DEALING WITH TRAUMA IN A SOUTH AFRICAN CONTEXT: CAN EMOTIONAL INTELLIGENCE ENHANCE COPING BEHAVIOUR?

by

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DECLARATION

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I, the undersigned, hereby declare that this dissertation en	titled, "DEALING WITH TRAU-
MA IN A SOUTH AFRICAN CONTEXT: CAN EMO	OTIONAL INTELLIGENCE EN-
HANCE COPING BEHAVIOUR?" is my own work, and	that all the sources I have used or
quoted have been indicated or acknowledged, using comple	ete references.
MgduPlooy	
7 0	30/11/2021
Signature	Date

DEDICATION

Odin Meintjes and Liam Engelbrecht, my two grandsons.

All the victims of violent crime in South Africa.

Marius du Plooy (1953-2009) who lost his life in a violent crime.

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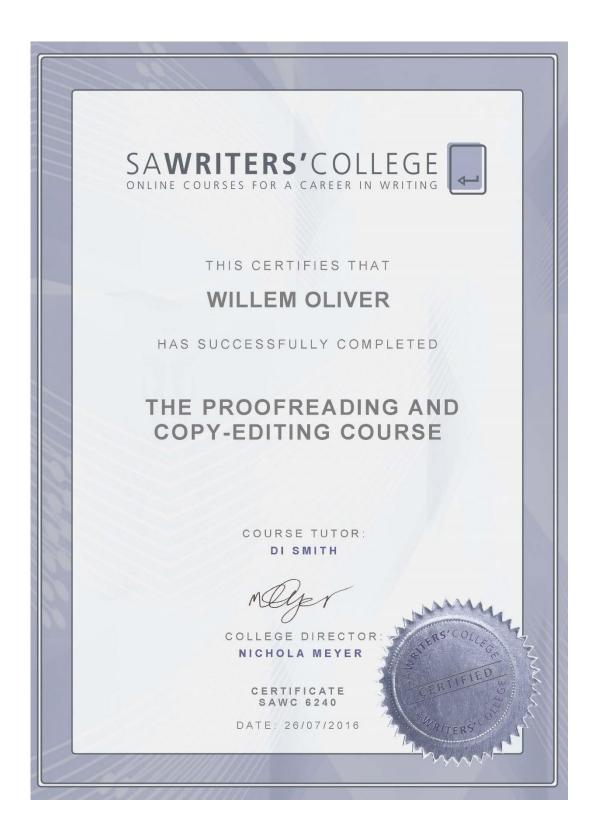
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CERTIFICATE OF THE EDITOR



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ABSTRACT

ENGLISH

The purpose of the study was to investigate the relationship between Emotional Intelligence (EI) and Post-Traumatic Stress Disorder (PTSD) and the effect thereof on coping in people who have experienced a violent traumatic event. On a daily basis, numerous citizens of South Africa are confronted, either directly or indirectly with violence and crime, which makes the question arise: How do they cope? International research was done on EI and PTSD in veterans and people living in war zones. No such studies were done in South Africa with its diverse population and living conditions (Psychol Trauma, 2017). Facebook and word of mouth were used to get participants. The criteria for selecting the research sample were people who experienced a violent traumatic event more than two (n=2) months ago. The participants' age group was 25 years and older. The sample size for the qualitative study was five (n=5) and for the quantitative study, 29 (n=29). 17 (n=17) of the participants are living in South Africa and 12 (n=12) are living in Perth, Australia. The aforementioned 12 (n=12) were South African citizens who were victims of violent crimes in South Africa and emigrated to Australia for a safer living environment. A total of 29 (n=29) participants were therefore questioned. The quantitative questionnaire was compiled according to the Trait Emotional Intelligence Questionnaire (TEIQue) (Petrides, 2009) and the Impact of Events Scale-Revised (IES-R) (Horowitz, Wilner, & Avarez, 1979), while the Background Questionnaire, compiled by the researcher, was adapted from published psychological questionnaires. The qualitative data were obtained by face-to-face and telephone interviews. These interviews were recorded and then analysed. The study shows that trait EI is a predictor of PTSD: People with higher EI scores are less likely to experience PTSD symptoms, while emotion regulation is an essential facet for coping with PTSD symptoms.

Keywords: Emotional Intelligence, Post-Traumatic Stress Disorder, Coping and Trauma

"Perhaps the greatest faculty our minds possess is the ability to cope with pain" (Rothfuss, 2007).

AFRIKAANS

Die doel van hierdie navorsingstuk is om die verhouding tussen Emosionele Intelligensie en Posttraumatiese Stresversteuring na te vors. Die navorsing word veral toegespits op die slagoffers van gewelddadige traumatiese gebeure. Daagliks word baie inwoners van Suid-Afrika, hetsy direk of indirek met geweld en misdaad gekonfronteer. Dit laat die vraag ontstaan hoe die slagoffers dit hanteer. Daar is baie internasionale navorsing op die Emosionele Intelligensie en Posttraumatiese Stresversteuring van veterane en mense wat in oorloggeteisterde gebied bly, gedoen. In Suid-Afrika met sy uiteenlopende bevolking en lewensomstandighede, is daar egter nie sulke studies gedoen nie (Psychol Trauma, 2017). Facebook en mondelinge getuienis het gehelp om deelnemers aan die studie te kry. Die maatstaf vir 'n persoon om gekies te word vir die steekproef was dat die persoon 'n slagoffer van geweld moes wees, wat meer as twee maande (n=2) tevore gebeur het. Die persoon moes 25 jaar of ouer wees. Die grootte van die steekproef vir die kwalitatiewe studie was vyf (n=5) en vir die kwantitatiewe studie, 29 (n=29). 17 (n=17) deelnemers bly in Suid-Afrika en 12 (n=12) in Perth, Australië. Laasgenoemde 12 was Suid-Afrikaanse burgers wat slagoffers van geweld in Suid-Afrika was en toe na Australië geëmigreer het vir hulle eie veiligheid. 'n Totaal van 29 (n=29) deelnemers is dus ondervra. Die kwantitatiewe vraelys is saamgestel volgens die Trait Emotional Intelligence Questionnaire (TEIQue) (Petrides, 2009) en die Impact of Events Scale-Revised (IES-R) (Horowitz, Wilner, & Avarez, 1979), terwyl die Agtergrondvraelys, wat opgestel is deur die navorser, gebruik gemaak het van gepubliseerde sielkundige vraelyste. Die kwalitatiewe data is verkry deur persoonlike en telefoononderhoude. Daardie onderhoude is opgeneem en later ontleed. Die ondersoek toon aan dat eienskaplike Emosionele Intelligensie 'n voorspeller van Posttraumatiese Stresversteuring is: Persone met 'n hoë Emosionele Intelligensie-telling is minder vatbaar vir Posttraumatiese Stresversteuring, terwyl die beheer van emosie 'n noodsaaklike faset van die simptome van Posttraumatiese Stresversteuring uitmaak.

Sleutelwoorde: Emosionele Intelligensie, Posttraumatiese Stresversteuring, hantering en trauma

ABBREVIATIONS

DSM: Diagnostic and Statistical Manual of Mental Disorders

EI: Emotional Intelligence

IPA: Interpretative Phenomenological Analysis

P: Participant

PTSD: Post-Traumatic Stress Disorder

SAPS: South African Police Service

DEFINITION OF KEYWORDS

Emotional Intelligence

Usually defined as a dispositional characteristic or the ability to understand, accurately perceive, express, and regulate emotions (Mayer, & Salovey, 1997).

Trauma

A deeply disturbing individual experience. In everyday life, it refers to a stressful event. According to Esther Giller, President of Sidran Institute (Giller 1999), it refers to extreme stress that overwhelms a person's ability to cope.

Post-Traumatic Stress Disorder

A psychological disorder that occurs after an experience of or witnessing a traumatic event (VA.gov., n.d.).

Dealing with trauma

An individual's unique way to cope with a traumatic event. Every person deals with their trauma in different ways (NIMH, n.d.).

Coping behaviour

Coping behaviour is "dealing with the problem" (Folkman, Lazarus, Gruen, & DeLongis, 1986:572).

Violence

Violence is demonstrating hostility and anger through physical force toward others' or someone's property with the intention to cause harm to another person (N. Sam, 2013b).

Sample group

Participants in the research/study.

Emotional Intelligence Components and Definitions

Emotional Intelligence Components	Definitions
Self-Awareness	The ability to recognise and understand your moods, emotions, and drives, as well as its effects on others.
Self-Regulation	 The ability to control or redirect impulses and moods. The propensity to suspend judgement and think before acting.
Motivation	 A passion to work for reasons that go behind money or status. A propensity to pursue goals with energy and persistence.
Empathy	 The ability to understand the emotional makeup of other people. Skill in treating people according to their emotional reactions.
Social Skills	 Proficiency in managing relationships and building networks. An ability to find common grounds and build rapport.

CHAPTER 1

INTRODUCTION, PROBLEM STATEMENT, AIM, AND SCOPE OF THE STUDY

1.1 INTRODUCTION

The relation between Emotional Intelligence (EI) and Post-Traumatic Stress Disorder (PTSD) is an area of interest in the field of Psychology. Of all the valuable research that has been done in various countries, limited studies have addressed the role of EI after a traumatic situation within a South African context (Ruback, 1994).

Daniel Goleman's best-seller, *Emotional Intelligence: Why it can matter more than IQ*, made EI popular in the last two decades. A dispositional characteristic of EI is the ability to understand, accurately perceive, express, and regulate emotions (Mayer, & Salovey, 1997).

EI is not a trait that one is born with, but something that a person learns and develops (Goleman, 1996). According to Goleman, people are born with a general EI that can be regarded as an indicator of their emotional competencies. Individuals working on the development of their EI, can achieve higher performances in their everyday life.

In a trauma situation, the victim demonstrates specific emotions, like fear, shame, guilt, anger, and sadness (Ananda, Amstadter, & Vernon, 2009). According to Amstadler and Vernon, fear is more elevated during a trauma than after the trauma. Other emotions increase in post-traumatic recurrent symptoms including fearful thoughts, flashbacks, and bad dreams.

PTSD is a mental health disorder that is elicited by a distressing event, either experiencing it directly or by witnessing it. The *Psychology Dictionary* (N. Sam, 2013a) describes "coping" as investing one's own conscious efforts and trying to master or tolerate stress and conflict.

1.1.1 Background of the Study

South Africa is one of the countries with the highest numbers of violent crime and violence in the world. Horror stories of murder and violence appear daily on the front pages of newspapers and on television. Many citizens of this country are affected, either directly or indirectly thus creating a growing need for more research to be conducted specifically on the coping strategies of victims of trauma, as the number of people who has first-hand experienced a traumatic situation has reached alarming proportions in this country (Stansfeld, 2002).

According to the 2017/2018 South African Bureau of Statistics (Stats SA, 2018), it is estimated that, on any given day, 512 people are experiencing trauma relating to murder, attempted murder, aggravated robberies, home robberies and vehicle hi-jacking. Further statistics for the year 2017/2018 are: 182,556 assaults, which are grievous bodily harm, 161,486 common assaults, and 53,167 sexual offences (Stats SA, 2018). According to Crime Statistics 2017/2018 (Stats SA, 2018), South Africa has a murder rate of 33 per 100,000 people – 57 murders per day.

According to Ananda, Amstadter, and Vernon (2008), there is nominal research done to establish the emotional responses of traumatised individuals. Considering the above statistics, it is a concern how the victims cope with the traumatic event. It is therefore of critical importance to thoroughly investigate the coping behaviours of trauma victims, especially during PTSD.

This research focuses on the personal traits and coping behaviours of South African citizens who have experienced violent trauma. Crime and trauma do not choose people according to their education, the colour of their skin, gender, or culture. A traumatic experience motivated this researcher to conduct this research.

The researcher is also a survivor of a violent crime situation. She was present in their home when her late husband was cold-bloodedly murdered. Dealing with this and the subsequent realisation that this is a daily phenomenon in South Africa, were a journey.

1.1.2 Awareness of the Problem

Engaging with other survivors as well as my own experience, awareness of trauma in the South African context does not seem to be a priority among the people of the country because of the everyday exposure to violence in South Africa. People are blasé about victims and expect that their lives must go on, whatever happens.

Victims are not always treated with empathy by authority figures. Once victims of violent crimes are reported to the public health, police, and judicial systems, no records exist of how these victims cope after the trauma incidents. Victims who are not able to approach someone with authority who can help them, normally talk to the people/person closest to them. It can be a family member or friend. How these victims cope is not known to us because the infor-

mation is not recorded. Due to the lack of empathy by authorities, victims have to cope with their emotions without any external help.

To understand the awareness of the problem better, the researcher looked at Gestalt therapy as a guideline. Gestalt therapy is the basic concept of awareness, as it refers to a common knowledge or understanding about a given subject that increases consciousness of the said subject (Counselling Connection, 2007). It focuses more on how an individual function in their everyday situation/life (Counselling Connection, 2007). The research thus focused on how a person copes with a traumatic event and how they cope with their day-to-day life after a traumatic event.

1.2 PROBLEM STATEMENT

As stated previously, an estimated 512 people experience trauma relating to murder, attempted murder, aggravated robbery, home robbery, and vehicle hi-jacking on any given day in South Africa. South Africa has a murder rate of 33 per 100,000 people – 57 murders per day. The community expects trauma victims to carry on as if it was just another day in South Africa. We became blasé – *crime happens*.

International research was done regarding EI and PTSD on veteran war heroes and people living in war zones. Sadly, in South Africa, there is currently very little research done on people experiencing trauma (cf. Wyatt, Thames, Simbayi, Stein, Burns, & Maselesele, 2017). Various studies aim to understand the consequences of trauma, but not why some people can cope with it and others not (Bookshelf, n.d.).

People react differently to post-trauma. However, there are some people whose stress reactions do not go away and even get worse over time. These stress reactions do not disappear but stay with the victim. In general, this post-trauma situation is referred to as the development of PTSD. PTSD can be described as anxiety that can occur after a crime experience or witnessing a traumatic event (NIMH, n.d.). Some people deal with PTSD better than others and those that manage to deal with it, have a better prognosis of recovery to a normal life. Some people find it extremely difficult to deal with PTSD, and their prognosis of recovery to normal life is less favourable.

Many South African citizens are affected, either directly or indirectly, by violent crime trauma which raises the following sub-questions:

- How are they coping with such an incident?
- Why do some people cope better with trauma than others?

• Which personal traits let them deal with PTSD?

1.3 PURPOSE OF THE RESEARCH

1.3.1 Main Aim of the Study

The main aim of this study is to examine if a person with higher developed EI traits has an increased coping behaviour, thereby dealing more effectively with PTSD. If there is a correlation between trait EI and PTSD, then EI can predict how individuals respond to traumatic experiences and PTSD. This study also intends to

- expand the understanding of the relation between trauma, PTSD, coping, and EI, as well as the various contributing factors;
- contribute to a vastly under-explored field of coping with PTSD after a violent crime trauma incident;
- gathering generated information that can lay the foundation for the development of an additional toolset for trauma counsellors to assist people in their recovery of PTSD.

Although coping is not the focus of the present study as the most frequently research response to trauma it will necessary to occupy a central position in the view of relevant literature. Emotion-focus coping skills help a person to process and work through unwanted or painful emotions and reactions. So, in other words, this approach helps you to manage your emotions rather than outside circumstances (Legg, 2020).

1.3.2 Specific Aims

Based on the main aim of this study, the specific aims, which were achieved by using literature study and/or empirical investigation, are to explore the following factors:

- To determine whether EI enhances in a post-trauma situation.
- To determine how a victim copes after a traumatic event, specifically relating to PTSD.
- To determine if specific traits of EI are present, following a trauma situation.
- How victims cope with their everyday life.

1.3.3 Hypothesis and Research Questions

The hypothesis of this research is based on the research question. From the main aim and specific aims, the fundamental research question, followed by the sub-questions that guide this study is: *Is there a correlation between trait EI and PTSD?* If so,

- are participants with higher trait EI scores less likely to experience PTSD symptoms?
- is there a correlation between the nature of a traumatic situation and coping behaviour?
- do different trait EI components have different predictive values for coping behaviour?

- Hypothesis 1: ¹
- H₀: There is no correlation between trait EI and PTSD
- H₁: As trait EI increases, PTSD decreases²

1.4 RESEARCH DESIGN AND METHODS

The purpose of a research design is to ensure that the research results are acquired to enable the researcher to effectively address the research problem in a logical and unambiguous manner. Research designs consist either of exploratory research or conclusive research. Exploratory research intends to explore, rather than offer conclusive answers to the research questions.

1.4.1 Research Method

The exploratory research method will be used, utilising a cross-sectional research design. According to Struwig and Stead (2001), a sectional design is where the participant is assessed at a single point in time in their life. This design is cost-efficient and will allow for studying the relations between different variables.

¹ I based this hypothesis on the statement "EI, since the basic research question is whether there is a correlation between the two traits EI and PTSD." (p. 69)

¹ H₁ indicates a one-directional hypothesis

Qualitative and quantitative research are two broad research approaches used in social sciences and both these methods are used in this study. Quantitative research involves collecting, analysing, and integrating quantitative (e.g., surveys) data, while qualitative research is used to gain an understanding of underlying reasons, opinions, and motivations, and it provides insights into the problem (e.g., interviews). A quantitative research method as set out by Bryman (2012) was used in the form of a questionnaire (Supplement 1) that was completed voluntarily by the participants.

Resources, including time, are very limited for service providing organisations (Steward, Reutter, Letourneau, Makwarimba, & Hungler, 2010) and therefore the completion of the questionnaire was done at a time most suited for the participants. The following questionnaires were used to determine the outcome of this study:

- Social Demographic Information.
- The Impact of Event Scale-Revised (IES-R) (Novopsych, n.d.).
- Trait Emotional Intelligence Questionnaire (TEIQue) (Petrides, 2009).

The Social Demographic Information questionnaire was compiled by the researcher. Previous questionnaires of studies used for research purposes were utilised as an example, like Novopsych (n.d.) and Petrides, Pita, and Kokkinaki (2007).

According to Weiss and Marmar (1996), the IES-R is a 22 self-report measure (for DSM-1V) for the Impact of Event Scale, that assesses subjective distress caused by traumatic events. This instrument was used to measure the PTSD variable. It was not a diagnosis but rather a potentially an indicator that PTSD might be expected. It corresponds to 14 of the 17 features described in the DSM-1V of PTSD.

The TEIQue questionnaire focuses on the personality framework. This questionnaire defines EI as self-perceptions and dispositions related to emotions that are found at the lower level of hierarchical taxonomies (Petrides, 2009).

1.4.2 Research Participants

The term "sampling" implies that the study must be internally consistent to determine the validity of the research (Bless, Higson-Smith, & Sithole, 2013). Participants can also be referred to as a "sample group." Participants in this study are individuals that were affected by a trauma incident. The research age group was 25 years and older. One of the criteria was that a trauma incident should have happened more than two months before the completion of the

questionnaire. They were from all walks of life and the survey was voluntary and without any compensation. No personal relationship was allowed between the participants and researcher, making it easier for the participants to freely express their experiences.

1.5 ETHICAL CONSIDERATIONS

Dealing with individuals who experienced trauma is in itself a sensitive matter. Their lives have changed in a way they never expected it to happen. It took a lot of empathy and knowledge from the researcher to obtain the relevant information needed.

Chapter 2 of the Ethics in Health Research, Principles, Processes, and Structure (Department of Health South Africa, 2015) outline the guiding principles for ethical research. This research was committed to adhering to the Ethical Code of Conduct as outlined by the mentioned Ethics in Health Research, Principles, Processes, and Structures.

1.5.1 Seeking Consent

The research followed the guidelines of the rights of the participants as stipulated in the Code of Research Ethics by the Human Sciences Research Council (HSRC, n.d.). The HSRC (n.d.) states the following in *The principle of respect and protection* (only those that apply to this research are mentioned below):

- The right of the participant must be respected and the participant can withdraw at any stage.
- The research should preferably be done on the identified community.
- The research should never be at the expense of the participants' personal, social, and cultural values.
- The researcher must protect the welfare of the participants and therefore the informed consent of the participant must be obtained.
- The identity of the participant must be kept confidential at all times.

Ethical clearance was also obtained by the Ethical Board of UNISA. Reference number: PERC-16059 (Supplement 2).

1.5.2 Confidentiality

This research was committed to adhering to the ethical code of conduct as outlined by the Ethics in Health Research, Principles, Processes, and Structures (Department of Health South

Africa 2015). The work by Harris and Robinson Kurpius (2014) on professional conduct principles relating to the confidentiality of information given by the participants, was also used as a guide. The research adhered to the ethical code of the Health Professional Council of South Africa (HPCSA) Booklet 6, section 6.2 (HPCSA, 2016), where it clearly outlines how to respect participants' dignity and privacy in a research study.

In the questionnaire, it was explicitly stated that participants would stay incognito, but a number would be allocated to them. Participants were also ensured that the information given by them will be anonymous at all times and no information given would be linked back to them. In general, the regulation requires that all raw data be kept for a minimum of five years after study completion. In this study, data were stored on a portable hard drive, a data storage device associated with digital storage. According to Berglund (1990), confidentiality applies not only during the research but also after the research was completed.

1.6 **DELIMITATIONS**

Specific problems that were considered:

- A person may not want to continue with the research and then withdraws.
- The trauma may be so severe that when answering the questions, the person may try
 to forget what happened to him/her (denial) and answer questions not according to
 what really happened.

1.7 OPERATIONAL DEFINITION OF TERMS

Defining concepts helps to give precision to the research as it is an analytical tool (Mouton, & Marias, 1990, p. 158). A detailed explanation of the concepts used in this study is included in Definitions and Key Words in the introduction (xvii).

1.8 CHAPTER OUTLINE

Apart from this introductory chapter, the study comprises the following chapters:

- Chapter 2: A review of related literature explores various literature sources on the subjects of trauma, EI, PTSD, and coping, what is already known about the subjects, and which concepts, theories, and research have previously been applied.
- Chapter 3: A theoretical and conceptual framework elaborates on the theoretical framework underlying this study and the conceptual framework that provides perspective on the research design and methodology.

- Chapter 4: The research design and methodology deal with the research design and research methodology concerning the questionnaires.
- Chapter 5: The data analysis deals with the data analysis and findings obtained from the questionnaires.
- Chapter 6: These recommendations, implications, and conclusions offer a summary of the major findings of the study, highlight the limitations of the study, provide recommendations for future research, and address the implications of the findings for trauma counselling.

1.9 SUMMARY

The aim of this research was to make a useful and meaningful contribution to the work of professionals in the field of Psychology, particularly those who deal with trauma counselling and PTSD, further, to establish if there is a correlation between EI and coping with trauma. The questionnaires were adapted and compiled to get the best statistical outcome.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Chapter 1 provided a framework of the aim of this research regarding EI and PTSD and the coping process of a victim after a violent crime. It explained the meaning of EI and PTSD. The research questions were set out. The questionnaires that were used, the research method, and the design of the questionnaires were described, as well as the ethical measures that were followed for the research according to the Ethics in Health Research (Department of Health South Africa, 2015). Emmett and Butchart (2000, p. 326) state that "it is not only necessary to address the causes of crime, but also its effects." We need to understand how the victim copes with PTSD and the role that EI plays in the experience when being personally attacked, especially within the South African context (Greenberg, & Ruback, 1992, p. 3).

In chapter 2, a comprehensive literature review supplies the reader with an overview of the literature that was used for this study. As the awareness of EI and PTSD grows in the field of Psychology, this chapter will particularly provide an understanding of the meaning and the relation between PTSD, coping, and EI. Most of this chapter will revolve around a discussion of how victims of a traumatic event in South Africa cope with PTSD after the incident, and the role of EI in experiencing trauma.

2.2 BACKGROUND

EI became a buzzword in the 1990s, with many articles and books being written on the subject. South Africa, with its diverse population, is a very important place in the world to research this. This research was also a personal journey for the researcher, as her husband was murdered in their house where she was present.

