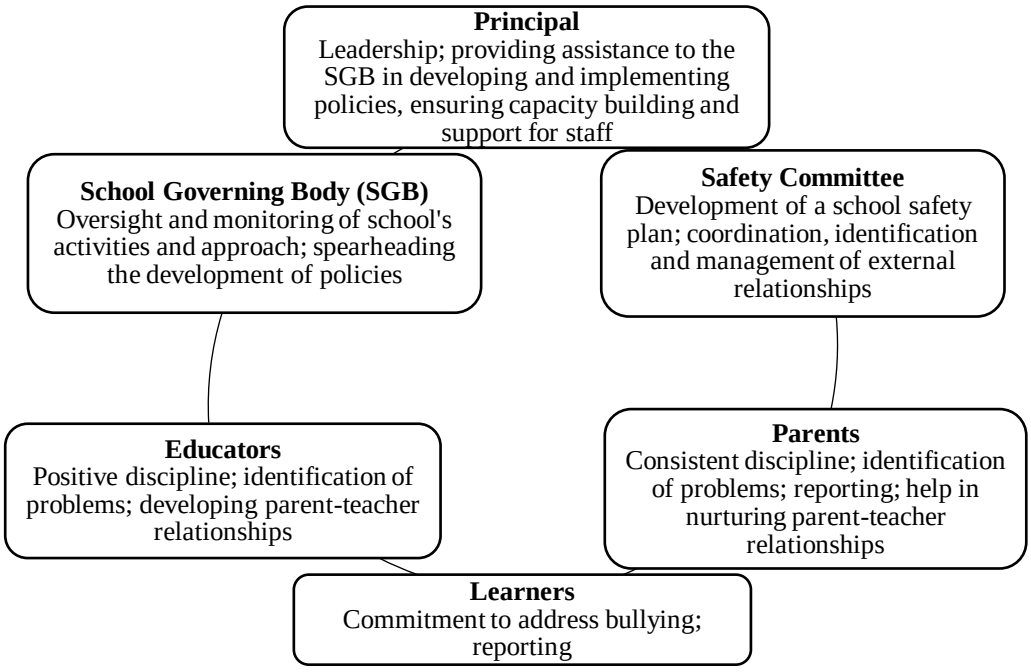
Whole school prevention interventions involve various components such as incorporating respect for human rights into classroom rules, teachers having in-depth lessons regarding bullying, engaging in activities with all the possible role players in a bullying situation, workshops provided to parents and elevating supervision within the school (Silva et al., 2017). Furthermore, enforcing disciplinary methods, elevated cooperation between researchers and school staff, increased training of teachers and incorporating the use of technological resources, are also components regarding whole school prevention interventions (Silva et al., 2017).

In international literature an ecological approach to interventions in a school context was suggested, which targets interventions strategies at various levels (Hornby, 2016). These levels include teachers, schools, communities and the broader society (Hornby, 2016). The ecological systems theory of development was founded by Bronfenbrenner in 1979 and is used to explain how the qualities in the individual and his/her multi-level environment, interacts and influences the way he/she develops and matures (Oswalt, 2015). In terms of bullying behaviour, this theory focuses on the relationship and interaction between the bully and victim (each with their inherent characteristics) in their multi-level environment that influences the behaviour (Barboza et al., 2008). Seeing that the bullying behaviour is impacted by the influences from the individuals, parents, peers, school, community and society, effective intervention strategies are needed at each of the levels (Hornby, 2016) to prevent and handle bullying behaviour effectively.

In South African literature, a whole-school comprehensive prevention approach was similarly suggested to best handle and prevent incidents of school-based bullying, and thereby contributing to create safer schools (Dale-Jones, 2015; Department of Basic Education Republic of SA, 2012). A school is seen to comprise of several essential components that are part of and interact within larger systems of the home and community environment (Department of Basic Education Republic of SA, 2012).

Figure 2.2

The responsibilities of the relevant stakeholders when adopting a whole-school approach



(Department of Basic Education Republic of SA, p. 12).

Each essential part is seen to play an important role, thus having certain responsibilities when adopting a whole-school bullying prevention approach (Department of Basic Education Republic of SA, 2012). Details regarding each essential component and each of their responsibilities are described in Figure 2.2 above.

2.8 Consequences of Bullying

Bullying is perceived to be a normal part of growing up by many individuals and therefore its effects are often overlooked (Harber & Mncube, 2013). Bullying in schools is

not seen as being a random event, and the behaviour is seen to contribute independently to individuals' mental health problems (Arseneault, Bowes &Shakoor, 2010). This is also seen later in young adults (Lereya, Copeland, Costella & Wole, 2015), and entails great costs to society (Olweus, 2013).

In many countries around the world, bullying has a greater negative effect on the victims' physical and psychological well-being than many people currently believe (Gruber & Fineran, 2007; Victoria State Government, 2013). The frequency of the bullying behaviour is seen to have an influence on the severity of the consequences (Thomas et al., 2016). There are various mental health consequences for being the victim of traditional and cyberbullying in schools. These include negative emotions and feelings such as hopelessness, loneliness (Flemming & Jacobsen, 2009; Owusu et al., 2011) and shame (Middlesex London Health Unit, 2015). These also include change in physiological reactions such as insomnia (Flemming & Jacobsen, 2009; Owusu et al., 2011), poor concentration (Beran & Li, 2008), suicidal ideation (Turner, Exum, Brame & Holt, 2013) and self-harm tendencies (Hay & Meldrum, 2010). In addition to the above-mentioned consequences the victims of traditional and cyberbullying also experience school absenteeism (Beran & Li, 2008), poor school performance (Ndibalema, 2013), less peer support, feeling disconnected from school, feeling unsafe at school (Lester, Cross, Dooley & Shaw, 2013) and social isolation (Hurley, 2018).

While these may be almost 'normal' reactions to a range of adversities, studies have shown that there may be a link between severe bullying experiences and depression (Brandt et al., 2012; Espelage, Hong & Mebane, 2016; Hurley, 2018; Owusu et al., 2011; Schneider, O'donnell, Stueve & Coulter, 2012; Turner, Exum, Brame & Holt, 2013; Wang, Nansel & Iannotti, 2011). This remains the case even when controlling for prior psychopathology, family adversity, gender and IQ (Zwievzynska, Wolke & Lereya, 2013). Similarly, anxiety symptoms were associated with bullying victimisation experiences (Brandt et al., 2012;

Espelage, Hong & Mebane, 2016; Hurley, 2018; Pepalasi, 2018). Bullying victimisation experiences were also associated with an increased risk of developing personality disorders (Pepelasi, 2018). In addition to the above-mentioned consequences, psychosomatic symptoms (Houbre, Tarquinio, Thuillier & Hergott, 2006) such as stomach aches, muscle aches and headaches (Hurley, 2018) and psychotic symptoms (Arseneault et al., 2011; Campbell & Morrison, 2007; Catone et al., 2015; Kelleher et al., 2008) were also associated with bullying victimisation experiences. Adult post-bullying syndrome (APBS) was another consequence associated with experiencing bullying victimisation (Delara, 2016).

APBS is seen to mimic many symptoms seen in PTSD, however there are differences as there are both positive and negative components associated with APBS (Delara, 2016). With PTSD, there are only negative components (Delara, 2016). The negative components of APBS include problems with self-esteem, inability to trust others, difficulties in forming and maintaining relationships, tend to be people pleasing, experience feelings of intense anger and have a risk of developing psychiatric disorders (Delara, 2016). The positive components on the other hand include discovering inner strength, developing the ability to take control of own life and determination to make a success of own future (Delara, 2016).

In many countries around the world, the bully/victim, which is a specific subgroup of victims, are seen to significantly score more negatively on measures of psychological and physical health (Kowalski & Limber, 2013). They also tend to suffer from suicidal ideation, suicidal attempts (Hepburn, Azrael, Molnar & Miller, 2012) and the most severe psychosomatic symptoms (Forero, Mclellan, Rissel & Bauman, 1999; Houbre, Tarquinio, Thuillier &Hergott, 2006). Bully/victims also tend to experience psychotic symptoms from the learners' and parents' perspectives following the bullying behaviour (Kelleher et al., 2008).

A body of literature exists on the relationship between bullying victimisation and psychotic symptoms (Campbell & Morrison, 2007; Kelleher et al., 2008; Valmoggia et al., 2015). Psychotic symptoms are seen to increase as the levels of bullying increase (Kelleher et al., 2013). Symptoms may include dissociation, auditory hallucinations, paranoia (Campbell & Morrison, 2007) and persecutory ideation (Catone et al., 2015). This is the case even when controlling for sociodemographic factors, IQ and other past general traumas (Catone et al., 2015). Bullying experiences early in life are thought to be associated with psychotic symptoms, since young children have not yet developed the coping strategies to deal with these traumatic experiences (Arseneault et al., 2011).

In many countries around the world, the individual/individuals playing the bully role, are also seen to experience consequences as a result of bullying. These consequences include forming a low self-concept (Houbre, Tarquinio, Thuillier & Hergott, 2006), antisocial outcomes (Bender & Losel, 2011), poor school performance, increased truancy risk, inability to maintain social relationships and increased risk for substance abuse (Hurley, 2018). There are also more long-term effects of playing a bully role. This includes the risk of engaging in spousal and/or child abuse and increase the individuals' risk of not being educated and/or employed (Hurley, 2018). Individuals playing the bully or victim role have however, both seen to be at an increased risk for hyperactivity, emotional symptoms, conduct problems and peer problems (Khamis, 2014). According to Chaux, Molano and Podlesky (2009) poverty, population density and homicide rates did not contribute to explaining the bullying rates in a school context.

Similarly, in South African literature, bullying victimisation is associated with a deep sense of shame, thus feeling that the bullying victimisation was their fault (Dale-Jones, 2015). Bullying victimisation is also associated with a loss of self-esteem, lower perceived social identity (Cassidy, 2009), internalising symptoms, conduct problems (Boyes et al., 2014), self-

harm tendencies and violent behaviour (Liang, Flisher & Lombard, 2007). In addition to the above-mentioned consequences bullying victimisation can also result in a loss of concentration, school drop-out tendencies, (Harber & Mncube, 2013) and poorer problem-solving styles (Cassidy, 2009).

Being the victim of bullying in South African schools has also similarly, been associated with depression, (Penning, Bhagwanjee & Govender, 2010; Singh & Steyn, 2014) anxiety (Singh & Steyn, 2014) and psychotic symptoms (Arseneault, Bowes & Shakoor, 2010). Another psychiatric disorder that has not regularly been associated with bullying is posttraumatic stress disorder (PTSD). Traumatic stress symptoms may however, be an additional serious consequence of being victimised by bullying and this is clear in the literature on many countries around the world (Brandt et al., 2012; Espelage, Hong & Mebane, 2016; Flannery, Wester & Singer, 2004; Houbre, Tarquinio, Thuillier & Hergott, 2006; Khamis, 2014).

This association also features in South African literature (Penning, Bhagwanjee & Govender, 2010) with the relationship being dependent on the frequency of bullying (Penning, Bhagwanjee & Govender, 2010). How traumatic stress unfolds will be explored in the next chapter.

2.9 Conclusion

Bullying, specifically traditional and cyberbullying is a prevalent problem, in a school context in many countries around the world and in South Africa. In terms of interventions, a whole-school comprehensive bullying prevention program has been found to be the most effective to reduce and prevent bullying. This was the case for schools in many countries around the world and in South Africa. It was however observed that educators from certain South African schools distanced themselves from the problem, regarding the bullying

situation and most South African schools were found not to have anti-bullying policies established at their prospective schools.

Various consequences follow victims and bullies in traditional or cyberbullying in a school context. In many countries around the world and in South Africa, the consequences range from ‘normal’ reactions for both the victim(s) and the bully(s) to more severe psychiatric disorders specifically for the victim(s). Traumatic stress symptoms and posttraumatic stress disorder (PTSD) being an example of a more severe psychiatric disorder that has been linked to being a victim of bullying in a school context in international and South African literature.

CHAPTER 3

TRAUMATIC STRESS

3.1 Introduction

International and South African literature regarding traumatic stress will be reviewed within this chapter. The concepts of traumatic stress and posttraumatic stress disorder (PTSD) will be discussed. The development of traumatic stress will be explained, followed by a discussion of the different traumatic stress symptoms. The posttraumatic stress disorder (PTSD) diagnostic criteria will thereafter be stipulated. This will be followed by a discussion of the various theories which exist regarding PTSD development and maintenance.

The factors which influence traumatic stress severity will thereafter be identified. This will be followed by a discussion regarding the general rates of PTSD, within the schools of many countries around the world and within South African schools. A discussion regarding interventions on PTSD prevention and treatment will commence, which will be followed by a discussion of international and South African literature which looks at the relationship between bullying and traumatic stress.

3.2 Definition of Traumatic Stress

Traumatic stress is defined as “a general set of symptoms a person may suffer from after enduring an intensely stressful situation…’’ by Jia (2017, p. 1) and as ‘‘…the result of extraordinary stressful events that shatter your sense of security, making you feel helpless in a dangerous world…’’ (Robinson, Smith & Segal, 2018, p. 1). Literature has shown that ‘‘… it’s not the objective facts that determine whether an event is traumatic, but your subjective emotional experience of the event. The more frightened and helpless you feel, the more likely you are to be traumatized…’’ (Robinson et al., 2018, p. 1).

Posttraumatic stress disorder (PTSD) is an official psychiatric diagnosis, which requires experiencing a traumatic event or incident as part of a strict diagnostic criteria (American

Psychiatric Association, 1980). It was first accepted in the third edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-III), in 1980 as an anxiety disorder (American Psychiatric Association, 1980). In the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) it appears in the section dealing with trauma and stress related disorders (National Centre for PTSD, 2013).

Traumatic stress severity is determined by calculating the total symptom severity score, of all the items on the PTSD Checklist for DSM-5 (PCL-5). The total symptom severity scores will be compared to a reasonable cut-off value, which allows to screen for a preliminary diagnosis of PTSD. Each quantitative measure varies regarding the cut-off value. In terms of the PTSD Checklist for DSM-5 (PCL-5), a cut-off value of 33 was proposed (U.S. Department of Veteran Affairs, 2018). The cut-off value of 33 will thus, be used to determine traumatic stress severity in this study. The details regarding the instrument will be explored in greater depth in the methodology chapter. First, we will explore how traumatic stress unfolds.

3.3 Stages in Traumatic Stress Development

There are three phases which explain the process of traumatic stress development, which essentially may lead to the individual becoming permanently traumatised (Van Rooyen, 2016). The first phase is comprised of the traumatic event and the immediate window of time which follows the traumatic event (Van Rooyen, 2016). During this phase which is referred to as the acute peri-traumatic phase, intrusive memories form (Van Rooyen, 2016) which are different from normal memories (Ehlers & Clark, 2000).

The second phase which is referred to as the adaptation phase, is where the traumatic stress symptoms present themselves, but are not yet entrenched as the symptoms may show improvement, if healthy coping mechanisms are adopted (Van Rooyen, 2016). There are various healthy coping mechanisms such as engaging in safe naturalistic exposure to components relating to the traumatic event with the help of a trained professional and

reaching out to healthy not overwhelming social support within ones' social network such as family and friends (Van, Rooyen, 2016). Additionally, processing thoughts, feelings and emotions so that one is thinking about the traumatic event is also a healthy coping mechanism which can be adopted (Van Rooyen, 2016).

The third and final phase has been referred to as the symptom expression phase and is where the traumatic stress symptoms appear to become permanent, if they are not resolved during the adaptation phase (Van Rooyen, 2016). If the person reaches this phase, which takes place at least a month after the traumatic event or incident had been witnessed or experienced, he/she may be suffering from PTSD (Van Rooyen, 2016).

There are seen to be long-term effects for individuals who suffer from PTSD. These include poor concentration, difficulty thinking abstractly and experiencing a decline in academic performance (Newport Academy, 2018). Additionally, having difficulty forming and maintaining relationships with others, avoiding challenging situations due to fear and increased risk-taking behaviours are also long-term effects for individuals who suffer from PTSD (Newport Academy, 2018).

3.4 Traumatic Stress Symptoms

There are four classes (referred to as criterion in the DSM-5) of traumatic stress symptoms in adults, which may present themselves during the second phase of traumatic stress development. The first class involves symptoms of memory intrusion (also referred to as re-experiencing symptoms), the second class involves symptoms of avoidance, the third class involves symptoms of changes in mood and cognition and the fourth class involves symptoms of hyperarousal reactions (Van Rooyen, 2016).

The symptoms which are grouped under the intrusive memory class includes experiencing nightmares, flashbacks and/or sensations of reliving the traumatic event again and having strong physical and psychological reactions when triggered by something that

reminds him/her of the traumatic event (U.S. Department of Veteran Affairs, 2015; Van Rooyen, 2016). The symptoms which are grouped under the avoidance class includes avoiding thinking or talking about the traumatic event and/or avoiding physical components that remind him/her of the traumatic event (U.S. Department of Veteran Affairs, 2015; Van Rooyen, 2016).

The various symptoms which are grouped under the change in mood and cognition class includes experiencing intense negative thoughts about self and/or other individuals, inability to experience positive feelings and/or trouble recalling important parts of the traumatic event (U.S. Department of Veteran Affairs, 2015). Additionally, experiencing self-blame, blaming others for the traumatic event, experiencing negative emotions such as fear and/or shame, experiencing a loss of interest in activities one enjoyed doing prior to the traumatic event and/or feeling isolated from others are also symptoms grouped under the change in mood and cognition class (Van Rooyen, 2016).

The symptoms which are grouped under the hyperarousal reaction class includes the feeling of always being in danger resulting in one being on guard at all times, experiencing exaggerated startle responses, having difficulty with concentration and/or having difficulty sleeping (U.S. Department of Veteran Affairs, 2015). Additionally, experiencing extreme irritability, anger outbursts towards others and/or engaging in behaviour which appears to be dangerous for self and/or others are also symptoms grouped under the hyperarousal reactions class (Van Rooyen, 2016).

Adolescents are seen to have many of the same traumatic stress symptoms which are seen in adults. There are however symptoms which may differ or appear as being more severe, due to their developmental age group (Sailing, 2017). The symptoms include experiencing extreme anger outbursts or irritability behaviour, experiencing extreme guilt for

not being able to stop the traumatic event from occurring and/or the desire to obtain revenge (Sailing, 2017).

3.5 Posttraumatic stress disorder (PTSD) Diagnostic Criteria

There are various aspects to consider when looking at what makes an event or incident traumatic. It was suggested that an event is considered traumatic if an individual is exposed to actual or threatened death, serious injury or sexual violence (American Psychiatric Association, 2013; Staggs, 2016). This being in one of the following ways namely directly experienced, personally witnessed, learnt that this happened to a close family member or friend and/or experienced repeated extreme exposure to details of the events aftermath (American Psychiatric Association, 2013; Staggs, 2016).

According to the DSM-5, what was mentioned above appears in criteria A as can be seen in Table 3.1 below for adults, adolescents and children six years and older, when making a formal diagnosis of PTSD (American Psychiatric Association, 2013). There are seven more criteria which need to be met, before a formal clinical diagnosis of PTSD can be made, with regards to the DSM-5 (American Psychiatric Association, 2013). These criteria are outlined in Table 3.1 below.