Being one of the dangerous countries in the world (Institute for Economics and Peace 2017), trauma in South Africa is part of our everyday living. Living in this country, the researcher was interested in how EI plays a role in the coping behaviour of victims after a traumatic event.

PTSD, a familiar term for psychologists, is the result of a traumatic event. The research specifically focused on people who went for help after their ordeal and how they dealt with PTSD.

Saakvitne and Pearlman (1996) state that psychological trauma is an individual's unique experience of an event. Psychological trauma is an overwhelming experience for an individual. Physically the experience is life-threatening, and emotionally it puts the victim in a position where they have to go on with life.

The relation between *general intelligence* and *EI* will be discussed briefly so that the reader can distinguish between the two concepts. To understand the concept of this research, the researcher also looked at the relation between *stress levels* and *stress reactivity* as it is linked to PTSD and EI.

This chapter will show that an understanding of EI is different with reference to gender, race, and culture. It will also indicate how people cope with PTSD if EI enhances in a trauma situation, and if people with a higher EI will cope better with trauma. The role of the trauma counsellor/psychologist will also be addressed.

2.3 MEANING OF EMOTIONAL INTELLIGENCE

As stated above, the concept of EI became popular in the 1990s, following the publication of Goleman's book, *Emotional intelligence: Why it can matter more than IQ* (Goleman 1996).

The researcher will reflect on some of the traits of EI that help prevent and/or dealing with PTSD, experienced by victims of trauma. Further, it will give some understanding concerning the meaning of the concept of EI and why it is important in traumatic events, focused on a South African context. The reader must keep in mind that the conceptualisation of EI is a personal trait that is separate from the human cognitive ability taxonomy (Petridis, 2009).

EI has been used for several purposes such as job evaluation, job selection, and job diagnosis (Goleman 1996). Most EI studies are focused on academic success and social relationships (Cronje, 2019). In the last few years, several studies have been conducted as a predictor variable, like this research. These studies helped to predict how vulnerable individuals cope with mental disorders. In this research, the focus was specifically on EI and the disorder PTSD. The challenge of this research was to predict if a person with a higher EI can cope better with PTSD and if EI enhances after a traumatic incident. This research produced inconclusive data regarding EI and PTSD. As different components of EI may be involved in different mental health problems, it is still not clear which component of EI contributes or is involved in enhancing EI and coping with PTSD.

The definitions can be found in the Introduction under Definitions and Keywords (xvii).

Chapman and Hailstone (2011) state that the Emotional Quotients (EQ) is better expressed as EI and relate that the way in which it is characterised relies upon which authority one chooses to go along with. This research used EI.

The first hypothesis of EI was provided in 1990 by two analysts, Diminish Salovey and John Mayer (Salovey, & Mayer, 1990), who have expounded on it in their research paper (cf. Chapman, & Hailstone, 2011). They characterised EI as the objective capacity. That is an educated or cognitive ability to precisely distinguish, comprehend, and communicate our sentiments and to deal with feelings to work in favour of us and not against us (Chapman, & Hailstone, 2011). Although Salovey and Mayer built upon the first hypothesis for EI, it was Daniel Goleman who promoted EI and formulated its principles as an authoritative guide (Chapman, & Hailstone, 2011). Goleman believes that a person is born with a general EI that determines if they have the ability or the potential to learn emotional competencies (Goleman, 2011). EI components develop throughout a person's life span. Some people's EI traits develop more than others.

EI is about being perceptive about how one feels and how the person deals with it, understanding which experiences are great and which are unpleasant and awful and how to change bad experiences into better memories (Chapman, & Hailstone, 2011). Furthermore, EI refers to emotional consciousness where one has the understanding and abilities to effectively selfregulate their welfare and future content (Chapman, & Hailstone, 2011). EI, concentrating on the grown-up populace, demonstrates that it acts as a defensive variable and can protect against a mental illness or suffering (cf. Hunt, & Evans, 2004; Schmidt, & Andrykowski, 2004; cf. Tolegenova, Jakupov, Chung, Saduova, & Jakupov, 2012). Armstrong, Galligan, and Critchley (2011) describe EI as being emotionally self-aware, the ability to express oneself emotionally, to have emotional self-control, and predominately to be able to emotionally self-manage in adverse life experiences. Stueve, Dohrenwend, and Skodol (1998) argue that significant life occasions, including the demise of friends and family, sickness, or employment misfortune, lead to mental distress. EI, or the capacity to astutely use passionate data, may alleviate its effect on psychological wellbeing (Ciarrochi, Chan, Caputi, & Roberts, 2001; cf. Armstrong, et al., 2011). How EI may cushion the impact of aversive occasions was the centre of Armstrong's study.

Negative or upsetting experiences can lead to adapting difficulties that can strain an individuals' capacity to adjust to the point of psychological stress. Symptoms may include feelings of despondency, distress, and depression (Armstrong, *et al.*, 2011). Monroe and Simons

(1991) claim that multiple negative life events can compound the intensity of psychological strain.

EI can have a direct connection to resilience, as EI behaviour is adaptive in stressful circumstances. Salovey, Bedell, Detweiler, and Mayer (2000) theorise that individuals with a well-developed EI cope better with emotional demands and stressful encounters because they can "accurately perceive and appraise their emotions, know when and how to express their feelings and can effectively regulate their mood states." EI is thus postulated to buffer the effects of aversive events through emotional self-awareness, expression, and management.

Researchers investigating these and other health-related links, have frequently distinguished between ability-based EI models in which EI is assessed via intelligence-like tests (e.g., the Mayor-Salovey-Caruso EI Test: Mayer, Salovey, & Caruso, 2000) and trait models in which EI is measured via self-reported emotional-related dispositions, self-perceptions, or motivations (e.g., the trait EI Questionnaire: Petrides, *et al.* 2007). While ability tests purport to measure "maximal performance," trait-models measure "typical performance" (Petrides, *et al.*, 2007). This study focuses on typical performance rather than episodes of peak EI performance in coping with event-related distress. Moreover, we regard EI as an antecedent to resilience (Zeidner, Matthews, & Roberts, 2006), rather than encompassing resilience (Bar-On, 2006), in that EI functions through its composite dimensions to facilitate resilience.

EI may be specifically associated with inner strength, displaying a versatile conduct in distressing circumstances. Salovey, & et al. (2000, p. 504) have the conviction that individuals with a higher EI adapt better to distressing experiences since they can "precisely see and assess their feelings, know-how and when to express their emotions and can adequately direct their mindset states." EI is accordingly hypothesised to support the impacts of aversive occasions through enthusiastic mindfulness, expression, and administration.

Scientists researching these and other wellbeing related connections have only sometimes recognised capacity-based EI models in which EI is evaluated, using insights like tests (e.g., the Mayer-Salovey-Caruso Passionate Insight Test [Mayer, et al., 2004]) and quality models in which EI is measured, using self-reported feeling related auras, self-recognitions, and inspirations (e.g., the Characteristic Passionate Knowledge Survey [Petrides, et al., 2007]). While capacity tests are gauging maximum performance, characteristic models measure common performance (Petrides, et al., 2007). In the present study, we concentrate on normal execution as opposed to scenes of top EI execution in adapting to occasion related trouble. Besides, this study takes the perspective that passionate knowledge is the forerunner to flexi-

bility (Zeidner, et al., 2006) instead of enveloping versatility (Bar-On, 1997), like those EI capacities needed to encourage strength through its composite measurements.

2.3.1 The Concept of Emotional Intelligence Models

There are three main models of EI (Emmerling, Shanwal, & Mandal, 2008):

- 1. The Ability-Based model (cf. Mayer, & Salovey, 1997). This concept of EI defines it within the standard criteria for new intelligence. Mayer and Salovey define EI as a dispositional characteristic or the ability to understand, accurately perceive, express, and regulate emotions (Mayer, & Salovey, 1997).
- 2. The Emotional Competencies model (Goleman, 1996) addresses several emotional and interpersonal competencies (Wolff, 2005). According to this model, EI is not an inherent talent, but an acquired competency that needs to be worked on and can be developed to achieve outstanding performance.
- 3. Trait EI models: It included the Trait EI model (Petrides. *et al.*, 2007) and Emotional-Social Intelligence model (Bar-On, 2006):
 - The trait EI model focuses on the personality framework. This model defines EI as as self-perceptions and dispositions related to emotions that are found at the lower level of hierarchical taxonomies (Petrides, 2009).
 - According to the Emotional-Social Intelligence model, EI and cognitive intelligence equally contribute to a person's general intelligence, which indicates their potential for success in life. As stated in the diagram above, EI is the ability to understand oneself and others' emotions and actions, to adapt with and cope with the immediate surroundings, to communicate with other people, and to deal with one's environmental demands successfully.

The abovementioned models are fully explained in chapter 3.

2.4 MEANING OF TRAUMA

"Trauma" is a term that we hear almost every day through the media and in our interactions with other people. The *Dictionary of Psychology* (Reber, Reber, & Allen, 2009, p. 764; original emphasis) describes it as follows: "From the Greek for *wound*, a term used freely either of physical injury caused by some extreme emotional assault." As this research is in the field of Psychology, we work on emotional assault with the implication that there could also be physical assault. Trauma is

therefore a violent event and the experience leaves the victim with a psychological scar that could last forever.

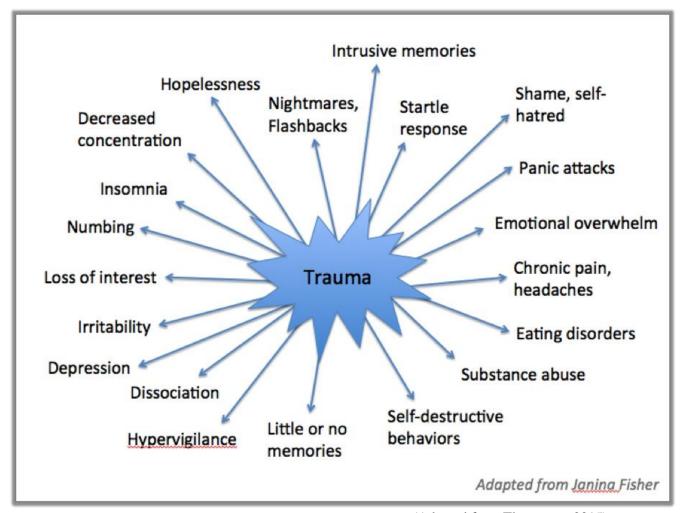
This research examined the different emotional responses and behavioural reactions (5.6.2) of individuals who had experienced a stressful situation or traumatic event in South Africa and how the trauma victims coped with PTSD. It was specifically focused on trauma in a South African context. South Africa is different from most other countries, as the crime rates are ranking as some of the highest in the world (Institute for Economics and Peace, 2017).

2.4.1 Historical Overview of Trauma

To understand where the theory of trauma originated and how it is perceived in a South African context, the history of trauma is briefly outlined. According to Hyer (2019, p. 14), "[t]he history of trauma theories provides some understanding of trauma and violence." Trauma is described as experiences that people have had throughout time. In the 1800s, Jean-Martin Charcot introduced the concept of traumatic hysteria as the exposure of emotions after a traumatic event (Motta, Kefer, Hertz, & Hafeez, 1999). In 1889, Pierre Janet and Jean-Martin Charcot did more research on his work and reached an explanation for trauma as being a psychological disassociation that surfaces after a traumatic event (Kaplan, Sadock, & Grebb, p. 644).

Freud [1963] cited in Bohleber, 2010, describes trauma in his psychoanalytic reflections as the core of subsequent psychopathology. With this, he refers to an obsessive-compulsive neurosis and hysteria. He also explains it as a psychological breakdown caused by an external event that exceeded the psychological structure. He explains that the event is so overwhelming that obsessive-compulsive neurosis and hysteria occur in the individual. Freud further notes that hysterics "repress the memory of certain very intense or painful experiences" and numb feelings associated with the event (Garland, 1998, p. 13).

"Trauma survivors have symptoms instead of memories" (Harvey, 1996). The brain stores trauma differently depending on a given event. The memories will therefore also differ from each other in intensity. The non-verbal trauma can be triggered by smells, noises, etc., from a specific event. In other words: It triggers the emotional response that ceases the symptoms of that specific trauma.



(Adapted from Thompson, 2015).

Figure 1: Trauma

Note: This image was created by Janina Fisher. Adapted from Thompson (2015).15 March 2015.

"There are wounds that never show on the body that are deeper and more hurtful than anything that bleeds" (Hamilton, 2006).

2.5 TRAUMA AND VIOLENCE IN A SOUTH AFRICAN CONTEXT

One might state that "trauma is trauma" and make it a stereotype theory. This is not necessarily true. The researcher has focused on trauma in a South African context with the aim to determine if trauma is experienced differently in our diverse cultures. Van der Spuy (1996:34) states the following: "The trauma situation is disastrous. It is way beyond that ex-

perienced internationally: death by non-natural causes is three times more in South Africa than globally." Violence is a deep concern in the South African society (McKendrick, & Hoffmann, 1990, p. 30) and there are many community actions, like the Community Police Forum (CPF, n.d.), trying to prevent crime by patrolling specific areas during the day and evening to be visible to criminals.

2.6 MEANING OF POST-TRAUMATIC STRESS DISORDER

PTSD is an anxiety that can occur after an experience or witnessing a traumatic event (VA.gov., n.d.). Some individuals in communities do not want to know about another person's psychological pain or are blasé about the criminal activities in South Africa, most survivors return to their normal life within a short time. However, there are some people whose stress reactions do not go away and even get worse over time. These people may develop PTSD. In many instances in South Africa, people lack coping resources and therefore have difficulty in dealing with a traumatic situation – and PTSD develops as a result.

The work of psychoanalysts like Freud is criticised by Williams (1980, cited in Peterson, Prout, & Schwarz, 1993, p. 82) for focussing on the victim's weaknesses as the cause of PTSD, instead of the stressor. Hendin (cf. Peterson, *et al.*, 1993, p. 82), on the other hand states that Williams is wrong and that the psychoanalytical work is important to give a better understanding of the reaction of a person to traumatic stress. The contribution of psychoanalysis to trauma is that the event itself does not cause traumatic stress but the psyche/mind of the victim.

2.6.1 Development of Post-Traumatic Stress Disorder

PTSD develops in response to a traumatic event or situation. Victims will have symptoms of PTSD within days, weeks, and sometimes months after the event. The severity of the symptoms varies from person to person. The factors that affect the development of PTSD are biological, psychological, and social by nature (VA.gov., n.d.).

2.6.2 Symptoms of PTSD

According to DSM-IV, an essential feature of PTSD is the development of symptoms, following an exposure to an extreme traumatic stressor. DSM-IV further defines it as an experience that causes physical, emotional, and psychological distress or harm (APA, 2000). It is an

event that is perceived and experienced as a threat to one's safety or the stability of one's world.

There are three different types of symptoms: Re-experiencing symptoms, avoidance and numbing symptoms, and hyper-arousal symptoms. Almost everyone experiences at least some of these symptoms as a result of a traumatic event.

2.6.2.1 Re-Experiencing Symptoms

Re-experiencing symptoms involve reliving the traumatic event. Memories of the event come back at the most unexpected times. The memories can be triggered by a reminder of a sound such as a balloon that burst and sounds like a gunshot. These memories are called "flash-backs" where the victim feels as if the traumatic event is happening again. These memories can cause emotional and physical reactions. It can also cause intense feelings of fear, anger, and helplessness, similar to the feelings that the person had experienced when the event took place.

2.6.2.2 Avoidance and Numbing Symptoms

Avoidance symptoms occur when a person makes efforts to ignore the traumatic event. Examples of ignoring or avoiding the event are e.g., not watching television programmes that will remind them of the incident, avoiding places where the event took place, and also avoiding people who remind them of the event. Some people take up multi activities just to distract themselves from thinking of the traumatic event.

Numbing symptoms occur when an individual finds it difficult to be in touch with their feelings or to express their feelings or emotions towards other people. They feel emotionally "numb" and isolate themselves. In that way, they feel safer and not so exposed. Sometimes they will be less interested in activities which they previously liked to do. Some people forget or are unable to talk about the event.

2.6.2.3 Hyper-Arousal Symptoms

People with PTSD may feel constantly alert after the event. This is also known as emotional arousal. It can cause an outburst of anger, they can be very irritable, and find it difficult to sleep and concentrate. They also feel that they must always be on guard and aware of any danger that may occur. The victim avoids any situation that can remind them of the event that can/may put them in a state of hyper-arousal (APA, 2000).

Symptoms of PTSD can commence directly after a traumatic incident. However, PTSD can only be diagnosed if one or more of the symptoms mentioned above last for more than a month. PTSD can also occur months and in many cases, years after a traumatic incident.

2.6.3 Problems Experienced by People with PTSD

Common symptoms that occur with PTSD are depression, anxiety, and substance abuse. Half of the men with PTSD also have problems with alcohol abuse (Brady, Killeen, Brewerton, & Lucerini, 1999; Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). The second common problem is depression, followed by conduct disorder and drug abuse. In women, the common problems are depression, social anxiety, specific fears that the incident can happen again, and alcohol abuse (Brady, *et al.*, 1999; Kessler, *et al.*, 1995).

PTSD is grouped in four types, namely intrusive memories, avoidance, negative changes in thinking and mood, and changes in physical and emotional reactions. This research focused on die question whether people with higher EI are coping better with PTSD or not.

2.7 RELATION BETWEEN EMOTIONAL INTELLIGENCE AND POST-TRAUMATIC STRESS DISORDER

With the exception of Hansen, Lloyd, and Stough (2009), there is not much scientific literature published on the relation between EI and PTSD. Research done by Hunt and Evans, investigated whether EI can predict how a victim will respond to being involved in a traumatic event. A sample of 414 students was asked to randomly participate in the research (cf. Hunt, & Evans, 2004). The Notting Emotional Intelligence Scale was used for measuring EI. This scale is a single-factor scale that can only assess the global score of EI but not the scores for separate EI components. For this particular study, the problem was that some of the sampling students were not involved in a traumatic event, even though they claimed that they were. Of the 414 students, 298 were involved in such an event. At the end of the study, it demonstrated that there is a clear correlation between EI and trauma-related symptoms namely that those students with a higher EI displayed fewer symptoms. The research could not establish which component of EI is involved in the development of trauma symptoms.

In the study of Khatuna (2015) on the relation between EI and PTSD, the abovementioned study was taken further, and the following interesting facts were discovered:

• Among all the EI trait factors, only one trait was a predictive value for PTSD, namely self-control.

- A trait EI is a predictor of PTSD, meaning that individuals with a higher EI are less likely to experience PTSD symptoms.
- As the different EI traits have different predictive values for PTSD, emotional regulation is essential for dealing with PTSD symptoms and internally displaces people.
- There are gender and age differences in post-traumatic disorders as traumatic events
 have more impact on women than on men. Trauma also has a bigger influence on older people than on youths.
- There is also a correlation between trauma specifics. People who lost family members
 in a traumatic event, have more PTSD symptoms than those without such an experience.

Khatuna (2015) presents a good understanding of the relation between EI and PTSD. Some of her findings were used for this study to correlate the similarity of people all over the globe.

2.8 MEANING OF COPING BEHAVIOUR

In this research, the focus was also on how a victim's coping behaviour can enhance their EI. According to the *Psychology Dictionary* (N. Sam, 2013a:2913), coping behaviour is a characteristic and frequently occurs when dealing with taxing or hazardous situations. Such actions can be either positive or negative in nature.

Coping in Psychology means investing in one's own conscious effort to solve personal problems to minimise or tolerate stress and conflict. It is commonly termed as coping strategies or coping skills.

No individual's coping behaviour is the same. As mentioned in the above quote, the outcome of an event can be negative or positive for a person. The researcher aims to prove that EI enhances in a trauma situation.

According to Rapoly (2020) coping is represented by:

- Problem focus coping involves handling stress by facing it head-on and taking action to resolve the underlying cause.
- Emotional focus coping involves regulating your feelings towards the problem instead of taking action.

Both strategies have coping benefits but emotional focus coping will assist in the answering of the research question.

Emotional focus coping will not help a person to solve the problem directly but will be helpful in stressful situations.

This research indicates that you cannot solve a problem directly. but EI is a great tool to help solve a problem.

2.9 GENERAL INTELLIGENCE AND EMOTIONAL INTELLIGENCE

There is a closer relation between *general intelligence* and *EI* than was previously reported (Ghose, 2013). In a study done by Aron Barbey, a neuroscientist at the University of Illinois, depends to a large extent on cognitive abilities like attention, perception, language, and memory (cf. Barbey, Patterson, & Sloman, 2021). He further states that we as fundamentally social beings, not only involves basic cognitive abilities, but are also applying those intelligent abilities to social abilities that can navigate and understand others. This information is only to explain that *general intelligence* and *EI* can be closely linked, although the two concepts are different from each other. The researcher wants to make sure the reader understands these two concepts to obtain a better understanding of the research.

2.10 STRESS LEVELS AND STRESS ACTIVITY

Chapman and Hailstone (2011) define "stress levels" as the severity of manifested physical or mental tension caused by factors that disturb the natural equilibrium. Stressful life events and daily life stresses have both deleterious and cumulative effects on the human body, especially when living in a violent country like South Africa. In several studies, stress has been proven to affect various parameters of higher mental functions like attention, concentration, learning, and memory. All of these are the result of stress levels.

According to Limm, Angerer, Heinmueller, Marten-Mittag, Nater, & Guendel (2010), perceived *stress reactivity* is determined by a disadvantageous pattern of a person's personality trait (EI). It also refers to the tendency to respond to stressors with immediate, intense, and long-lasting stress response characteristics. This response to stressors is assumed to be a vulnerability factor for developing diseases.

2.11 CONCLUSION

This chapter started to discuss the questions in chapter 1. It provided an overview of what EI and PTSD are about. An attempt was made to examine the effects of PTSD and its symptoms.

The traits of EI were also discussed. Meanings of the different concepts used in this study were highlighted and explained.

The available literature on traumatic stress, specific because of a traumatic event, is very important in this research because it determines the outcome. The literature revealed the need for an investigation that probes EI and PTSD trauma and coping thereof within a South African context. This is an area for research in chapter 3 in which the following elements will be introduced:

• **Who**: Sample group.

• What: The measuring instruments.

• **How**: Research methodology.

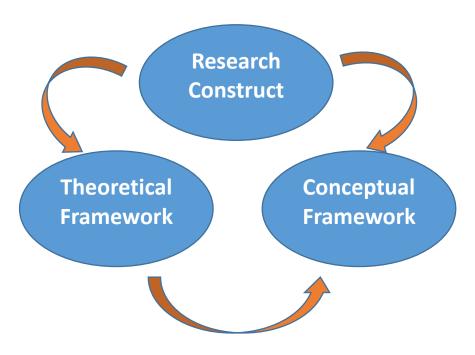
CHAPTER 3

CONCEPTIONAL AND THEORETICAL FRAMEWORK

3.1 INTRODUCTION

Chapter 2 encapsulated an in-depth literature review of the variables identified for this particular study, namely trauma, coping, PTSD, and EI to construct a framework for this research. In this chapter, the importance of a solid epistemological, logical, and methodological foundation is deliberated on to construct a valuable research outcome.

In chapter 3, the research construct is described. A research construct contains a structure to guide collective research which provides the reader with a perspective from the derivation in which this study arose (Roller, & Lavrakas, 2015). For this specific study, the research construct was divided into two components, namely the theoretical framework (where the study comes from) and the conceptual framework (what this study is about) (McGaghie, Bordage, & Shea, 2001). It was important to use both frameworks as it provides a platform for the reader to obtain a broader perspective on the relevance and contexts of this study.



(Created by researcher du Plooy, 2021).

Figure 2: Research Construct

3.2 THEORETICAL FRAMEWORK

First, the *theoretical framework* explains to the reader the various important philosophies of different philosophers, relevant to this study. These different theories provide a conspicuous perspective about the research problem and also the reason for its assumptions. The different philosophers' theories and explanations about why their research was done and the outcome of their theories are discussed. All these theories were taken into consideration and were narrowed down to choose the best theoretical option for this research. The theoretical framework is the broader framework where the conceptual framework lies (McGaghie, *et al.*, 2001). The theoretical framework reflects the hypothesis of the study (Grant, & Osanloo, 2014).

The theoretical framework is based on an existing theory or theories. Different theories provide "lenses" to look at a research problem (McKinley, 2015). Out of these various theories, the most appropriate one is selected to do the theoretical framework that underpins the study. The theoretical framework thus originates from time-tested theories that represent the findings of other researchers to describe and make a "map" for the conceptual framework (Fulton, & Krainovich-Miller, 2010).

The two philosophies that were investigated in this research were *modernism* and *post-modernism*. These two schools of thought must be discussed separately as postmodernism is a result of the criticism of modernism. The differences between postmodernism and modernism are not the result of rational thought, but because of historical development (Thompson, 2016).

3.2.1 Modernism

Modernism was an emancipatory project that started with the enlightenment in the late 19th and early 20th centuries. This movement encouraged the re-examination of every aspect of existence in life as it has regarded itself as extricating humanity from the historical baggage of the past through the use of philosophy and science. All traditional values and institutions with oppressive and inefficient values were regarded as outdated and holding back the process of development in all areas (N. Sam, 2013c). Social psychologists have specifically been studying the relationship between individuals and society since 1898 (Chryssochoou, 2000). Embracing modernist doctrines of truth, reality, and progress, psychologists advocated the adoption of scientific Psychology, aligned with universalism to fit among established science disciplines (Gergen, 1973; cf. Kuhn, 1970).

3.2.2 Postmodernism

After the Second World War, postmodernism challenged the basic assumptions made by modernism. According to Newman and Holzman (2000), postmodernism needs reflexive thinking and the end-of knowing to break down oppression in Psychology. Postmodernism describes the way in which humans construct their social world (Gergen, 1973; Potter, 2000).

Postmodernist Psychology uses a range of different methodologies rather than one specific approach (Gergen, 1990). The reason for this is to avoid oversimplification and embrace the complexity of reality. Postmodernism further approaches the understanding of the human psyche in a systematic and analytical manner. It is descriptive in the theory of the human condition. It therefore describes an impasse between philosophy and social relations. In this study, postmodernism is defined as a philosophy that underpins the definition of counselling and psychotherapy paradigms.

Thinkers such as Heidegger, Derrida, and Leotard (Thompson, 2016) were committed to postmodernism, in favour of relativism (the view that there is no objective truth), and identity. Postmodernism is the theory that variation (tradition) should be "celebrated" (Clegg, & Kornberger, 2003).

Robert Cottone (1992) states that, according to postmodern philosophy, there are many ways to understand a common or shared experience. Each experience is bounded and objectified within a social group or context. It further states that the postmodern position is both a foundation for the definition of counselling paradigms *and* the philosophy of counselling. His argument is relevant to this study.

3.2.3 Paradigms of Counselling and Psychotherapy

The theory of the research was identified as a Social Construction of Trauma as it enables collaboration between the victims and their experience of trauma. Social Constructionism is interested in topics that concern the shared social aspects that are psychological (Creswell, 2008). Social Constructivism as a movement of thought has its origins in postmodernism (Andrews, 2012). Subsection 3.2.4 describes the differences between the two theories.

As the theoretical framework was based on Social Constructivism, a result of postmodernism, the researcher found it applicable to supply the reader with some background to the four different paradigms (cf. Cottone, 1992), which are organic medical, psychological, systemic-relational, and Social Constructivism. To understand why Social Constructivism was select-

ed, these four paradigms of counselling and psychotherapy that stem from postmodernism, are explored to give the reader a review of these paradigms in counselling and psychotherapy.

- **Organic medical paradigm**: This treatment paradigm is the traditional paradigm, using drugs, psychotherapy, and surgery, which treats injuries and symptoms, rather than healing the underlying problem.
- **Psychological paradigm**: It is a distinct set of concepts or thought patterns, including theories, research methods, postulates, and standards for what constitutes legitimate contributions to a field.
- **Systemic-relational paradigm**: This paradigm addresses people, not only on an individual level, as had been the focus of earlier forms of therapy, but also as people in relationships, dealing with the interactions of groups and their patterns and dynamics.
- **Social Constructivism paradigm**: It focusses on an individual's learning that takes place because of their interaction with an inside group.

Social Constructionism and qualitative research are a natural fit or "marriage" (Roller, & Lavrakas, 2015) due to the close relationship between the participant's experiences and the researcher who explores these experiences. This is why some of the elements of Constructionism such as a lack of truth, the value of circumstance, meaning significance, the importance of the researcher, and participant relationships and the design adaptability (Roller, & Lavrakas, 2015) are suitable for the study, as it enables collaboration between the research and the participants in the construction of their experience.

3.2.4 Social Constructionism vs. Social Constructivism

Social constructionists focus on what happens between people as they join together to build realities, while constructivists focus on what's going on in each individual's mind (Galbin, 2014).

To understand why Social Constructionism forms the theoretical framework for this research, the importance of the two schools of thought, Social Constructionism and Social Constructivism, are contrasted. The researcher was aware of the two paradigms, resembling meanings that one learns from a traumatic event, what it is to be a victim and how to cope by oneself (knowledge, constructivism). On the other hand, the victim interacts with their environment (Social Constructionism) and is contracted through social interactions.

3.2.4.1 Social Constructionism

According to the Social Constructionist paradigm, knowledge arises through the development of jointly constructed understandings of the world as a basis for shared assumptions about reality (Leeds-Hurwitz, 2009). Social Constructionism argues that social and psychological worlds are made real or are contracted through social processes and interactions (Vinney, 2019),

Within the context of trauma victims, the study examines how EI is socially constructed by focusing on how trauma victims construct their coping experiences. The concept of "coping experience" is described in this research as to how a victim copes with their PTSD (NIMH, n.d.).

It could be argued that trauma is a learning curve in how victims see their reality, so Constructionism is a suitable theory for this study. Certainly, surviving trauma is a major learning experience. However, Constructionism is not a suitable paradigm for this study because the researcher was interested in how participants go on living, knowing that they are now part of the crime stats.

3.2.4.2 Social Constructivism

According to Honebein (1996), the Constructivism philosophical paradigm as an approach asserts that people construct their understanding and knowledge through experiencing things in life. This is based on the analogy of Bada (2015) and Hein (1991) that people form or construct what they learn through experiences. Thus, to the constructivist, constructing means learning.

Jim McKinley (2015) states that Social Constructivism is useful in a theoretical framework as it allows the researcher a necessary qualitative analysis of how people interact with the world. As this study includes both qualitative and quantitative research, Social Constructivism served as an empirical framework for how the trauma victim copes with their world.

The Social Constructivism theory's used in research can be described as the collection of data from the participants by the researcher with an open mind, i.e., "no" bias or pre-existent ideas (HSRC, n.d.). This suited the researcher's purposes for this study as it allows for the data to be analysed in a streamlined and fresh approach so that the possibility of new theories may be developed (HSRC, n.d.).

Development is socially situated, and knowledge is constructed through an interaction with others (Leeds-Hurwitz, 2009). As trauma is socially situated in our everyday world, trauma victims have to go on with their "normal" life in their environment.

3.3 CONCEPTUAL FRAMEWORK

The second part of the research design namely *conceptual framework* originated as a result of the theoretical framework's outcome (McGaghie, *et al.*, 2001). The conceptual framework "sets the stage" to investigate the research problem. It is therefore the researcher's understanding of how the variables for the study connect to develop a relationship model. This research explored the role of EI as socially constructed in the context of trauma victims and focused on how the trauma victims cope with the traumatic event.

As outlined above, the research paradigm was recognised as Social Constructivism. As this study focused on a trauma victims' journey of experience on their ordeal and the coping of it, it is necessary to understand how this research is set together to get the results of the outcome.

3.3.1 Elements that were Classified as Traumatic Events in this Study

What is traumatic for one person is not necessarily traumatic for another one. The University of Pretoria defines trauma as "a result of events or circumstances that is harmful or threatening for an individual and have lasting adverse effects on the person's 'well-being'" as cited in Levine, 2005. Trauma is physically, emotionally, and socially functioning. Trauma victims (i.e., any victims of crime) were exposed to an incident that they did not ask for and now have to cope with. A victim in this study is any person who suffered physical or emotional harm as a result of a crime.

Trauma is so diverse and dissimilar in people, but still has the same devastating impact on victims' lives (Bookshelf, n.d.). In this research, the concept was narrowed down and outlined to a sudden, brutal event. The focus was on trauma victims that have experienced the murder of a loved one, hi-jacking, rape, robbery that was violent, suicide of a loved one, gunshot, or stabbing. The incident should have happened more than two months before completing the questionnaire, and the participant had to be older than 25 years. The reason for constructing these criteria was to get a reliable outcome for the study.

According to Allarakha (2021) at MedicineNet *Early childhood health*, there are three main types of trauma, namely acute, chronic, and complex:

- Acute trauma results from a single incident.
- **Chronic trauma** is repeated and prolonged i.e., domestic violence or abuse.
- **Complex trauma** is an exposure to varied and multiple traumatic events, often of an invasive, interpersonal nature.

This research was about *acute trauma* as it was based on how a trauma victim copes with an unexpected trauma incident.

3.3.2 Effects of a Trauma Experience

Just as a traumatic event differs from person to person as stated above, so is every individual's experience or reaction to the traumatic event. The effect of trauma on a victim can be physical or psychological (Reber, Reber, & Allen, 2009; cf. PsychGuides.com, n.d.).

3.3.3 Physical Responses Expected after Trauma

Physical responses after a traumatic event can be a lack of concentration, anxiety, fear, or a heartbeat that races (it feels like a heart attack), while the victim cannot cope with some circumstances. The psychical responses are just as real as psychical illness and must also be treated as such (PsychGuides.com, n.d.).

3.3.4 Psychological Responses Expected After Trauma

Psychological responses after a traumatic event have effects on the trauma victim's emotions. According to Elisabeth Kübler-Ross, there are five stages of grief namely denial, anger, bargaining, depression, and acceptance (Kübler-Ross, 1969). We must keep in mind that the stages are responses to feelings or emotions that can last for minutes or even hours as a person flips out from one stage to another. They may experience one stage, then directly thereafter another, and then back again to the first one or another one. The stages vary and are not scheduled to be in a specific sequence.

To further expand on expected psychological responses, the researcher thinks that the five stages of grieving can be superimposed on the model to provide further insight into the existing complex relations.

A short discussion on each stage is presented below.

3.3.4.1 Denial

Denial is the first stage of grief/loss. In this stage, a person is in shock, numbness occurs, and life seems meaningless and overwhelming. It may also come to a victim's mind that the incident did not take place and that it was just a dream. It is nature's way to protect the victim. Denial and shock are mechanisms to cope with one's loss. Once reality starts to surface, denial fades and the feelings that are denied start to surface.

3.3.4.2 Anger

Anger is a necessary element of the healing process. Anger is the emotion we use most to manage our loss. Truth is that anger has no limits. It can extend to the family, the person who died, and even to God. Here the graphic is going up to the following level.

3.3.4.3 Bargaining

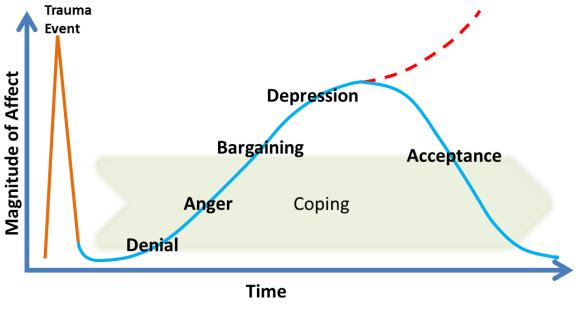
Bargaining is a way just to get life back as it was before the traumatic incident. The person will do anything to get the loved one back to life, even if they know that it cannot happen. Questions like "What if?" and "Why shouldn't I?" are used to express the victim's mood, as they want to get the past back to the present.

3.3.4.4 Depression

Here, the attention moves to the present. A victim may feel empty feelings in themselves as grief enters on a deeper level. For the victim, emptiness, sadness, and grief feel as if it will go on forever. It is a natural feeling. It must clearly be stated that this depression stage is not a sign of a mental illness. Most people accept their loss even if it will never be good to them. It is just a result of a traumatic event.

3.3.4.5 Acceptance

The victim accepts the reality that a person is gone forever or that the traumatic event has happened. With the realisation that life must go on, the person starts to live again. One must never think that the person has accepted their situation. One will never like this reality, but eventually, one will accept what happened and learn to live with it. This is typically the start of recovery. It is just a matter to live with the traumatic event.



(Created by researcher du Plooy, 2021).

Figure 3: Stages of Grieving

The reason for including the five stages is that it opens up further opportunities for trauma counsellors to assist trauma victims. Each stage can unlock a specific therapy on the road to recovery. As part of the questionnaire, the participants will be asked about their feelings. A detailed discussion of statistics will be provided in chapter 5.

3.4 LITERATURE REVIEW

As stated above, the theoretical framework is developed from and connected to the review of knowledge on the topic, namely literature. Literature reviews can be useful if the aim is to assist in theory development (Baumeister, & Leary, 1995). A literature review is not normally explained as part of two chapters, but the researcher has the view that the reader will get a better opinion of the variables of interest in the context of the literature review. It will also allow the reader a better understanding of the theorised relations of the variables.

3.4.1 Constructing a Model to Understand the Relation between Trauma, PTSD, Coping, and EI

The literature review provides the necessary insights on the key dimensions that are required to formulate the research approach for this study. However, at first the researcher experienced a feeling of looking at various pieces of a puzzle (without the box cover showing the complete picture) – every piece has its level of detail, but it is difficult to see the bigger picture of how they fit together. In essence, the research topic is a complex mix of theories and concepts that requires a holistic view. A lack of a holistic view of the research topic can lead to an unproductive research effort and possibly underestimate important relations and dependencies that can provide valuable further insights into the relations between Trauma, PTSD, coping, and EI. The researcher, therefore, considers it imperative to distil the various dimensions covered in the literature review into a relational model which will guide the methodology and research design for this study. From the literature review it is evident that the four major dimensions are:

- Trauma;
- PTSD;
- Coping; and
- EI.

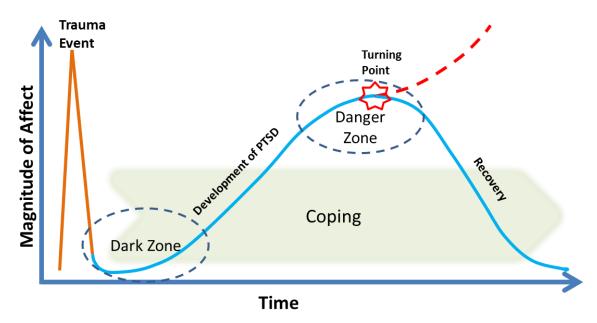
It is predominantly researched and discussed as separate fields of study with some references to how these dimensions are related, specifically for this research. The development of the relational model will be discussed in the remainder of this chapter.

Trauma, PTSD, coping, and EI each have different measure and occur, singularly or combined, over some time. For this relational model, the different measure for trauma, PTSD, coping, and EI are standardised to a scale of *magnitude of affect*. Affect (as a noun) refers to feelings, emotions, or a specific emotional response, and these terms can describe each of the dimensions individually as well. The magnitude of affect, therefore, describes a relative scale (relative to each dimension) for the four main dimensions. In a two-dimensional model, the different axis is thus the magnitude of affect and time.

Trauma, in the context of this research, is considered to be a violent event that happens at a specific time. Saakvitne and Pearlman (1996) state that psychological trauma is the unique individual experience of an event. Psychological trauma is an overwhelming experience for an individual.

PTSD develops in response to a traumatic event or situation (APA, 2000). Victims will have symptoms of PTSD in days, weeks, and sometimes months after the event. In the early days or weeks after the traumatic event, victims might not be aware of the development of PTSD. This is typically a *dark zone* – not realising the development of PTSD and not recognising the typical symptoms. However, with some people the stress reactions do not go away and even get worse over time (PTSD development). It is assumed that PTSD develops from a low base of *magnitude of affect* and progressively increases in *affect* with time. If PTSD is not managed or treated successfully, it can result in an ever-increasing *magnitude of affect*. This is typically a *danger zone*. A turning point is therefore imperative for a healing process to recovery. If no turning point is reached, the PTSD symptoms can spiral to uncontrollable levels, typified by severe depression, and can have tragic consequences for the victim – suicide, permanent mental disorder, excessive dangerous substance abuse, and many other severe conditions.

Trauma victims are expected to return to their normal life. However, it can be assumed that trauma victims that develop PTSD will have an urge to eventually recover from this situation to return to their normal life. Successful recovery will therefore imply that the magnitude of affect will decrease over time. During this time frame, the victim will use a process of coping. EI is not covered at this point and will be incorporated into the model at the next stage.



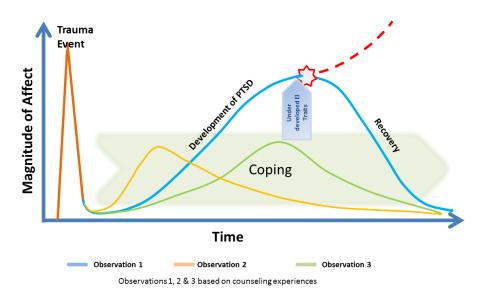
(Created by researcher du Plooy, 2021).

Figure 4: A Basic Model to Demonstrate the Relation between Trauma, PTSD, and Coping

As a final addition to the model, the dimension of EI will be considered.

We have to elaborate on PTSD and coping to understand the dynamics. As stated above, trauma victims respond differently to traumatic events of the same nature. It is also supported by the reviewed literature. Coping is the ability to solve personal problems to minimise or tolerate stress and conflict (N. Sam, 2013a). It is commonly termed as coping strategies or coping skills. No individual's coping behaviour is the same. Based on this, two PTSD development observations are superimposed on the model. These two observations serve the purpose to illustrate the principle, and the researcher acknowledges that many more observations can be included. The first observation is the PTSD development shown in Figure 1. The second is where it is observed that PTSD develops faster and there seems to be a lower *magnitude of affect*. Recovery is typically faster, and the danger zone is not prominent. It seems that these trauma victims have more control (or perhaps awareness) of their situation, while their ability to cope is considered to be better than compared to other victims. The third observation is where it is observed that PTSD develops slower than the second observation, but with a similar *magnitude of affect* as the first observation and successful recovery.

Lastly, the dimension of EI can be added to the model. Goleman has the view that a person is born with a general EI and that they have the ability or the potential to learn emotional competencies (Goleman, 2011). With some people, IE traits seem to develop more than others. EI components can thus develop throughout a person's life span. It is this differentiating factor of EI that plays a significant role in how different trauma victims cope with PTSD and recovery. Trauma victims that follow the first observation curve may therefore have some under-developed EI traits, limiting their ability to cope with PTSD and recovery.



(Created by researcher du Plooy, 2021).

Figure 5: Relation Model for Trauma, PTSD, Coping, and EI

The *magnitude of affect* (noun) refers to how one feels emotion.

This relation model represents the view of the researcher based on the literature review. It will serve as a guide to approach the methodology and research design for this study in a holistic manner.

3.5 SUMMARY

As the majority of EI research is cross-sectional, the measure validity could change over time (Howitt, & Cramer, 2005). As EI is a rapidly growing field and the models have helped to underpin a good foundation for research in this subject, there is still potential in several fields for research.

The researcher's aim was to give the reader an overview of how the study was constructed. The *magnitude of affect* was explained and illustrated to give the reader a better perspective of where this study stems from.

CHAPTER 4

RESEARCH METHODOLOGY

4.1 INTRODUCTION

In chapter 3, both the theoretical and Constructivism frameworks were explained. The details of the variables – trauma, PTSD, EI, and coping – were put in perspective. It was also outlined that the variables fit into each other like a puzzle.

In this chapter, the research design, study population, sampling technique, tool for data collection, and the methods for measuring outcomes, are outlined. The instrument used and the issues of reliability and validity are described. Ethical considerations and measures being taken to protect the rights of the participants to the study are presented in this chapter.

4.2 RESEARCH DESIGN

In this research, the relation between the key variables namely EI, PTSD, and coping, were examined. These variables were discussed in broad terms in the previous chapter. A mixed methodology, combining both quantitative (positivist) and qualitative (interpretivist) methods were chosen. The research mixed methods have the attributes of both qualitative and quantitative designs.

According to Leedy and Ormrod (2001), people are more honest when completing a questionnaire because their answers are anonymous. The quantitative research data are used to compare the outcomes to other research and can be used to test existing research theories. Further, quantitative data measure the "how many," "how often," and "how much" (Stansfeld, 2002). This method was appropriate for this study as it employed the use of a structured questionnaire. In return, the structured questionnaire offered data to identify similarities, differences, and relations between the variables.

The advantage of this approach for the study was that it was cost-effective, the research was focussed on specific questions or hypotheses to attain the best results, and it was flexible as it addresses all types of research questions.

The researcher uses descriptive phenomenology for the qualitative research. It implies that the researcher has explored the meanings which "insiders" supplied about their experiences in exact words without any attempt to interpret (Husserl, 1962). As this is mostly an empirical method of data collecting, the environment where participants were interviewed, was mostly

informal so that they could feel more at ease. With the qualitative interviews, more verbal information was collected regarding the perceptions, beliefs, and attitudes of the participants. The explanation of these perceptions, beliefs, and attitudes with the help of words in this study, could only be done by qualitative research.

To sum up: "By the mystery and expressiveness of numbers we can express what is indescribable and predict what is reasonable – in other words, statistics is a language that can speak when other tongues are mute" (Leedy 1997:243).

4.3 RESEARCH SAMPLE

The sample group consisted of 29 individuals over the age of 25 years. Criteria were set for individuals who experienced a traumatic event more than two months before the completion of the interview. As there is such a variation in the spectrum of violent crimes in South Africa, it was decided to only focus on victims who lost loved ones through murder and victims who were harmed during housebreaking or were raped or hi-jacked.

The researcher focused on each individual's uniqueness as well as the situation in which each of the victims was involved. The sample in this research consisted of victims of a traumatic event and the outcome of this research was focused on the victims. The volunteers were requested to participate on Facebook (see below) and orally.

Participants, who were willing to participate, were contacted by the researcher. The purpose of the study was explained to them as well as the fact that they would remain anonymous. The process of their participation was fully explained to them. They were also informed that there was no compensation to complete the questionnaire, and no one was under any obligation to complete their questionnaire if they did not feel comfortable with (some of) the questions.

According to Bless, *et al.* (2013), sampling means that the study must be internally consistent to determine the validity of the research. It further means that the researcher must decide who the sample group would be (in this case, trauma victims) and which sampling technique to use.

The sample size of 29 participants was enough for the research purpose. The expected response rate was 50%, the confidence level was 95%, and the margin of error was 4.9%.

The method for sampling for this research was *volunteer sampling*. As this research worked with a specific sample, namely victims of a traumatic event, the sample group was requested to voluntarily participate in this survey.

The reason for employing the volunteer sampling method for this research was to ensure that people, who were not part of trauma, were excluded. As research is time-consuming, this method of sampling was the best approach in collecting data for this specific research. It also guaranteed that the sample included specific characteristics which the researcher required in the sample to execute the study (Creswell, 2008, p. 153).

The sample size was determined in consultation with a statistician. The statistician estimated that at least 26 trauma victims were needed to make the research validity and reliability accurate. A sample of 29 was provided. Probability sampling as a form of stratified sampling was used for claiming that the sample was representative in the South African context and that it could apply to the general population (Creswell, 2008, p. 154). The sample size was proportionate and stratified, implying that a smaller sample size could be used to achieve the same degree of accuracy as a larger sample. The data collection time was reduced, the sampling error was decreased, and the cost of the study was less because the method of stratification was used.