Table 3.1

PTSD DSM-5 diagnostic criteria

Criterion	Details
A	The event is traumatic if exposed to actual or threatened death, serious injury or sexual violence (American Psychiatric Association, 2013) in one of the following ways • Directly experienced, • Personally witnessed, • Learnt that this happened to a close family member or friend and/or • Experienced repeated extreme exposure to details of the events aftermath (American Psychiatric Association, 2013).
B	Include symptoms of memory intrusion/re-experiencing such as • Nightmares • Flashbacks • Sensations of reliving the traumatic event again

	• Strong physical and psychological reactions when triggered by something that reminds an individual of the traumatic event (U.S. Department of Veteran Affairs, 2015).
C	Includes symptoms of avoidance such as • Avoiding thinking or talking about the traumatic event • Avoiding physical components that remind him/her of the traumatic event (U.S. Department of Veteran Affairs, 2015).
D	Includes symptoms of changes in mood and cognition such as • Extreme negative thoughts about self and/or other individuals • Difficulty or inability to feel positive emotions • Difficulty recalling important parts of the traumatic event (U.S. Department of Veteran Affairs, 2015). • Experiencing self-blame or blaming others for the traumatic event • Negative emotions for example fear and/or shame • Loss of interest in activities one enjoyed doing prior to the traumatic event • Feeling isolated from close others (Van Rooyen, 2016).
E	Includes symptoms of hyperarousal reactions such as • The feeling of always being in danger thus being on guard at all times • Exaggerated startle responses • Inability to concentrate • Difficulty sleeping (U.S. Department of Veteran Affairs, 2015). • Extreme irritability • Anger outbursts towards others • Engaging in behaviour which is seen to be dangerous for self and/or others (Van Rooyen, 2016).
F	The symptoms should be present for more than one month (American Psychiatric Association, 2013).
G	The symptoms should appear to cause functional damage, to various spheres within the individual's life (American Psychiatric Association, 2013).
H	The symptoms should be present even when medication, substance use or other illnesses have been ruled out (American Psychiatric Association, 2013).

For criterion B, at least one symptom which was listed under the memory intrusion symptoms class in Table 3.1, should be experienced by the individual (American Psychiatric Association, 2013). For criterion C, at least one symptom which was listed under the avoidance symptoms class in Table 3.1 should be experienced by the individual (American Psychiatric Association, 2013). For criterion D, at least two symptoms which were stipulated under changes in mood and cognition symptoms class in Table 3.1 should be experienced by the individual (American Psychiatric Association, 2013). For criterion E, at least two

symptoms in the hyperarousal symptoms class listed in Table 3.1 should be experienced by the individual (American Psychiatric Association, 2013). In Table 3.1 above criterion F also suggests that the symptoms should be present for longer than one month, criterion G stipulates that the symptoms should cause disruption in various domains of an individual's life and criterion H states that the symptoms should still be present even when medication, substance use and other medical conditions have been ruled out before a clinical diagnosis of PTSD can be made (American Psychiatric Association, 2013).

As mentioned previously, the criteria which was discussed above relates only to adults, adolescents and children six years and older. Within the DSM-5 there appears to be a separate developmental subtype, for children younger than six years, which is referred to as posttraumatic stress disorder in preschool children (Scheeringa, 2016). The diagnostic criteria for that separate developmental subtype appears to differ slightly from that of the adult criteria, as it is seen to be more behaviourally based and sensitive to the specific developmental age group (Scheeringa, 2016). Various PTSD theories and models will be reviewed in the following section and the development and maintenance of PTSD will be discussed.

3.6 Theories to explain PTSD

There are various theories and models which exist that have been used, in numerous studies in many countries around the world and specifically in South Africa to explain the development and maintenance of Posttraumatic Stress Disorder (PTSD). The trauma theory (Kubeka, 2008) was used to explain the development and maintenance of PTSD with regards to South African literature. In terms of literature based on studies done on other countries in the world the dose-dependent response model of PTSD (Maddux & Winstead, 2015), the two-factor theory of PTSD (Antony & Stein, 2009) and the protective-factor-based model of posttraumatic distress (Pat-Horenczyk, Kehan, Achituv & Bachar, 2014) were used to explain

the development and maintenance of PTSD. Additionally, the social cognitive theory of PTSD (Smith, Felix, Benight & Jones, 2017) and the cognitive model of PTSD (Ehlers & Clark, 2000) were also used to explain the development and maintenance of PTSD. Each theory and model mentioned above will be briefly discussed below.

The trauma theory which stems from the work of Cathy Caruth, assists in understanding how certain experiences deplete a person's coping resources (Cuddon, 2013) It looks at the relationship between memory, truth and the manner in which testimony can assist in an individual's recovery (Cuddon, 2013). The theory proposes that an individual may develop posttraumatic stress disorder (PTSD) if he/she experiences a life-threatening event(s), which is seen to take place in the environment external to the individual (Kubeka, 2008).

The dose-dependent response model of PTSD which has also been referred to as stressor-dose model of PTSD proposes ''…severity, duration and proximity to a traumatic event, or 'dose' of trauma exposure determines who will and who will not develop PTSD'' (Maddux & Winstead, 2015, p. 168). An individual's risk for developing PTSD can thus essentially be assessed by looking at the severity of the specific traumatic event experienced.

The two-factor theory of PTSD has also been referred to as the two-stage learning theory which was proposed by Mowrer in 1960 (Devilly & McGrail, 2006). Stage one involves a previous neutral stimulus, being linked with an unconditioned stimulus (now becoming a conditioned stimuli) producing anxiety and fear (Devilly & McGrail, 2006). The quantity of conditioned stimuli can be increased by stimulus generalisation, these also produce anxiety and fear due to sharing similar properties to the original conditioned stimuli (Devilly & McGrail, 2006). Individuals with PTSD become fearful and distressed and adopt the avoidance coping strategy, to deal with the numerous stimuli surrounding the traumatic event (Antony & Stein, 2009). The second stage involves operant conditioning, where the anxiety produced strengthens the chances of adopting avoidant thoughts and behaviours, which is

strengthened through the process of negative reinforcement, which results from the reduction of anxiety and fear resulting from the avoidance coping strategy (Devilly & McGrail, 2006).

The protective-factor-based model of PTSD proposes that perceived self-efficacy, cognitive-emotion regulation and flexibility are the most important predictors of PTSD symptom severity (Pat-Horenczyk, Kenan, Achituv & Bachar, 2014). Perceived self-efficacy is an individual's belief about his/her abilities to overcome difficulties and the belief that he/she exercises some degree of control, over events that influence his/her life (Bandura, 1994). Cognitive-emotion regulation is the management of emotions and feelings, through cognitive strategies which are to assist individuals maintain control over their feelings and emotions, during or after the traumatic event (Thompson, 1991). Flexibility is referring to both cognitive flexibility and the flexibility in terms of using coping mechanisms which is essential following a traumatic experience (Aldao et al., 2010).

The social cognitive theory previously known as the social learning theory, was developed by Albert Bandura in 1986 (LaMorte, 2016) and proposes that the general self-efficacy and perceived social support of an individual decreases the risk for PTSD as coping self-efficacy appraisals are increased after the traumatic event had been experienced (Smith, Felix, Benight & Jones, 2017). Coping self-efficacy is an individual's perceived ability to cope with difficulties and demands following a traumatic event (Smith, Felix, Benight & Jones, 2017).

The cognitive model of the development and maintenance of PTSD was developed by Ehlers and Clark in 2000 and is based on the earlier cognitive behavioural therapy models of PTSD (Devilly & Mc Grail, 2006). Within this model an individuals' sense of current threat is said to be what causes and maintains PTSD (Ehlers & Clark, 2000). There are two key factors which are seen to lead to the sense of current threat experienced by an individual after the traumatic event (Ehlers & Clark, 2000). These two key factors include the faulty appraisal

of the trauma and the intrusive nature of the memories regarding the traumatic event, in sequence to other memories (Ehlers & Clark, 2000). The negative faulty appraisal (which can be internal and/or external) are seen to maintain PTSD by eliciting negative emotional responses which could include fear, anger, guilt and/or shame (Ehlers & Clark, 2000).

It has been found in literature that ‘‘the experience of shame causes and/or maintains the current threat associated with PTSD, as it attacks an individual’s psychological integrity, leaving them feeling devalued, powerless and socially unattractive’’ (Harman, 2005, p. 12). Victims of bullying, as has been previously stipulated in chapter two, similarly experience shame as a consequence of the bullying action (Middlesex London Health Unit, 2015) which may be linked to the sense of current threat experienced, that is vital in the cognitive model of the development and maintenance of PTSD (Ehlers & Clark, 2000).

Trauma memories are seen to be intrusive memories, which are not incorporated into an individuals’ long-term memory (autobiographical) base as these memories do not develop and function the same way other memories do, thus producing a sense of current threat (Ehlers & Clark, 2000). Intrusive memories are also seen to be the starting point, for the emergence of many of the other traumatic stress symptoms (Ehlers & Clark, 2000). When experiencing a threat after a traumatic experience, the individual tries to control it by adopting maladaptive behavioural coping strategies a prime example being the avoidance coping strategy that further maintains the PTSD (Ehlers & Clark, 2000). This is because by adopting maladaptive behavioural coping strategies, the individual is preventing change in the traumatic memories and the faulty negative appraisals (i.e. the negative emotional responses) (Ehlers & Clark, 2000).

3.7 Traumatic Stress Influential Factors

As was discussed previously, according to the DSM-5 there are various components that are required in Criterion A, for an event to be equated as traumatic. Literature has however

suggested that it also depends on how the unique individual experienced or perceived the specific event, rather than relying on the event itself, when considering whether it is traumatic or not (Robinson et al., 2018). For example, a significant breakup, a severely humiliating experience or an automobile accident where physical damage was not present, has been seen to be perceived as being traumatic (Robinson et al., 2018).

There are also factors which may influence whether an individual experiences traumatic stress after a traumatic event. These factors are referred to as risk and protective factors. ‘‘A risk factor is any attribute, characteristic or exposure of an individual that increases the likelihood of developing a disease or injury…’’ (World Health Organisation, 2018, p. 1) or disorder in the case of this study namely PTSD. Risk factors are divided into three groups namely pre-trauma, peri-trauma and post-trauma (Sayed, Lacoviello & Charey, 2015). Pre-trauma (period of time before the event occurred) risk factors include gender (Seedat et al., 2004), race/ethnicity, neurobiology (Sayed, Lacoviello & Charey, 2015), older age, living in inner city areas, personal predisposition and presence of chronic family challenges (Thabet, 2017). In addition to the above-mentioned factors personal values held, mental health history (Robinson et al., 2018) and level of education (Sayed, Lacoviello & Charey, 2015) are also considered pre-trauma risk factors.

Risk factors grouped under the peri-trauma (referring to the period of time when the event took place) group include the severity of the event also referred to as the duration of the event (Robinson et al., 2018), the proximity to the traumatic event (Thabet, 2017), the individual’s response at the time of the event (Tull, 2018) and the individuals’ perception of the idea that the event has ended (Sayed, Lacoviello & Charey, 2015). The victim’s relationship to the perpetrator (Lubit, 2016) is also a peri-trauma risk factor, because being victimised by someone known and trusted by the individual, overwhelms the individuals’ sense of safety which in turn increases the probability of developing PTSD.

The post-trauma (the time period after the event had occurred) risk factors includes the meaning attached to the event, coping strategies adopted after the event occurred and the strength of the individuals' social support network (Robinson et al., 2018). Access to relevant resources within the community is also seen as a post-trauma risk factor (Sayed, Lacoviello & Charey, 2015).

Avoidance and numbing are examples of maladaptive coping strategies which may be adopted by an individual after a traumatic event, which appear to minimise the distress experienced by intrusive memories and are counterproductive in the healing process (Ehlers, Hackmann & Michael, 2004; Schnider, Elhal & Gray, 2007). The individual's traumatic stress symptoms as a result may not to be resolved, leading to a possible diagnosis of PTSD.

A protective factor can be described as any attribute, characteristic or exposure that reduces an individuals' vulnerability for developing a disorder such as PTSD (Tull, 2018). There are various protective factors which appear to mask a individuals' vulnerability for developing PTSD after a traumatic event for example having contact with family and healthy social support, ability to disclose the trauma to family and friends and the ability to identify self as a survivor not as a victim (Kissen & Lozano, 2017). Protective factors also include the use of humour and positive emotions, searching for positive meaning in the traumatic experience and possessing the belief that one can manage ones' feelings and cope effectively (Kissen & Lozano, 2017). Additionally, the presence of healthy coping strategies (Thabet, 2017), having good problem-solving skills and spirituality (Tull, 2018) are also seen as being protective factors against developing PTSD after a traumatic event.

3.8 General Rates of PTSD

In many countries around the world, PTSD appears to be prevalent among school going children and adolescents, where in Germany for example 2.2% of female learners and 1% of male learners met the diagnosis for PTSD (Perkonigg, Kessler, Storz & Wittchen, 2000). In

Germany 26% of male learners and 17.7% of female learners experienced at least one traumatic event in their lifetime (Perkonigg, Kessler, Storz & Wittchen, 2000). In Nairobi, examples of traumatic events which are prevalent among adolescents include witnessing violence (69%), physical assault by a relative (27%) and sexual assault (18%) (Seedat et al., 2004).

Similarly, South African school children and adolescents are also seen to suffer from PTSD as 22.2% in one study (Seedat et al., 2004) and 38% in another study (Suliman, Kaminer, Seedat & Stein, 2005) presented symptoms severe enough for a diagnosis of PTSD. Collings, Penning and Valjee (2014) suggested 29% of learners in their study were able to qualify for a diagnosis of PTSD. When considering gender, boys were seen to be more likely to meet the criteria for PTSD (Seedat et al., 2004).

In South African schools, a high rate of learners namely 80% in one study (Seedat et al., 2004) and 91% in another study (Suliman et al., 2005), had experienced a traumatic event or incident in their lifetime. Additionally, it was found that 93% of adolescents had experienced more than one traumatic event in their lifetime, where more than half had experienced four or more traumatic events in their lifetime (Kaminer, du Plessis, Hardy & Benjamin, 2013). In another study, 81% of adolescents had experienced two or more traumatic events in their lifetime (Collings, Penning & Valjee, 2014).

The three most prevalent traumatic events most among South African school children and adolescents include for example witnessing someone being killed or seriously injured, being involved in a serious accident and experiencing the unpredicted death or suicide of a loved one (Peltzer, 1999). The fourth most prevalent traumatic event among South African children being sexual abuse or rape of a family member/close friend and the fifth includes experiencing a violent crime and/or experiencing child abuse (Peltzer, 1999).

According to Kaminer, du Plessis, Hardy and Benjamin (2013), the most common traumatic events experience by South African children and adolescents include in descending order witnessing community violence (98.9%), witnessing domestic violence (76.9%) and/or being directly/indirectly exposed to school violence (75.8%). This is followed by being directly victimised at home (58.6%), being directly threatened/assaulted in the community (40.1%) and/or being sexually assaulted (8%).

Ward, Flisher, Zissis, Muller and Lombard (2001) stated that witnessing 'stranger violence' (81.7%) followed by witnessing 'known violence' (61.5%) are the most prevalent categories of general traumatic events, to which learners were exposed to in a South African school context. The least prevalent category of general traumatic events to which the learners were exposed to in a South African school context was being a victim of 'stranger violence' (30.8%) (Ward, Flisher, Zissis, Muller & Lombard, 2001).

3.9 Interventions regarding the Prevention and Treatment of PTSD

There are various forms of interventions available to prevent and/or treat PTSD, which can either be adopted on a short-term or long-term basis, depending on the specific individual and the design of the intervention in question. Acute interventions are adopted on a short-term basis, immediately after an adolescent or child had encountered the traumatic experience and includes for example psychoeducation, bereavement support, psychological debriefing, clarification of cognitive distortions and disclosure of thoughts and feelings (Foa, 2009). Reinforcement of healthy coping and safety behaviours, use of healthy support systems and structured or/and unstructured play exercises have also been said to be acute interventions to prevent and/or treat PTSD (Foa, 2009).

The traditional more long-term interventions, which are designed to treat traumatic stress symptoms include psychotherapy and psychopharmacological treatment (Gilman, Strawn & Keeshin, 2015). Psychotherapy is said to be carried out at an individual, family or group level

and in many different settings such as at an inpatient, outpatient, community, school and/or classroom setting (Agency for Healthcare Research and Quality, 2012).

Psychopharmacological interventions are designed to address underlying physiological expressions such as hyperarousal and mood instability (Gilman, Strawn & Keeshin, 2015). It was suggested that there is very little evidence to support the effectiveness of psychopharmacological interventions for PTSD in adolescence and children (Gerson & Rappaport, 2012; Morina, Koerssen & Pollet, 2016).

Psychotherapy interventions aim at alleviating the individual symptoms being presented (Gilman, Strawn & Keeshin, 2015) and was found to be the first line of treatment that is effective in treating adolescents suffering from symptoms of PTSD (Gerson & Rappaport, 2012; Morina, Koerssen & Pollet, 2016). Trauma-Focused Cognitive Behavioural Therapy (TF-CBT) was found to be the most researched form of psychotherapeutic intervention (Morina, Koerssen & Pollet, 2016) and is the most widely used treatment for adolescents suffering from PTSD symptoms (Gerson & Rappaport, 2012). TF-CBT is a conjoint parent-child treatment which has demonstrated positive outcomes in decreasing PTSD symptoms, in adolescence and children (de Arellano et al., 2014).

In TF-CBT both the parents/guardians and the adolescents are taught skills to assist in processing, managing and restoring the overwhelming thoughts, feelings and behaviours which have accompanied the traumatic event (Agency for Healthcare Research and Quality, 2012). The treatment involves various components such as psychoeducation regarding the traumatic event for both parents and adolescents, parenting skills, relaxation skills and child exposure tasks such as trauma narratives (Agency for Healthcare Research & Quality, 2012). Gerson and Rappaport (2012) also suggested that affect regulation skills, cognitive coping, in-vivo mastering, child-parent joint sessions and increasing future safety and personal development (Gerson & Rappaport, 2012) are components of TF-CBT treatment.

According to Gilman, Strawn and Keeshin (2015) the most effective approach to PTSD prevention and treatment, is the biopsychosocial framework. The biopsychosocial framework incorporates psychopharmacological treatments, individual interventions and family intervention approaches in a systematic manner (Gilman, Strawn & Keeshin, 2015).

Returning to the TF-CBT approach, it was suggested that if multiple learners in a school context are influenced by the traumatic event, then TF-CBT can be delivered in the form of group therapy within the school (Gerson & Rappaport, 2012). TF-CBT in the above-mentioned scenario can either be delivered by certified mental health professionals (Cognitive Behavioural Intervention for Trauma in Schools) or by the teachers (Support for Students exposed to Trauma) (Gerson & Rappaport, 2012). The Cognitive Behavioural Intervention for Trauma in Schools (CBITS) is an example of one of the three intervention programs for traumatic stress, which were designed for use in a school context specifically (Foa, 2009). These school intervention programs are trauma-focused, developmentally oriented and include the main elements common in various trauma-focused interventions (Foa, 2009). CBITS involves group as well as individual sessions, this is to teach the students about the consequences of the traumatic event, guide the students in developing a narrative of cognitive therapy as well as social problem-solving approaches (Jaycox & Stein, 2018).

The remaining two programs mentioned previously, are The Multimodality Trauma Treatment (MMTT) and the UCLA Trauma/ Grief program (Foa, 2009). It was found that CBITS (Jaycox & Stein, 2018) as well as the other two school intervention programs for traumatic stress identified above, produced a significant reduction in PTSD symptoms among learners who were exposed to a traumatic event (Foa, 2009).

3.10 Relationship between Bullying and Traumatic Stress

An association between bullying and traumatic stress seems to exist, however limited studies have been conducted on the relationship between the variables. Numerous

international and limited South African studies were found surrounding PTSD (which is the last stage of traumatic stress development) and bullying in a school context, which will be discussed below.

According to research conducted in many countries around the world, being the victim of bullying in a school context, may lead to the development of symptoms mirroring those seen in traumatic stress (Carlisle & Rofes, 2007; Guzzo, Pace, Lo Cascio, Craparo & Schimnenti, 2014; Shannon, 2016). Bullying victimisation also resulted in having scores within the clinical range for a PTSD diagnosis (Chen & Elklit, 2017; Dobry, Braquehais & Sher, 2013; Gordon, 2017; Houbre et al., 2006; Hurley, 2018; Idsoe et al., 2012; Khamis, 2014; Mebane, 2010; Mynard, Joseph & Alexander, 2000; Nielsen et al., 2015; Pepelasi, 2018; Randall & Parker, 2007; Shannon, 2016; Storch & Esposito, 2003; The Oaks at La Paloma Treatment Centre, 2018; Weaver, 2000), which has seen to be able to linger into adulthood (Brice, 2012; Craig, 2017).

It was suggested that the overwhelming nature of bullying in a school context, accompanied with the individuals perceived inability to do anything about it, is the main cause of the stress-related condition following bullying victimisation (The grass gets greener, 2014). Bullying within a school context has been said to be a personalised event/incident as the perpetrator(s) is known to the victim, and the victim is within the same surroundings as his/her perpetrator(s) on a daily basis (The Oaks at La Paloma Treatment Centre, 2018). Due to school attendance being compulsory the victim is unable to avoid or escape the situation, thus creating the feeling of helplessness (The Oaks at La Paloma Treatment Centre, 2018).

There is however no association between type of bullying behaviour and PTSD symptom expression (Houbre et al., 2006). Gender played a role, as a greater percentage of girls reported having PTSD-like symptoms (Brice, 2012; Gordon, 2017; Idsoe et al., 2012), despite the fact that boys were more likely to report being a victim of bullying in a school context

(Brice, 2012). When considering why females are more at risk for developing PTSD, it was suggested that females experience different types of events (more high impact traumas) when compared to males, for example sexual traumas (Breslau & Anthony, 2007). There are also biological explanations, as a females' brain has shown to respond differently to stimuli perceived as being threatening (Greenberg, 2018). As the right region of the brain during exposure to a traumatic event has shown more activation, which is associated with emotionality in females (Greenberg, 2018).

The negative effects of bullying victimisation, appeared to increase if the bullying was severe and the victim lacked social support (Ayenibiowo & Akinbode, 2011). Similarly, Idsoe, Dyregrov and Idsoe (2012) found that there is an association between the frequency of bullying exposure and PTSD symptoms presented and the duration of the bullying victimisation, also appeared to affect the development of PTSD symptoms (Idsoe et al., 2012; The Oaks at La Paloma Treatment Centre, 2018).

In many countries around the world, adolescents whom are the bully/victim in the bullying situation, had seen to also experience traumatic stress symptoms (Obrdalj et al., 2013) and presented scores to be within the clinical range for a PTSD diagnosis (Khamis, 2014). Similarly, the individual/individual's playing the bullying role in a bullying situation were also found to present PTSD-like symptoms (Khamis, 2014).

The majority of the above-mentioned studies done in many countries around the world show that a significant relationship exists, between being the victim of bullying and portraying traumatic stress symptoms. Similarly, in the South African studies a significant relationship was seen between, being a victim of bullying and portraying PTSD-like symptoms (Collings, Penning & Valjee, 2014; Meyer, 2016; Penning et al., 2010; Singh & Steyn, 2014). The traumatic stress severity was seen to depend on the frequency of bullying (Penning, Bhagwanjee & Govender, 2010).

3.11 Conclusion

Within the DSM-5 specific stipulated diagnostic criteria should be met before a clinical diagnosis of PTSD can be made. There are factors which are seen to influence, whether an individual perceives an event/incident to be traumatic or not. Additionally, there are also numerous other risk and protective factors, which influence whether the individual may become permanently traumatised by the occurrence of such an event/incident. The general PTSD rates in terms of learners in a school context from many countries around the world are somewhat lower, when compared to South African learners in a school context.

The victims of bullying in a school context, in many countries around the world and in South Africa, have been found to suffer from PTSD-like symptoms. There are various theories in literature which explain the maintenance and development of PTSD. Various acute and traditional long-term interventions are available to prevent and treat PTSD in adolescents, where Trauma-Focused Cognitive Behavioural Therapy (TF-CBT) was found to be the most widely used treatment for those adolescents suffering from PTSD. In the next chapter, an outline of the research design and methodology that was utilised in the current study will be discussed in detail.

CHAPTER 4

RESEARCH DESIGN AND METHODOLOGY

4.1 Introduction

This chapter will provide an outline of the research design and methodology that was utilised in this study. The main research aim and objectives will be stipulated. Specific attention will be given to describing the research design that was used in this study. This is followed by a description of the sampling method that was utilised and the research participants whom were involved in the study. Information on the various measures used to collect the data will be provided, followed by a discussion regarding the method and procedures that were used in terms of data collection. The methods used to analyse the data will thereafter be stipulated and discussed. Finally, the ethical considerations that were taken into account in terms of this study will be discussed.

4.2 The Aim and Objectives

The research study had the overall aim to explore and describe the relationship between bullying victimisation and traumatic stress severity, among high school learners in the Nelson Mandela Metropole.

The study's objectives relating to the problem statement were

- To identify the bullying victimisation rates among high school learners in the Nelson Mandela Metropole.
- To identify the traumatic stress severity rates among the high school learners in the Nelson Mandela Metropole.
- To identify the degree to which general traumatic events are experienced by high school learners in the Nelson Mandela Metropole.

- To explore and describe the relative contribution of previous general traumatic experiences and bullying victimisation on the traumatic stress severity among, high school learners in the Nelson Mandela Metropole.

4.3 Research Methodology

4.3.1 Research design

The research design can be described as the ‘‘overall strategy that you choose to integrate the different components of the study in a coherent and logical way… it constitutes the blueprint for the collection, measurement, and analysis of data’’ (Labaree, 2018, p. 1). The purpose of a research design is to ensure that the findings drawn, allow for the researcher to attend to the research problem in an unambiguous manner (Labaree, 2018). The research design is seen to initially branch out into two main research methods/approaches, which a researcher can adopt, these being quantitative and/or qualitative.

The researcher used a quantitative research approach for this study, which makes use of gathering information in the form of numbers, which can further be categorised, ranked and measured in units (McLeod, 2008). In other words, the quantitative research approach focusses on quantifying some phenomenon (Langdridge, 2004). It usually takes place in a controlled setting to eradicate any external influences, in the attempt to gain objective findings (Langdridge, 2004).

There are certain advantages as well as disadvantages, when using a quantitative research approach. There are many advantages to choosing the quantitative research approach for example, the design of this approach or method is perceived to be controlled and the measurement aspect of this approach is perceived to be precise (Langdridge, 2004). A quantitative research approach allows for a larger sample size to be drawn which means greater generalisability, thus making it possible to generalise findings to other settings which mimic the original controlled setting (Langdridge, 2004). It has also been found to be quicker

and simpler, in terms of the data collection and is perceived as being more economical (Mander, 2017).

Similarly, there are also many disadvantages attached to a quantitative research approach for example this approach may underestimate the complexity behind human behaviour and may not take individuality and the independent nature of each human participant into account (Langdridge, 2004). A quantitative research design may be perceived to be artificial, as the research may be done in a controlled environment which may result in unnatural findings (Mander, 2017).

A qualitative research approach on the other hand is ‘‘…concerned with aspects of reality that cannot be quantified, focusing on the understanding and explanation of the dynamics of social relations’’ (Queiros, Faria & Almeida, 2017, p. 370). There are also seen to be certain advantages and disadvantages, to using the qualitative research approach. In terms of the advantages which accompany using a qualitative research approach various examples were found, such as it acknowledges the subjective aspect of the individuals encounter in more depth and detail (Langdridge, 2004). Additionally, a qualitative research approach also allows for a more open discussion, which enables the possibility of exploring unexpected topics related to human nature and it allows for more flexibility in terms of approaching the topic (Langdridge, 2004).

Many disadvantages can accompany using a qualitative research approach such as not being able to generalise findings to the general population and not being able to use traditional statistical methods in terms of reliability and validity to the research findings (Langdridge, 2004). A qualitative research design also requires a greater amount of time to carry out studies, requires more resources and lacks anonymity, which may influence participants’ willingness and comfort level, regarding responding to the questions posed (Mander, 2017).

The research study was descriptive, exploratory and correlational. The research study was descriptive, as the data was gathered without manipulating the environment and because causality was not assigned. The study simply discovered and described relationships between the variables, namely bullying victimisation and traumatic stress severity. Descriptive studies are explained as, providing information about the present status of the variables and conditions in a situation, where cause and effect are not determined (Hale, 2018; Key, 1997).

The study was exploratory as the aim was not to produce conclusive evidence or results, but rather to gain a deeper understanding of the presenting problem. An exploratory study is conducted if little or no research and/ evidence has been found on a topic or phenomenon, which was the case for this research study (Dudovskiy, 2016). In exploratory research it is also suggested that multiple possible connections between the variables is what one essentially strives to identify (American Psychological Association, 2018).

The study was correlational because it aimed to determine the relationship and link between the variables, namely bullying victimisation and traumatic stress severity, with the use of statistical data (Howie, 2010). Trends and patterns were recognised, but what caused the patterns were not delineated (Howie, 2010). The specific variables namely bullying victimisation and traumatic stress severity were essentially studied in a natural setting and were not manipulated or under the control of the researcher (Howie, 2010).

4.3.2 Sampling

Sampling is the process of selecting a specific group of individuals, which is an accurate representation of the whole population, so that specific characteristics of the entire population can be determined (Surbhi, 2016). Sampling is seen to be divided into two broad categories, namely probability sampling and non-probability sampling (Surbhi, 2016). Probability sampling describes any sampling method in which, each individual from the population has an equal opportunity to be selected to form part of the sample group each time (Surbhi, 2016;

Trochim, 2006). There are different types of probability sampling methods that exist namely simple random sampling, systematic sampling, stratified sampling and cluster sampling (Sharma, 2017). Hussey and Salkind (2012) suggested that multistage sampling is also a probability sampling method.

There are certain advantages and disadvantages that accompany probability sampling. Advantages include for example that the researcher will have accurate and unbiased results and the researcher will be able to make an estimation regarding the precision of the data (Hussey & Salkind, 2012). A disadvantage of probability sampling includes that it is expensive and time-consuming (Hussey & Salkind, 2012).

Non-probability sampling on the other hand ‘‘is conducted without the knowledge about whether those chosen in the sample are representative of the entire population’’ (Hussey & Salkind, 2012, p. 2). It can thus, be described as completely based on subjective judgement (Sharma, 2017). As with probability sampling, there are also different types of non-probability sampling methods that exist, these includes quota sampling, purposive sampling, self-selection sampling and snowball sampling (Sharma, 2017).

There are also advantages and disadvantages that accompany non-probability sampling methods. An advantage regarding choosing non-probability sampling methods includes that it is easier and cheaper to carry out, when being compared to probability sampling methods (Laerd Dissertation, 2012; Shantikumar, 2018). Where the disadvantages which accompany non-probability sampling methods, includes for example that bias may be introduced due to the lack of randomisation in non-probability sampling methods (Australian Bureau of Statistics, 2006; Laerd Dissertation, 2012) and conclusions drawn by the researcher from the sample cannot be generalised to the entire population (Surbhi, 2016; Australian Bureau of Statistics, 2006).

The researcher decided to use a probability sampling method, namely stratified random sampling which involves dividing the entire population into different subgroups (strata) and thereafter selecting subjects from each stratum, in a proportionate or disproportionate manner randomly (Dudovskiy, 2017). The aim of stratified random sampling is mainly ‘‘to reduce the potential for human bias in the selection of cases to be included in the sample’’ (Sharma, 2017, p. 750).

There are advantages as well as disadvantages that accompany stratified random sampling. An advantage is that with stratified random sampling, the sampling error is reduced which leads to more precise results, which may later be generalised to the entire population (Shantikumar, 2018). A disadvantage of stratified random sampling includes that certain conditions are required for the method to be carried out accurately, such as knowledge regarding certain details of the population from which the sample group will be drawn, which may not always be readily available (Shantikumar, 2018).

The researcher had prior knowledge regarding certain conditions which were required, for stratified random sampling to be used accurately, for example knowledge regarding the characteristics of the population from which the sample group would be drawn. For this, a list of schools (updated in 2017) situated in the Eastern Cape, was accessed on the Department of Basic Education in the Republic of South Africa’s website: https://www.education.gov.za/Programmes/EMIS/EMISDownloads.aspx. The total number of high schools which made up the population was 61. Only public high schools who offered grades 8 through to 12 and teaching instruction language is English, within the Nelson Mandela Metropole were included.

All the public schools in each province of South Africa, were found to be divided into five groups known as Quintiles which range from the poorest (Quintile 1) to the least poor (Quintile 5) (School Guide, 2014). The Quintile of each of the 61 high schools, which is

another characteristic that was required for the purpose of this study, were indicated on the list accessed. None of the 61 high schools were from Quintile 1. The researcher with the help of her statistician, utilised Microsoft® Excel to randomly select two public high schools, one from within Quintile 4 or Quintile 5 and one from within Quintile 2 or Quintile 3.

4.3.3 A description of research participants

The potential sample size regarding a minimum of 250 participants, which was suggested by a statistician, was needed to make the study viable. A minimum of 680 participants was however aimed for, in terms of the potential sample size. This number was calculated based on the number of parents/guardians who consented for their child/children to participate in a study, which was conducted by the researcher for her BPsych (Counselling) degree in 2016, on a sample of grade 8 high school learners in Port Elizabeth. If the sample size was larger than 680 participants, then the researcher was planning to make use of more than four fieldworkers at each high school, to assist in administering and collecting the completed questionnaires.

A total of 735 learners from grades 8 through to 12, within the two public high schools, with English being the instruction language in the Nelson Mandela Metropole formed part of the sample group. From the public high school within Quintile 2 or Quintile 3 (poorest) 617 learners participated, where a total of 1530 learners, from grade 8 through to grade 12 attended the high school. From the public high school within Quintile 4 or Quintile 5 (least poor) 118 learners participated, where a total of 844 learners from grade 8 through to grade 12 attended the high school.

The 735 learners in the sample group completed all four questionnaires, even if the learner had not necessarily experienced bullying victimisation. This was to ensure that the victims of bullying were not pointed out, which may have led to further victimisation and to ensure the confidentiality and anonymity of victims were seen to. Although the sample group

exceeded the expected 680 participants, the researcher only required two fieldworkers at the two schools because the two principals planned it in such a way which made that possible.

The sociodemographic information obtained from the biographical questionnaire, will now be discussed. This questionnaire was completed by all participant and the questions from the biographical questionnaire focused on grade, gender, age and home language. These variables will be discussed in detail below.

4.3.3.1 *Grade.* Grade can be defined as ‘‘that part of an educational programme which a learner may complete in one school year, or any other education programme which the Member of the Executive Council may deem to be equivalent thereto’’ (South African Schools Act No 84, 1996 p. 4). The research sample included learners from grades 8 through to grade 12, from two public high schools in the Nelson Mandela Metropole.

Table 4.1

Distribution of Grade

Grade	n	%
8	212	28.84
9	199	27.07
10	140	19.05
11	94	12.79
12	90	12.24
Total	735	100

Details regarding how the participants from both the public high schools in Nelson Mandela Metropole were distributed, per grade can be found in Table 4.1 above. The largest group from within the sample group were the grade eights (28.84%), followed by the grade

nine's (27.07%), the grade tens (19.05%), the grade elevens (12.79%) and lastly by the grade twelves (12.24%). The grade twelves were thus, the smallest group within the sample group.

4.3.3.2 *Gender.* Gender can be defined as a ''term for the condition of being male or female or neuter…'' (Nugent, 2013 p. 1). The current study focused on both male and female participants. In Table 4.2 below, it can be seen that there were more female (67.89%) than male (32.11%) participants in the sample group.

Table 4.2

Distribution of Gender

Gender	n	%
Male	236	32.11
Female	499	67.89
Total	735	100

4.3.3.3 *Age.* According to Collins English Dictionary (2018) age refers to the number of years that a person has lived or existed. The concept of adolescence refers to any individual who is between the ages of ten to nineteen, which marks the life change from childhood to adulthood (Csikszentminalyi, 2018). According to a Silver Health reporter (2018) it has also been suggested that in today's society, adolescence is seen to last from the ages of ten to twenty-four years of age.

All the participants in the sample group for this specific study, as can be seen in Table 4.3 below, thus fall in the life stage of adolescence. The largest age group were those who were 14 years of age (24.35%). The next five largest age groups following 14 were 15 (21.36%), 16 (15.10%), 13 (12.79%), 17 (11.02%) and 18 (6.53%). The smallest age group were those who were 22 years old (0.14%).

Table 4.3

Distribution of Age

Age	n	%
13	94	12.79
14	179	24.35
15	157	21.36
16	111	15.10
17	81	11.02
18	48	6.53
19	22	2.99
20	8	1.09
21	5	0.68
22	1	0.14
Missing	29	3.95
Total	735	100

4.3.3.4 *Home language.* Home language can be defined as the language that is most often used during daily conversations, among members of a family in their home environment (Nordquist, 2017). Home language was categorised in five main groups namely English, Afrikaans, IsiZulu, IsiXhosa and Other. Details regarding how home language was distributed among the sample group can be found in Table 4.4 below.

The two public high schools within the Nelson Mandela Metropole from which the sample group was drawn, had English as their teaching instruction language. In Table 4.4 it can be seen that majority of the sample group selected IsiXhosa (91.70%), as their home language. The second and third most dominant categories of home language prevalent among

the sample group were English (4.49%) and being bilingual in English and IsiXhosa (1.50%). This was followed by IsiZulu (1.09%), another language which was not listed above referred to as 'Other' (0.54%) and Afrikaans (0.27%). The least dominant home language category prevalent among the sample group was being bilingual in IsiXhosa and another language not listed above referred to as 'Other' (0.14%).