"Proportionate" means that the numbers of the sample were selected in proportion to their occurrence in the population (Gray, Grove, & Sutherland, 2017, p. 351). The *stratification* procedure was used to stratify victims of trauma in subgroups of the population, in order to focus on all the ethnic groups. It was important for the researcher to cover the whole spectrum of cultural diversity in South Africa in the proportion to the existing trauma victims in the population (Creswell, 2008, p. 154).

To ensure that the sample was proportionally represented by the target population, the selection was made from the victims who responded to participate in this research. As the participation was not what was expected regarding more diverse participants, it is a recommendation for further study (See chapter 6.6, Limitations).

Table 1: Summary of the Proportional Representation of the Target Population

Race	Victims	Male	Female
Black	4	1	3
Indian	2		2
White	23	3	20
Total	29	4	25

4.4 RESEARCH POPULATION

The research population, stated above, consisted of individuals who were victims of a violent crime, not less than two months before the study took place, and over the age of 25 years. Each of them had to experience such a violent crime in South Africa, as this research was focussed on EI, PTSD, and coping within a *South African context*.

4.5 RESEARCH OBJECTIVES

The general aim of this research was to investigate the correlation between EI, PTSD, and coping, after a trauma situation. The specific research objectives were:

- 1. To review EI in trauma victims in South Africa.
- 2. To examine trauma victims' PTSD.
- 3. To obtain data on which traits in EI would help a victim to cope after a violent crime.
- 4. To set a goal for other researchers to make a contribution to Psychology within a South African context as there is very limited research material available on this subject with reference to a South African context. The diversity of the South African population creates a unique environment for this research.

4.6 DATA COLLECTING INSTRUMENTS

The *quantitative data* required by the questionnaire was presented and analysed according to the research aims. The comparison and summary of this research were based on victim ability to deal and cope with PTSD, and their EI.

The research questions were adapted from existing questionnaires. Reasons for adapting the questionnaires were:

- 1. The research was focussed on South African victims. Previous research on this topic was mostly done in America and Europe.
- 2. The questionnaires that were used were not designed to determine if EI can or cannot enhance in a trauma situation within a South African context and were therefore adapted.

Questionnaires that were used, were the TEIQue (Petrides, 2009), IES-R (Horowitz, Wilner, & Avarez, 1979), and a Background Questionnaire compiled by the researcher.

4.6.1 Trait Emotional Intelligence Questionnaire

The TEIQue-SF (Petrides, 2009) was chosen for its structure that is user-friendly and also that the TEIQue-SF technique is regarded as a very good operationalisation tool for the trait EI. The four EI trait dimensions, namely emotionality, self-control, sociability, and wellbeing, are clear in the replicable structure that shows satisfactory psychometric characteristics. The 30-item questionnaire measures and evaluates global EI that makes it perfect for the research. The researcher adapted this questionnaire to 27 questions to make it more suitable within a South African context. This also guaranteed that the sample included specific characteristics which the researcher required to execute the study (Creswell, 2008, p. 153).

4.6.1.1 Multiple Responses

In this section, participants could give more than one answer. The answer therefore constituted two percentages – one was the number of participants (cases) and the other was the number of responses. Because every person could give more than one answer, the answers were more than the cases.

4.6.1.2 Coping and PTSD Responses

Here the rating scale was used to measure the attitudes and feelings of the participants about their traumatic events.

4.6.1.3 Emotional Intelligence Responses

Here the S-point Likert scale was used. Participants had five options, indicating how they agreed or disagreed with the premise: 1 = Strongly disagree, 2 = Disagree, 3 = Uncertain, 4 = Agree, and 5 = Strongly agree.

4.6.2 Impact of Events Scale-Revised

The IES-R is a 22-item self-report measure and assesses distress caused by traumatic events. It is a revised version of the previous version which consisted of 15 items. The items correspond with the DSM-IV (APA, 2000) symptoms of PTSD. As PTSD is one of the traits that is investigated in the research, the questionnaire was an obvious choice.

4.6.3 Background Questionnaire

Background regarding this research was of high importance as the diversity of the South African population was part of the research. The researcher was interested to measure how EI in different cultures helped victims in trauma situations. The questionnaire was compiled according to the most important data that was needed for the study.

4.6.4 Advantages and Disadvantages of the Response Formats Used in the Questionnaire

A questionnaire is an instrument for collecting data and always asks questions about a given subject or research (Debois, 2016). As in all research studies, there are advantages and disadvantages that one should take into account to get the best outcome for the research.

Table 2: Summary of the Advances and Disadvantages of Data Collection Tools Used

			The Disadvantage of the Ques-
	Tool	Used	tionnaire Used
1	Questionnaire	Cost-effective: The internet is	Dishonesty : The possibility that
		cost-effective and has a gener-	participants are not always hon-
		ous reach. The pen-and-paper	est in their answers, exists.
		format was done at the institu-	Some reasons may include so-
		tion that was involved in the	cial desirability bias and also
		research. The researcher did	protecting their privacy.
		not need to travel to different	Lack of conscientious re-
		places to get data.	sponse : Researchers hope for
		Practical : Questionnaires are a	conscientious answers, but there
		practical way to gather data.	is no way to know if the partici-
		As in this research, open-	pant thought about the answer
		ended questions as well as	before answering it. Some ques-
		multiple-choice questions offer	tions may be sometimes
		a way to gather vast amounts	skipped, affecting the outcome
		of data in all subject matter.	of the data.
		Speedy results : Online results	Differences in understanding
		can reach a researcher within	and interpretation: Without

Data Collecting Tool

Advantage of QuestionnaireUsed

The Disadvantage of the Questionnaire Used

24 hours. No need to wait for a third party to collect and deliver the data that one needs.

Scalability: Information can be gathered from large audiences. Questionnaires can be sent globally if the internet is available.

User anonymity: Pen-andpaper and online answering
allow complete invisibility.
This has put the respondents at
ease and encouraged them to
answer honestly. However, the
human touch is still there in
the knowledge that a researcher is going through the answers, and they can benefit
from the outcome, namely an
understanding of their trauma.

Cover all aspects of a topic:

As the questionnaires are easy to deliver, one can ask as many questions as one wants. It is essential to keep questionnaires as short as possible, but there is no harm in creating multiple surveys that are built upon one another.

someone to explain the questions, there can be a misunderstanding of the questions.

Difficulty in conveying feelings and emotions: Especially in this research, the researcher could not observe the victims' expressions when answering the questionnaires when done digitally.

Some questions are difficult to analyse: Open-ended questions may produce more data that can be analysed, which in turn can be time-consuming when examining and filtering the more relevant against the less relevant responses.

Accessibility issues: Some trauma victims suffered from hearing and eye loss that make it difficult to participate. Victims in rural areas have limited or no internet access.

Data Collecting	Advantage of Questionnaire	The Disadvantage of the Ques-
Tool	Used	tionnaire Used
Interview	A distinct advantage for the	Time-consuming, expensive,
	researcher to establish a report	and impractical when large
	with the victim and therefore	samples are involved (Leedy, &
	gain their cooperation.	Ormrod, 2001).
Computerised	A new way of research meth-	Exclusion of people who do not
Self-	odology.	have a computer or access to the
Administered	The participant clicks the link	internet.
Questionnaire	and answers questions.	Validity of the answering of
	Often quicker and less de-	questions, as it can be time con-
	tailed.	suming, and participants may be
		in a rush in completing the ques-
		tionnaire.
	Tool Interview Computerised Self- Administered	Tool Used Interview A distinct advantage for the researcher to establish a report with the victim and therefore gain their cooperation. Computerised A new way of research methodology. Administered Odology. Administered The participant clicks the link Questionnaire and answers questions. Often quicker and less de-

4.6.5 Online Questionnaire

Today, technology is an advantage in more than one way. For this research, the researcher made use of Facebook and oral questioning.

The method of sampling used in this research was purposive sampling. According to Merriam (2009), purposeful sampling is based on the assumption that the researcher wants to discover and gain further insight, and therefore a sample must be selected that will provide the best answers. In this research, it was attempted to prove that EI can help individuals to better respond to traumatic experiences. The type of purposive sampling that was used for this study, is criterion sampling. Criterion sampling involves searching for individuals who meet a certain criterion (Palys, 2008).

The selection criteria are important when choosing participants for a research study (Merriam, 2009). The first criterion for inclusion in this study was that participants had to be in the age group of 25 years or older.

The second criterion of inclusion was that the potential participants should belong to the social networking sites, Facebook and/or Instagram. Some of the participants were recruited via Facebook due to the availability of various public and private groups in which participants may be accessed. Instagram on its own does not allow this. The potential participants

therefore had to be on Facebook, or both Facebook and Instagram. There are various Facebook groups for trauma victims, and currently these social networking sites are popular and growing fast. Facebook is regarded as the most popular social networking site (Wagner, Aguirre, & Summer, 2016). Businesstech (2016) also confirms this and states that Facebook users have increased from 12 million to 13 million users within a year in South Africa. There were some of the participants who were not on Facebook – they were contacted via e-mail.

The third criterion of inclusion was that the potential participant had to be a victim of a traumatic situation in not less than two months. This criterion was important as the research study involved the identification of the psychological effects of the "trauma."

In terms of sample size, some studies state that six participants are recommended for phenomenological studies while others state that five or 25 are needed for a phenomenological study (cf. Guest, Bunce, & Johnson, 2006). The sample size for this study was also dependent on the method of data analysis called Interpretative Phenomenological Analysis (IPA). According to Smith and Osborn (2007), IPA studies are conducted on small sizes, with six to eight participants being the recommended size. This research study had a sample size of 29 participants. The sample size was also guided by the theoretical principle of saturation (Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood, 2015). Saturation refers to the sampling of a cohort until no new information can be acquired (Palinkas, *et al.*, 2015).

4.7 RESEARCH QUESTION

The research question and sub-questions are: Is there a correlation between trait EI and PTSD? If so,

- are participants with higher trait EI scores less likely to experience PTSD symptoms?
- is there a correlation between the nature of a traumatic situation and coping behaviour?
- do different trait EI components have different predictive values for coping behaviour?

4.8 STRUCTURE OF THE RESEARCH

The questionnaire was in English, being the predominant language understood by most South Africans. The questionnaire was designed to answer the core questions and traits of coping, EI, and PTSD within a South African context. This included the research question (cf. above).

4.9 ETHICAL CONSIDERATION

Before the completion of the questionnaire, every participant signed an information sheet reconfirming their voluntary participation and the confidentiality of the process. No financial reimbursement was made to the participants. Finally, if a participant felt uncomfortable at any stage, they did not have to complete the questionnaire.

This research was committed to adhering to the ethical code of conduct as outlined by the Ethics in Health Research, Principles, Processes, and Structures (Department of Health South Africa, 2015) and professional conduct principles relating to the confidentiality of information given by the participants (Harris, & Robinson Kurpius, 2014).

In the questionnaire, it was explicitly stated that participation was voluntary and if the participant did at any stage feel uncomfortable to complete the questionnaire, they had the right to withdraw. Participants were also ensured that the information given by them would be regarded as anonymous at all times and no information given by them would be linked to their names. After completing the research, all information would be safely stored for at least three years. According to Berglund (1990), confidentiality would apply not only during the research, but also after the research was completed.

4.9.1 Facebook Ethics

The proposed research also involved viewing the individual's Facebook pages as part of the data collection process, hence ethics in social media was also important. Facebook provides users with the opportunity to protect their displayed information through profile security settings. According to Moreno, Goniu, Moreno, and Diekema (2013), an individual's profile settings can be *private* (i.e., limiting some or all profile information access to online friends approved by the profile owner) or *public* (i.e., allowing any user access to the profile). Privacy settings can limit access to the profile as a whole or the individual can customize settings limiting access to certain sections of the profile (Moreno, *et al.*, 2013).

The Facebook privacy policy states: "When you choose the 'everyone' setting to post content or information, you're letting anyone, even individuals who aren't on Facebook, to access and use it, as well as associate it with you (i.e., your name and profile picture)" (Moreno, et al., 2013). A further statement in the privacy policy indicates the following: "Information set to 'everyone' is information that is open to the general public. For example, such information could be accessible by anybody on the internet (even those who aren't logged into

Facebook), indexed by third-party search engines, and imported, exported, distributed, and re-distributed by us and others without regard for privacy" (Moreno, *et al.*, 2013). These statements highlight the fact that Facebook intends to share information, implying that profile owners should not have a reasonable expectation of privacy.

However, in contrast to the privacy policy is the rights-and-responsibilities hyperlink. This section states: "If you collect information from users, you must have their permission, make it obvious that you (not Facebook) are the one collecting it, and establish a privacy policy that explains what the information is you are collecting and how you will be using this information collected" (Moreno, *et al.*, 2013). This statement seems to be directed at a third party, such as a researcher that will aim to collect information from Facebook profiles (Moreno, *et al.*, 2013).

Taking into account the issue of public and private data, interactive research for this study took place with data that was not publicly available. Therefore, if an individual wishes to become part of the research, but their Facebook page was not available due to privacy settings, then the interaction had to involve a *friend request* to view the profile (Moreno, *et al.*, 2013). Friend requesting may lead to a misrepresentation of the researcher's intention for the relationship, but at the same time a large number of friends is considered a marker of social capital, as Facebook friending implies a loose tie relationship, often including associates or acquaintances, thus it is not likely that friending will trigger unreasonable expectations for a prolonged relationship (Moreno, *et al.*, 2013).

The research procedure began by identifying groups on Facebook. The main reason for using Facebook was that it would allow the research topic to reach trauma victims in the various provinces in South Africa. The community group identified that comprises thousands of individuals, was the "classifieds group." Every province has a "classifieds group" where members of the group post adverts, market businesses, or sell items. Therefore, posting a description and aim of the proposed research, reached thousands of individuals throughout the country.

These groups are either "closed" or "public" groups. A "closed" group must consent to posts to be viewed by members of the group, whereas a "public" group allows all users of Facebook to view the content posted. To post on a "closed" group, one will have to "join" the group. Once access was gained to the various groups, the research topic and aim of the research was posted on the groups. The post read as follows:

I am a MA student in Psychology at the University of South Africa. I am currently undertaking research based on the following topic: *Relation between EI and PTSD*. The research selection will involve trauma victims of 25 years and older, who belong to the social networking site, Facebook and who were victims in a trauma situation. The incident should have taken place not less than 2 months ago. If you are interested or have a friend who meets the criteria and will be willing to participle in the research, I will appreciate it if you would inbox me.

The basic objective of the questionnaires was to "obtain facts and opinions about a phenomenon from people who are informed on the particular issue" (De Vos, & Strydom, 1998, p. 153). The researcher did take the necessary precautions in the approach to victims and when asked, helped them to complete the questionnaire. After the completion of the information, the researcher put the questionnaires on a computer hard drive and in a safe place.

4.10 METHOD OF DATA ANALYSIS AND STATISTICAL PROCEDURES

The research was both quantitative and qualitative. These data analyses will be addressed separately in this chapter. The results are explained in detail in chapter 5.

4.10.1 Quantitative Data

The quantitative data consisted of dichotomous questions (yes/no), demographic questions, multiple questions, and rating scale questions. A null hypothesis was obtained in the research.

Scale scores were calculated for Coping, PTSD and EQ were obtained by calculating the mean scores for the items related to the scale. This resulted in three continuous variables being generated with possible scores ranging from 1 to 5.

A Pearson correlation was used to test the relationship between EI, PTSD and Coping.

4.10.2 Qualitative Results – Empirical

There were informal face-to-face and telephone conversations with five of the participants. The researcher's observation in short is as follows:

- All participants said that they lost some faith in humanity.
- They are feeling numb about the incident.
- They take more caution in their surroundings than before their ordeal.

- The one outstanding feeling among them is that nobody cares what happened to them.

 This is South Africa and this is what happens here.
- The researcher's conclusion with these interviews is that the participants coped with the incidents in a way of "life goes on."
- Participants said that they feel "okay," even if they sometimes did not. The traumatic event is always somewhere in the background.

4.11 RELIABILITY, VALIDITY, AND GENERAL ABILITY

Validity and reliability are two different concepts (Kelley, 1927). Although, in research, the one cannot be mentioned without the other, the definitions and explanations of these concepts will be discussed separately.

4.11.1 Validity

Validity in a psychological context means to determine if the test that one does is valid or not, if the test measures what it is supposed to measure, and if the concept is measured correctly. The validity concept was formulated by Kelley (1927), who stated that a test can only be valid if it measures what it has to measure. There are two types of validity, namely external and internal validity:

- External validity refers to the extent to which a test measures the same value every time it is done.
- *Internal validity* requires that measurements are valid and that the results are according to the data that was received.

The outcome of the research validity will be measured and the results will be presented in Chapter 5.

4.11.2 Reliability

Reliability is the ability of a test or assessment to obtain the same results when it is repeated on a different day. According to Cronbach's alpha (Cortina, 1993), reliability means taking into account differences in the item standard deviations. In this research, the reliability was not retested as the victims were only seen once, following their experiences. The reliability and the results are according to the outcome of the data. If the correlation is .80 or higher, then it is considered a typically reliable test. A perfect correlation is not necessary as long as the coefficient is .80 and higher.

The researcher was aware of the challenges to the reliability of this research:

- A person may not want to continue with the questionnaire after starting to complete it and subsequently withdraw from it.
- The trauma may be so severe that in answering the questions, the incident may become real again and the victim may experience revictimisation (APA, 2000).
- The person tries to forget what has happened to them (denial) and then unintentionally answers the questions not accordingly to what had happened.

Reliability and credibility are partly measured through a data analysis (Stansfeld, 2002).

4.12 LIMITATIONS WITH DATA COLLECTION

Working around the limitations that surrounded the data collection, proved to be challenging. As the South African population is so diverse in language, culture, and income, the investigation/research had to cater for this complex context to be inclusive for the entire South African population.

As the literature on this subject is limited to international studies, this research can be of an advantage for further research. This research is not only to discover new knowledge, but to confront certain assumptions which were previously voiced/made. Every trauma victim must be treated on their own merits and needs. There is no stereotyped method to approach a person (Price, & Murnan, 2004).

To get a relevant sample for this research was therefore difficult. As South Africa is one of the most dangerous countries in the world (Numbeo, 2020), one would think that there are enough victims to get for the sample. However, many people are not open to completing questionnaires about their experiences. A few of the willing participants experienced a traumatic incident in South Africa, but then left the country. This phenomenon should be explored in more in-depth research.

4.13 CONCLUSION

In this chapter, the process of the methodology for this study was outlined. The sample collection was explained as well as the limitations to get the best results. The reader was also informed about the data processing. Furthermore, it also outlined several aspects of the research design, study population, sampling technique, instruments for collecting data, as well as measures of the expected outcomes.

CHAPTER 5

RESULTS OF DATA

5.1 INTRODUCTION

Chapter 1 introduced the reader to the research study. The outline of the questions, the aim of the study, and the meaning of EI and PTSD were discussed. In chapter 2, a comprehensive literature review provided the reader with an overview of the literature that was used for this study. As the awareness of EI and PTSD grows in the field of Psychology, this chapter particularly provided an understanding of the meaning of PTSD and EI. Trauma in the South African context, in particular with relation to PTSD and EI, was considered and discussed. Most of the chapter revolved around a discussion of how victims of a traumatic event in South Africa cope with PTSD after an incident.

Chapter 3 addressed a conceptual framework from a psychological theory and practice, indicating on what merits the research study should succeed. In contrast to Constructivist thoughts, Social Constructionism argues that social and psychological worlds are made real or are constructed through social processes and interactions. This study has both theoretical and conceptual frameworks. The two terms are not research design specific. Added to this, the qualitative and quantitative paradigms are not necessarily excluding each other.

Chapter 4 started with the purpose of the research, followed by the relevant research question and sub-questions. The advantages and disadvantages of the quantitative approach were discussed and considered from a quantitative point of view. This methods section described the rationale for the application of specific procedures or techniques used to identify, select, and analyse information applied to understanding the research problem, thereby allowing the reader to critically evaluate the study's overall validity and reliability.

In chapter 5, the different questionnaire outcomes are presented.

5.2 ORGANISATION OF DATA RESULTS

This result section is structured around the research question and sub-questions and will answer the questions one by one. The research survey was both quantitative and qualitative.

5.2.1 Results obtained through Quantitative Data Analysis

The quantitative research questionnaire was completed by 29 (n=29) participants who were 25 years (n=25) or older.

5.2.1.1 Results obtained for the Biographical Information Questionnaire

The SPSS (version 27) software was used to analyse the quantitative data. The following information was relevant: Gender; age; highest qualification; income; place of living; previous experiences of a violent trauma incident; personal involvement in the trauma incident; what incident caused the trauma; when did the incident happen; their relationship with the person who experienced the trauma incident; was the victim injured; were they hospitalised; who was the first person they asked for guidance; how long after the trauma incident did they go for counselling; did the trauma incident effect friend and family relationships; did they relocate; did they take more precautions afterwards; and did they report it to the South African Police Service (SAPS)?

Table 3: Gender

Frequency	Percentage	Valid	Cumulative
		Percentage	Percentage
6	20.7%	20.7%	20.7%
23	79.3%	79.3%	100.0%
29	100.0%	100.0%	
	6 23	6 20.7% 23 79.3%	Percentage 6 20.7% 20.7% 23 79.3% 79.3%

A total of nine questionnaires were sent out to male participants, after asking if they would like to participate. With regards to gender (Table 3), six (n=6) males and 23 (n=23) participate in the study. This research shows that male is more reluctant to participate than female. Women were more willing to participate (79.3%). There were twenty-three (n=23) questionnaires submitted to female participants. All of the questionnaires were received back.

Table 4: Age

Age	Frequency	Percentage	Valid	Cumulative
			Percentage	Percentage
25-29	2	6.9%	6.9%	6.9%
30-39	3	10.3%	10.3%	17.2%
40-49	4	13.8%	13.8%	31.0%
50+	20	69.0%	69.0%	100.0%
	29	100.0%	100.0%	

One of the criteria for the research was that a person had to be 25 years or older. 69% of the participants were over the age of 50. The purpose of this question is to establish the willingness of different age groups to share their traumatic experiences. This can be a study for the future of why older people are more willing to deal with their experiences than younger people.

Table 5: Highest Qualification

Qualification	Frequency	Percentage	Valid	Cumulative
			Percentage	Percentage
Pre-Matric	2	6.9%	6.9%	6.9%
Matric	9	31.0%	31.0%	37.9%
Graduate	12	41.4%	41.4%	79.3%
Post-Graduate	9	20.7%	20.7%	100.0%
Total	29	100.0%	100.0%	

Qualification was added to the questionnaire to get an overall perspective of the population who participated. This question was solely used to compile a complete Biographical profile the participants.

Table 6: Income

	Income	Frequency	Percentage	Valid	Cumulative
	(Rands)			Percentage	Percentage
Valid	<9,999	4	13.8%	14.8%	14.8%
	10,000-19,999	7	24.1%	25.9%	40.7%
	20,000-29,999	3	10.4%	11.2%	51.9%
	30,000-39,999	1	3.4%	3.7%	55.6%
	>40 000	12	41.4%	44.4%	100.0%
Total		27	93.1%	100.0%	
Missing		2	6.9%		
Total		29	100.0%		

The income of 41% of the participants is more than R40,000. One reason may be that more people in the high-income bracket who have responded, had access to the internet. Another reason links to their age, as the majority of the participants were above the age of 50. This question serves to complete the participants' Biographical profiles.

Table 7: Place of Living

	Place	Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Rural Area	4	13.8%	14.3%	14.3%
	City	23	79.3%	82.1%	96.4%
	Township	1	3.5%	3.6%	100.0%
	Total	28	96.6%	100.0%	
Missing		1	3.4%		
Total		29	100.0%		

Most of the participants lived in the city (79.3%). The reason for not having more participants in rural and township areas was that the researcher found it difficult to find people willing to participate in those areas.

Table 8: Previously Experienced Trauma Incidents

		Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Yes	28	96.6%	96.6%	96.6%
	No	1	3.4%	3.4%	100.0%
	Total	29	100.0%	100.0%	

The majority of the participants experienced previous trauma incidents (96.6%). One of the reasons for this research was also to investigate how South Africans cope with violent crime.