Table 4.4

Distribution of Home Language

Home Language	n	%
English	33	4.49
Afrikaans	2	0.27
IsiZulu	8	1.09
IsiXhosa	674	91.70
Other	4	0.54
English & IsiXhosa	11	1.50
IsiXhosa & Other	1	0.14
Missing	2	0.27
Total	735	100

4.4 Measures

Survey data was used as sources of data in this study. When using a survey, the researcher selects a sample from the chosen population and administers a standardised questionnaire to them, data from a small or large sample can be gathered when using a survey (Colorado State University, 2016). Survey data was collected using a biographical questionnaire and three validated questionnaires. These included the revised Olweus Bully/Victim questionnaire (Olweus, 1996), the PTSD Checklist for DSM-5 (PCL-5)

questionnaire (Weathers, Litz, Keane, Palmieri, Marx & Schnurr, 2013) and an adapted version of part 1 of the Harvard Trauma questionnaire (Ward, Flisher, Zissis, Muller & Lombard, 2004). The only questionnaire which required permission from the developer was the revised Olweus Bully/Victim questionnaire as the other two validated questionnaires were accessible to all via the internet. The revised Olweus Bully/Victim questionnaire cannot be attached to this study as an appendix, as only the person who was granted permission to use the questionnaire may have access to it. The researcher received written permission (APPENDIX C) to use the questionnaire for this study, by Dr Dan Olweus who developed the questionnaire

4.4.1 Biographical questionnaire

The biographical questionnaire (APPENDIX H) was very brief and was utilised to obtain essential demographic information from all the research participants. The biographical questionnaire required information such as the learner's school using a school reference code, grade, questionnaire completion date, age, gender and home language and took a maximum of approximately 2 minutes to complete.

4.4.2 The revised Olweus bully/ victim questionnaire

The revised Olweus Bully/Victim questionnaire was developed by Dan Olweus and is a standardised anonymous multiple-choice self-report questionnaire, that consists of 40 group administered paper and pencil items, that measures bullying issues (bullying perpetration as well as bullying victimisation) within a school context (Olweus, 1996). For the purpose of this study, this questionnaire was used to identify those participants who have experienced direct and/or indirect physical, verbal, racial and/or sexual forms of bullying victimisation within a school context.

There are two versions of the questionnaire, the junior version which is intended for learners in grades three to five and the senior version which is intended for learners in grades

six to ten or higher (Greeff, 2004). The senior version was used for the purpose of this study, as the sample group looked at learners from grades eight through to twelve. The questions are designed to be as simple as possible and the entire questionnaire took approximately 25-45 minutes to complete.

Reliability and validity of research instruments are key issues which should be considered in quantitative research studies (Bolarinwa, 2015). Reliability is defined as ‘‘the consistency of a measure’’ (Jhangiani, Chiang & Price, 2015, chapter 5) and validity is the ‘‘extent to which the scores from a measure represent the variable, they are intended to’’ (Jhangiani et al., 2015, chapter 5). The revised version of the Olweus Bully/Victim questionnaire has psychometrically sound properties, specifically construct validity and reliability (Kyriakides, Kaloyirou & Lindsay, 2006). Construct validity is ‘‘whether you can draw inferences about test scores related to the concept being studied’’ (Heale & Twycross, 2015, p. 66). This instrument is sound for international studies, in terms of bullying in different countries (Kyriakides et al., 2006). At an individual level, a combination of items for being victimised or bullying others, yield internal consistency reliabilities (Cronbach’s alpha) in 0.80’s or higher (Kyriakides, Kaloyirou & Lindsay, 2006). If the school is the natural unit of analysis reliabilities are even higher, in 0.90’s (Kyriakides, Kaloyirou & Lindsay, 2006). Internal consistency reliabilities also known as homogeneity is the ‘‘extent to which all the items on a scale measure one construct’’ (Heale & Twycross, 2015, p. 67).

Validity of self-reports were found in the 0.60 – 0.70 correlation range (Olweus, 1994). The revised Olweus Bully/Victimisation questionnaire has previously been successfully utilised in South Africa with a primary school sample (Greeff, 2004) and high school sample (Darney, 2009; Penning et al., 2010; Meyer, 2016). Greeff (2004) indicated that satisfactory results for the questionnaires reliability and validity were obtained for grades three to twelve.

4.4.3 The PTSD checklist for DSM-5 (PCL-5) questionnaire

The PTSD Checklist for DSM-5 (PCL-5) questionnaire (APPENDIX I) is a 20 item self-report instrument, which looks at the DSM-5 symptoms for PTSD (U.S. Department of Veteran Affairs, 2018). The DSM-5 symptoms for PTSD includes symptoms of memory intrusion, avoidance, changes in mood and cognition and hyperarousal reactions (Van Rooyen, 2016). This questionnaire was utilised to identify the traumatic stress severity of each participant, which was calculated by summing up the total score of the twenty items for each participant. A cut-off score of 33 was found in literature to be a reasonable value to propose, that the individual may be suffering from severe traumatic stress symptoms (U.S. Department of Veteran Affairs, 2018). This questionnaire took approximately a maximum of 10 minutes to complete and used a Likert type self-rating scale (U.S. Department of Veteran Affairs, 2018).

The PTSD Checklist for DSM-5 (PCL-5) questionnaire (APPENDIX I) has had 25 years of research conducted on it to support the validity of the measure, to assess PTSD in diverse and large populations (Belvins & Weathers, 2015). The measure is seen to have excellent test-retest reliability ($r = 0.82$), strong internal consistency ($\alpha = 0.94$) as well as convergent ($r = 0.74$ to 0.85) and discriminant ($r = 0.31$ to 0.60) validity (Belvins & Weathers, 2015). Test-retest reliability also known as stability is ‘‘when the same or similar scores are obtained with repeated testing with the same group of respondents’’ (Bolarinwa, 2015, p. 198). Convergent validity is when the ‘‘…same concept measured in different ways yields similar results’’ (Bolarinwa, 2015, p. 197). Discriminant validity is when ‘‘there is evidence that one concept is different from other closely related concepts’’ (Bolarinwa, 2015, p. 197). The researcher has previously been granted approval by the REC-H ethics committee at Nelson Mandela Metropolitan University in 2016, to use this questionnaire in a South African context with a high school sample.

4.4.4 An adapted version of part 1 of the Harvard trauma questionnaire

The adapted version of part 1 of the Harvard Trauma questionnaire (APPENDIX J), identifies a variety of traumatic experiences that are likely to occur in South Africa and can be used for high school students (Ward, Flisher, Zissis, Muller & Lombard, 2004). The original Harvard Trauma questionnaire was developed to look at how Indochinese refugees experienced the United States (Ward et al., 2004). For the purpose of this study, an adapted version of part 1 of the Harvard Trauma questionnaire (APPENDIX J) was utilised to identify general traumatic events, the participants may have experienced in a South African context. The participants stated 'yes' or 'no' to 49 different forms of violence that they may have experienced, which were grouped in four different categories namely victim of 'known violence' (16 questions), witnessing 'known violence' (18 questions), victim of 'stranger violence' (9 questions) and witnessing 'stranger violence' (6 questions) (Ward et al., 2004). The questionnaire took approximately 20 minutes to complete.

The adapted version of the Harvard Trauma questionnaire, which has previously been utilised with a South African high school sample has fair reliability, as the Cronbach's alpha for the symptoms scale was 0.92 and the concordance correlation coefficient between the total symptoms score was 0.64 (Ward et al., 2004, p. 31). Concordance correlation coefficient refers to the measurement of precision and accuracy between the variables (Akoglu, 2018).

4.5 Method and Procedures

The researcher received ethical clearance from the Faculty Postgraduate Studies Committee and Nelson Mandela University Research Ethics Committee (Human) (REC-H) (APPENDIX A). Approval was thereafter gained prior to data collection from the Eastern Cape Department of Education (APPENDIX B), the principals of the two high schools (Appendix D) and the parents/guardians of the learners, through written informed consent

(APPENDIX F). On the day of data collection at each of the two public high schools prior to data collection, written informed assent (APPENDIX G) was also sought from the learners.

The four questionnaires were then group administered to all the high school learners, from grade 8 through to grade 12, whose parents had given written informed consent. This was done in a manner negotiated with the two public high schools. The researcher made use of one fieldworker at each public high school, thus two in total who were qualified registered counsellors (registered with the HPCSA). This was to assist her as the potential sample size was too large to manage alone. The two fieldworkers attended a pre-workshop to iron out the practicalities regarding the data collection procedure for each data collection session at the two public high schools. These fieldworkers assisted in gaining written informed assent (APPENDIX G) from the learners on the day of data collection and administering and collecting of the completed questionnaires at the two public high schools. The researcher was personally available to answer any questions that the fieldworkers were unsure of or unable to answer and the researcher's supervisor was also available telephonically if guidance was needed. A total of approximately 30-57 minutes was needed to complete the four questionnaires.

The register class teachers were briefed on the purpose of the questionnaires, however were only asked to issue an information letter (APPENDIX E) with a written informed consent form attached (APPENDIX F) to each high school learner. The register class teachers were also asked to inform the learners that the above-mentioned documents be taken home for their parents/guardians to read, complete and return. The information letters were detailed and self-explanatory in terms of what was being asked of the parents of the learners. There was thus nothing which required an explanation to the learners by the register class teachers. The learners were only given a date by the register class teacher, which was set by the school principal at each public high school, as to when the written informed consent form had to be

returned to each register class teacher. The researcher collected the written informed consent forms personally from each school on a day agreed upon by the principal, at each of the public high schools in the Nelson Mandela Metropole.

The date and time regarding when the questionnaires were administered to each grade at each public high school, was arranged individually with each principal at each of the two public high schools, to avoid disruption to their educational schedules. The researcher ensured that the questionnaires were administered at each school during a convenient time. The researcher was potentially planning to administer the questionnaires during school hours during a single Life Orientation lesson (approximately 50-60 minutes long) for each grade at each school.

The principal at school A (high school found within Quintile 2 or Quintile 3) the school arranged that the researcher be placed in a specific classroom for one week during school hours. The principal also arranged that the learners whose parents gave written informed consent from the different grades, were grouped in a manner which ensured the researcher with the help of one fieldworker, had approximately five to six groups to administer the four questionnaires to each day.

The principal at school B (high school found within Quintile 4 or Quintile 5) arranged that all the learners whose parents had given written informed consent, from grades 8 through to grade 12, were all seated in the school hall. The researcher was thus able to administer the four questionnaires to all the high school learners in one school lesson, with the help of one fieldworker. This ensured reliable research results. Internal validity increased if participants were able to answer the questions honestly. The researcher thus ensured that the test venues allowed for confidentiality and privacy to be maintained.

4.6 Data Analysis

Data analysis is a vital step in the research process because in quantitative research, this is where the researcher applies rational and critical thinking to the numerical data and through interpretation, brings the underlying meaning across to the readers (Dudovskiy, 2018). After consulting with a statistician from Nelson Mandela University, the researcher decided on the following methods of analysis for this study. Objective one to three was analysed using descriptive statistics through Microsoft® Excel. Descriptive statistics is one of the two divisions in statistics, the other being inferential statistics (Taylor, 2018). Descriptive statistics is used to describe the basic features of a sample group or whole population (Trochim, 2006; Crossman, 2017). The aim of inferential statistics on the other hand, is to draw conclusions which look beyond the mere basic features of the data set (Trochim, 2006). The purpose of descriptive statistics is to give a detailed account of the data which can be done using different measures such as measures of central tendency or measures of spread (Taylor, 2018). Measures of central tendency include for example mean, median and mode and measures of variability include for example the range, frequency distribution and standard deviation (which can be depicted using tables or graphs) (Taylor, 2018).

Objective four was analysed with the help of a statistician from Nelson Mandela University, using multiple linear regression analysis. Multiple linear regression analysis is used to assess the association between two or more independent variables simultaneously and a single dependent variable (Boston University School of Public Health, 2013). The dependent variable which has also been referred to as a response or criterion variable, is usually continuous and the independent variables which have also been referred to as explanatory or predictor variables, are usually continuous or binary (Public Health Action Support Team, 2017).

Multiple linear regression analysis is seen to be used for two main purposes namely to produce an equation that anticipates the dependant variable, from the two or more independent variables (Moss, 2016). This method of analysis is also used to recognise the specific independent variables which associate with the dependant variable, while practicing control over the other variables (Moss, 2016). The independent variables in the study being bullying victimisation and general traumatic events and the dependent variable being traumatic stress severity. The control variables of this study being age, gender, grade and home language. To facilitate the multiple regression analysis, dummy variables were added for grades and home language.

There are seen to be advantages and disadvantages associated with using multiple linear regression, as the specific analysis technique. Advantages for example include the technique allows the researcher to determine the relative contribution of two or more independent variables, on the value of the dependent variable and allows the researcher to recognise the outliers (Weedmark, 2018). A disadvantage that accompanies multiple linear regression analysis is the concern of multicollinearity, as it becomes difficult to recognise independent variables which are statistically significant (Allison, 2014)

4.7 Ethical Considerations

Ethics deals with standard conduct, which is vital when conducting research with human participants (McLeod, 2015). There are essentially, three things which are aimed for in research ethics namely the protection of participants (human/animal) and striving to meet the interests of the greater society, including the individual participants through the research (Walton, 2017). In addition to the two above-mentioned things which are aimed for in research ethics, paying close attention to whether the research activities are conducted in an appropriate and acceptable manner, by adhering to specific standards of conduct is also aimed for (Walton, 2017).

4.7.1 Beneficence, non-maleficence and justice

Beneficence is considered to be the risks and benefits involved in the research study on the research participants (The Belmont Report, 1979; University of Wollongong, 2011). In terms of this study there was a risk that the questionnaires may elicit an adverse psychological reaction. The primary researcher and her two fieldworkers (who are qualified registered counsellor registered with the HPCSA) were however available to provide debriefing to those in need on the days of data collection. The contact details of the University Psychology Clinic (UCLIN) at Nelson Mandela University, was also provided on the information letter provided to the learners' parents/ guardians (APPENDIX E), which is where they could have found further assistance (if it was necessary). The parents/guardians or the participant could have also contacted the researcher directly, as her contact details were also provided on the information letter (APPENDIX E), where she then would have made an appropriate referral to an individual at UCLIN.

The researcher has used the four questionnaires previously with high school learners in grade 8 in Port Elizabeth, during her BPsych (Counselling) degree. The participants for that specific study did not appear to have had any psychological reactions, during or after the administration process. Her supervisor who is a registered counselling psychologist, was also available telephonically to guide her along the process.

When considering the benefits of this study, there may not be a benefit on an individual basis regarding the research participants. The research findings may however, create a greater awareness, as it has generated knowledge regarding the consequences that follow bullying victimisation in a high school context.

Non-maleficence includes the concept of doing no harm (Morrison, 2009; The Belmont Report, 1979) and was ensured in terms of this study, as the researcher obtained the written informed consent from the parents/guardians (APPENDIX F) of the minors prior to data

collection. The researcher additionally, ensured confidentiality and anonymity was safeguarded by keeping the identities of the research participants unknown to outsiders, by using a specific coding system.

Justice involves striving for a balance between those benefiting from the research study and those who are experiencing the negative effects which the research study may impose (Ethical considerations, 2016). Justice in this study was ensured by feeding the research findings directly back into the contexts from which they came, by providing reports on the research findings to each public high school principal involved.

4.7.2 Confidentiality

Confidentiality involves ensuring that the study's raw data and participants identities remain anonymous at all times (McLeod, 2015). The two public high schools selected for this study, have remained anonymous. The high school learners whose parents/guardians gave written informed consent for them to take part in the study, completed the four questionnaires however their identities remained confidential to ensure anonymity, which in turn served to protect the integrity of the research participants.

4.7.3 Informed consent

Informed consent involves a process whereby all the potential research participants are provided detailed information regarding the method, potential risks and benefits involved in the research study (Cherry, 2018). This is to ensure that the potential participants are able to make an informed decision, as to whether they would like to take part in the study or not (Cherry, 2018).

Once the researcher received ethical clearance from REC-H (APPENDIX A) and approval from the Eastern Cape Department of Education (APPENDIX B). The register class teachers from the two public high schools gave a written informed consent form (APPENDIX F) attached to an information letter (APPENDIX E), to each learner to take home for their

parents/guardians to complete. The information letter (APPENDIX E) provided the parents/guardians with information about the purpose and nature of the research study and they were asked to give permission on behalf of their child to partake in the study and was informed that participation was completely voluntary. The contact details of the researcher were provided on the information letter (APPENDIX E), so that the parents/guardians who had questions were able to contact her.

The completed written consent forms (APPENDIX F) were collected by each grade head. The researcher was then contacted to personally collect the total completed consent forms, from each public high school. Most learners were not legally capable of providing informed consent, however written informed assent (APPENDIX G) was obtained from them. This was obtained by the researcher and her fieldworkers, on the day of data collection before the questionnaires were completed.

4.7.4 Provision of debriefing, counselling and additional information

Debriefing is done after data collection has taken place (Ethical considerations, 2016) and has been found to perform three functions namely an ethical function, an educational function and a methodological function (Stewart, 1992). The ethical function involves undoing any harm which may have resulted from the participation, essentially ensuring that the participants leave the study in a similar frame of mind as to when they entered it (Stewart, 1992). The educational function involves giving the participants an opportunity to ask questions after the data collection has taken place (Stewart, 1992). The methodological function involves the researcher collecting additional information from the participants after data collection has taken place, with the aim of allowing researchers to review and assess their research methods used (Stewart, 1992).

The primary researcher explained to the learners before data collection took place, that they could approach either her or one of her two fieldworkers if they experienced a negative

reaction as a result of completing the questionnaires. The primary researcher and her two fieldworkers were thus available for immediate intervention, if any of the participants had an adverse psychological reaction while completing the questionnaires. The two fieldworkers and the researcher herself are qualified registered counsellor (registered with the HPCSA) and were thus able to provide debriefing. Appropriate referrals were made (as necessary) to the University Psychology Clinic (UCLIN) by the researcher with the assistance of her supervisors.

4.8 Conclusion

The research design and methodology utilised in the study was explained in detail. The main research aim and objectives were restated at the beginning of the chapter. Special attention was thereafter given to the sampling method which was used and a description of the research participants was given with the aid of tables. The various research measures that were used were thereafter discussed. This was followed by information regarding the research method and procedures, which were followed during data collection. The techniques used to analyse the data was thereafter discussed, followed by a discussion of the ethical considerations that were taken into account for this research study.

The methodological considerations and procedures stipulated above were used to investigate the main aim and objectives of this study. The results of the data collection, capturing and analysis will be presented in the next chapter.

CHAPTER 5

RESULTS AND DISCUSSION

5.1 Introduction

In this chapter the results obtained from the statistical analysis, which were outlined in the previous chapter will be described and discussed. This will focus on information obtained from the revised Olweus Bully/Victim questionnaire, the PTSD Checklist for DSM-5 (PCL-5) questionnaire and an adapted version of part 1 of the Harvard Trauma questionnaire. The reporting and discussion of the results will be guided by the four research objectives that were outlined in the previous chapter. Tables and figures will be utilised to aid in the discussion of the four objectives.

5.2 Findings Pertaining to Objective 1.

5.2.1 Results

The first objective of the study was to identify the bullying victimisation rates among high school learners in the Nelson Mandela Metropole. Data obtained from the revised Olweus Bully/Victim questionnaire will be discussed in this section. The focus specifically being on data obtained from certain questions within the revised Olweus Bully/Victim questionnaire, which relate specifically to bullying victimisation. Details regarding this can be found in Table 5.1, 5.2 and 5.3 below.

The data obtained from question four from the revised Olweus Bully/Victim questionnaire, which specifically looks at frequency of bullying victimisation within a school context, is represented in Table 5.1 below. It can be seen that the majority of participants (68.71%) indicated that they had not experienced bullying victimisation at school whereas 20.95%, which is just over one fifth of the sample group, indicated that they had experienced it once or twice in the past couple of months. Chronic bullying victimisation was experienced by 8.29% of the sample group, within their school environment during this academic year.

Table 5.1

Frequency of Bullying Victimisation

Q4 How often have you been bullied at school in the past couple of months?	n	%
I haven't been bullied at school in the past couple of months	505	68.71
It has only happened once or twice	154	20.95
2 or 3 times a month	22	2.99
about once a week	22	2.99
several times a week	17	2.31
Missing	15	2.04

Note. The total number of participants (n) was 735.

The data obtained from questions five, six, seven, eight, nine, ten, eleven, twelve (a), twelve (b) and thirteen from the revised Olweus Bully/Victim questionnaire, pertaining to types of bullying victimisation prevalent within a school context, is represented in Table 5.2 below. In Table 5.2 it can be seen that the three most prevalent types of bullying victimisation among the sample group in descending order were verbal bullying, relational bullying and isolation bullying.

In Table 5.2 below just over one fourth of the sample group (26.39%) experienced verbal bullying once or twice in the last couple of months. Chronic verbal bullying was experienced by 13.20% of the sample group, within this academic year. When considering relational bullying, which is the second most prevalent type of bullying victimisation among the learners, one fourth of the sample group (25.03%) experienced it once or twice in the last couple of months. Relational bullying was experienced by 11.83% of the sample within an academic year

Table 5.2
Types of Bullying Victimisation

	I haven't been bullied at school in the past couple of months		It has only happened once or twice		2 or 3 times a month		about once a week		several times a week		Missing	
	n	%	n	%	n	%	n	%	N	%	n	%
Q5 I was called names, was made fun of, or teased in a hurtful way (verbal bullying).	438	59.59	194	26.39	38	5.17	26	3.54	33	4.49	6	0.82
Q6 Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me (social exclusion/isolation bullying).	519	70.61	153	20.82	29	3.95	14	1.90	13	1.77	7	0.95
Q7 I was hit, kicked, pushed, shoved around, or locked indoors (direct physical bullying).	618	84.08	81	11.02	5	0.68	17	2.31	5	0.68	9	1.22
Q8 Other students told lies or spread false rumours about me and tried to make others dislike me (relational bullying).	460	62.59	184	25.03	40	5.44	22	2.99	25	3.40	4	0.54

Q9 I had money or other things taken away from me or damaged (indirect physical bullying).	601	81.77	88	11.97	15	2.04	10	1.36	13	1.77	8	1.09
Q10 I was threatened or forced to do things I didn't want to do (emotional/psychological bullying).	620	84.35	83	11.29	10	1.36	8	1.09	7	0.95	7	0.95
Q11 I was bullied with mean names or comments about my race or colour (racial bullying).	554	75.37	119	16.19	23	3.13	15	2.04	15	2.04	9	1.22
Q12a I was bullied with mean names, comments, or gestures with a sexual meaning (sexual bullying).	578	78.64	104	14.15	15	2.04	5	0.68	17	2.31	16	2.18
Q12b I was bullied with mean or hurtful messages, calls or pictures, or in other ways on my mobile phone or over the internet (computer) (cyberbullying).	612	83.27	72	9.80	9	1.22	13	1.77	7	0.95	22	2.99
Q13 I was bullied in another way.	578	78.64	92	12.52	15	2.04	10	1.36	10	1.36	30	4.08

Isolation bullying, which is the third most prevalent type of bullying victimisation among the learners, was experienced by just over one fifth (20.82%) of the sample group, once or twice in the last couple of months. Isolation bullying was experienced by 7.62% of the sample within an academic year. In Table 5.2 above relational bullying was the most prevalent type of bullying victimisation (5.44%) within the two to three times a month category. Verbal bullying on the contrary was the most prevalent type of bullying victimisation experienced once a week (3.54%) and/or several times a week (4.49%).

In Table 5.2 above the three least prevalent types of bullying victimisation, in ascending order started with psychological/ emotional bullying, as majority (84.35%) of the learners indicated that they had not experienced this type of bullying within the past couple of months. Direct physical bullying was the second least prevalent type of bullying victimisation among the sample group, as 84.08% of the learners indicated that they had not experienced this type of bullying within the past couple of months. This was followed by cyberbullying as the third least prevalent type of bullying victimisation experienced among the sample group, with 83.27% of the learners indicating that they had not experienced this type of bullying within the past couple of months.

The results obtained from question 17 of the revised Olweus Bully/Victim questionnaire that looks specifically at bullying victimisation severity, among learners in a school context can be found in Table 5.3 below. In Table 5.3 approximately one fourth (25.58%) of the sample group experienced a low severity of bullying victimisation that lasted one or two weeks in a school context. Moderate severity of bullying victimisation that lasted about a month at school was reported by 6.53% of the sample. Severe chronic bullying victimisation was experienced by 7.62% of the sample group, which went on for six months or even up to several years, within a school context.

Table 5.3

Bullying Victimisation Severity

Q17 How long has the bullying lasted?	n	%
I haven't been bullied at school in the past couple of months.	432	58.78
It lasted one or two weeks.	188	25.58
It lasted about a month.	48	6.53
It lasted about 6 months.	18	2.45
It lasted about a year.	21	2.86
It has gone on for several years.	17	2.31
Missing	11	1.50

Note. The total number of participants (n) was 735.

5.2.2 Discussion

The aim of the research study was to explore and describe the relationship between bullying victimisation and traumatic stress severity among the high school learners in the Nelson Mandela Metropole. When considering the first objective to identify the bullying victimisation rates among high school learners in the Nelson Mandela Metropole the bullying victimisation rate among the learners from the two public high schools was 20.95%. This is consistent with an international study, which indicated a bullying victimisation rate of 20.60% (Analitis et al., 2009). The rate mentioned above was however higher than the bullying victimisation rate reported in two other South African studies, namely 19.30% (Liang, Flisher & Lombard, 2007) and 16.49% (Mlisa, Ward, Flisher & Lombard, 2008).

The chronic bullying victimisation rate among the learners of 8.29% was lower than the rate of 26% which was suggested by Darney (2009). Both the bullying rates found in the

present study are however relatively high, when considering that both the sampled public high schools have anti-bullying policies incorporated in their code of conduct.

The most prevalent types of bullying victimisation experienced by the learners were verbal bullying followed by relational bullying and isolation bullying. This was consistent with international studies that found verbal bullying to be the most prevalent type of bullying victimisation (Thomas et al., 2016) followed by relational bullying (Khamis, 2014) in a school context. Similarly, South African studies found verbal bullying to be the most dominant type (de Wet, 2005) and relational bullying to be the second most dominant type (Darney, 2009) of bullying victimisation prevalent among learners in a school context.

The least prevalent type of bullying victimisation experienced by the learners was emotional/ psychological bullying. This finding differed with an international study (Kljakovic, Hunt & Jose, 2015) and a South African study (Darney, 2009) which found cyberbullying to be less prevalent than traditional bullying at school.

The severity rates of bullying victimisation experienced by the sample group of low severity (25.58%), moderate severity (6.53%) and severe chronic (7.62%) were lower, however similar to those found by Darney (2009) among a South African grade eight sample group. Among the grade eight sample group Darney (2009) found that 33% experienced low severity, 8% experienced intermediate severity and 12% experienced severe chronic bullying at school.

5.3 Findings Pertaining to Objective 2

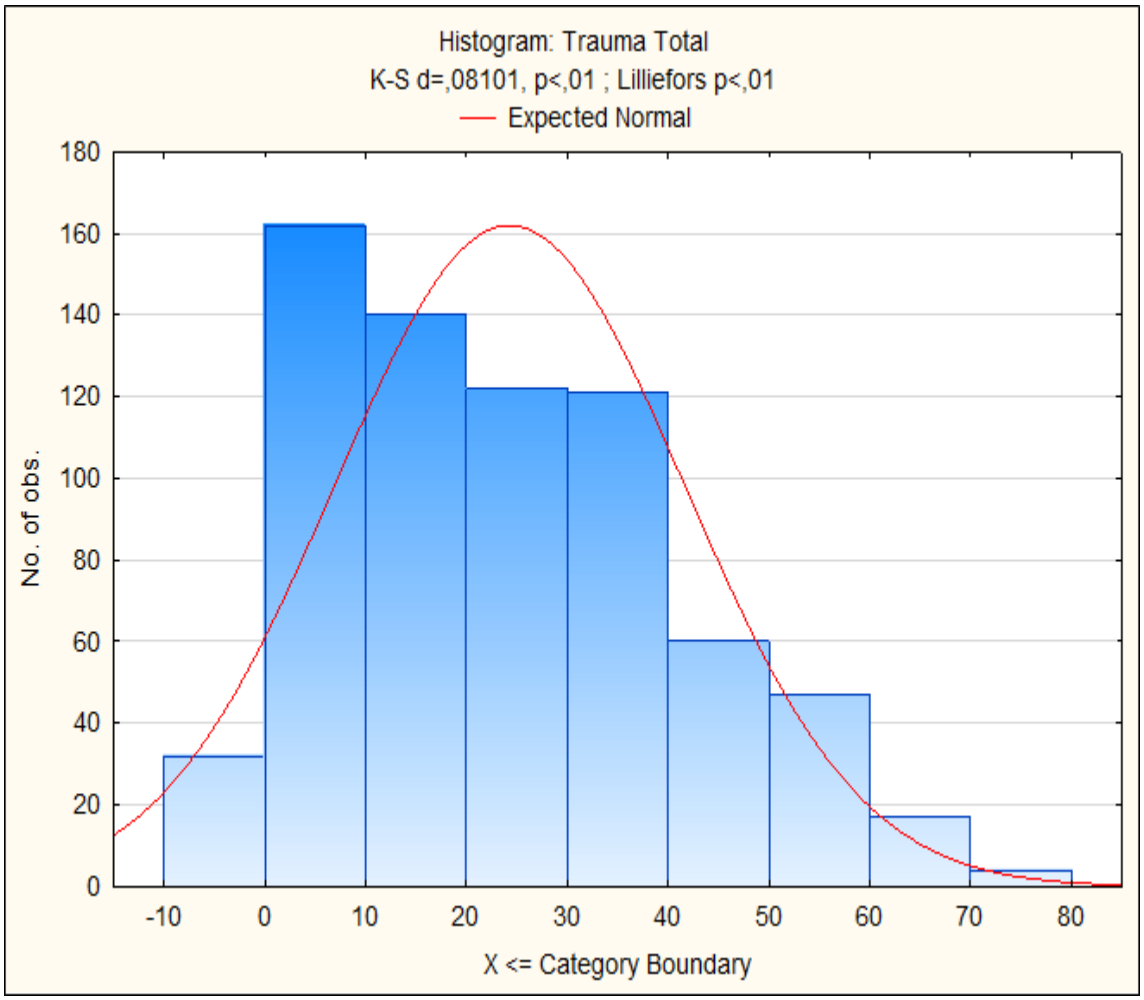
5.3.1 Results

The second objective of the research study was to identify the traumatic stress severity rates among the high school learners in the Nelson Mandela Metropole. Data obtained from the PTSD Checklist for DSM-5 (PCL-5) questionnaire, will be discussed in this section. The

total traumatic stress score for each of the participants within the sample will be the focus and is depicted in Figure 5.1 below.

Figure 5.1

Histogram depicting Total Traumatic Stress Score



The valid n value was 705, this represents the number of participants which completed the entire questionnaire. The minimum score was 0 and the maximum score was 76. The mean score was ($\bar{x}$=24.28), the median score was (M=22) and the standard deviation was (SD=17.36). The mean score was greater than the median score, suggesting the distribution has a longer tail at the high end than the low end. A normal distribution has a skewness value of 0. The skewness value for this data set was 0.55, thus showing it was positively skewed.

According to the K-S test, the null hypothesis stipulates that a normal distribution is followed. In terms of this dataset the null hypothesis is rejected due to $p<0.01$ which is less

than the significance level of 0.05. The normality assumption for the residuals are thus rejected for the traumatic stress scores.

According to U.S. Department of Veteran Affairs (2018) a total traumatic stress cut-off score of 33 is a reasonable value to propose that the individual may be suffering from severe traumatic stress symptoms. Two hundred and twenty (31.21%) of the participants exceeded the cut-off score of 33, suggesting that 31.21% of the sample group may be suffering from severe traumatic stress. This is approximately just under one third of the sample group, which is a high number of individuals that may be experiencing severe traumatic stress symptoms.

5.3.2 Discussion

When considering the traumatic stress severity rates among the high school learners in the Nelson Mandela Metropole, a considerable rate (31.21%) of the participants exceeded the cut-off score of 33. This suggests that just under one third of the learners from the two public highs schools within the Nelson Mandela Metropole, may be suffering from severe traumatic stress. These individuals may thus at this stage benefit from appropriate short-term (Foa, 2009), or long-term interventions (Gilman, Strawn & Keeshin, 2015) to prevent and/or treat PTSD. The rate of 31.21% was higher than the rate of 22.2% which was found in a South African study done by Seedat et al. (2004), however lower than the rate of 38% reported by Suliman, Kaminer, Seedat and Stein (2005).

5.4 Findings Pertaining to Objective 3

5.4.1 Results

The third objective of the research study was to identify the degree to which general traumatic events were experienced by high school learners in the Nelson Mandela Metropole. Data obtained from part 1 of an adapted version of the Harvard Trauma questionnaire, will be discussed in this section. The different general traumatic events were grouped into four categories of exposure within part 1 of the adapted version of the Harvard Trauma

questionnaire. These can be found in Tables 5.4, 5.5, 5.6 and 5.7 below and include victim of ‘known violence’, witnessing ‘known violence’, victim of ‘stranger violence’ and witnessing ‘stranger violence’.

Table 5.4
General Traumatic Events grouped under Victim of ‘‘known violence’’

	Yes		No		Missing	
	n	%	n	%	n	%
I have been beaten up by someone I know (not a family member).	159	21.63	572	77.82	4	0.54
I have been beaten up by a member of my family.	246	33.47	485	65.99	4	0.54
Someone I know threatened to stab me.	74	10.07	654	88.98	7	0.95
Someone I know threatened to shoot me.	36	4.90	691	94.01	8	1.09
A member of my family threatened to stab me.	33	4.49	695	94.56	7	0.95
A member of my family threatened to shoot me.	11	1.50	716	97.41	8	1.09
I have been shot by someone I know.	8	1.09	719	97.82	8	1.09
I have been stabbed by someone I know.	16	2.18	713	97.01	6	0.82
I have been shot by a member of my family.	7	0.95	719	97.82	9	1.22
I have been stabbed by a member of my family.	13	1.77	716	97.41	6	0.82
Someone I know tried to rape me.	35	4.76	691	94.01	9	1.22
A family member tried to rape me.	14	1.90	709	96.46	12	1.63
Someone I know raped me.	5	0.68	720	97.96	10	1.36
A family member raped me.	11	1.50	711	96.73	13	1.77
Grown-ups in my home hit me.	126	17.14	599	81.50	10	1.36
Grown-ups in my home always scream at me.	157	21.36	570	77.55	8	1.09

Note. The total number of participants (n) was 735.

In Table 5.4 it can be seen that there are three general traumatic events within the being a victim of ‘known violence’ category, which were the most prevalent among the sample group. In descending order, the most prevalent traumatic event was *I have been beaten up by a member of my family* (33.47%). This was followed by *I have been beaten up by someone I know who is not a family member* (21.63%). *Grown-ups in my home always scream at me* (21.36%) featured as the third most prevalent general traumatic event among the sample.

In Table 5.4 the three least prevalent general traumatic events included *someone I know raped me* (0.68%), followed by *I have been shot by a member of my family* (0.95%) and *I have been shot by someone I know* (1.09%).

The data obtained from part 1 of an adapted version of the Harvard Trauma questionnaire, which specifically looks at general traumatic events grouped under witnessing 'known violence' can be found in Table 5.5 below. There was a total of 735 participants (n). In Table 5.5 there are six general traumatic events under witnessing 'known violence' which were the most prevalent among the sample group.

In descending order, the three most prevalent being, *I have seen someone I know, who is not a family member being beaten up* (56.60%), followed by *grown-ups in my home scream at each other* (32.38%) and *I have seen a member of my family being beaten up* (28.44%). High prevalence was also reported for *I have seen someone I know, who is not a family member get shot* (22.18%) and *I have seen a dead body of someone I know, who is not a family member* (21.63%). *I have seen someone I know, who is not a family member get stabbed* (21.50%) was the sixth most prevalent among the sample.

In Table 5.5 there are four general traumatic events under witnessing 'known violence' which were the least prevalent among the sample. In ascending order, the least prevalent was *I have seen a stranger get shot in my home* (1.09%) and *I have seen someone I know get shot in my home* (1.63%). This is followed by *I have seen someone I know get stabbed in my home* (1.77%) and *I have seen a member of my family get shot in my home* (2.04%).

Table 5.5
General Traumatic Events grouped under Witnessing ''known violence''

	Yes		No	Missing		
	n	%	n	%	n	%
I have seen someone I know (not a family member) being beaten up.	416	56.60	314	42.72	5	0.68
I have seen a member of my family being beaten up.	209	28.44	523	71.16	3	0.41
I have seen someone I know (not a family member) get stabbed.	158	21.50	572	77.82	5	0.68
I have seen someone I know (not a family member) get shot.	163	22.18	567	77.14	5	0.68
I have seen a member of my family get stabbed.	97	13.20	633	86.12	5	0.68
I have seen a member of my family get shot.	45	6.12	685	93.20	5	0.68
I have seen a dead body of a family member (not at a funeral).	120	16.33	604	82.18	11	1.50
I have seen the dead body of someone I know, who was not a family member (not at a funeral).	159	21.63	567	77.14	9	1.22
I have seen someone I know trying to commit suicide.	107	14.56	616	83.81	12	1.63
I have seen a member of my family trying to commit suicide.	66	8.98	656	89.25	13	1.77
Grown-ups in my home hit each other.	130	17.69	593	80.68	12	1.63
Grown-ups in my home scream at each other.	238	32.38	487	66.26	10	1.36
I have seen a stranger get stabbed in my home.	38	5.17	689	93.74	8	1.09
I have seen a stranger get shot in my home.	8	1.09	718	97.69	9	1.22
I have seen someone I know get stabbed in my home.	13	1.77	714	97.14	8	1.09
I have seen someone I know get shot in my home.	12	1.63	715	97.28	8	1.09
I have seen a member of my family get stabbed in my home.	35	4.76	689	93.74	11	1.50
I have seen a member of my family get shot in my home.	15	2.04	710	96.60	10	1.36

Table 5.6

General Traumatic Events grouped under Victim of ''stranger violence''

	Yes		No		Missing	
	n	%	n	%	n	%
I have been beaten up by a stranger.	92	12.52	639	86.94	4	0.54
A stranger threatened to stab me.	196	26.67	533	72.52	6	0.82
A stranger threatened to shoot me.	101	13.74	628	85.44	6	0.82
I have been stabbed by a stranger.	23	3.13	705	95.92	7	0.95
I have been shot by a stranger.	13	1.77	713	97.01	9	1.22
I have been chased by a gang.	162	22.04	565	76.87	8	1.09
I have been kidnapped.	15	2.04	714	97.14	6	0.82
A stranger tried to rape me.	42	5.71	684	93.06	9	1.22
A stranger raped me.	6	0.82	720	97.96	9	1.22

Note. The total number of participants (n) was 735.