Table 9: Personally Involved in a Traumatic Incident

		Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Yes	24	82.8%	82.8%	82.8%
	Yes	5	17.2%	17.2%	100.0%
	Total	29	100.0%	100.0%	

All 29 participants (100%) were personally involved in a traumatic incident. Five (n=5) of the 29 participants also participated in the qualitative research.

Table 10: When did the Incident Happen?

	Happened	Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	6-12 months ago	3	10.3%	10.3%	10.3%
	More than 12 months	26	89.7%	89.7%	100.0%
	ago				
	Total	29	100.0%	100.0%	

Most trauma incidents happened more than 12 months before the completion of the questionnaires. One of the participants wrote at the end of the questionnaire that even though it happened so long ago, she still feels the pain that she experienced after the incident.

Table 11: Relationship with Person who Experienced Trauma Incident

	Relationship	Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Spouse	6	20.7%	26.1%	26.1%
	Partner	2	6.9%	8.8%	34.9%
	Friend	3	10.3%	13.0%	47.9%
	Parent	3	10.3%	13.0%	60.9%
	Child	1	3.4%	4.3%	65.2%
	Self	8	27.7%	34.8%	100.0%
	Total	23	79.3%	100.0%	
Missing	Colleague	1	3.4%		
	System	5	17.3%		
	Total	6	20.7%		
Total		29	100.0%		

This data shows that 26.7% of the participants experienced the trauma themselves and 20.7% of them had spouses who experienced it. This shows that even though the person may not be a victim of the incident, the effect of the crime will always affect the family.

Table 12: Were you Injured in the Trauma Incident?

		Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Yes	14	48.3%	48.3%	48.3%
	No	15	51.7%	51.7%	100.0%
	Total	29	100.0%	100.0%	

The lower percentage (48.3%) here at the "yes" answer, in contrast to the higher percentage of the "no" answer (51.7%), does not reflect that these people were not badly injured. This question is directly aimed at the participant and not at the victim *per se*.

Table 13: Were you Hospitalised after the Trauma Incident?

		Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Yes	8	27.6%	27.6%	27.6%
	No	21	72.4%	72.4%	100.0%
	Total	29	100.0%	100.0%	

The majority of the participants, 72.4%, indicating that they were not hospitalised after the incident. Again, this can in many cases be the result that they were not the victim, but only a bystander when a loved one was badly injured.

Table 14: First Person for Guidance

	Person	Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Trauma Counsellor	3	10.3%	18.8%	18.8%
	Friend	3	10.3%	18.8%	37.6%
	Parent	3	10.3%	18.8%	56.4%
	Colleague	2	6.9%	12.4%	68.8%
	Psychologist	1	3.5%	6.2%	75.0%
	Spiritual/Religious	4	13.9%	25.0%	100.0%
	Counsellor				
	Total	16	55.2%	100.0%	
Missing	Husband	2	6.9%		
	Neighbour	11	37.9%		
	Total	13	44.8%		
Total		29	100.0%		

Four (13.9%) of the participants turned to spiritual/religious counsellors. It is interesting to note that only 3.5% went to a psychologist, 10.3% to a trauma counsellor, 10.3% to a friend and 10.3% to a parent. The question that should be asked is why people are more willing to seek counselling with a spiritual/religious counsellor than with a psychologist. (See 6.7 for Recommendations). *Missing: Husband and Neighbour*, here refers to people that the participants did not discuss the trauma incident with.

Table 15: How Long After a Trauma Incident?

	Time Period	Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Immediately	6	20.7%	33.3%	33.3%
	Within a week	8	27.6%	44.4%	77.8%
	1-2 months	3	10.3%	16.7%	94.4%
	7-12 months	1	3.4%	5.6%	100.0%
	Total	18	62.1%	100.0%	
Missing	Did not seek advice	11	37.9%		
Total		29	100.0%		

Out of the participants, 27.6% (n=8) of sought guidance within a week. The fact that they did not seek it immediately may be that they did not realise the effect of the incident on them.

Table 16: Did the Trauma Incident Affect Friend and Family Relationships?

		Frequency	Percentage	Valid Per-	Cumulative
				centage	Percentage
Valid	Yes	13	44.8%	46.4%	46.4%
	No	15	51.7%	53.6%	100.0%
	Total	28	96.6%	100.0%	
Missing		1	3.4%		
Total		29	100.0%		

For 51.7% (n=15) of the participants, the incident did not have any effect on their relationships with family or friends. This number is not exponentially distant from the positive answer (44.8%).

Table 17: Did you Relocate?

		Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Yes	13	44.8%	46.4%	46.4%
	No	15	51.8%	53.6%	100.0%
	Total	28	96.6%	100.0%	
Missing		1	3.4%		
Total		29	100.0%		

Twelve (n=12) participants relocated to Australia after their trauma incident, while 51.7% did not relocate. Here the percentage between those who relocated and those who did not is also very close.

Table 18: Did you Take more Precautions after the Incident?

		Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Yes	25	86.3%	89.3%	89.3%
	No	3	10.3%	10.7%	100.0%
	Total	28	96.6%	100.0%	
Missing		1	3.4%		
Total		29	100.0%		

After the incident 86.2% (n=25) took more precautions in terms of their own safety. They put more security in place like security cameras, and more protection to their property like safety doors and palisades.

Table 19: Was the Trauma Incident Reported to the South African Police?

		Frequency	Percentage	Valid	Cumulative
				Percentage	Percentage
Valid	Yes	21	72.4%	75.0%	75.0%
	No	7	24.2%	25.0%	100.0%
	Total	28	96.6%	100.0%	
Missing		1	3.4%		
Total		29	100.0%		

It was found that 72.4% (n=21) of these trauma incidents were reported to the SAPS. As no question was asked why participants did not report it to the SAPS, the answer why 24.2% did not report it, is not clear.

5.3 RESULTS OBTAINED THROUGH THE DATA ANALYSIS

The research question and sub-questions for the current study were: *Is there a correlation between trait EI and PTSD?* If so,

- are participants with higher trait EI scores less likely to experience PTSD symptoms?
- is there a correlation between the nature of a traumatic situation and coping behaviour?
- do different trait EI components have different predictive values for coping behaviour?

A null hypothesis, which assumes there is no meaningful relationship between the variables EI and PTSD, was established in this research. (1.3.3)

5.3.1. Results obtained for the Trait Emotional Intelligence Questionnaire (TEIQue)

Concerning the EI scale, the reliability of the subscales did not reach an adequate level of reliability. The overall EI scale showed acceptable reliability though, when removing some items which showed unacceptable item statistics. It was thus decided to work with the total EI score instead of the subscales. It was not possible to answer the research question on the different EI components.

However, the other side of the coin might be whether different EI components have a different predictive value for coping behaviour. The average of *Coping* (Table 23) was measured quantitatively in the questionnaire.

COMPUTE Cop-

ing_behaviour=mean(@.Iavoidedlettingmyself,@.Ifeltasifithasnthappened,@.Istayedaway,

- @.Itriednottothinkaboutit,@.IwasawarethatIstill,@.Myfeelingaaboutitiskindofdumb,
- @.Itriedtoremoveirformmemory,@.Itriednottotalkaboutit).

EXECUTE.

Items were removed from the EI total scale which did not prove to contribute to the overall reliability.

Table 20: Items Removed from the EI Total Scale

Question	Question
Number	
1	It is easy for me to talk to other people about my feelings.
2	I am often able to see things from another person's viewpoint.
10	I can make other people feel better when I want to.
12	I often find it easy to adjust when things change in my life.
14	I often find it easy to show my affection/love to those close to me.
15	I normally find it easy to keep myself motivated.
19	I tend to get involved in things I later wish I could get out of.
20	I often pay a lot of attention to my feelings.

The above eight (n=8) questions was not included in the EI Questionnaire. The questions in the questionnaire completed by the participants complied by the requirements of the study.

Table 21: Reliability Statistics

Cronbach's	Cronbach's Alpha Based	
Alpha	on Standardised Items	N of Items
.705	.755	19

The **Reliability Statistics** confirms that the Table 20 met the requirements of the questionnaire.

Table 22: Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum/	Variance	N of
					Minimum		Items
Inter Item	.140	363	.665	1.028	-1.832	.050	19
Correlations							

This correlation was significant at the 0.01 level (2-tailed), as shown in the above table.

Table 23: Inter Item Correlations

		Coping behaviour	PTSD	EI Total
Coping behaviour	Pearson Correlation	1	.590*	0,022
	Sig. (2-tailed)		0,001	0,910
	N	28	28	28
PTSD	Pearson Correlation	.590*	1	-0,019
	Sig. (2-tailed)	0,001		0,924
	N	28	28	28
EI Total	Pearson Correlation	0,022	-0,019	1
	Sig. (2-tailed)	0,910	0,924	
	N	28	28	29

^{*} Based on the above table, there is a strong correlation between *Coping Behaviour* and *PTSD*.

Having only worked with the Total EI, it was important to also provide the reader with the results on the subscales. The reason is that whereas research on the reliability of EI subscales can be done as a result of this research, future studies can be informed by it. Accordingly, the researcher concludes that it should be included in the study. Both the measures of EI and PTSD yielded continuous data. (See 5.3.1).

Cronbach's Alpha

Scale: Emotionality

Table 24: Reliability Statistics (Emotionality Scale)

Cronbach's Alpha	Number of Items	
	on Standardised Items	
0.398	0.383	5

The **Reliability Statistics** is to inform the reader.

Table 25: Summary Item Statistics (Emotionality Scale)

	Mean	Minimum	Maximum	Range	Maximum/	Variance	N of
					Minimum		Items
Inter-Item	0.110	-0.242	0.331	0.573	-1.369	0.033	5
Correlations							

Table 26: Item-Total Statistics

	Scale	Scale	Corrected	Squared	Cronbach's
	Mean if	Variance	Item-Total	Multiple	Alpha if
	Item De-	if Item	Correlation	Correlation	Item Delet-
	leted	Deleted			ed
Q1. It is easy for me to	14.26	5.824	0.165	0.259	0.375
talk about my feelings					
to other people.					
Q2. I am often able to	13.64	6.608	0.177	0.158	0.367
see things from another					
person's viewpoint.					
Q7. Many times, I do	14.36	3.720	0.422	0.229	0.094
not exactly know what					
emotion I feel.					

Q14. I often find it is	13.54	6.332	0.220	0.150	0.340
easy to show my affec-					
tion/love to those close					
to me.					
Q20. I often pay a lot	15.21	6.323	0.055	0.196	0.450
of attention to my feel-					
ings.					

Table 27: Reliability Statics (Sociability Scale)

Cronbach's Alpha	N of Items	
	on Standardised Items	
0.346	0.573	8

Table 28: Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum/	Variance	N of
					Minimum		Items
Inter-Item	0.144	-0.380	0.673	1.053	-1.773	0.073	8
Correlations							

Table 29: Item-Total Statistics

	Scale Mean	Scale Vari-	Corrected	Squared	Cronbach's
	if Item De-	ance if Item	Item-Total	Multiple	Alpha if
	leted	Deleted	Correlation	Correlation	Item
					Deleted
Q3. I am a highly motivated per-	28.24	6.261	0.166	0.202	0.308
son.					
Q5. I normally find life enjoya-	28.59	5.323	0.145	0.565	0.179

	Scale Mean	Scale Vari-	Corrected	Squared	Cronbach's
	if Item De-	ance if Item	Item-Total	Multiple	Alpha if
	leted	Deleted	Correlation	Correlation	Item
					Deleted
ble.					
Q8. I feel that I	28.31	6.079	0.342	0.315	0.254
have a number of					
good qualities.					
Q11. Sometimes,	29.59	8.108	-0.356	0.216	0.703
I thought my					
whole life is go-					
ing to face cri-					
sis/difficultly.					
Q15. I normally	28.52	6.116	0.260	0.470	0.274
find it easy to					
keep myself mo-					
tivated.					
Q17. On the	28.55	5.185	0.358	0.631	0.190
whole, I am hap-					
py with my life.					
Q21. I often feel	29.03	5.606	0.220	0.475	0.271
good about my-					
self.					
Q24. I generally	28.48	5.473	0.494	0.530	0.173
believe that					
things will work					
out fine in my					
life.					

Reliability

Scale: Sociability

Table 30: Reliability Statistics (Sociability Scale)

Cronbach's Alpha	Cronbach's Alpha Cronbach's Alpha Based				
	on Standardized Items				
0.577	0.569	8			

Table 31: Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum/	Variance	N of
					Minimum		Items
Inter-Item	0.142	-0.240	0.487	0.727	-2.032	0.032	8
Correlations							

Table 32: Item-Total Statistics

	Scale	Scale Var-	Corrected	Squared	Cronbach's
	Mean if	iance if	Item-Total	Multiple	Alpha if
	Item De-	Item De-	Correlation	Correlation	Item
	leted	leted			Deleted
Q6. I am interacting	25.74	13.738	0.243	0.388	0.556
with my classmates in					
a good way.					
Q9. I often find it dif-	26.85	11.439	0.253	0.510	0.567
ficult to stand up for					
my rights.					
Q10. I can make other	26.00	13.486	0.192	0.336	0.568
people feel better if I					
want to.					
Q18. I can describe	25.96	14.345	0.117	0.217	0.586
myself as sociable.					

	Scale Mean if	Scale Var-	Corrected Item-Total	Squared Multiple	Cronbach's
	Item De-	Item De-	Correlation	Multiple Correlation	Alpha if Item
	leted	leted			Deleted
Q22. I tend to accept	26.74	9.815	0.595	0.470	0.413
defeat even if I know I					
am right.					
Q23. I am able to	26.19	12.926	0.330	0.221	0.532
change the way other					
people feel.					
Q25. I find it difficult	26.59	11.251	0.379	0.370	0.508
to bond well even with					
those close to me.					
Q26. I am able to	25.67	14.308	0.150	0.159	0.577
adapt/adjust to new					
environments/settings.					

Table 33: Reliable Statistics (Sociability Scale)

Cronbach's Alpha	Cronbach's Alpha Cronbach's Alpha based				
	on Standardized Items				
0.100	0.083	6			

Table 34: Summary Item Statistics (Emotionality Scale)

	Mean	Minimum	Maximum	Range	Maximum/	Variance	N of
					Minimum		Items
Inter-Item	0.015	-0.503	0.504	1.008	-1.002	0.101	6
Correlations							

Table 35: Item-Total Statistics

	Scale Mean	Scale Vari-	Corrected	Squared	Cronbach's
	if Item	ance if Item	Item-Total	Multiple	Alpha if Item
	Deleted	Deleted	Correlation	Correlation	Deleted
Q4. I usually	16.19	4.322	0.008	0.339	0.131
find it difficult					
to regulate my					
emotions.					
Q12. I often find	17.69	6.702	-0.357	0.436	0.331
it easy to adjust					
when things					
change in my					
life.					
Q13. I feel I am	15.81	4.882	0.206	0.344	-0.026
able to adapt/					
control stress.					
Q16. I can con-	15.62	4.886	0.178	0.409	-0.013
trol my anger					
when I want to.					
Q19. I tend to	17.12	3.466	0.133	0.203	-0.061
get involved in					
things I later					
wish I could get					
out of.					
Q27. I try to	16.04	4.758	0.116	0.426	0.017
control my					
thoughts so that					
I do not worry					
about things.					

5.3.2. Results obtained for the Impact of Events Scale Revised (IES-R) Cronbach's Alpha

Table 36: Reliability Statistics (Sociability Scale)

Cronbach's Alpha	Cronbach's Alpha Cronbach's Alpha Based				
	on Standardised Items				
0.838	0.839	8			

Table 37: Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum/	Variance	N of
					Minimum		Items
Inter-Item	0.395	0.143	0.701	0.558	4.893	0.021	8
Correlations							

Table 38: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item
	Zeretea	Deleted			Deleted
@ I avoided let-	17.85	42.855	0.646	0.638	0.810
ting myself get					
upset when I					
thought about it					
or was reminded					
of it.					
@ I felt as if it	18.42	41.454	0.586	0.542	0.817
hasn't happened					
or was not real.					
@ I stayed away	18.19	40.482	0.706	0.640	0.800
from reminders of					
it.					

	Scale Mean if Item	Scale Variance if	Corrected Item-Total	Squared Multiple	Cronbach's Alpha if
	Deleted	Item	Correlation	Correlation	Item
		Deleted			Deleted
@ I tried not to	17.92	45.514	0.511	0.601	0.826
think about it.					
@ I was aware	18.19	43.042	0.544	0.401	0.822
that I still have a					
lot of feelings					
about it, but					
didn't deal with					
it.					
My feelings about	18.15	43.975	0.475	0.358	0.831
it are kind of					
numb.					
@ I tried to re-	18.0	41.840	0.649	0.550	0.808
move it from my					
memory.					
@ I tried not to	18.38	45.046	0.442	0.535	0.835
talk about it.					

Table 39: Reliability Statistics (Emotionality Scale)

Cronbach's Alpha	Cronbach's Alpha Cronbach's Alpha Based	
	on Standardised Items	
0.932	0.934	14

Table 40: Summary Item Statistics (Emotionality Scale)

	Mean	Minimum	Maximum	Range	Maximum/	Variance	N of
					Minimum		Items
Inter-Item	0.503	0.115	0.793	0.678	6.916	0.023	14
Correlations							

Table 41: Item-Total Statistics

	Scale	Scale Vari-	Corrected	Squared	Cronbach's
	Mean if	ance if Item	Item-Total	Multiple	Alpha if
	Item	Deleted	Correlation	Correlation	Item
	Deleted				Deleted
@ Any reminder	32.75	159.773	0.719	0.777	0.926
brings back feel-					
ings about it.					
@ I have trouble	33.60	159.167	0.702	0.931	0.926
staying asleep.					
@ Other things	33.44	162.923	0.720	0.802	0.926
kept me thinking					
about it.					
@ I felt irritable	33.24	160.857	0.694	0.775	0.926
and angry.					
@ I thought about	33.24	160.607	0.738	0.863	0.925
it when I didn't					
mean to.					
@ Pictures of it	33.08	163.993	0.756	0.871	0.925
popped into my					
mind.					
@ I was jumpy and	32.68	167.810	0.599	0.788	0.929
easily startled.					
@ I found myself	33.64	161.740	0.755	0.907	0.925
acting or feeling					
that I was back at					
that time.					
@ I have trouble	33.56	159.423	0.741	0.907	0.925
falling asleep.					
@ I have waves of	33.40	159.917	0.736	0.903	0.925
strong feelings					
about it.					

	Scale Mean if Item	Scale Vari- ance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item
	Deleted				Deleted
@ I have trouble concentrating.	33.84	164.890	0.738	0.865	0.926
@ Reminders of it cause me to have	33.76	163.023	0.691	0.863	0.926
psychical reactions, such as sweating, trouble breathing, nausea, or pound-					
ing heart. @ I had dreams	33.60	167.917	0.491	0.774	0.933
about it. @ I felt watchful	32.60	165.583	0.487	0.669	0.934
and on-guard.					

5.3.1 Results obtain for the Hypothesis testing

5.3.1.1 Rational for this Statistic

The statistic/rational was devised to determine if the test statistics of the study were significant. The questions were adapted accordingly.

5.3.1.2 Variables Entered into the Statistics

As defined at the beginning of the dissertation (Definition of Keywords, xvii), the variables EI, PTSD, trauma, and coping are described and defined.

- 1. EI, since the basic research question is whether there is a correlation between the two traits EI and PTSD.
- 2. PTSD: The objective of this study was to determine if people with a high EI are better able to cope with PTSD.
- 3. Trauma, since the study looked at how people cope with trauma.
- 4. Coping: In order to determine if certain components of trait emotional intelligence predict coping behaviour.

5.4 EXPLANATION OF MEASUREMENTS OF EACH VARIABLE

- 1. EI was measured by using questions specified in Petrides' TEIQue-SF (Petrides 2009). The questions were adapted by the researcher to befit the purpose of the study to take the South African milieu into account.
- 2. PTSD (the severity thereof) was measured by using specific questions.
- 3. Trauma was determined by using specific questions.
- 4. Coping with the aftermath of the harrowing experience was measured by asking specific questions.

5.5 STATISTICS PRESENTATION

The raw data derived from the responses of the participants' completed questionnaires, were analysed by using the SPSS (version 27) for the quantitative and the ATLAS.ti v9 for the qualitative analyses. The outcome of the quantitative data was produced in the form of tables and graphs. In the qualitative analysis, the outcome was produced in the form of answers from the participants, tables, and graphs. The researcher used both tables and graphs to organise information to show patterns and relationships. Therefore, the graph below the tables shows the information by representing it as a shape.

Table 42 is important for the reader to know that some of the participants went through more than one traumatic event.

Table 42: Incident Frequencies

		N	Response	Percentage
			Percentage	of Cases
Incident	Murder	3	8.3%	13.6%
	Hijacking	10	27.7%	45.5%
	Rape	2	5.6%	9.1%
	Robbery	12	33.3%	54.5%
	Suicide	1	2.8%	4.5%
	Gunshot	6	16.7%	27.3%
	Stabbing	2	5.6%	9.1%
Total		36	100.0%	163.6%

The incident frequencies in table 47 show that some of the participants were more than once involved in a crime incident.

Table 43 below indicates different types of traumatic events, but no post-trauma emotional responses were compared for these traumatic event types.

Table 43: Incident Frequencies

Incident	Response Percentage
Murder	8.3%
Hijacking	27.7%
Rape	5.6%
Robbery	33.3%
Suicide	2.8%
Gunshot	16.7%
Stabbing	5.6%
Total	100.0%

Incident 40 30 33.33% 27.78% 10 16.67% 8.33% 5.56% 5.56% 2.78% 0 Incident Murder Incident Hijacking Incident Rape Incident Robbery Incident Suicide Incident Gunshot Incident Stabbing

Figure 6: Trauma Incidents

The purpose of Table 44 is to establish the frequency of different emotional responses to trauma.

Table 44: Multiple Response — Symptom Frequencies

Symptoms	N	Response	Percentage
		Percentage	of Cases
Ate more	4	13.3%	22.2%
Ate less	9	30.0%	50.0%
Used more alcohol	2	6.7%	11.1%
Used less alcohol	1	3.3%	5.6%
Smoked more	2	6.7%	11.1%
Smoked less	1	3.3%	5.6%
Worked/study more	2	6.7%	11.1%
Worked/study less	2	6.7%	11.1%
Was more aggressive	6	20.0%	33.3%
Shopped more	1	3.3%	5.6%
Total	30	100.0%	166.7%

Table 45: Symptom Frequencies

Symptoms	Response Percentage
Ate more	13.3%
Ate less	30.0%
More alcohol	6.7%
Less alcohol	3.3%
Smoked more	6.7%
Smoked less	3.3%
Worked/study more	6.7%
Worked /study less	6.7%
Was more aggressive	20.0%
Shopped more	3.3%
Total	100.0%

One of the symptoms, ate less than before the incident, show that 30% of the participants indicate that it was appropriate to them. 20% of the participants were more aggressive after the trauma incident. It is an interesting outcome because one would assume that as one experienced aggressive behaviour from attackers, they would be less aggressive, not to be like them.

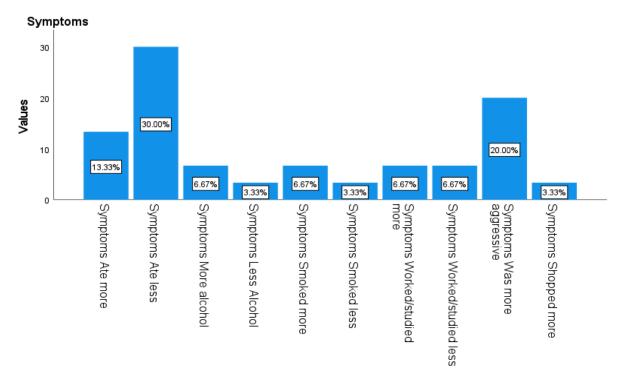


Figure 7: Physical Symptoms Experience by Trauma Victims

Table 46: Physical Symptom Frequencies

Physical Symptoms	N	Response	Percentage of
		Percentage	Cases
Short of breath	2	4.0%	8.0%
Chest pains	3	6.0%	12.0%
Heart palpitations	8	16.0%	32.0%
Headaches	6	12.0%	24.0%
Restlessness	12	24.0%	48.0%
Sleeplessness	19	38.0%	76.0%
Total	50	100.0%	200.0%

Physical symptoms frequencies in table 46 show what the impact is on the human body after a traumatic incident.

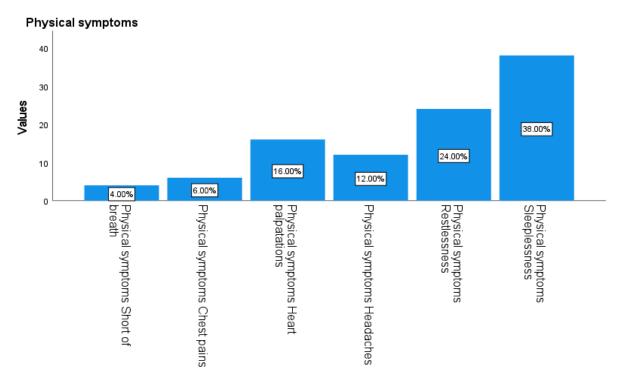


Figure 8: Physical symptoms frequencies

5.6 QUALITATIVE DATA ANALYSIS

The study will now outline the qualitative coding framework based on participants who have experienced traumatic events. The original data were merging, deleting, or renaming the codes in the master project within ATLAS.ti v9. The following premises guided the researcher when approaching the analysis inductively:

- Trait EI as a predictor of PTSD.
- Individuals with higher EI scores are less likely to experience PTSD symptoms.
- Emotion regulation is an essential facet for coping with PTSD symptoms.

The following results outline the thematic process that was followed to gather a perspective of the participants' traumatic experiences and which reactions were evident when the participant perceived their trauma.

It was difficult to add EI to the qualitative results. During the qualitative direct questions to the participants during the interviews, what was in question was how EI factors were per-

ceived by participants and how EI had influenced the traumatic event. As it was very emotional for the participants to talk about their traumatic experiences, the researcher let them talk about it freely and try not to interrupt them too much when talking. Thus, the integrated report is limited to the findings of EI.

All the represented codes are outlined according to the participants' experiences and perceptions. Some codes are grounded quite well. However, other codes are perceived as low in groundedness, where just a few or only one participant had the viewpoint. The following table outlines the codes with the groundedness (frequency) relevant to an ascending order (low coded codes ranged to the higher coded codes).

Table 47: Codes Based on Traumatic Experiences

Code	Grounded/Frequency
Murder	1
Behavioural Reactions: Religion	1
Emotional Response: Unable to forget	1
Emotional Response: Not Sure How to React	1
Assault	2
Behavioural Reactions: Physical Change	2
Behavioural reactions: More Aware	2
Emotional Response: Empathy	2
Gunshot	2
Coping Mechanisms	3
Childhood Trauma	3
Emotional Response: Conform	3
Behavioural Reaction: Relocate	3
Emotional Response: Disappointment	3
Emotional Response: Feeling Emotional	3
Emotional Response: Sadness and Tears	3
Emotional Response: Overworking	4
Communication	4
Armed Robbery	4
Emotional Response: Anger	4

Code	Grounded/Frequency
Molestation and Rape	5
Behavioural reaction: The importance of Me	6
Behavioural Reaction: Closer Social Group	6
Behavioural reaction: Anxiety	6
Behavioural reactions: Sleeping Patterns	6
Counselling	9
Emotional Response: Fear	10
Consumption Habits	11
SAPS	12
Physical Trauma	13
Precautionary Measures	16
Emotional Response: Dissociate or Distanc-	19
ing oneself	

Table 47 outlines the codes and the themes within which these codes have been grouped. In Table 48 the types of traumatic events are as per self-reports of the qualitative traumatic response to the different traumatic events.

The next table outlines the responses to the codes. This is the finalised code list of the analysis based on participant traumatic experiences. Some of the participants were more in agreement with the codes which makes this experience more relevant/common. The higher the frequency in codes, the more participants agreed with it, thus making dissociating or distancing oneself a common experience amongst the five qualitative participants.

Below is a thematic outline of the participants' verbal responses, i.e., completing of the qualitative questionnaire. Five participants (from the cohort of 29 participants) were willing to participate in the qualitative as well as the quantitative research questionnaires. Participants are referred to as P1, P2, P3, P4, and P5. The responses of P2 and P3 were translated from Afrikaans.

Table 48: Themes with Grouped Codes

Theme	Categories	Codes
Responses to traumatic events	Behavioural reactions	Closer social group
		Sleeping patterns
		More aware
		Physical change
		Religion
		The importance of me
	Emotional response	Anger
		Anxiety
		Confirm
		Depression
		Disappointment
		Dissociate or distance oneself
		Empathy
		Fear
		Feeling emotional
		Not sure how to react
		Overworking
		Sadness and tears
		Unable to forget

5.6.1 Coping Strategies

This theme identified participants' responses on elements that made the traumatic event easier for them to cope with. According to Carolyn Aldwin and Loriena Yancura (2004), coping strategies/mechanism are dependent on the environmental demands and an individual's beliefs and values. Five codes were utilised under this theme: Coping strategies/mechanism, communication, counselling, consumption habits, and precautionary measures.

5.6.1.1 Coping Mechanisms

This code has identified coping strategies that could not have been grouped within other

codes. It was mentioned by participants that there is more to life than possessions. They also

averred that, over years it gets easier to think and talk about the trauma incident. Well-

supported structures of friends and family make the healing journey easier.

Responses

P4: "This incident that happened to me, made me realise that there is more to life than what's

happening. So, it made me open my eyes, especially the recent one. It groomed me where I

am now. Because I thought to myself, yes, they came to me, yes, he took my belongings, yes,

they took my everything, but they didn't, didn't take my life. This means I still have to contin-

ue what I do best."

P2: "It heals over the years."

P5: "I have massive support from the team."

5.6.1.2 Communication

Participants explained how communication played a role as a coping mechanism. The role of

communication seems evident in counselling on how to cope with a traumatic event. Talking

about what happened really helps one to feel better and to cope.

Responses

P4: "I cope by talking to other people and telling them about my experience."

P4: "It's much easier to talk about it to people who have been through it, to people who un-

derstand what's going on."

P4: "I sit with girls, and then we talk about it. And then I relate some of their stories to my

stories. So, it made me the woman I am today."

P2: "In January, I could talk about it now."

5.6.1.3 Counselling

Counselling identifies one's experiences while engaging with a psychologist/counsellor to

cope with the traumatic event. The perception gathered from participants is that counselling

plays a significant role in how to cope with a traumatic event.

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Responses

P1: "No, I only went to church counselling."

P1: "The anger started settling down, all the pain and all the counselling with the pastor, I felt better."

P2: "We went to talk to someone, to Vorster, and I did not have any anger in me and neither did Raymond."

P3: "I also had to get other people some counselling to talk about it too."

P5: "I was quite uneasy in the early years, until I actually got counselling and realised that these people (counsellors) – I do see them as a potential, as my dad and I needed the consent of these individuals."

P5: "That was why I was nervous, but I mean one works through therapy."

P5: "It was intensive hypnotherapy and counselling basically daily."

P5: "I was abused when I was eight or nine and that only come to the fore during hypnotherapy sessions when I was receiving counselling."

5.6.1.4 Consumption Habits

The term "consumptions habits" refers to the participant's change in habits after the traumatic event. Some participants expressed that their consumption of alcohol had increased, whereas other participants mentioned either an increase in eating or a decrease in their eating habits after the traumatic event.

Responses

P4: "I'm eating more."

P4: "I'm drinking more."

P4: "I drink more alcohol now, more than I did before."

P5: "I started eating less. I actually lost a lot of weight. I just couldn't eat. Later it became so bad that I couldn't really brush my teeth in the morning, but still I did not recognise the warning signs."

P5: "If I think now, I was actually anorexic."

P5: "In the later years, weight gain has become a problem of relatively."

P5: "That is sometimes related to alcohol consumption."

P5: "Just not eating."

P5: "I don't feel like eating."

P5: "I was incredibly thin and just lost a lot of weight."

5.6.1.5 Precautionary Measures

The term "precautionary measures" refers to how the participants implemented precautions in their lives. This code identifies the aftermath of the traumatic event, as well as which participants implemented measures to ensure that their perception of feeling safe was increased. For example, participants mentioned that they were trying to be safe and stayed off the streets at night, incorporating structural changes at one residence, and even moving to another residence, just to add to the feelings of being safe.

Responses

P4: "When it comes to more, I'm protecting myself more. I'm still scared and I don't have anything to protect myself with at this point."

P4: "So I'm staying safe, as safe as I can. I try not to walk around at night."

P4: "I'll try to avoid being on the street at night."

P4: "I just try and avoid being alone at night and being outside at night."

P2: "Yes, Raymond totally secured the house."

P2: "Raymond bought a new yard."

P3: "I made absolutely sure that I always have the gun next to me, at my head."

P3: "Let me put up extra gates, put in cameras."

P3: "I had to be very prepared and tried to speak as prepared as possible, to make sure we are safe now."

P3: "She's looking for another place to stay. She does not want to stay there anymore. It's too dangerous."

P3: "I go in and stand on top of the balcony and see if the gate gets stuck and there is no one."

P3: "But in time we got it now. It's gone. But that time was really very rough. I mean when we go to a party then we drove in convoy cars. We drove four cars and we knew there were two guys armed. We rode together and came back together and walked into the house with the people so it felt like a gang, you are close to your people and you help to protect."

P5: "I wanted to catapult myself from the socio-economic circumstances in which we grew up."

P5: "I moved out of the home at the age of 21, after I finished studying."

P5: "I have always been very guarded with our children to make sure they are safe."

5.6.2 Responses to the Traumatic Event

The theme identifies how participants had reacted during and after the traumatic event. There are three categories in responses to a traumatic event, namely physical, emotional, and behavioural reactions (Huffman, & Miller, 2013). This theme has been split in two categories, namely *emotional responses* and *behavioural reactions*. There are 19 Codes in this section. To make it easier for the reader to get a picture of the building blocks of the emotional responses category and the building blocks of the behavioural reactions category the following table is included.

Table 49: Building Blocks: Emotional Responses and Behavioural Reactions

Emotional responses	Behavioural reactions
Not Sure how to React	Religion
Emotional Response: Unable to Forget	Physical change
Sadness and tears	More aware
Disappointment	Sleeping patterns
Conform	Closer social group
Feeling emotional	Importance of Me
Anger	Relocate
Over working	
Anxiety	
Empathy	
Fear	
Dissociate or distancing one- self	

5.6.2.1 Emotional Response: Not Sure how to React

This theme depicts the emotions experienced by the participants after the traumatic event.

Response

P4: "I couldn't because I was too young. I didn't know how to react."

5.6.2.2 Emotional Response: Unable to Forget

These are emotions experienced by participants after the traumatic event.

Response

P1: "Only I can't forget the case, never."

5.6.2.3 Behavioural Reactions: Religion

This indicates to us how the participants experienced changes in their behaviour after the trauma.

Response

P3: "Some of us have come much closer to the Lord."

5.6.2.4 Emotional Response: Sadness and Tears

In this section, the emotions experienced by participants after the traumatic event, are portrayed.

Responses

P2: "There were days I felt like I just wanted to burst into tears."

P2: "My mind was full that day and then I burst into tears unbelievably."

P2: "I just felt depressed one day in January."

5.6.2.5 Behavioural Reactions: Physical Change

This code identified responses that did not fit within any other emotions or changes. One participant mentioned that there were physical changes in their blood pressure when they talked about the traumatic event. Another participant mentioned that they struggled to sit still and relax after the traumatic event.

Responses

P3: "She tested my blood pressure afterwards. Because of the revival, my blood pressure was sky-high, because of the revival of that."

P5: "I do find it difficult to relax and chill. I can be quite guarded."

5.6.2.6 Behavioural Reactions: More Aware

Two participants further agreed that the traumatic event caused them to be more aware of their surroundings.

Responses

P2: "I was very observant, when I walk into a mall, I see a bunch of people standing around there, and then I realise, so I was very prepared, a lot more than usual, a lot more."

P3: "If there was a dog barking then I was awake and then I stood up, so I could turn on the lights outside and see what was going on."

5.6.2.7 Emotional Response: Disappointment

Disappointment is an emotion experienced by some participants after the traumatic event. Although they feel they let people down, the truth is that they are actually disappointed in themselves.

Responses

P5: "I felt disappointed that I let people down."

P5: "I felt that I was not good enough."

P5: "It was a very lonely stage in my life and a lot of disappointment because I felt that my parents weren't there for me in that sense."

5.6.2.8 Emotional Response: Conform

Participant 5 mentioned that, instead of dissociating from other people, they conformed more and tried to be in the presence of others.

Responses

P5: "Thought of doing things to keep my parents happy, you know, I wanted to have their approval at all costs."

P5: "My coping mechanism was to conform."

P5: "I decided to always seek approval."

5.6.2.9 Emotional Response: Feeling Emotional

This code identified when participants had a feeling of being overwhelmed or a similar emotional reaction towards a situation.

Responses

P5: "I know he did care for us deeply, although it was never vocalised and obviously left a massive wound in my life and suppose still to this day."

P5: "I was suicidal as well. It was a massive shock to the whole family because I always coped and no-one knew how to manage this properly."

P5: "So, what happened, I closed my door and just said to my boss that I had enough. Still a bit composed, it was his birthday, and when I got home, I completely fell apart. I was absolutely hysterical."

5.6.2.10 Emotional Response: Anger

The code "anger" had identified quite a few participants who expressed those feelings of anger were evident after the traumatic event.

Responses

P1: "I was angry. I'm angry."

P4: "Years later, when I went into a relationship, then all of those things came back. Then I started being angry. I started having fear for men – and then I started hating men."

P2: "I did not have any anger in me and neither did Raymond...but my daughter-in-law was angry. Yes, she had an anger in her."

5.6.2.11 Emotional Response: Overworking

Actions were taken by some participants to cope with the traumatic response, such as putting much energy and thought into their work in order to forget about the traumatic event. This was evident from only one participant.

Responses

P5: "My way of coping was working myself to death."

P5: "I mentioned about really working and really taking on quite a bit."

P5: "I actually worked myself to death."

P5: "In the end I had a complete breakdown and that actually unearthed stuff that I wasn't aware of at that stage. I was driven by wanting to excel, could never say no and in that sense lack of sufficient boundaries and I suppose taking on so much but doing it so well that the more I did, the more I got and that led to burnout and a complete breakdown."

5.6.2.12 Behavioural Reaction: Sleeping Patterns

When referring to changes in sleeping patterns, participants mentioned that they either slept way too much or had insomnia.

Responses

P1: "Only insomnia. I suffered with insomnia."

P4: "I couldn't sleep for days and months."

P4: "I was restless at night."

P2: "To some extent insomnia."

P3: "I slept a lot."

P5: "My sleeping pattern started changing."

5.6.2.13 Emotional Response: Anxiety

Two participants related that they had anxious experiences after the traumatic event.

Responses

P4: "Now in 2019 I was admitted you know. And then I was told the doctor diagnosed me. There was a psychologist that knows who diagnosed me with MDD like major depressive disorder and anxiety because I couldn't cope. And then that's when I spoke about being raped."

P4: "I was having chest pains; I was having harsh anxiety; I couldn't control myself."

P4: "Then they had to admit me at the hospital and that's when they said, I have depression and anxiety."

P4: "Then I would have invested more into this life than to sit and to worry about what happened. It's all in the past now. And it hurts. It hurts badly."

P5: "I start getting panic attacks."

P5: "I thought I was having a heart attack."

5.6.2.14 Emotional Response: Empathy

Two participants developed more empathy toward victims who had also experienced trauma.

Responses

P2: "Yes, yes ensure empathy with people who go through such trauma."

P5: "In a way in that sense my trauma has given me insight also empathy with clients that I am getting into a system and getting things in place.

5.6.2.15 Behaviour Reaction: Closer Social Group

These are social experiences of the participants after the traumatic event. Participants mentioned that they joined a social group and started talking to those who went through a similar traumatic experience.

Responses

P1: "So, during the first two years, they were there for me, they were very, very supportive. So, I can't say it drew me apart from them. I didn't isolate myself, I made sure that I was around people."

P4: "It brought us much closer."

P4: "So we, we started being closer to each other."

P4: "I think now we, we are closer than we were before."

P4: "So it brought us much closer. It didn't divide us as a family. It brought us much closer."

P3: "So, yes, we came very close to each other after the shooting. To trust such personal stuff takes a lot from a man."

5.6.2.16 Behavioural Reactions: The Importance of Me

This code portrays the sense that participants felt after the traumatic event: They needed to pay more attention to themselves and their personal happiness.

Responses

P4: "I need to get out of that zone. I need to move on. I need to do what I do best. And what I do best, it's being me and it's securing my future and securing my son's future and investing in myself."

P4: "So now I'm at that point where I want to study further. I study further, I still study more, I want to do more. I want to pursue my career more because I feel it's, it's like an investment. I want to invest in myself. And I want to invest in my son's future. So that when something like this happens again, when, when I have to pass on like when I have to die, I know that my son's future is secured and my future is also secured."

P5: "I also made the decision as a 13-year-old, that I will never marry someone like my father."

P5: "Karin will always just cope.' So, it was a label that was put on me and that my identity was linked to what I was doing, not who I was."

P5: "I am not always managing the best self-care and issues that I've kept clients or staff accountable to. I don't follow the same rules for myself, but I am trying to make strides slowly but surely."

P5: "I make more time now for me to do more creative things and I read a lot and if I did creative projects, it helps me to work through things."

5.6.2.17 Behavioural Response: Relocate

Some participants had mentioned that the idea of relocating and getting out of the traumatic experience the obvious solution was to relocate. However, this code was predominantly based on the experiences of participant 5 and their familial traumatic experiences as children trying to escape.

Responses

P5: "I promised myself I was going to move out as soon as possible."

P5: "So very sad situation, my brother also tried to address things to a certain extent, by also getting out of the house early."

P5: "My sister, as I say, walked away from home at 18 or 16."

5.6.2.18 Emotional Response: Fear

This code shows that the emotional response of fear is a familiar feeling expressed by participants after a traumatic event.

Responses

P4: "I was scared that people were going to judge me."

P4: "When it comes to more protecting myself more, I'm still scared and I don't have anything to protect myself with at this point."

P2: "I have a fear of darkness because they came out of the dark."

P2: "At that time, one only occasionally heard a shot in Faerie Glen, and, yes, I was scared, but I will not say that I have nightmares about it."

P2: "We only drew the curtains when it was hot, but now the curtains are closed."

P3: "I only know at that moment, I was scared but I do not know why I reacted like that."

P3: "There was nothing to be afraid of, but I was scared."

P3: "I really, I was very scared."

P5: "I remembered the intense fear of trying to take care of my mom."

5.6.2.19 Emotional Response: Dissociate or Distancing Oneself

These are also emotions experienced by participants after a traumatic event. Avoiding actions were taken by participants to cope after the traumatic event.

Responses

P4: "So I've been avoiding it."

P4: "So with my first incident, it changed me a lot because I started not enjoying my child-hood. I was pulling myself away from friends. I was pulling myself away from a lot of things. I started behaving like an adult. I told myself that now I'm an adult. This is what happens when you're an adult."

P4: "I didn't tell anyone about being raped. I only told them about being assaulted."

P4: "I was like a bad mother to my son, was not involved more in his life. I was distanced. I couldn't, I couldn't cope with everything."

P2: "I did not want to talk about it at all."

P2: "He says, 'I just want to come and visit you,' but I tried to avoid the thing."

P2: "I did not want to talk about it."

P5: "You suppress it."

P5: "OK, behaviour changes as a young child, I think as I said. Just wanted to get people's consent. A bit withdrew, I think a very quiet and modelled child, which people would say a modelled child, couldn't do anything wrong."

P5: "It was just the whole suppressing of everything."

P5: "I can become detached to a situation."

P5: "In a way, in that sense my trauma has given me insight, also empathy with clients that I am getting into a system and getting things in place."

P5: "I don't allow many people into my inner circle."

P5: "I choose to have limited friendships."

P5: "It takes me a long time to decide if I want to pursue a friendship with certain people and it's very easy for me to step away if I feel that it's not a two-way street. But like I said, I have two beautiful children and I am very, very thankful."

P5: "I need to withdraw from people and I'm very comfortable in my own company."

P5: "I don't need a lot of people around me."

5.6.3 The Role of the Police

One of the objectives of the SAPS, in accordance with the Constitution of South Africa (section 205) is to "prevent, combat and investigate crime" (Govline, 2019). Participants were asked how they were helped by the SAPS.

5.6.3.1 Support by Police Service

In this theme there was one code, being the experience of participants regarding the service rendered by the police force in South Africa to traumatic crimes being reported.

Responses

P1: "And the police situation was very bad. They left her on the road. They didn't put any cones or beacons or anything. And it took them about four hours to come and fetch her body and take her to the mortuary."

P1: "And it's still pending under investigation. Two years later."

P1: "Not good."

P1: "They weren't very accurate as to what actually happened. When I went to the car and saw what was going on, I could see. The fact that nothing has been taken, was a problem."

Yeah, the biggest problem."

P4: "And the case just vanished into thin air."

P4: "They sent us the message that the case has been withdrawn, the docket has been closed."

P4: "So when it comes to police, when it comes to, like, I don't feel safe, I don't trust them."

P4: "I felt like the justice system failed me."

P4: "In the two cases, the docket is being closed. So, I don't feel safe."

P2: "just the detective I was dealing with and he was completely friendly and accommodating."

P3: "The experience I get from the police was very good, actually."

P5: "The South African Police Service was not involved."

5.6.4 Traumatic Events

According to the Diagnostic and Statistical Manual of Mental Disorders, a traumatic event can be defined as an event where a person was confronted, threatened, or seriously injured, be it the person themselves or another person (APA, 2000). The person has intense feelings of helplessness. This theme outlines the different traumatic events experienced by the participants. It consists of eight codes.

5.6.4.1 Murder

During the study, one participant had experienced a murder traumatic event. It also included a gunshot traumatic event. She related not only a shooting, but the death of an individual as a result of the gunshot.

Response

P1: "A person got murdered. So, what happened is I got called out to go to Johannesburg. It was a Saturday night. It was two, one in the morning. And she had been shot multiple times through the vehicle, and one through her chest and one through her head, and she died an hour later."

5.6.4.2 *Gunshot*

One participant experienced a violent gunshot event where he was a bystander. This separates his experiences into gunshot trauma and those who died from gunshot wounds due to murder.

Responses

P2: "So in total there were five shots in a very short period of time, quickly, and when Jan landed on the ground, then they were gone."

P2: "I saw two and the one with his revolver and he fired a shot very aggressively."

5.6.4.3 Assault

The participant was physically injured as a result of the assault. The participant was afraid if she fights back, the criminal will kill her.

Responses

P5: "He started assaulting me."

P5: "I was injured, because I was assaulted."

5.6.4.4 Molestation and Rape

The term "molestation" includes being sexually abused. Although the two terms do not have the same exact meaning, the participants experienced both.

Responses

P5: "I was later also sexually molested by a family member."

P5: "I was sexually abused.

P4: "I was raped on New Year's Eve. I was assaulted and raped years back."

P4: "He started tearing my clothes off. And then that's when he raped me."

P4: "The first incident happened 11 years ago, and I was raped."

5.6.4.5 Childhood Trauma

Childhood trauma comes a long way with this participant. Even now as an adult she still experiences the trauma.

Responses

P5: "I experienced a very destructive childhood."

P5: "Child trauma in the home."

P5: "The work-related incident happened. It was actually related to the underlying childhood trauma issues which were never identified or addressed."

5.6.4.6 Armed Robbery

Guns were used in the armed robberies. Shots were fired in one event and in the other traumatic event the participant was threaten with a gun while being robbed.