The data obtained from part 1 of an adapted version of the Harvard Trauma questionnaire, pertaining to general traumatic events grouped under victim of 'stranger violence' can be found in Table 5.6 above. In Table 5.6 there are two general traumatic events under being a victim of 'stranger violence' which were the most prevalent among the sample group. The most prevalent was *a stranger threatened to stab me* (26.67%), followed by *I have been chased by a gang* (22.04%).

In Table 5.6 above there are three general traumatic events under being a victim of 'stranger violence', which were the least prevalent among the sample group. In ascending order these included *a stranger raped me* (0.82%), *I have been shot by a stranger* (1.77%) and *I have been kidnapped* (2.04%).

The data obtained from part 1 of an adapted version of the Harvard Trauma questionnaire, which looks specifically at general traumatic events grouped under witnessing 'stranger violence can be found in Table 5.7 below. In Table 5.7 there are five general traumatic events under witnessing 'stranger violence' which were the most prevalent among

the sample group and will be discussed in descending order. The most prevalent traumatic events were *I have heard gunshots* (74.97%) and *I have seen a stranger being beaten up* (69.52%). This was followed by *I have seen a dead body of a stranger* (40.41%), *I have seen a stranger get stabbed* (32.38%), and *I have seen a stranger get shot* (31.56%). The least prevalent general traumatic event under witnessing 'stranger violence' among the sample group was *I have seen a stranger trying to commit suicide* (9.12%).

Table 5.7

General Traumatic Events grouped under Witnessing ''stranger violence''

	Yes		No		Missing	
	n	%	n	%	n	%
I have heard gunshots.	551	74.97	177	24.08	7	0.95
I have seen a stranger being beaten up.	511	69.52	217	29.52	7	0.95
I have seen a stranger get stabbed.	238	32.38	493	67.07	4	0.54
I have seen a stranger get shot.	232	31.56	496	67.48	7	0.95
I have seen a dead body of a stranger.	297	40.41	427	58.10	11	1.50
I have seen a stranger trying to commit suicide.	67	9.12	658	89.52	10	1.36

Note. The total number of participants (n) was 735.

When considering all four categories of exposure (Tables 5.4, 5.5, 5.6 and 5 7) above, the five most prevalent general traumatic events the sample group were exposed to will be listed in descending order. Firstly, hearing gunshots (74.97%), seeing a stranger being beaten up (69.52%) witnessing someone I know, who is not a family member being beaten up (56.60%) seeing the dead body of a stranger (40.41%) and being beaten up by a member of my family (33.47%).

Additionally, when considering all the four categories of exposure (Tables 5.4, 5.5, 5.6 and 5.7) above, the most prevalent category of exposure was witnessing 'stranger violence'

(42.99%), which is just over two-fifths of the sample. This was followed by witnessing 'known violence' (15.34%) and being a victim of 'stranger violence' (9.83%). The least prevalent category of exposure was being a victim of 'known violence' (8.09%).

5.4.2 Discussion

When considering the degree to which general traumatic events were experienced by high school learners in the Nelson Mandela Metropole, witnessing 'stranger violence' (42.99%) and witnessing 'known violence' (15.34%) were the two most prevalent categories of general traumatic events to which the learners from the two public high schools within the Nelson Mandela Metropole were exposed.

Ward, Flisher, Zissis, Muller and Lombard (2001) similarly found witnessing 'stranger violence' (81.7%) followed by witnessing 'known violence' (61.5%) as being the two most prevalent categories of general traumatic events, to which the learners were exposed in their South African sample. According to Kaminer, du Plessis, Hardy and Benjamin (2013) the most common traumatic event experienced by South African children and adolescents include witnessing community violence (98.9%). The above-mentioned finding was similarly found in the present study, as the two most prevalent general traumatic events experienced by the learners in the sample group were *I have heard gunshots* (74.97%) and *I have seen a stranger being beaten up* (69.52%), which are both events that could be categorised as events under witnessing community violence.

The category of general traumatic events which Ward, Flisher, Zissis, Muller and Lombard (2001) found to be the least prevalent was being a victim of 'stranger violence' (30.8%) which differed to what was found in the present study namely being a victim of 'known violence' (8.09 %).

5.5 Findings Pertaining to Objective 4

5.5.1 Results

Objective four was to explore and describe the relative contribution of previous general traumatic experiences and bullying victimisation on the traumatic stress severity among high school learners in the Nelson Mandela Metropole. Multiple linear regression analysis was used to analyse the results for this objective, as summarised in Table 5.8, 5.9 and 5.10 below. The multiple linear regression analysis summary table can be found in Table 5.8 below.

The model was obtained using backward stepwise regression analysis. The combination of variables in the first column of Table 5.8 below significantly contributed to the traumatic stress severity experienced by the sample group. These variables included being in grade 9 and gender, questions 5, 6, 10 and 12 from the revised Olweus Bully/Victim questionnaire, in addition to questions 11, 12, 18, 29, 37 and 45 from an adapted version of part 1 of the Harvard Trauma questionnaire.

In Table 5.8 the R-squared value was 0.381, which was above 0.25. This suggests that the variables mentioned in the first column below, have a strong combined effect on traumatic stress severity. The R-squared value additionally indicates that 38.1% of the variance can be explained by the model. The p-values of all the variables in the first column below are lower than the significance level of ($p < 0.05$) and thus are statistically significant, indicating that the model is a strong one to work from, because changes in the predictor variable values are related to changes in the dependent variable value.

Table 5.8

Multiple Linear Regression Analysis Summary Table

N=544	B	Std. Err.	t (531)	p-value
Intercept	3.26029	0.165810	19.66280	0.000000
Grade 9	0.43830	0.105727	4.14559	0.000039
Gender	-0.55384	0.104715	-5.28907	0.000000
OBQ5 I was called names, was made fun of, or teased in a hurtful way (verbal bullying).	-0.25380	0.052943	-4.79386	0.000002
OBQ6 Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me (social exclusion/isolation bullying).	-0.24792	0.066162	-3.74710	0.000198
OBQ10 I was threatened or forced to do things I didn't want to do (emotional/psychological bullying).	-0.34892	0.080929	-4.31140	0.000019
OBQ12 I was bullied with mean names, comments, or gestures with a sexual meaning (sexual bullying)	-0.25286	0.072144	-3.50496	0.000495
HTQ11 I have been beaten up by a member of my family (victim of 'known violence').	-0.39027	0.103250	-3.77989	0.000175
HTQ12 I have seen a stranger get stabbed (witnessing 'stranger violence').	-0.35263	0.100230	-3.51825	0.000472
HTQ18 A stranger threatened to stab me (victim of 'stranger violence').	-0.40985	0.110747	-3.70072	0.000237
HTQ29 I have been stabbed by a member of my family (victim of 'known violence').	1.52394	0.464344	3.28191	0.001099
HTQ37 A family member raped me (victim of 'known violence').	-1.65252	0.402800	-4.10259	0.000047
HTQ45 Grown-ups in my home scream at each other (witnessing 'known violence').	-0.42446	0.102160	-4.15492	0.000038

In Table 5.8 the t-values of all the variables in the first column above are greater than an absolute value of 2, indicating that they all are statistically significant. Gender in the first column above, appeared to have had the largest single effect on traumatic stress severity at $t(531) = 5.29$, $p = .00$.

In Table 5.8, male learners in grade nine appeared to have reported the lowest levels of traumatic stress. When using the multiple regression formula, a male student in grade nine, who had not experienced any form of bullying victimisation or general traumatic events, on the ten items which contributed significantly to the predicted traumatic stress score, had a predicted baseline score of 5.3. This score of 5.3 was the lowest predicted score and was used as a baseline to measure the percentage of increase to scores for those participants who deviated from this baseline.

In Table 5.8 above when considering grade, the predicted traumatic stress scores increased by 50.7% for participants that were not in grade nine. When considering gender, females had higher traumatic stress scores that were 67.0% higher than the scores for male participants.

In terms of the revised Olweus Bully/Victim questionnaire, the multiple regression analysis identified the following questions listed in the first column in Table 5.8 above from the questionnaire, as contributing significantly to the traumatic stress scores. The traumatic stress scores appeared to elevate as the frequency of the bullying victimisation increased. The percentage increase in the baseline scores are presented in Table 5.9 below.

In Table 5.9 below a consistent, incremental pattern is seen in the traumatic stress scores, depending on the frequency of the bullying victimisation that was reported. This increase in traumatic stress score was more dramatic when the type of bullying victimisation was emotional/ psychological bullying, with the trauma score increasing by 236.4% when this type of bullying victimisation was experienced several times a week within a school context.

Table 5.9

Percentage Increase in the Baseline Scores

Question	It has only happened once or twice	2 or 3 times a month	About once a week	Several times a week
OBQ5 I was called names, was made fun of, or teased in a hurtful way (verbal bullying).	27.5%	60.3%	100.2%	148.2%
OBQ6 Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me (social exclusion/isolation bullying).	26.8%	58.6%	97.2%	143.4%
OBQ10 I was threatened or forced to do things I didn't want to do (emotional/psychological bullying).	39.0%	89.5%	154.7%	236.4%
OBQ12 I was bullied with mean names, comments, or gestures with a sexual meaning (sexual bullying)	27.4%	60.0%	99.7%	147.4%

In terms of part 1 of an adapted version of the Harvard Trauma questionnaire, the multiple regression analysis identified the following questions listed in the first column of Table 5.8 as having contributed significantly to the traumatic stress score. The percentage increase baseline scores are presented in Table 5.10 below.

From Table 5.10, it appears that all the listed questions increased the severity of traumatic stress. Such increases were greatly elevated when the participants reported being a

victim of ‘known violence’ such as being stabbed by a family member and being raped by a family member.

Table 5.10

Percentage Increase in the Baseline Scores

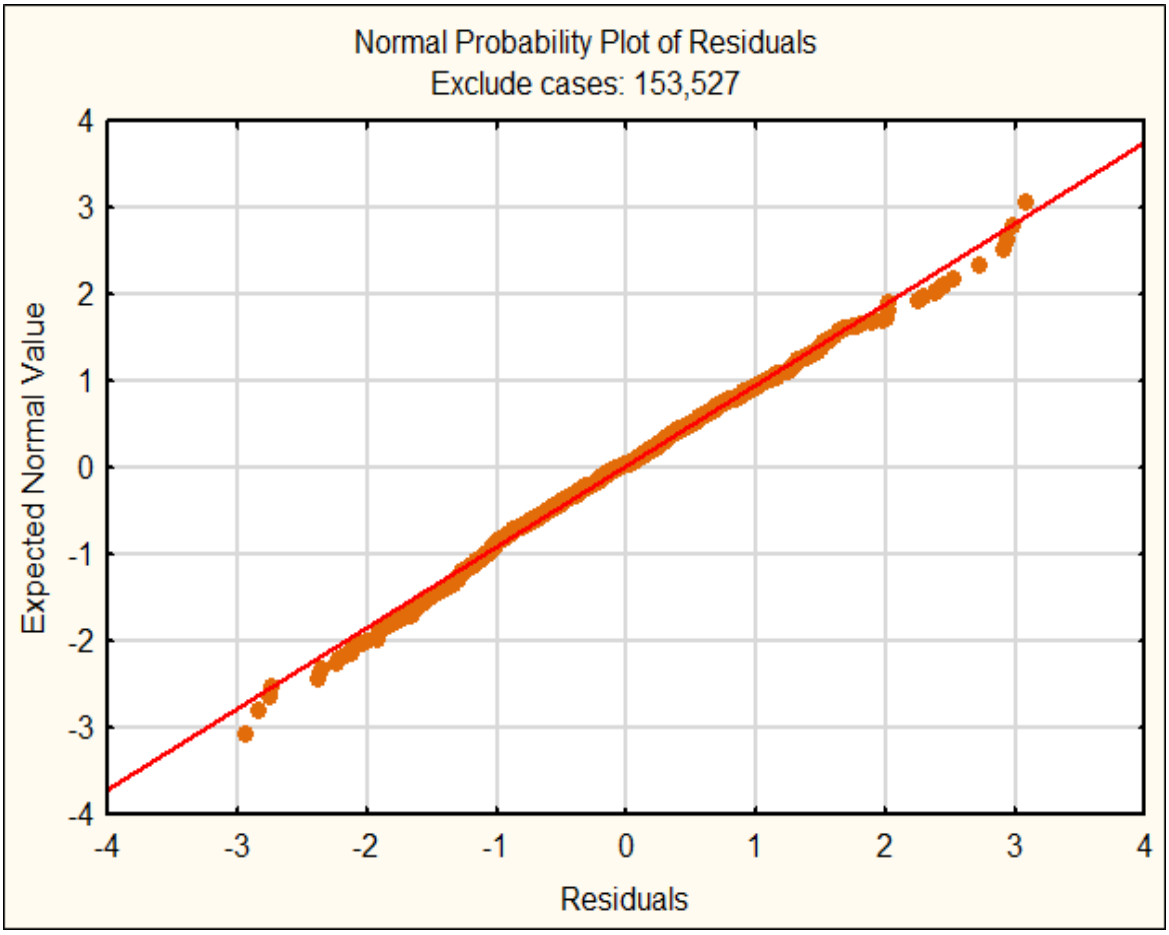
Question	Yes Response
HTQ11 I have been beaten up by a member of my family (victim of ‘known violence’).	44.3%
HTQ12 I have seen a stranger get stabbed (witnessing ‘stranger violence’).	39.5%
HTQ18 A stranger threatened to stab me (victim of ‘stranger violence’).	46.9%
HTQ29 I have been stabbed by a member of my family (victim of ‘known violence’).	76.8%
HTQ37 A family member raped me (victim of ‘known violence’).	300.3%
HTQ45 Grown-ups in my home scream at each other (witnessing ‘known violence’).	48.8%

In Table 5.10 the effect of rape by a family member on the traumatic stress score is particularly noticeable, given that a relatively small number (n=11) representing 1.5% of the sample answered yes to this specific question. This finding is significant, as an adapted version of part 1 of the Harvard Trauma questionnaire, presents three questions on being raped. The other two questions only elicited five and six “Yes” responses. The question thus arises whether the other two questions would also have featured as contributing significantly to traumatic stress severity, if there had been more yes responses.

To investigate the accuracy of the multiple regression formula, scores were plotted against a normal distribution line, to check whether error values remained consistent throughout the dataset. From Figure 5.2 below, the residual (error) plot remains close to the expected normal distribution value, indicating a good level of fit between predicted and observed trauma scores throughout the dataset.

Figure 5.2

Residual Plot of Traumatic Stress Total Scores

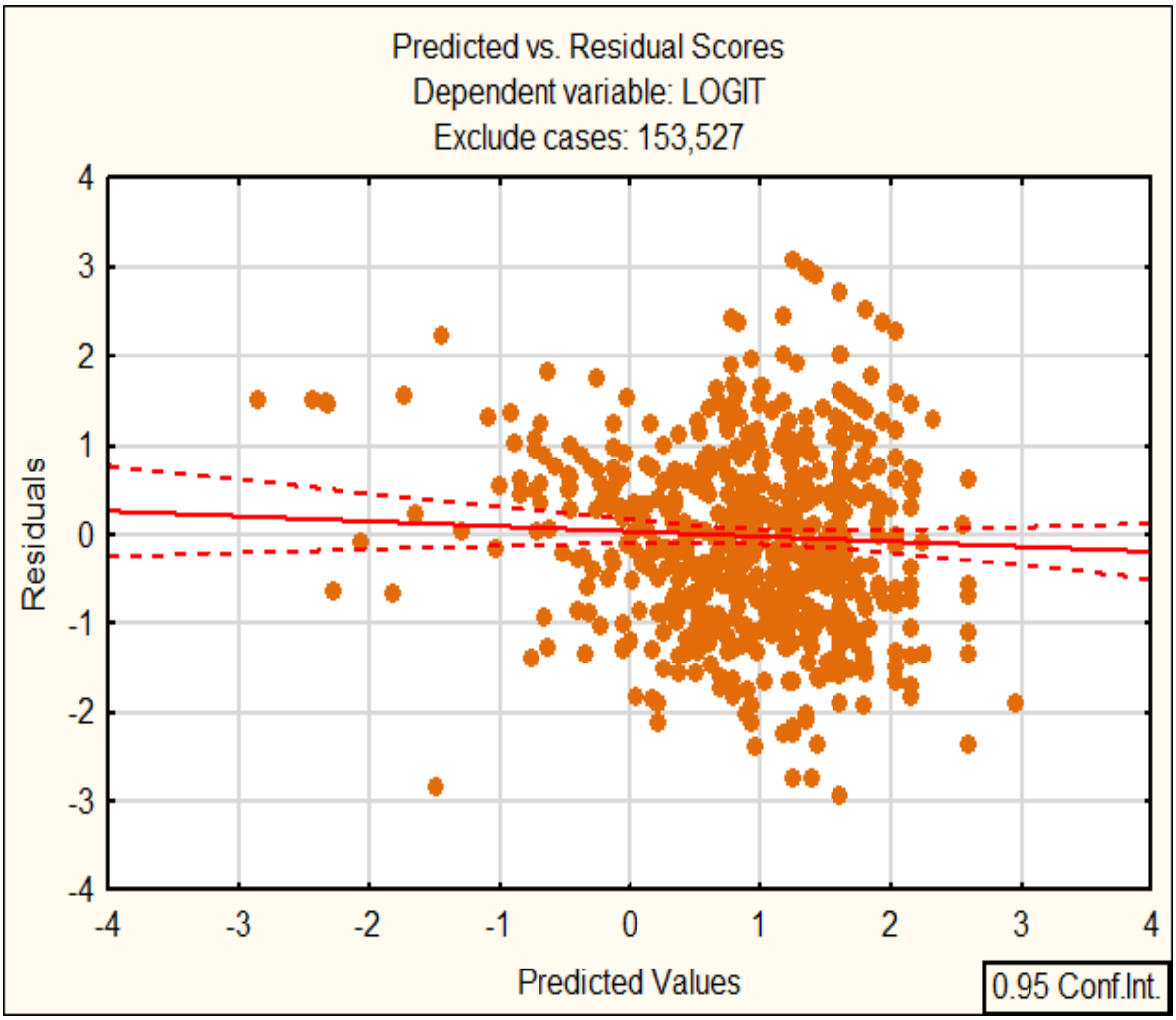


The appropriateness of the regression formula was further investigated through a scatterplot of predicted versus residual traumatic stress total scores, which is depicted in Figure 5.3 below. For the regression formula to be viewed as stable, scores firstly need to cluster around the null-point regression line, which from Figure 5.3 below is evident. The second aspect is for scores to be evenly clustered together and spread around both sides of the

null-point regression line, with fewer outliers (Hair, Black, Babin & Anderson, 2014), this pattern was also observed in Figure 5.3 below. From the analyses displayed in Figures 5.2 and 5.3, the multiple linear regression model was found to be valid for predicting the total traumatic stress scores of the studied sample, as measured by the PTSD Checklist for DSM-5 (PCL-5) questionnaire.