Responses

P4: "And then he pointed that gun straight into my forehead. And then he said to me, I must give him everything that I have. And then I gave him my cell phone, all my belongings."

P4: "But a gun went off and then that guy turned away and then he ran."

P4: "The second incident happened four months ago, in July this year. July. So, it was armed robbery."

P3: "He swung a large nine mm revolver or pistol around in the air and pulled the shot, to get our attention."

5.6.4.7 Physical Trauma

Responses

P4: "I was injured because I was assaulted."

P2: "Because of the gunshot wound in the back he had so much pain and inflammation and cystitis."

P2: "He always had a lot of pain, for seven years, and then he passed away."

P3: "I used the chair, grabbed it, and threw the guy with the chair. The guy then shot at me. He then shot me through the leg, but I felt nothing."

P3: "He shot at me again."

P3: "I was paralysed."

P3: "My foot was then full of blood."

P3: "The leg I cannot bend as much as the other one."

P5: "It was definitely physical, in terms of beating."

P5: "You know where basically she was almost strangled."

P5: "I have witnessed in the household from physical, emotional, financial, as well as a massive threat to my safety."

P5: "I did witness how my dad actually strangled my sister and how she eventually stopped breathing."

5.7 INTEGRATED FINDINGS

The *qualitative* results had outlined those different traumatic experiences are related within South Africa, although hi-jacking was mostly mentioned in the *quantitative* surveys. It should be noted that *robbery* was the most common experience, both *qualitative* and *quantitative*.

Table 50: Integrated Findings of Traumatic Experiences

		Responses		Percentage
		${f N}$	Percentage	of Cases
Incident	Murder	3	8,3%	13,6%
	Hijacking	10	27,8%	45,5%
	Rape	2	5,6%	9,1%
	Robbery	12	33,3%	54,5%
	Suicide	1	2,8%	4,5%
	Gunshot	6	16,7%	27,3%
	Stabbing	2	5,6%	9,1%
Total		36	100,0%	163,6%

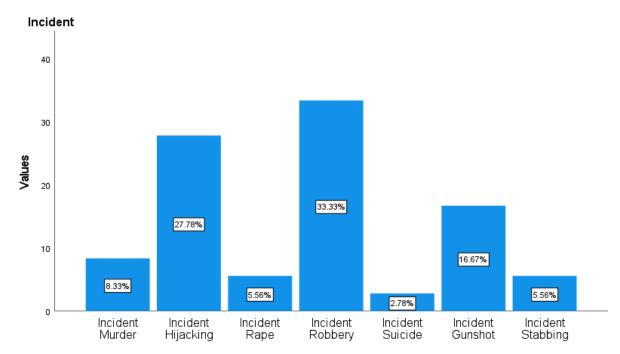


Figure 9: Integrated Finding

Table 51: Findings Related to Eating Habits/Consumption after a Traumatic Event

		Responses
		Percentage
Symptoms	Ate more	13,3%
	Ate less	30,0%
	More alcohol	6,7%
	Less Alcohol	3,3%
	Smoked more	6,7%
	Smoked less	3,3%
	Worked/studied more	6,7%
	Worked/studied less	6,7%
	Was more aggressive	20,0%
	Shopped more	3,3%

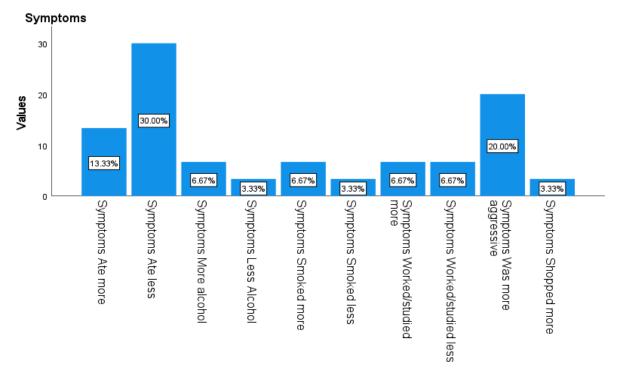


Figure 10: Findings Related to Eating Habits/Consumption after a Traumatic Event

Based on the quantitative findings, it was noted that participants ate more and had more aggression after the traumatic event. This is in line with the qualitative results shown in the code "consumption habits" that most participants mentioned an increase in their food and alcohol consumption. Some participants also sideways mentioned a decrease in their eating habits. One participant mentioned under the code "overworking," that they had engaged with working more after the traumatic event. Lastly, under the code "sleeping patterns," most participants expressed that they felt a sense of insomnia and restlessness at night. Only P4 narrated that he engaged in more sleeping, whereas the rest mentioned a disturbance in trying to fall asleep.

Table 52: Physical Symptoms

	Responses			
		N	Percentage	Percentage of Cases
Physical symptoms ^a	Short of breath	2	4,0%	8,0%
	Chest pains	3	6,0%	12,0%
	Heart palpitations	8	16,0%	32,0%

	Headaches	6	12,0%	24,0%
	Restlessness	12	24,0%	48,0%
	Sleeplessness	19	38,0%	76,0%
Total		50	100,0%	200,0%

a. In the qualitative capturing, participants did not mention any physical symptoms in the interviews.

5.8 INTERPRETATION OF THE RESULTS

This research was about two prominent concepts, namely EI in trauma, and coping with trauma, having PTSD symptoms. "EI" is defined as a dispositional characteristic or the ability to understand, accurately perceive, express, and regulate emotions (Mayer, & Salovey, 1997). "Coping behaviour" can be defined as being the same as "dealing with trauma" (Folkman, *et al.*, 1986). According to N. Sam (2013a), "coping behaviour" is a trait "ensued whenever coping with taxing or hazardous scenarios." "Coping" is the process to manage different challenges of a personal nature that can be threatening, defiant, or otherwise regarded as challenging or demanding. Spurred on Coleman's theory/view that EI and PTSD are parallel with each other, some researchers support the fact that specific PTSD symptoms are linked to a higher EI (Khatuna, 2015).

The danger is that researchers want to create a new concept/theory whilst it already exists (Zeidner, *et al.*, 2006), for example, to put the term "stress vulnerable" (and other relative constructs) under the EI umbrella. To look at it from another perspective, some of the current stress research could maybe have missed some important differences between individuals. What this study thus tried to establish, arises from the research question, put in other words, "To what degree does EI enhance in a trauma situation, so that victims with a higher EI can cope and deal better with PTSD?" Based on a quantitative and qualitative analysis of the responses received from the victim cohort, it can be concluded that it does *not* support the research question. The analysis of the data supports the outcome of the research done by Zeidner, *et al.* (2006, p. 120) where they conclude: "Our review of the EI literature also demonstrates the vague conceptual relation between EI and 'adaptive coping." Therefore, it can be alleged that the EI of the victim is not a significant factor when coping in the aftermath of a violent/traumatic crime. However, it may be possible for coping skills to emerge from the underlying mediation of EI. Therefore, EI should not be completely excluded from the notion of coping skills following a traumatic event.

This research concludes that the null hypothesis is true. There is no relationship between trait EI and PTSD.

The reason for this theorem is that the outcome of this research does not point out that victims with higher EI scores will have higher rates of coping skills and also deal better with PTSD throughout trauma situations. Thus, there are no acceptable criteria for the degree of EI scores and victim coping skills to deal better with PTSD throughout trauma situations. The results show that specific handling strategies are poor related to EI. It is thus appreciable that emotions should be understood in the specific context where it stands. Although the EI concept is a superficial attraction, the bigger part of the research shows that one cannot identify EI with emotional adaptability.

As a result, the researcher in this study is sceptical about the premise that EQ can be regarded as a central "skill" when dealing with a traumatic event.

5.9 SUMMARY

The findings of this research were outlined in broad terms. Readers gained an insight into the experiences of trauma victims from the qualitative data. It was also indicated why the researcher does not agree with earlier researchers that EI is a "skill" to cope with traumatic events (Rajan, Thomas, & Vidya, 2021; Liu, & Boyatzis, 2021).

CHAPTER 6

IN CONCLUSION:

SUMMARY, RECOMMENDATIONS, AND LIMITATIONS

6.1 INTRODUCTION

The well-known Victor Frankl, a survivor of a Nazi camp, stated that "an abnormal reaction to an abnormal situation is normal behaviour" (Frankl, 1964, p. 18).

This chapter concludes the research. An overview of the research is given, followed by a summarised discussion and findings of each chapter. Limitations of the research are discussed and recommendations for future research are made.

6.2 SUMMARY OF THE STUDY

Chapter 1 provided the framework for this dissertation, assessing the relation between EI and PTSD. Chapter 2 was a comprehensive literature review that supplied the reader with a broad overview of the literature that was used in this study. Chapter 3 explained how the research was constructed and also gave a perspective where it stems from. Both the theoretical (where the study comes from) and conceptual (what this study is about) concepts were discussed in detail. Chapter 4 outlined the research design, sampling technique, tool for data collection, study population, and the methods of measuring the outcomes used. The issues of reliability and validity were described, as well as the ethical considerations to protect participants. In chapter 5, the survey instrument that was developed for this research as well as the outcome of the questionnaire (quantitative) and interviews (qualitative) were revealed (Supplement 1). In chapter 6, the findings, recommendations, and limitations of the research are outlined.

6.3 FINDINGS

Although some of the participants in the qualitative sample experienced trauma many years ago, they still get emotional when discussing their ordeal. One of the participants in the quantitative questionnaire wrote at the end: "And now I want to cry about it." Two (n=2) of the participants who emigrated to Australia, elaborated in their questionnaires about their different emotions when they were in South Africa and how they feel now in Australia. They feel safer in their present environment.

Interesting results were obtained from the research. The dominant variable is coping, rather than EI, as discussed in chapter 5.

6.4 CONCLUSIONS

This study fills its purpose. It reflects the way in which trauma victims cope with their every-day life after going through a life-changing event. It also is of interest to the field of Psychology, meaning that according to this study, *coping*, and not *EI*, is the variable to work within therapy.

6.5 RECOMMENDATIONS

A study for a more diverse sample where age, culture, and more men are represented, can make research more in-depth. It will also be interesting to see how South Africans who relocate to other countries, cope with the fact that a traumatic event happened to them. Do they think they are safer now?

6.6 LIMITATIONS

All of the participants were willing to complete the quantitative questionnaire, but most of them were not eager to participate in the qualitative sample. One reason for some who did not want to participate in the qualitative part of the research can be that they do not trust their emotions when opening up to an interviewer. The researcher observed that for them it is still too overwhelming to talk about the traumatic event and what happened. One can only think of the cliché: *You will never forget what happened, you only learn to live with it.* Although the qualitative sample size was enough to obtain the necessary outcome, it would be interesting to see what the outcome would be with a bigger sample.

The diversity of the sample size was not what was expected and particular it was significantly smaller than predicted by the researcher. It may be that some do not have access to the internet and Facebook, it may be that they feel that what happened to them is not something to talk about, or it happens every day, so their experience is not so unusual.

Facebook's response to trauma and victim groups was zero. This may be because Facebook users are overwhelmed by requests to participate in research. The data that were obtained, were mostly canvassed from family and friends, as well as in their friendship circles where trauma occurred.

6.7 RECOMMENDATION FOR FUTURE RESEARCH

Further research is needed to determine how victims of traumatic events have handled their life-changing experiences. Most South Africans are so used to crime and trauma that they do not anymore observe the pain of people who have gone through a traumatic event.

A comparison of the emotional experience of different trauma types can be the subject of further studies. (See Table 43).

Another recommendation is to further examine a broader range of trauma symptoms, particularly in relation to PTSD. It would be helpful in future research on PTSD and emotional responses. (See Table 44 and Table 45).

This research does not examine the relationship between the attributes and emotional responses during and after trauma. The results suggest different types of trauma causes different levels of negative emotions during and after the event. Further research is required in order to examine these relationships. (See Table 48).

A further future study can be why older people are more willing to deal with their experiences than younger people. Twenty (69%) of the participants were 50years and older (Table 4).

A further recommendation is to do research on why only 72.4% (n=21) of these trauma incidents were reported to the SAPS. As no question was asked about why participants did not report it to the SAPS, the answer why 24.2% did not report it, is not clear.

Another recommendation is to the question that should be asked is why people are more willing to seek counselling with a spiritual/religious counsellor than with a psychologist. See Table 14.

6.8 SUMMARY

This was a personal journey for me, realising just how precious every human emotion is. When in a situation where trauma is so overwhelming, like when my husband was murdered, you feel that you are the only one with this enormous "hole" in your life. As mentioned in chapter 1, I realised that there is more to trauma than only your own emotion and loss. We are all the same in our basic needs, but so different in how we journey on this road called life, and cope with adversity and as we saw in this dissertation, extremely traumatic experiences.

REFERENCES

- Aldwin, C. M., & Yancura, L. A. (2004). Coping processes (review of *coping processes*). In Spielberger, C. D. (Ed.), *Encyclopedia of applied psychology* (507-510). Cambridge: Elsevier.
- Allarakha, S. (2021). What are the 3 types of trauma? Retrieved from: https://www.medicinenet.com/what_are_the_3_types_of_trauma/article.htm.
- APA (American Psychiatric Association). (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, D.C.: American Psychiatric Association.
- Ananda, B., Amstadter, A. B., & Vernon, L. L. (2009). Emotional reactions during and after trauma: A comparison of trauma types. *Journal of Aggression, Maltreatment & Trauma*, *16*(4), 391-408. doi: 10.1080/10926770801926492.
- Andrews, T. (2012). What is Social Constructionism? *The Grounded Theory Review*, 11(1), 39-46.
- Armstrong, A. R., Galligan, R. F., & Critchley, C. R. (2011). Emotional intelligence and psychological resilience to negative life events. *Personality and Individual Differences*, 51(3), 331-336. doi: 10.1016/j.paid.2011.03.025.
- Bada, S. (2015). *Constructivism learning theory: A paradigm for teaching and learning*. Kano: Department of Psychology Federal University of Education. Retrieved from: https://iosrjournals.org/iosr-jrme/papers/Vol-5%20Issue-6/Version-1/I05616670.pdf.
- Barbey, A., Patterson, R., & Sloman, S. (2021). Scientists look beyond individual brain to study collective mind. Retrieved from: https://www.miragenews.com/scientists-look-beyond-individual-brain-to-656986/.
- Bar-On, R. (2006). The Bar-On model of emotional-social intelligence (ESI). *Psicothema*, *18* Suppl, 13-25.
- Baumeister, R., & Leary, M. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529. doi: https://doi.org/10.1037/0033-2909.117.3.497.
- Berglund, C. (1990). Australian standards for privacy and confidentiality of health records in research: Implications of the Commonwealth Privacy Act. *Medical Journal of Australia*, *152*(12), 664-669. doi: 10.5694/j.1326-5377.1990.tb125429.x.
- Bless, C., Higson-Smith, C., & Sithole, S. L. (2013). Fundamentals of social research methods: An African perspective. Cape Town: Juta.

- Bohleber, W. (2010). The development of trauma theory in psycho-analysis. In Bohleber, W. (Ed.), *Destructiveness, intersubjectivity and trauma: The identity crisis of modern psychoanalysis* (1st ed.) (pp. 75-100). London: Karnac.
- Bookshelf. (n.d.). *Covid-19 information: Trauma-informed care in behavioral health services*. Retrieved from: www.ncbi.nlm.nih.gov/books/NBK207191/.
- Brady, K., Killeen, T., Brewerton, T., & Lucerini, S. (1999). *Comorbidity of psychiatric disorders and Posttraumatic Stress Disorder*. Charleston: University of South Carolina. Retrieved from: https://www.psychiatrist.com/wp-content/uploads/2021/02/24280_comorbidity-psychiatric-disorders-posttraumatic-stress.pdf.
- Bryman, A. E. (2012). Social research methods (4th ed.). New York: Oxford University Press.
- Businesstech, S. (2016). Massive rise in Facebook users in South Africa. Retrieved from: https://businesstech.co.za/news/trending/128584/massive-rise-in-facebook-users-in-south-africa/.
- Chapman, M., & Hailstone, P. (2011). *The Emotional intelligence pocketbook* (2nd ed.). Hampshire: Management Pocketbooks.
- Ciarrochi, J., Chan, A., Caputi, P., & Roberts, R. (2001). Emotional intelligence in everyday life: A scientific inquiry. (Book review of *Emotional intelligence in everyday life: A scientific inquiry.*). In Ciarrochi, J., Forgas, J. P., & Mayer. J. D. (Eds.), *Measuring emotional intelligence* (pp. 25-45). London: Psychology Press.
- Clegg, S., & Kornberger, M. (2003). Modernism, postmodernism, management and organization theory. *Post Modernism and Management*, (pp. 57-88). Research in the Sociology of Organizations, Vol. 21. Bingley: Emerald Group Publishing Limited. doi: 10.1016/s0733-558x(03)21003-x.
- CPF (Community Police Forum). (n.d.). *What is community policing?* Retrieved from: https://cvwa.org.za/community-police-forum/.
- Cortina, J. M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78(1), 98-104. doi: 10.1037//0021-9010.78.1.98.
- Cottone, R. R., 1992. *Theories and paradigms of counseling and psychotherapy*. Boston: Allyn and Bacon.
- Counselling Connection. (2007). *Gestalt therapy: Overview and key concepts*. Retrieved from: https://www.counsellingconnection.com/index.php/2007/10/16/gestalt-therapy/.

- Chryssochoou, X. (2000). Multicultural societies: Making sense of new environments and identities. *Journal of Community & Applied Social Psychology*, *10*(5), 343-354. doi: 10.1002/1099-1298(200009/10)10:5<343::aid-casp593>3.0.co;2-5.
- Creswell, J. W. (2008). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (3rd ed.). Upper Saddle River, NJ: Merrill.
- Cronje, J. (2019). Predictors of Emotional Intelligence amongst University Students (Master's dissertation, University of the Free State, Bloemfontein, South Africa).
- Debois, S. (2016). Survey anyplace: Questionnaires returning personalized advice. Retrieved from:

 https://surveyanyplace.com/?utm_source=bing&utm_medium=cpc&utm_campaign=b randed&msclkid=52205d7fef341bd7e10a3cacfda87547.
- Department of Health South Africa. (2015). *Ethics in health research, principles, processes and structure*. Retrieved from: https://www.ul.ac.za/research/application/downloads/DoH%202015%20Ethics%20in%20Health%20Research%20Guidelines.pdf.
- De Vos, A. S., & Strydom, H. (1998). Research at grass roots: A primer for the caring professions. Pretoria: J. L. Van Schaik.
- Emmerling, R. J., Shanwal, V. K., & Mandal, M. K. 2008. *Emotional intelligence*. New York: Nova Science Publishers.
- Emmett, T., & Butchart, A. (2000). *Behind the mask: Getting to grips with crime and violence in South Africa*. Pretoria: HSRC Publishers.
- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. J. (1986). Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, 50(5), 992-1003. doi: 10.1037/0022-3514.50.5.992.
- Folkman, S., Lazarus, R., Gruen, R., & DeLongis, A. (1986). Appraisal, coping, health status, and psychological symptoms. *Journal of Personality and Social Psychology*, *50*(3), 571-579. doi: 10.1037/0022-3514.50.3.571.
- Frankl, V. (1964). Man's search for meaning. Thetford: Hodder and Stoughton.
- Fulton, S., & Krainovich-Miller, B. (2010). Gathering and appraising the literature. In Lo-Biondo-Wood, G., & Haber, J. (Eds.), *Nursing research* (7th ed.). St Louis: Mosby Elsevier.

- Galbin, A. (2014). An introduction to Social Constructionism. Iasi Experts Projects Publishing House. Retrieved from: https://www.researchgate.net/profile/Alexandra-Galbin/publication/283547838_AN_INTRODUCTION_TO_SOCIAL_CONSTRUCTIONISM/links/563e436d08ae34e98c4d8ed1/AN-INTRODUCTION-TO-SOCIAL-CONSTRUCTIONISM.pdf.
- Garland, C. (1998). *Understanding trauma: A psychoanalytical approach*. London: Karnac.
- Gergen, K. (1973). Social psychology as history. *Journal of Personality and Social Psychology*, 26(2), 309-320. doi: 10.1037/h0034436
- Gergen, K. (1990). Toward a postmodern psychology. *The Humanistic Psychologist*, *18*(1), 23-34. doi: 10.1080/08873267.1990.9976874
- Ghose, T. (2013). Emotional smarts tied to general IQ. Retrieved from: https://www.livescience.com/26486-emotional-intelligence-tied-to-general-iq.html.
- Giller, E. (1999). What is psychological trauma. Sidran Institute. Retrieved from: https://www.sidran.org/wp-content/uploads/2019/04/What-Is-Psychological-Trauma.pdf.
- Goleman, D. (1996). Emotional intelligence: Why it can matter more than IQ. *Learning*, 24(6), 49-50.
- Goleman, D. (2011). *Emotional intelligence: Why it can matter more than IQ*. New York: Bantam Books.
- Govline. (2019). Functions of South African Police Service. *SA Government information website*. Retrieved from: govline.co.za.
- Grant, C., & Osanloo, A. (2014). Understanding, selecting, and integrating a theoretical framework in dissertation research: Creating the blueprint for your "house." *Administrative Issues Journal Education Practice and Research*, 4(2): 12-26. doi: 10.5929/2014.4.2.9.
- Gray, J., Grove, S., & Sutherland, S. (2017). *The practice of nursing research: Appraisal, synthesis and generation of evidence* (8th ed.). St Louis, MO: Elsevier.
- Greenberg, M. S., & Ruback, R. B. (1992). *After the crime: Victim decision making*. New York: Plenum Press.
- Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? *Field Methods*, *18*(1), 59-82. doi: 10.1177/1525822x05279903.

- Hamilton, L. (2006). *Mistral's kiss*. New York: Random House. Retrieved from: https://rachelintheoc.com/2015/03/trauma-survivors-have-symptoms-instead-of-memories-by-guest-linneabutlermft/.
- Hansen, K., Lloyd, J., & Stough, C. (2009). Emotional intelligence and clinical disorders. In Parker, J., Saklofske, D., & Stough, C. (Eds.), *Assessing emotional intelligence* (pp. 219-237). Boston: Springer.
- Harris, S., & Robinson Kurpius, S. (2014). Social networking and professional ethics: Client searches, informed consent, and disclosure. *Professional Psychology: Research and practice*, 45(1), 11-19. doi: 10.1037/a0033478.
- Harvey, M. (1996). An ecological view of psychological trauma and trauma recovery. *Journal of Traumatic Stress*, *9*(1), 3-23. doi:10.1002/jts.2490090103.
- HPCSA (Health Professions Council of South Africa). (2016). *Ethics booklet*. (6th ed.). Pretoria: Health Professions Council of South Africa. Retrieved from: https://www.hpcsa.co.za/Uploads/Professional_Practice/Ethics_Booklet.pdf.
- Hein, G. (1991). Constructivist learning theory. *Exploratorium*. Retrieved from: https://www.exploratorium.edu/education/ifi/constructivist-learning.
- Honebein, P. (1996). Seven goals for the design of Constructivist learning environment: In Wilson, B. G. (Ed.), *Constructivist learning environments* (pp. 11-24). Englewood Cliffs: Educational Technology Publications.
- Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of event scale: A measure of subjective stress. *Psychosomatic Medicine*, 41(3), 209-218. doi: 10.1097/00006842-197905000-00004.
- Howitt, D., & Cramer, D. (2005). *Introduction to research methods in psychology*. Harlow: Prentice Hall.
- Huffman, M., & Miller, C. (2013). *Evidence-based health coaching for healthcare providers* (3rd ed.). Winchester: Miller & Huffman Outcome Architects.
- HSRC (Human Sciences Research Council). n.d. *Code of research ethics*. Retrieved from: http://www.hsrc.ac.za/en/about/research-ethics/code-of-research-ethics.
- Hunt, N., & Evans, D. (2004). Predicting traumatic stress using emotional intelligence. *Behaviour Research and Therapy*, 42(7), 791-798. doi: 10.1016/j.brat.2003.07.009.
- Husserl, E. (1962). *Ideas: General introduction to pure phenomenology*. Translated by W. R. B. Gibson. London: Macmillan.

- Hyer, L. (2019). *Trauma victim: Theoretical issues and practical suggestions*. London: Routledge.
- Institute for Economics and Peace. (2017.) Global Peace Index 2017 World. Retrieved from: https://reliefweb.int/report/world/global-peace-index-2017.
- Kaplan, H., Sadock, B., & Grebb, J. (1994). *Synopsis of psychiatry*. Baltimore: Williams & Wilkins.
- Kelley, T. L. (1927). *Interpretation of educational measurements*. New York: World Book Company.
- Kessler, R., Sonnega, A., Bromet, E., Hughes, M., & Nelson, C. B. (1995). Posttraumatic stress disorder in the national comorbidity survey. *Archives of General Psychiatry*, 52(12), 1048-1060. doi: 10.1001/archpsyc.1995.03950240066012.
- Khatuna, M. (2015). Relationship between Emotional Intelligence and Post-Traumatic Stress. Retrieved from: https://ge.boell.org/sites/default/files/uploads/2015/11/khatuna.pdf.
- Kübler-Ross, E. (1969). On death and dying (40th ed.). London: Routledge.
- Kuhn, T. (1970). *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- Leeds-Hurwitz, W. (2009). Social construction of reality. In Littlejohn, S. W., & Foss, K. (Eds.), *Encyclopaedia of communication theory*, Vol. 1 (pp. 892-895). Thousand Oaks, CA: Sage. doi: 10.4135/9781412959384.n344.
- Leedy., P. D. (1997). *Practical research: Planning and design* (6th ed.). New Jersey: Prentice-Hall.
- Leedy, P. D., & Ormrod, J. 2001. *Practical research: Planning and design*. 7th Ed. Upper Saddle River: Merrill Prentice Hall.
- Legg, T.J. (2020). Geropsychiatry: Caring for trauma survivors in older adulthood. American Association of Nurse Practitioners, Annual Conference, New Orleans, LA.
- Levine, P. (2005). *Healing trauma: Restoring the wisdom of your body*. Sounds True Audio Learning Course. Retrieved from: https://www.abebooks.com/9781591793298/Healing-Trauma-Restoring-Wisdom-Body-1591793297/plp.
- Limm, H., Angerer, P., Heinmueller, M., Marten-Mittag, B., Nater, U., & Guendel, H. (2010). Self-perceived stress reactivity is an indicator of psychosocial impairment at the workplace. *BMC Public Health*, *10*(1), 252. doi: 10.1186/1471-2458-10-252

- Liu, H., & Boyatzis, R. (2021). Focusing on resilience and renewal from stress: The role of Emotional and Social Intelligence competencies. *Frontiers in Psychology*, *12*, 11 pages. doi: 10.3389/fpsyg.2021.685829.
- Mayer, J. D., & Salovey, P. 1997. What is emotional intelligence? In Salovey, P., & Sluyter,D. (Eds.), *Emotional development and emotional intelligence: Implications for educators* (pp. 3-31). New York: Basic Books.
- Mayer, J., Salovey, P., & Caruso, D. (2004). *Mayer-Salovey-Caruso emotional intelligence test*. Toronto: Multi Health Systems. Retrieved from: https://www.talentlens.com.au/userfiles/MSCEIT%20Resource%20Sample%20Report.pdf.
- McGaghie, W., Bordage, G., & Shea, J. (2001). Problem statement, conceptual framework, and research question. *Academic Medicine*, 76(9), 923-924. doi: 10.1097/00001888-200109000-00021.
- Mckendrick, B., & Hoffmann, W. (1990). *People and violence in South Africa*. Cape Town: Oxford University Press.
- McKinley, J. (2015). Critical argument and writer identity: Social Constructivism as a theoretical framework for EFL academic writing. *Critical Inquiry in Language Studies*, 12(3), 184-207. doi: 10.1080/15427587.2015.1060558.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco: John Wiley & Sons.
- Monroe, S. M., & Simons, A. D. (1991). Diathesis-stress theories in the context of life stress research: Implications for the depressive disorders. *Psychological Bulletin*, *110*(3), 406-425. doi: 10.1037/0033-2909.110.3.406.
- Moreno, M., Goniu, N., Moreno, P., & Diekema, D. (2013). Ethics of social media research: Common concerns and practical considerations. *Cyberpsychology, Behavior, and Social Networking*, *16*(9), 708-713. doi: 10.1089/cyber.2012.0334.
- Motta, R., Kefer, J., Hertz, M., & Hafeez, S. (1999). Initial evaluation of the secondary trauma questionnaire. *Psychological Reports*, 85(3), 997-1002. doi: 10.2466/pr0.1999.85.3.997.
- Mouton, J., & Marais, H. C. (1990). *Basic concepts in the methodology of the social sciences*. Pretoria: Human Sciences Research Council.
- N. Sam, M. S. (2013a). Coping behaviour. *Psychology Dictionary*. Retrieved from: https://psychologydictionary.org/coping-behaviour/.

- N. Sam, M. S. (2013b). Violence. *Psychology Dictionary*. Retrieved from: https://psychologydictionary.org/violence/.
- N. Sam, M. S. (2013c). Modernism. *Psychology Dictionary*. Retrieved from: https://psychologydictionary.org/modernism/.
- Newman, F., & Holzman, L. (2000). Against againstism. *Theory & Psychology*, 10(2), 265-270. doi: 10.1177/0959354300102006.
- NIMH (National Institute of Mental Health). (n.d.). *Coping with traumatic events*. Retrieved from: https://www.nimh.nih.gov/health/topics/coping-with-traumatic-events.
- Novopsych. (n.d.). *The impact of Event Scale-Revised (IES-R)*. Retrieved from: https://novopsych.com.au/wp-content/uploads/2021/03/Impact-of-Event-Scale-Revised-IES-R-PSD.pdf.
- Numbeo. (2020). Crime index by country 2020. Retrieved from:

 https://www.numbeo.com/crime/rankings_by_country.jsp?title=2020&displayColumn
 =0.
- Palinkas, L., Horwitz, S., Green, C., Wisdom, J., Duan, N., & Hoagwood, K. 2015. Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544.
- Palys, T. 2008. Purposive sampling. In *The Sage Encyclopedia of Qualitative Research Methods* (pp.697-698) (2nd ed.). Los Angeles: L. M. Given.
- Peterson, K. C., Prout, M. F., & Schwarz, R. A. (1993). *Post-traumatic stress disorder: A clinician's guide* (3rd ed.). New York: Plenum Press.
- Petrides, K. (2007). Obtaining the TEIQue. *London Psychometric Laboratory*. Retrieved from: https://psychometriclab.com/obtaining-the-teique/.
- Petrides, K. (2009). Psychometric properties of the trait emotional intelligence questionnaire (TEIQue). In Stough, C., Saklofske, D. H., & Parker, J. (Eds.), *Assessing emotional intelligence: Theory, research, and applications* (pp. 85-101). Dordrecht: Springer. doi: 10.1007/978-0-387-88370-0_5.
- Petrides, K., Pita, R., & Kokkinaki, F. (2007). The location of trait emotional intelligence in personality factor space. *British Journal of Psychology*, *98*(2), 273-289. doi: 10.1348/000712606x120618.
- Potter, J. (2000). Post-cognitive psychology. *Theory & Psychology*, *10*(1), 31-37. doi: 10.1177/0959354300010001596.

- Price, J., & Murnan, J. (2004). Research limitations and the necessity of reporting them. American Journal of Health Education, 35(2), 66-67. doi: 10.1080/19325037.2004.10603611.
- PsychGuides.com. (n.d.). *Trauma symptoms, causes and effects*. Retrieved from: https://www.psychguides.com/trauma/.
- Rajan, S., Thomas, M., & Vidya, P. (2021). Emotional Intelligence as a predictor of Police operational stress: A pilot study. *Journal of Police and Criminal Psychology*, *36*(3), 568-578. doi: 10.1007/s11896-021-09456-9.
- Reber, A., Reber, E., & Allen, R. (2009). *The penguin dictionary of psychology* (3rd ed.). London: Penguin Books.
- Roller, M., & Lavrakas, P. (2015). *Applied qualitative research design*. New York: The Guilford Press.
- Ruback, R. B. (1994). Advice to crime victims: Effects of crime, victim, and advisor factors. *Criminal Justice and Behavior*, 21(4), 423-442.
- Saakvitne, K., & Pearlman, L. (1996). Transforming the pain. New York: W. W. Norton.
- Salovey, P., Bedell, B., Detweiler, J., & Mayer, J. (2000). Current directions in emotional intelligence. In Lewis, M., & Haviland-Jones, J. M. (Eds.), *Handbook of emotions* (2nd ed., pp. 504-520). New York: Guilford Press.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185-211. doi: 10.2190/DUGG-P24E-52WK-6CDG.
- Schmidt, J. E., & Andrykowski, M. A. (2004). The role of social and dispositional variables associated with emotional processing in adjustment to breast cancer: An internet-based study. *Health Psychology*, 23(3), 259-266. doi: 10.1037/0278-6133.23.3.259.
- Smith, J., & Osborn, M. (2007). Interpretative phenomenological analysis. In Smith, J. (Ed.), *Qualitative psychology: A practical guide to research methods* (2nd ed., pp. 53-80). Los Angeles: Sage.
- Stansfeld, F. D. (2002). Beyond the victim: The traumatic effects of violent crime: An educational psychological perspective (Master's dissertation, University of South Africa, Pretoria, South Africa).
- Stats SA (Statistics South Africa). (2018). Statistical release: P0341: Victims of crime. Retrieved from: statssa.gov.za.

- Steward, M., Reutter, L., Letourneau, N., & Makwarimba, E. (2009). *A support intervention to promote health and coping among homeless youths*. The Canadian Journal of Nursing Research. Retrieved from:

 https://www.researchgate.net/publication/26712866_A_Support_Intervention_to_Promote_Health_and_Coping_Among_Homeless_Youths.
- Struwig, F., & Stead, G. (2001). *Planning, designing and reporting research*. Cape Town: Pearson Education South Africa.
- Stueve, A., Dohrenwend, B., & Skodol, A. (1998). Relationships between stressful life events and episodes of major depression and nonaffective psychotic disorders: Selected results from a New York risk factor study. In Dohrenwend, B. (Ed.), *Adversity, stress, and psychopathology* (pp. 341-357). New York: Oxford University Press.
- Thompson, K. (2016). From modernity to post-modernity. Retrieved from: https://revisesociology.com/2016/04/09/from-modernity-to-post-modernity/.
- Thompson, R. (2015). Trauma survivors have symptoms instead of memories by guest @LinneaButlerMFT. 15 March 2015. Retrieved from: https://rachelintheoc.com/2015/03/trauma-survivors-have-symptoms-instead-of-memories-by-guest-linneabutlermft/.
- Tolegenova, A. A., Jakupov, S. M., Chung, M. C., Saduova, S., & Jakupov, M. S. 2012. A theoretical formation of emotional intelligence and childhood trauma among adolescents. *Procedia: Social and Behavioural Sciences* 69, 1891-1894.
- VA.gov. (Veterans Affairs). (n.d.). *PTSD basics*. Retrieved from: https://www.ptsd.va.gov/understand/what/ptsd_basics.asp.
- Van der Spuy, F. W. (1996). Trauma in South Africa: Trauma and its research some perspectives. *South African Journal of Epidemiological and Infection*, *11*(2): 34-36.
- Vinney, C. (2019). Social Constructionism definition. Retrieved from: https://www.thoughtco.com/social-constructionism-4586374.
- Wagner, C., Aguirre, E., & Sumner, E. (2016). The relationship between Instagram selfies and body image in young adult women. *First Monday (21)*9. doi: https://doi.org/10.5210/fm.v21i9.6390.

- Weiss, D., & Marmar, C. (1996). the impact of the event scale revised. In Wilson, J., & Keane, T. (Eds), *Assessing psychological trauma and PTSD* (pp. 399-411). New York: Guilford.
- Wolff, S. (2005). Emotional competence inventory (ECI): Technical manual. Hay Group, McClelland Center for Research and Innovation. Retrieved from: https://www.eiconsortium.org/pdf/ECI_2_0_Technical_Manual_v2.pdf.
- Wyatt, G., Thames, A., Simbayi, L., Stein, D., Burns, J., & Maselesele, M. (2017).

 Trauma and mental health in South Africa: Overview. *Psychological Trauma: Theory, Research, Practice, and Policy*, 9(3), 249-251. doi: 10.1037/tra0000144.
- Zeidner, M., Matthews, G., & Roberts, R. D. (2006). *Emotional intelligence, adaptation, and coping*. Retrieved from:

 https://www.researchgate.net/publication/292587716_Emotional_intelligence_adaptation_and_coping/.

SUPPLEMENT 1

QUESTIONNAIRE TO BE COMPLETED

BY RESEARCH PARTICIPANTS

Participation in the research pertaining to "Dealing with trauma in a South African

context: Can emotional intelligence enhance coping behaviour?"

I am currently enrolled for a Master's degree in Psychology at the University of South Africa.

As part of the requirements for the completion of this degree, a research project is being un-

dertaken. You are invited to participate in this research conducted by Thia Du Plooy.

Your participation will involve a questionnaire that will provide an understanding of the dif-

ferences in **affects** that victims experience after a traumatic violent crime.

AFFECTS of violent crime

"Affects" (as a noun) refers to feelings, emotions, or specific emotional responses.

There are no known risks associated with this research and all information gathered will be

treated confidentially. Your participation in this research is completely voluntary and you

may at any point withdraw your consent to further partake in this study.

If you have any questions or concerns about this study, please contact Thia Du Plooy on 082

455 0310.

Kind Regards

Thia Du Plooy

Research Student

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CONSENT FORM

I have been informed as to the purpose of this study.	YES NO
I hereby agree to participate in the above study.	YES NO
I agree to complete the questionnaire for research purposes.	YES NO
I understand that my confidentiality is protected.	YES NO
Please complete the details below in case I need to clarify anything	g with you.
NAME:	
ADDRESS:	
E-MAIL:	
TELEPHONE NR:	
SIGNED:	

You are most welcome to contact me for the results of this research.

QUESTIONNAIRE

SECTION 1: BIOGRAPHICAL INFORMATION

PLEASE COMPLETE ALL THE QUESTIONS

1.	Your gender
	Male
	Female
2.	Your age
	25-29 years
	30-39 years
	40-49 years
	50+ years
3.	Your highest qualification/grade passed
	Pre-matric
	Matric
	Graduate
	Post-Graduate
4.	Income bracket (per month)
	R0-R9,999
	R10,000-R19,999
	R20,000-R29,999
	R30,000-R40,000
	More than R40,000
5.	Where do you live?
	Rural area
	City
	Township
	Farm

6.	Have you previously experienced a violent trauma incident?
	YES
	NO
7.	Were you personally involved in the traumatic incident?
	YES
	NO
8.	What was the incident that caused the trauma?
	Murder
	Hi-jacking
	Rape
	Robbery
	Suicide
	Gunshot
	Stabbing
	Other (please specify):
9.	When did the incident happen?
	Less than 3 months ago
	6-12 months ago
	Longer than 12 months ago
10.	What is your relationship to the person that experienced the trauma incident?
	Spouse
	Partner
	Friend
	Parent
	Child
	Other (Please specify):

11. Were you, the trauma victim, injured?

	YES
	NO
12.	. Were you hospitalised after the trauma incident?
	YES
	NO
13.	. Who was the first person you asked for advice/guidance/counselling after the
	trauma incident?
	Trauma counsellor
	Friend
	Parent
	Colleague
	Psychologist
	Spiritual/Religious counsellor
	Other (Please specify):
	No one
14.	How long after the trauma incident did you seek advice/guidance/counselling?
	Immediately
	Within a week
	1-2 months
	3-6 months
	7-12 months
	Did not seek advice/guidance/counselling
15.	Did you experience any of the following after the trauma incident? (You can
	choose more than 1 if applicable.)
	Ate more than before.
	Ate less than before.
	Consumed more alcohol than before.
	Consumed less alcohol than before.
	Consumed less alcohol than before.

	Smoked less than before.
	Worked/studied more than before.
	Worked/studied less than before.
	Was more aggressive than before.
	Shopped more.
	Other (Please specify):
16	. Physical symptoms developed after the trauma. (You can choose more than 1 is
	applicable.)
	Short of breath
	Chest pains
	Heart palpitations
	Headaches
	Restlessness
	Sleeplessness
	Other (Please specify):
	Did the trauma incident affect your relationship with family and friends?
	YES
	NO
18.	If question 17 is NO, skip question 18. Which of the following describes the
_	change in your relationship with family and friends?
	The incident drew us closer together.
	The incident pulled us apart.
	I experienced more conflict/tension between family members.
	Other (Please specify):
10	Did was valenate after the two in the second
19	Did you relocate after the trauma incident?
	YES
Ц	NO

20. After the trauma incident, did you take more precautions to protect yourself?

□ YES					
□ NO					
21. Did you	report the inci	dent to the	South Africa	an Police S	ervice?
□ YES					
□ NO					
22. If question	on 21 is NO, sk	cip question	22. In your	dealings w	ith the South African
Police Se	ervice and the	judicial syst	tem, did you	experience	e any of the following?
Mark yo	ur choice on tl	ne scale belo	ow.		
(1=Stron	gly Disagree; 2	2=Disagree;	; 3=Uncertai	n; 4=Agre	e; 5=Strongly Agree)
They are	doing a good	job			
1	2	3	4	5	
L			L	L	
I was tre	ated with dign	ity			
1	2	3	4	5	
			1	l	
I felt like	the criminal				
1	2	3	4	5	
	1			1	

SECTION 2: TRAIT EMOTIONAL INTELLIGENCE QUESTIONNAIRE (TEIQue)

INSTRUCTIONS: Below are statements (1-27) designed to assess your TRAIT EMO-TIONAL INTELLIGENCE. Answer each statement by circling one of the five options provided on the right side that best shows how much you agree or disagree with each statement below.

5-Point Likert Scale (1=Strongly Disagree; 2=Disagree; 3=Uncertain; 4=Agree; 5=Strongly Agree)

Statements	

Statements	
1. It is easy for me to talk to other people about my feelings.	1 2 3 4 5
2. I am often able to see things from another person's viewpoint.	1 2 3 4 5
3. I am a highly motivated person.	1 2 3 4 5
4. I usually find it difficult to regulate my emotions.	1 2 3 4 5
5. I generally find life enjoyable.	1 2 3 4 5
6. I am good at interacting with my classmates.	1 2 3 4 5
7. Many times, I do not exactly know what emotion I feel.	1 2 3 4 5
8. I feel that I have a number of good qualities.	1 2 3 4 5
9. I often find it difficult to stand up for my rights.	1 2 3 4 5
10. I can make other people feel better when I want to.	1 2 3 4 5
11. Sometimes, I think my whole life is going to face crisis/difficulty.	1 2 3 4 5
12. I often find it easy to adjust when things change in my life.	1 2 3 4 5
13. I feel I am able to adapt/control stress.	1 2 3 4 5
14. I often find it easy to show my affection/love to those close to me.	1 2 3 4 5
15. I normally find it easy to keep myself motivated.	1 2 3 4 5
16. I can control my anger when I want to.	1 2 3 4 5
17. On the whole, I am happy with my life.	1 2 3 4 5
18. I would describe myself as sociable.	1 2 3 4 5
19. I tend to get involved in things I later wish I could get out of.	1 2 3 4 5
20. I often pay a lot of attention to my feelings.	1 2 3 4 5
21. I often feel good about myself.	1 2 3 4 5
22. I tend to accept defeat even if I know I am right.	1 2 3 4 5
23. I am able to change the way other people feel.	1 2 3 4 5
24. I generally believe that things will work out fine in my life.	1 2 3 4 5
25. I find it difficult to bond well even with those close to me.	1 2 3 4 5
26. I am able to adapt/adjust to new environments/settings.	1 2 3 4 5
27. I try to control my thoughts so that I do not worry about things.	1 2 3 4 5

SECTION 3: IMPACT OF EVENTS SCALE-REVISED (IES-R)

TRAUMA INFLUENCE AND POST-TRAUMATIC STRESS SYMPTOMS

The following questionnaire determines the impact of trauma and PTSD symptoms on a victim of a violent crime.

INSTRUCTIONS: Below is a list (1-22) of difficulties that people sometimes have after stressful life events. Please read each of them, and then indicate with a X how distressing each difficulty has been for you – how much you have been distressed by these difficulties.

	DIFFICULTY	Not at	A little	Moderately	Quite a	Extremely
		all	bit		bit	
1.	Any reminder brings					
	back feelings about it.					
2.	I have trouble staying					
	asleep.					
3.	Other things keep me					
	thinking about it.					
4.	I feel irritable and an-					
	gry.					
5.	I avoid letting myself					
	get upset when I think					
	about it or am remind-					
	ed of it.					
6.	I think about it when I					
	do not mean to.					
7.	I feel as if it has not					
	happened or was not					
	real.					
8.	I stay away from re-					
	minders of it.					
9.	Pictures of it are pop-					
	ping into my mind.					
10.	I am jumpy and easily					
	startled.					

DIFFICULTY	Not at	A little	Moderately	Quite a	Extremely
	all	bit		bit	
11. I try not to think about					
it.					
12. I am aware that I still					
have a lot of feelings					
about it, but do not					
deal with them.					
13. My feelings about it					
are kind of numb.					
14. Many times, I find					
myself acting or feel-					
ing that I was back at					
that time.					
15. I have trouble falling					
asleep.					
16. I have waves of strong					
feelings about it.					
17. I try to remove it from					
my memory.					
18. I have trouble concen-					
trating.					
19. Reminders of it cause					
me to have psychical					
reactions, like sweat-					
ing, trouble to breathe,					
nausea, or a pounding					
heart.					
20. I have dreams about it.					
21. I am always feeling					
watchful and on-guard.					
22. I try not to talk about					

DIFFICULTY	Not at	A little	Moderately	Quite a	Extremely
	all	bit		bit	
it.					

THANK YOU FOR YOUR VALUED PARTICIPATION.

SUPPLEMENT 2

Ethical Clearance Form

Ref. No: PERC-16059



Ethical Clearance for M/D students: Research on human participants

The Ethics Committee of the Department of Psychology at Unisa has evaluated this research proposal for a Higher Degree in Psychology in light of appropriate ethical requirements, with special reference to the requirements of the Code of Conduct for Psychologists of the HPCSA and the Unisa Policy on Research Ethics.

Student Name: Matthia Johanna du Plooy **Student no.:** 6529240

Supervisor: Prof P van der Merwe **Affiliation:** Dept. of Psychology, Unisa

Title of project:

DEALING WITH TRAUMA IN A SOUTH AFRICAN CONTEXT: CAN EMOTIONAL INTELLIGENCE ENHANCES COPING BEHAVIOUR?

The proposal was evaluated for adherence to appropriate ethical standards as required by the Psychology Department of Unisa. The application was approved by the Ethics Committee of the Department of Psychology on the understanding that –

- All ethical conditions related to voluntary participation, informed consent, anonymity, confidentiality of the information and the right to withdraw from the research must be explained to participants in a way that will be clearly understood, and a signed letter of informed consent will be obtained from each of the participants in the study.
- Clearance is to be obtained from the hospitals from which the participants are to be
 drawn, and all conditions and procedures regarding access to information for research
 purposes that may be required by these institutions are to be met.

• If further counselling is required in some cases, the participants will be referred to appropriate counselling services.

Signed:

Prof. M Papaikonomou

Date: 2016-10-24

[For the Ethics Committee]

[Department of Psychology, Unisa]

The proposed research may now commence with the proviso that:

- 1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the Unisa Policy on Research Ethics.
- 2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the Psychology Department Ethics Review Committee.
- 3) An amended application should be submitted if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.
- 4) The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines, and scientific standards relevant to the specific field of study.

Please note that research where participants are drawn from Unisa staff, students or data bases requires permission from the Senate Research and Innovation Committee (SENRIC) before the research commences.