Figure 5.3

Scatterplot showing Predicted versus Residual Traumatic Stress Total Scores



5.5.2 Discussion

When considering the relative contribution of previous general traumatic experiences and bullying victimisation on the traumatic stress severity among high school learners in the

Nelson Mandela Metropole, the results portrayed that when applying multiple regression analysis to the data, the combination of certain variables significantly contributed to the traumatic stress experienced by the learners. These variables included grade nine, gender, verbal bullying, social exclusion/isolation bullying, emotional/psychological bullying and sexual bullying. In addition to the above-mentioned variables questions 11 (victim of 'known violence'), 12 (witnessing 'stranger violence'), 18 (victim of 'stranger violence'), 29 (victim of 'known violence'), 37 (victim of 'known violence') and 45 (witnessing 'known violence') from an adapted version of the Harvard questionnaire were also variables which significantly contributed to the traumatic stress experienced by the learners.

The variable gender in this study appeared to have had the largest single effect on traumatic stress severity, as females had higher traumatic stress severity scores when compared to their male counterparts. The above-mentioned finding is consistent with what was found in a study by Idsoe, Dyregrov and Idsoe (2012), which proposed a greater percentage of girls within that study appeared to suffer from PTSD-like symptoms. When considering why females are at a greater risk of developing PTSD after exposure to an event considered to be traumatic, the following was found. Females have shown to experience different types of events (more high impact traumas) when compared to males, for example sexual traumas (Breslau & Anthony, 2007). There are also biological explanations, as the brains of females have been shown to respond differently to stimuli perceived as being threatening (Greenberg, 2018). For females the right region of the brain during exposure to a traumatic event has shown more activation, which is associated with emotionality (Greenberg, 2018).

Within this study, experiencing a general traumatic event where a person is a victim of violence, which was perpetrated by someone the person knows or by someone who is a family member of the person, resulted in experiencing elevated traumatic stress severity

scores. This category of general traumatic events was however found to be the least prevalent category among the learners in the two selected public high schools. According to Lubit (2016) the relationship to the perpetrator is seen to play a vital role because being victimised by someone known and trusted by the individual overwhelms the individuals' sense of safety, which in turn increases the likelihood of developing PTSD. This could also be because within those circumstances the danger or threat comes from within the social support system, and a faulty or weak social support network may act as a risk factor for the development of traumatic stress symptoms (Robinson et al., 2018).

In terms of the types of bullying victimisation which were part of the combination of variables that significantly contributed to the traumatic stress severity scores, verbal bullying and social exclusion/ isolation bullying were included in that combination. This is a significant finding as they were the first and third most dominant types of bullying victimisation prevalent among the learner sample.

As previously mentioned, being exposed to bullying victimisation specifically in the form of verbal bullying, social exclusion/isolation bullying, emotional/psychological bullying and/or sexual bullying significantly contributed to the traumatic stress scores reported by the learners. It is consistent with research conducted internationally, which suggested that being a victim of bullying (in no specific form) in a school context, may lead to the development of symptoms mirroring those seen in traumatic stress (Carlisle & Rofes, 2007; Guzzo, Pace, Lo Cascio, Craparo & Schimnenti, 2014; Shannon, 2016). Similarly, in South African literature, a significant relationship was reported between being a victim of bullying and portraying PTSD-like symptoms (Collings, Penning & Valjee, 2014; Penning et al., 2010; Singh & Steyn, 2014).

Within this study the traumatic stress scores were seen to depend on the frequency of bullying victimisation. This finding is similar to those stipulated in an international (Idsoe,

Dyregrov & Idsoe, 2012) and a South African study (Penning, Bhagwanjee & Govender, 2010). This may be because the more frequent the bullying occurs the more the victim becomes stuck in his/her role where he/she feels isolated or alone, feeling a lack of control over the bullying process.

5.6 Conclusion

The quantitative information obtained from the revised Olweus Bully/Victim questionnaire, the PTSD Checklist for DSM-5 (PCL-5) questionnaire and an adapted version of part 1 of the Harvard Trauma questionnaire was discussed. The discussion of the results with the aid of tables and figures were guided by the four research objectives outlined in Chapter 4. The conclusions based on the study, the limitations of the study and the recommendations for future research will be discussed in the next chapter.

CHAPTER 6

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter will provide a summary of the main findings and will present a discussion of the conclusions that were reached regarding the present study. This will be followed by some of the limitations presented in the research, where lastly recommendations for future research will be discussed.

6.2 Aim and Objectives of the Study Revisited

The aim and objectives that served to guide the shape of the current research study will now be presented. The research study had the overall aim to explore and describe the relationship between bullying victimisation and traumatic stress severity among high school learners in the Nelson Mandela Metropole. The study's objectives were:

- To identify the bullying victimisation rates among high school learners in the Nelson Mandela Metropole.
- To identify the traumatic stress severity rates among the high school learners in the Nelson Mandela Metropole.
- To identify the degree to which general traumatic events are experienced by high school learners in the Nelson Mandela Metropole.
- To explore and describe the relative contribution of previous general traumatic experiences and bullying victimisation on the traumatic stress severity, among high school learners in the Nelson Mandela Metropole.

6.3 Overall Findings and Conclusions

Quantitative data was obtained in order to achieve the above overall aim and objectives of the study. This was done using a biographical questionnaire and three validated questionnaires. These included the revised Olweus Bully/Victim questionnaire (Olweus,

1996), the PTSD Checklist for DSM-5 (PCL-5) questionnaire (Weathers, Litz, Keane, Palmieri, Marx & Schnurr, 2013) and an adapted version of part 1 of the Harvard Trauma questionnaire (Ward, Flisher, Zissis, Muller & Lombard, 2001). The findings and conclusions that were drawn from the present study will now be addressed, according to the four research objectives.

6.3.1 Bullying victimisation rates among high school learners

The first objective of the research study was to identify the bullying victimisation rates among high school learners in the Nelson Mandela Metropole. This was done by administering the revised Olweus Bully/Victim questionnaire to all the learners from grade eight through to grade twelve, from the two selected public high schools in the Nelson Mandela Metropole for completion.

The results suggested that just over one fifth of the high school learners (20.95%) experienced bullying victimisation, once or twice in the past couple of months. The results also suggested that 8.29% of the high school learners experienced chronic bullying victimisation during an academic year, on a monthly or weekly basis. In descending order verbal bullying, relational bullying and isolation bullying were found to be the three most prevalent types of bullying victimisation, experienced among the high school learners. Psychological/ emotional bullying was found to be the least prevalent type of bullying victimisation experienced among the high school learners.

In terms of bullying victimisation severity, a quarter (25.58%) of the high school learners experienced a low severity of bullying victimisation, which lasted one to two weeks. Among the high school learners, 6.53% were seen to have experienced a moderate severity of bullying victimisation that lasted about a month. Among the sample, 7.62% were found to have experienced severe chronic bullying victimisation, which lasted six months up to several years.

In chapter 2, studies done in many counties around the world, from the learners' perspective, found peer-on-peer bullying as being extensively experienced in a school context (Ayenibiowo & Akinbode, 2011). An international study found a bullying rate of 20.6% (Analitis et al., 2009). The above-mentioned rate is similar to the bullying victimisation rate (20.95%) found among the high school learners in the present study. In terms of studies conducted by other researchers in different areas in South Africa (Liang, Flisher & Lombard, 2007; Mlisa, Ward, Flisher & Lombard, 2008), it was found that the bullying rates were lower than the rate of 20.95% which was found in the current study among the high school learners.

6.3.2 Traumatic stress severity rates among high school learners

The second objective of the research study was to identify the traumatic stress severity rates among the high school learners in the Nelson Mandela Metropole. This was obtained by administering the PTSD Checklist for DSM-5 (PCL-5) questionnaire to all the learners from grade eight through to grade twelve from the two selected public high schools in the Nelson Mandela Metropole for completion.

In this study the scores of two hundred and twenty out of seven hundred and thirty-five participants exceeded the cut-off score of 33. The cut-off score of 33, according to the U.S. Department of Veteran Affairs (2018), is a reasonable value to propose that the individual may be suffering from severe traumatic stress. This means that just under one third (31.21%) of the learners from the two public high schools may be suffering from severe traumatic stress.

In chapter 3, studies done in many countries around the world showed that PTSD, which is the last stage of traumatic stress development, appears to be prevalent among school going children and adolescents (Perkonigg, Kessler, Storz & Wittchen, 2000). Similarly, many children and adolescents in a South African school context appear to be suffering from severe

traumatic stress, which was the case in this study with the rate being 31.21%. The traumatic stress severity rate in the current study was higher than the traumatic stress severity rates found in two other South African studies (Collings, Penning & Valjee, 2014; Seedat et al., 2004). The traumatic stress severity rate in another South African study done by Suliman, Kaminer, Seedat and Stein (2005) was however higher than the rate found in the current research study.

6.3.3 General traumatic events experienced by high school learners

The third objective of the research study was to identify the degree to which general traumatic events were experienced by high school learners in the Nelson Mandela Metropole. This was obtained by administering an adapted version of part 1 of the Harvard Trauma questionnaire, to all the learners from grade eight through to grade twelve from the two selected public high schools in the Nelson Mandela Metropole for completion.

In chapter 3, Ward, Flisher, Zissis, Muller and Lombard (2001) suggested witnessing 'stranger violence' (81.7%) was seen as being the most prevalent category of general traumatic events, to which learners were exposed to in a South African school context. This was similarly the case in the current research study, as approximately almost half of the participants (42. 99%) had witnessed violence perpetrated by a stranger.

In the present study, the five general traumatic events that were the most prevalent among the high school learners will be mentioned in descending order. The general traumatic events included *I have heard gunshots* (74. 97%), followed by *I have seen a stranger being beaten up* (69. 52%) and *I have seen someone I know, who is not a family member being beaten up* (56. 60%). The fourth most prevalent general traumatic event was *I have seen a dead body of a stranger* (40. 41%) and the fifth was *I have been beaten up by a member of my family* (33.47%).

In chapter 3, according to Kaminer, du Plessis, Hardy and Benjamin (2013) the most common general traumatic event prevalent among South African learners is witnessing community violence (98.9%). This was similarly found within the current study as the two most prevalent general traumatic events among the learners namely *I have heard gunshots* and *I have seen a stranger being beaten up*, can also essentially be categorised under witnessing community violence.

6.3.4 The contribution of general traumatic events and bullying victimisation on the traumatic stress severity

The fourth objective was to explore and describe the relative contribution of previous general traumatic experiences and bullying victimisation on the traumatic stress severity among high school learners in the Nelson Mandela Metropole. The results for the fourth objective was analysed using multiple linear regression analysis.

In the current study it was found that the combination of the variables grade nine, gender, verbal bullying, social exclusion/isolation bullying, emotional/psychological bullying and sexual bullying, in addition to questions 11 (victim of 'known violence'), 12 (witnessing 'stranger violence'), 18 (victim of 'stranger violence'), 29 (victim of 'known violence'), 37 (victim of 'known violence') and 45 (witnessing 'known violence') from an adapted version of part 1 of the Harvard questionnaire, significantly contributed to the traumatic stress severity scores.

The variable gender in the current study appeared to have had the largest single effect on traumatic stress severity. In terms of gender, females appeared to have had higher traumatic stress severity, which was similarly found by Idsoe, Dyregrov and Idsoe (2012). When applying multiple linear regression analysis to the least prevalent category of general traumatic events, in the current study namely being a victim of 'known violence', this resulted in elevated traumatic stress severity scores. This can be understood when referring to

what was suggested in chapter 3, namely that the victim's relationship with the perpetrator acts as a risk factor for developing PTSD after exposure (Lubit, 2016).

In terms of being exposed to bullying victimisation in the form of verbal bullying, social exclusion/isolation bullying, emotional/psychological bullying and sexual bullying had a significant contribution on the traumatic stress severity scores experienced by the learners. In the present study verbal and social exclusion/isolation bullying were found within the top three most dominant types of bullying victimisation among the learners.

Similarly, as mentioned in chapter 3 bullying victimisation (in any form) was seen as being associated with the development of symptoms mirroring those seen in traumatic stress in international studies (Guzzo, Pace, Lo Cascio, Craparo & Schimnenti, 2014; Shannon, 2016) and South African studies (Penning et al., 2010; Singh & Steyn, 2014). In the current research study, the traumatic stress severity was seen to be influenced by frequency of bullying victimisation, which was similarly found in an international study (Idsoe, Dyregrov & Idsoe, 2012) and a South African study (Penning, Bhagwanjee & Govender, 2010).

6.4 Limitations of the Present Research

Limitations of the current study will be discussed in order to make suggestions for further research in the future. The two high schools selected through stratified random sampling, were two public high schools within the Nelson Mandela Metropole. The current study did not include private high schools within the Nelson Mandela Metropole. The two high schools were also both English-medium high schools. The researcher did not access high schools where the teaching instruction language was anything other than English, as the researcher did not have access to measures in other languages. The research findings may thus not be generalised to all high schools but only to English public high schools in the Nelson Mandela Metropole. The current study also only considered self-reports of bullying victimisation in a school context from the learners' subjective perspective and therefore the

perspectives of the educators or parents who witnessed the bullying were not considered in the present study.

The current research study also only focussed on bullying in a school context from the role of the victim and not from the other role players, such as the bully(s) or bystander(s) in a bullying situation. The study lastly focussed only on the traumatic stress severity that was determined by calculating the total symptom severity score of all the items on the PTSD checklist for DSM-5 (PCL-5), and not on the specific traumatic stress symptoms that the participants may have been experiencing.

6.5 Recommendations for Future Research

The current researcher will discuss ideas for future research. In terms of the research finding regarding objective four in chapter 5, the effect of rape by a family member (victim of 'known violence') on the traumatic stress score was particularly noticeable. The question thus arose whether the other two questions in an adapted version of part 1 of the Harvard Trauma questionnaire namely *someone I know raped me* (victim of 'known violence') and *a stranger raped me* (victim of 'stranger violence') would have also featured as contributing significantly to traumatic stress severity, if there had been more yes responses. The researcher thus suggests that these two questions be explored further in future studies. In chapter 5 for objective four, the predicted trauma scores increased by 50.7% for participants that were not in grade nine. This finding should thus be explored further in future studies to determine if the finding was affected by sampling in the present study, or other causes.

Lastly the researcher suggests a large-scale study should be conducted to determine the prevalence of bullying victimisation and traumatic stress severity in both private and public primary schools and high schools in the Nelson Mandela Metropole.

6.6 Conclusion

A summary of the main findings were presented and a discussion of the conclusions that were reached regarding the present study occurred. This was followed by some of the limitations presented in the research, where after recommendations for future research were discussed. Despite some of the limitations to the current study, the findings contributed in a valuable way to increasing knowledge regarding the relationship between bullying victimisation and traumatic stress severity among high school learners in the Nelson Mandela Metropole.

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APENDIX A

REC-H Approval Letter

NELSON MANDELA
UNIVERSITY

PO Box 77000, Nelson Mandela University, Port Elizabeth, 6031, South Africa mandela.ac.za

Chairperson: Research Ethics Committee (Human)
Tel: +27 (0)41 504 2235
charmain.cilliers@mandela.ac.za

Ref: [H17-HEA-PSY-018 / Approval]

2 March 2018

Ms L Currin
Faculty of Health Sciences
South Campus

Dear Ms Currin

BULLYING VICTIMISATION AND TRAUMATIC STRESS SEVERITY AMONG HIGH SCHOOL LEARNERS

PRP: Ms L Currin
PI: Ms C Meyer

Your above-entitled application served at the Research Ethics Committee (Human) for approval.

The ethics clearance reference number is **H17-HEA-PSY-018** and is valid for three years. Please inform the REC-H, via your faculty representative, if any changes (particularly in the methodology) occur during this time. An annual affirmation to the effect that the protocols in use are still those for which approval was granted, will be required from you. You will be reminded timeously of this responsibility and will receive the necessary documentation well in advance of any deadline.

We wish you well with the project.

Yours sincerely

CB Cilliers

Prof C Cilliers
Chairperson: Research Ethics Committee (Human)

Cc: Department of Research Capacity Development
Faculty Officer: Health Sciences

APPENDIX B

Eastern Cape Department of Education Approval Letter

Province of the
EASTERN CAPE
EDUCATION

STRATEGIC PLANNING POLICY RESEARCH AND SECRETARIAT SERVICES
Steve Vukile Tshwete Complex • Zone 6 • Zwelitsha • Eastern Cape
Private Bag X0032 • Bhisho • 5605 • REPUBLIC OF SOUTH AFRICA
Tel: +27 (0)40 608 4773/4035/4537 • Fax: +27 (0)40 608 4574 • Website: www.ecdoe.gov.za

Enquiries: B Pamla Email: babalwa.pamla@ecdoe.gov.za Date: 09 May 2018

Ms. Courtney Clarissa Meyer

9 Bushwillow Street

Wavecrest

Jeffreys Bay

6330

Dear Ms Meyer

PERMISSION TO UNDERTAKE A MASTER'S THESIS: BULLYING VICTIMISATION AND TRAUMATIC STRESS SEVERITY AMONG HIGH SCHOOL LEARNERS

1. Thank you for your application to conduct research.
2. Your application to conduct the abovementioned research involving 680 participants from two Secondary Schools in Port Elizabeth of Nelson Mandela Bay District under the jurisdiction of the Eastern Cape Department of Education (ECDoE) is hereby approved based on the following conditions:
    a. there will be no financial implications for the Department;
    b. consent will be sought from parents of minor children;
    c. institutions and respondents must not be identifiable in any way from the results of the investigation;
    d. you present a copy of the written approval letter of the Eastern Cape Department of Education (ECDoE) to the Cluster and District Directors before any research is undertaken at any institutions within that particular district;
    e. you will make all the arrangements concerning your research;
    f. the research may not be conducted during official contact time;

g. should you wish to extend the period of research after approval has been granted, an application to do this must be directed to Chief Director: Strategic Management Monitoring and Evaluation;

h. your research will be limited to those institutions for which approval has been granted, should changes be effected written permission must be obtained from the Chief Director: Strategic Management Monitoring and Evaluation;

i. you present the Department with a copy of your final paper/report/dissertation/thesis free of charge in hard copy and electronic format. This must be accompanied by a separate synopsis (maximum 2 – 3 typed pages) of the most important findings and recommendations if it does not already contain a synopsis.

j. you present the findings to the Research Committee and/or Senior Management of the Department when and/or where necessary.

k. you are requested to provide the above to the Chief Director: Strategic Management Monitoring and Evaluation upon completion of your research.

l. you comply with all the requirements as completed in the Terms and Conditions to conduct Research in the ECDoE document duly completed by you.

m. you comply with your ethical undertaking (commitment form).

n. you submit on a six-monthly basis, from the date of permission of the research, concise reports to the Chief Director: Strategic Management Monitoring and Evaluation

3. The Department reserves a right to withdraw the permission should there not be compliance to the approval letter and contract signed in the Terms and Conditions to conduct Research in the ECDoE.

4. The Department will publish the completed Research on its website.

5. The Department wishes you well in your undertaking. You can contact the Director, Ms. NY Kanjana on the numbers indicated in the letterhead or email nelisa.kanjana@ecdoe.gov.za should you need any assistance.

NY KANJANA
DIRECTOR: STRATEGIC PLANNING POLICY RESEARCH & SECRETARIAT SERVICES

FOR SUPERINTENDENT-GENERAL: EDUCATION

APPENDIX C

Permission granted to use the revised Olweus Bully/Victim questionnaire

From: Dan Olweus

To: "Meyer, Courtney, (Miss) (s213282992)''

Mon 3/21/2016 1:34 PM

Hello-
Please find attached the Olweus Bullying Questionnaire (OBQ) materials (see document with Code Form in the file name for scoring) and some publications you may find useful. Use of OBQ should be referenced as Olweus, D. (1996). The Revised Olweus Bullying Questionnaire. Mimeo. Bergen, Norway: Research Centre for Health Promotion (HEMIL), University of Bergen, N-5020 Bergen, Norway.
Good luck with your work!

(Please note that, due to copyright regulations, you are not allowed to include a copy of the Questionnaire in a thesis/ dissertation or any other unpublished or (to be) published materials. However, selected text portions from the Questionnaire that have already been published, for example, in the attached Solberg & Olweus 2003 paper can be included/published without restrictions.

For possible further inquiries, you may contact Sue Thomas - srthomas@hazelden.org<https://kalender.uib.no/owa/redir.aspx?REF=U3Cmz7i4qbMSKbdZil3HBDU_73Wc5KDA2yweGTXbF_UajDiffFHTCAFodHRwczovL2thbGVuZGVyLnVpYi5uby9vd2EvcmVkaXIuYXNweD9SRUY9ZGZjNWU2TGNpTmRtMG0wLURRTEx4Mi1WNS1lcExtVkdDWUtCVm5HZEp3d3VQdnlodEZEVENBRm9kSFJ3Y3pvdkwydGhiR1Z1WkdWeUxuVnBZaTV1Ynk5dmQyRXZaTV1Ynk5dmQyRXZjbVZrYVhJdVlYTndlRDlTUlVZOVNIRm9jVVJVZVRWR1JuUm5TVkp4UVdWT1IySklUa0pzVDAxNFlsZEdaMDlxU21aalRUWkZjSGxPYkY5Wk5VUnNhVVJJVkVOQlJuUlpWMnh6WkVjNE5tTXpTakJoUnpsMFdWaE9RV0ZIUmpaYVYzaHJXbGMwZFdJelNtNC4.>).

Kind regards
Dan Olweus
Research Professor of Psychology
Uni Health and the HEMILCenter, UiB
PB 7810
NO-5020 Bergen
NORWAY

APPENDIX D

Letter to School Principal

NELSON MANDELA UNIVERSITY
mandela.ac.za
Change the World

South Campus
Department of Psychology
Tel. +27(0)41 504 2354

To the school principal

RE: Request for consideration of research project

I am a Master of Arts in Psychology (Research) student at Nelson Mandela University and am in the process of doing a research study on ‘‘Bullying victimisation and traumatic stress severity among high school learners’’. I will thus be looking at collecting data from all the high school learners from grade 8 to grade 12. My supervisor is Mrs Lisa Currin from the Psychology Department at Nelson Mandela University.

In addition to the academic value, the research may contribute to the awareness of the effects that bullying victimisation may have on high school learners. I would appreciate the opportunity to partner with your school in terms of this agenda and specifically with the above research. If you are willing to consider the above request, I would follow a process of engagement to establish whether there is specific research value that I can add in terms of your school specifically.

Confidentiality will always be maintained in terms of the school as well as the individual learners. All ethical procedures will be strictly adhered to and institutional authorities’; the Nelson Mandela University Research Ethics Committee (Human) and Eastern Cape Department of Education have granted permission. The research ethics clearance number is H17-HEA-PSY-018 at Nelson Mandela University.

If you agree to allow me to conduct this research project at your school, we can administer the fieldwork in a manner of your choosing, to ensure no disruption to educational activities. The research requires four questionnaires (one for biographical information, one to assess bullying victimisation, one to assess traumatic stress and a final one to assess other events related to traumatic stress). I anticipate that the full set of questionnaires will take approximately 30-57 minutes to complete.

Thank you very much for your time in considering this request. If you have any questions regarding the above, please do not hesitate to contact me.

Miss Courtney Meyer
Primary Investigator

Mrs Lisa Currin
Principal Responsible Person

APPENDIX E

Information Letter for Parents/Guardians

NELSON MANDELA UNIVERSITY
mandela.ac.za
Change the World
South Campus
Department of Psychology
Tel. +27(0)41 504 2354

Dear Parent/Guardian Date:

I am a Master of Arts in Psychology (Research) student at Nelson Mandela University. I am in the process of conducting a research study on, ‘‘Bullying victimisation and traumatic stress severity among high school learners’’. Bullying victimisation means ‘’being exposed, repeatedly and over time, to negative actions on the part of one or more other persons’’ (Olweus, 1993). My supervisor is Mrs Lisa Currin from the Psychology Department at Nelson Mandela University.

The research is aimed at creating a greater awareness of the consequences that bullying victimisation may have on high school learners. You are being asked, to give permission for your child to take part in a research study. If you do agree to allow your child to take part, he/she will be asked to complete 4 questionnaires: one for biographical information, one to assess bullying victimisation, one to assess traumatic stress and a final one to assess other events related to traumatic stress. The date and time will be arranged with the school to avoid disruption to the educational schedule as approximately 30-57 minutes will be needed in total to complete the questionnaires.

Participation is not compulsory, and your child will not get into trouble for not taking part. Your child will be allowed to leave the venue at any time, if he/she feels uncomfortable. All the information will remain completely confidential. Your child could receive debriefing by the researcher or one of her four fieldworkers on the day of data collection and/or could be sent to an appropriate individual from The University Psychology Clinic (UCLIN) if he/she feels distressed due to the research project. UCLIN’s contact number is: 041 504 2330.

The learners will have an opportunity to attend a workshop on bullying presented by the researcher. If your child is interested, please either inform the school principal of this or contact me via my cell number: 0792720790.

Thank you for your consideration in advance

Yours sincerely

Courtney Clarissa Meyer

APEENDIX F

Parent Informed Consent Form

NELSON MANDELA UNIVERSITY
mandela.ac.za
Change the World
South Campus
Department of Psychology
Tel. +27(0)41 504 2354

I _____, give permission for my child_____, to participate in the study that is aimed at exploring bullying victimisation and traumatic stress severity among high school learners. I understand that this means that my child will be asked to complete 4 questionnaires: one for biographical information, one to assess bullying victimisation, one to assess traumatic stress and a final one to assess other events related to traumatic stress. Approximately 30-57 minutes will be needed in total to complete the above-mentioned questionnaires. The date and time will be arranged with the school to avoid disruption to the educational schedule. The following has been explained to me:

- My child does not need to take part in the study, it is not compulsory, my child will thus be allowed to withdraw from the study at any point.
- My child's personal details will be kept confidential and will thus not be included when results are drawn up.
- If my child experiences adverse psychological consequences due to completing the questionnaires, the primary researcher will be available to provided immediate debriefing and/or will arrange for him/her to receive further assistance from appropriate individuals from The University Psychology Clinic (UCLIN). UCLIN provides assessments and treatment for children, adolescents and adults who are experiencing educational, emotional and/or behavioural difficulties. UCLIN's contact number is: 041 504 2330.
- Information or results shall not be shared with parties not involved in this research study.
- I understand that my child will not be penalised if I do not allow him/her to take part in the research study.
- I understand that my child will be completing a written informed assent form on the day of the study.
- I will have the opportunity to attend the summarised group feedback session.

Signature of Parent: Date:

_____ _____

Signature of Primary Researcher: Date:

_____ _____

Signature of Principle Responsible Person: Date:

_____ _____

APPENDIX G

Participant Assent Form

NELSON MANDELA UNIVERSITY

mandela.ac.za

Change the World

South Campus
Department of Psychology
Tel. +27(0)41 504 2354

I _____, am willing to take part in the study that looks at exploring bullying victimisation and traumatic stress severity among high school learners. Bullying victimisation means ‘’being exposed, repeatedly and over time, to negative actions on the part of one or more other persons’’ (Olweus, 1993). I understand I will be completing 4 questionnaires.

The following has been explained to me:

- I understand that it is my choice to complete the questionnaires, it is not compulsory.
- I understand that my name will not be mentioned when I leave the venue here today.
- If I feel distressed, I understand that I can speak to the researcher to assist me where she may send me to an appropriate individual from The University Psychology Clinic (UCLIN) for further help. UCLIN’s contact number is: 041 504 2330.
- I understand that I will not be in trouble or get lower marks at school if I do not complete the questionnaires.
- I understand that if I would like feedback, I am able to attend a summarised group feedback session arranged by the researcher.

Signature of Participant	Date:
_____	_____
Signature of Primary Researcher:	Date:
_____	_____
Signature of Principle Responsible Person:	Date:
_____	_____

APPENDIX H

Biographical questionnaire

School Reference Code: _____

Grade: _____

Today's Date:

(Please write the corresponding numbers in the spaces below).

Day Month Year

__ __ __ __ __ __ __ __

Gender: ☐ Male ☐ Female

Age:

(Please write the corresponding numbers in the spaces below).

tens units

__ __

Home Language: ☐ English ☐ Afrikaans

☐ IsiZulu ☐ IsiXhosa

☐ Other Please specify _____

APPENDIX I

PTSD Checklist for DSM-5 Diagnostic Criteria (PCL-5) questionnaire

Instructions: Below is a list of problems that people sometimes have in response to a very stressful experience. Please read each problem carefully and then circle one of the numbers to the right to indicate how much you have been bothered by that problem in the past month. **In the past month, how much were you bothered by:**	**Not at all**	**A little bit**	**Moderately**	**Quite a bit**	**Extremely**
1. Repeated, disturbing, and unwanted memories of the stressful experience?	0	1	2	3	4
2. Repeated, disturbing dreams of the stressful experience?	0	1	2	3	4
3. Suddenly feeling or acting as if the stressful experience were actually happening again (as if you were actually back there reliving it)?	0	1	2	3	4
4. Feeling very upset when something reminded you of the stressful experience?	0	1	2	3	4
5. Having strong physical reactions when something reminded you of the stressful experience (for example, heart pounding, trouble breathing, sweating)?	0	1	2	3	4
6. Avoiding memories, thoughts, or feelings related to the stressful experience?	0	1	2	3	4
7. Avoiding external reminders of the stressful experience (for example, people, places, conversations, activities, objects, or situations)?	0	1	2	3	4
8. Trouble remembering important parts of the stressful experience?	0	1	2	3	4
9. Having strong negative beliefs about yourself, other people, or the world (for example, having thoughts such as: I am bad, there is something seriously wrong with me, no one can be trusted, the world is completely dangerous)?	0	1	2	3	4
10. Blaming yourself or someone else for the stressful experience or what happened after it?	0	1	2	3	4
11. Having strong negative feelings such as fear, horror, anger, guilt, or shame?	0	1	2	3	4
12. Loss of interest in activities that you used to enjoy?	0	1	2	3	4
13. Feeling distant or cut off from other people?	0	1	2	3	4
14. Trouble experiencing positive feelings (for example, being unable to feel happiness or have loving feelings for people close to you)?	0	1	2	3	4
15. Irritable behaviour, angry outbursts, or acting aggressively?	0	1	2	3	4
16. Taking too many risks or doing things that could cause you harm?	0	1	2	3	4
17. Being “super alert” or watchful or on guard?	0	1	2	3	4
18. Feeling jumpy or easily startled?	0	1	2	3	4
19. Having difficulty concentrating?	0	1	2	3	4
20. Trouble falling or staying asleep?	0	1	2	3	4

APPENDIX J

Adapted version of part 1 of the Harvard Trauma questionnaire

FOR OFFICE USE ONLY

Line one

7

1. ☐

2. ☐

3. ☐

4. ☐

11

5. I have heard gunshots. *Yes* ☐ ☐

No ☐

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐

15

6. I have seen a stranger being beaten up. *Yes* ☐ ☐

16

No ☐

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐

7. I have seen someone I know (not a family member) being beaten up

Yes ☐

No ☐ **20**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐

8 I have seen a member of my family being beaten up.

Yes ☐

No ☐ **24**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐ **27**

9 I have been beaten up by a stranger

Yes ☐

No ☐ **28**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐

10. I have been beaten up by someone I know (not a family member).

Yes ☐

No ☐ **32**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐

11. I have been beaten up by a member of my family.

Yes ☐

No ☐ **36**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐ **39**

12. I have seen a stranger get stabbed

Yes ☐

No ☐ **40**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐

13. I have seen a stranger get shot

Yes ☐

No ☐ **44**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐

47

14. I have seen someone I know (not a family member) get stabbed

Yes ☐

No ☐

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐ **51**

15. I have seen someone I know (not a family member) get shot

Yes ☐

No ☐ **52**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐

16. I have seen a member of my family get stabbed.

Yes ☐

No ☐ **56**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months*?*

Yes ☐ *No* ☐ ☐

17. I have seen a member of my family get shot.

Yes ☐
No ☐

☐ 60

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months*?* ☐ 63
Yes ☐ *No* ☐

18. **A stranger** threatened to stab me.

Yes ☐ *No* ☐ ☐ 64

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months*?* ☐
Yes ☐ *No* ☐

19.. **A stranger** threatened to shoot me

Yes ☐ ☐
No ☐ 68

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months*?* ☐
Yes ☐ *No* ☐

20. Someone I know threatened to stab me

Yes ☐ ☐
No ☐ 72

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months*?* ☐
Yes ☐ *No* ☐

75

21.. Someone I know threatened to shoot me

Yes ☐ ☐
No ☐ 76

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months*?* ☐
Yes ☐ *No* ☐

22. A member of my family threatened to stab me.

Yes ☐ ☐
No ☐ 80

IF YES:

a. How many times?_____ Line two ☐☐
b. Did this ever happen in the last 12 months*?* 2
Yes ☐ *No* ☐ ☐

23. A member of my family threatened to shoot me.

Yes ☐ ☐
No ☐ 4

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months*?* ☐
Yes ☐ *No* ☐

7

24. I have been stabbed by a stranger. *Yes* ☐ *No* ☐ ☐ 8

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months? *Yes* ☐ *No* ☐ ☐

25.. I have been shot by a stranger *Yes* ☐ *No* ☐ ☐ 12

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months? *Yes* ☐ *No* ☐ ☐

26. I have been shot by someone I know. *Yes* ☐ *No* ☐ ☐ 16

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months? *Yes* ☐ *No* ☐ ☐ 19

27. I have been stabbed by someone I know. *Yes* ☐ *No* ☐ ☐ 20

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months? *Yes* ☐ *No* ☐ ☐

28. I have been shot by a member of my family. *Yes* ☐ *No* ☐ ☐ 24

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months? *Yes* ☐ *No* ☐ ☐

29. I have been stabbed by a member of my family. *Yes* ☐ *No* ☐ ☐ 28

IF YES:

a. How many times?_____ ☐☐
b. Did this ever happen in the last 12 months? *Yes* ☐ *No* ☐ ☐ 31

30. I have been chased by a gang. *Yes* ☐ *No* ☐ ☐ 32

IF YES:

a. How many times?_____ □□
b. Did this ever happen in the last 12 months? *Yes* □ *No* □ □

31. I have been kidnapped.

Yes □ □
No □ 36
IF YES:

a. How many times?_____ □□
b. Did this ever happen in the last 12 months? *Yes* □ *No* □ □

32. A stranger *tried* to rape me.

Yes □ □
No □ 40
IF YES:

a. How many times?_____ □□
b. Did this ever happen in the last 12 months? *Yes* □ *No* □ □

43

33. Someone I know *tried* to rape me.

Yes □ □
No □ 44
IF YES:

a. How many times?_____ □□
b. Did this ever happen in the last 12 months? *Yes* □ *No* □ □

34. A family member *tried* to rape me.

Yes □ □
No □ 48
IF YES:

a. How many times?_____ □□
b. Did this ever happen in the last 12 months? *Yes* □ *No* □ □

35. A stranger raped me.

Yes □ □
No □ 52
IF YES:

a. How many times?_____ □□
b. Did this ever happen in the last 12 months? *Yes* □ *No* □ □

55

36. Someone I know raped me.

Yes □ □
No □ 56

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months? ☐

Yes ☐ *No* ☐

37. A family member raped me. *Yes* ☐ ☐

No ☐ **60**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months? ☐

Yes ☐ *No* ☐

38.. I have seen a dead body of a stranger *Yes* ☐ ☐

No ☐ **64**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months? ☐

Yes ☐ *No* ☐

67

39. I have seen the dead body of a family member (not at a funeral). *Yes* ☐ ☐

No ☐ **68**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months? ☐

Yes ☐ *No* ☐

40. I have seen the dead body of someone I know who was not a family member (not at a funeral). *Yes* ☐ ☐

No ☐ **72**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months? ☐

Yes ☐ *No* ☐

41. I have seen a stranger trying to commit suicide. *Yes* ☐ ☐

No ☐ **76**

IF YES:

a. How many times?_____ ☐☐

b. Did this ever happen in the last 12 months? ☐ **79**

Yes ☐ *No* ☐

42. I have seen someone I know trying to commit suicide. *Yes* ☐ ☐

No ☐ **80**

IF YES:

a. How many times?_____ **Line three ☐☐**

b. Did this ever happen in the last 12 months? **2**

Yes ☐ *No* ☐ ☐

43. I have seen a member of my family trying to commit suicide.

Yes ☐
No ☐
IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

☐ 4
☐☐
☐ 7

44. Grown-ups in my home hit each other.

Yes ☐
No ☐

IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

☐ 11
☐☐
☐ 12

45. Grown-ups in my home scream at each other.

Yes ☐
No ☐
IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

☐ 16
☐☐
☐ 20

46. Grown-ups in my home hit me.

Yes ☐
No ☐
IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

☐ 23
☐☐
☐ 24

47. Grown-ups in my home always scream at me.

Yes ☐
No ☐
IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

☐ 28
☐☐
☐ 31

48. I have seen a stranger get stabbed in my home.

Yes ☐
No ☐
IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

49. I have seen a stranger get shot in my home.

Yes ☐
No ☐
IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

50. I have seen someone I know get stabbed in my home.

Yes ☐
No ☐
IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

☐ ☐☐ ☐ **35**

51. I have seen someone I know get shot in my home.

Yes ☐
No ☐
IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

☐ **36** ☐☐ ☐

52. I have seen a member of my family get stabbed in my home.

Yes ☐
No ☐
IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

☐ **40** ☐☐ ☐

53. I have seen a member of my family get shot in my home.

Yes ☐
No ☐
IF YES:

a. How many times?_____
b. Did this ever happen in the last 12 months*?*
Yes ☐ *No* ☐

☐ **44** ☐☐ ☐ **47**