

IDENTIFYING AND EVALUATING RISK FACTORS THAT PREDICT TRAUMATIC STRESS SEVERITY IN SOUTH AFRICA

R. VAN WYK

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RESEARCH TREATISE

**Identifying and Evaluating Risk Factors that Predict Traumatic Stress Severity in
South Africa**

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Declaration

I, Rozelle van Wyk (211160741), hereby declare that the research treatise for the degree of Magister Artium in Clinical Psychology is my own work and that it has not previously been submitted for assessment or completion of any postgraduate qualification to another University or for another qualification.

Rozelle van Wyk

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I am dedicating this to Tommie and Talitha Thomasse, my late grandparents, who have –
throughout my life – offered me encouragement, love, quality time, a place of rest, a genuine
smile, support, and an inspiration that cannot be expressed.

To my grandmother – for your role-modelling qualities of compassion, gentleness,
tenderness, and thoughtfulness.

And to my grandfather – for always imparting a seed of knowledge and learning.
The world has more integrity, strength, courage, and love because you lived those qualities.

You were an example to all and a hero to me.

You always were and always are in my heart.

And both your loving spirits sustain me.

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In the words of Albert Einstein:

“Learn from yesterday, live for today, hope for tomorrow.

The important thing is not to stop questioning.”

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List of Abbreviations

APA: American Psychiatric Association

DSM: Diagnostic and Statistical Manual of Mental Disorders

HPCSA: Health Professions Council of South Africa

MVA: Motor Vehicle Accident

N/A: Not Applicable

NGO: Non-Government Organisation

PTSD: Posttraumatic Stress Disorder

PSS: Posttraumatic Stress Severity

RC: Registered Counsellor

SANC: South African Nursing Council

SOC: Sense of Coherence

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Preface

Thank you for reading this research treatise. Before starting, please note the following in order to make it a fluid and enjoyable reading experience.

This research treatise does not follow the traditional format. The initial abstract is the only feature representative of the traditional dissertation format and it provides an overview of the findings included in this document.

Each chapter is written in an article format to facilitate a smoother process toward publication. Chapter 1 provides an overview of the study. Chapter 2 gives a review of some of the screening issues and offers insight into the risk assessment for Posttraumatic Stress Disorder (PTSD) in South Africa. Chapter 3 offers the content validation of a newly constructed risk measure of PTSD obtained from the quantitative and qualitative feedback from expert reviewers. Chapter 4 provides the supplementary content validation of an adapted and improved risk measure of PTSD based on the qualitative feedback from intended administrators or primary health care personnel. This treatise document ends in Chapter 5 providing a summary of the findings and conclusions in this study.

Every chapter includes the sections normally found in a published article: title page, abstract, literature review, context of the research, methodology, results, discussion, conclusions, limitations, recommendations, references, and also any relevant tables and figures. Headers are used to assist the reader to track which chapter (article) is being read.

In writing this treatise document, there was the constant tension to maintain the balance between the independent, stand-alone quality of each chapter, while minimising repetition to facilitate reading this document cover to cover. To achieve this, a compromise was made between some repetitions and cross-referencing between chapters.

Abstract

Background: This study identified, addressed and validated risk factors that can be measured in the peri-traumatic period which may eventually be used in predicting the development of traumatic stress. Many people in South Africa possibly suffer from Posttraumatic Stress Disorder (PTSD) if we consider the extent of trauma exposures that is apparent within the South African population. Traumatized individuals are at risk but may remain undiagnosed and untreated. It makes sense for first line and primary health care practitioners (i.e., not highly qualified psychological practitioners) to screen for risk since they have the initial contact with trauma individuals. A relatively easy screening instrument that can be administered time efficiently would be useful in this regard. The principles of this instrument are that it needs to be objectively measurable, quick and easy to administer. No consistent measure geared towards identifying risk factors in such a manner immediately post trauma currently exists in South Africa.

Objectives: The overall aim was to start a process of designing a psychometric instrument that is valid in predicting the development of traumatic stress. Since this is the initial stage of constructing a new measure, content validity was of utmost importance. It became imperative to ensure that items were not only relevant and appropriate, but also accurate and capable in identifying at-risk individuals. The proposed end goal is to develop effective identification strategies in South Africa geared towards helping victims of traumatic events.

Method: A pilot psychometric questionnaire was compiled using three major international reviews, South African research on known risk factors, and literature on PTSD risk assessment considerations. This preliminary assembled item pool was used as a departure point and evaluated quantitatively as well as qualitatively by expert reviewers who have research and/or clinical experience with PTSD in a South African context. Their feedback resulted in either the omission or the modification of certain items; for some items, further

exploration was recommended. The questionnaire was further scrutinised and modified accordingly after qualitative interviews with and critical feedback from the intended administrators or primary health care professionals, namely Registered Counsellors (RCs) and/or nursing staff from a participating general government hospital and a non-government organisation.

Findings: Expert reviewers did not agree consistently across all the items. At times they rated certain items as relevant according to the necessity of the information rather than with regards to the relevance of the content of the item – in terms of prediction of PTSD. It was also observed that intended administrators did not always agree with expert reviewers.

Key words: Risk factors, South Africa, traumatic stress, posttraumatic stress disorder, psychometric instrument / questionnaire, international reviews, national studies, content validity, expert review, primary health care professionals

Chapter 1: Introduction to Study

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Abstract

Background: This chapter contextualises the overall project and chapters that follow by reviewing the theoretical and conceptual constructs – including risk factor concepts, PTSD definition, and psychometric considerations. Furthermore, the overall rationale and methodology and specific methodological considerations are dealt with, such as the description and analysis of the samples' characteristics.

Objectives: The specific objective of this chapter is to describe the focus of the overall study which is risk assessment and prediction of PTSD in terms of theoretical background, methodology, and sample characteristics.

Method: A variety of sources were consulted to inform the central research questions (i.e., clinicians, academics, and non-professional counsellors). A pilot psychometric questionnaire was compiled using three major international reviews, South African research on known risk factors, and literature on PTSD risk assessment considerations. This preliminary assembled item pool was used as a departure point and evaluated quantitatively as well as qualitatively by expert reviewers who have research and/or clinical experience with PTSD in a South African context. Their feedback resulted in either the omission or the modification of certain items; for some items, further exploration was recommended. The questionnaire was further scrutinised and modified accordingly after qualitative interviews with and critical feedback from the intended administrators or primary health care professionals, namely Registered Counsellors (RCs) and/or nursing staff from a participating general government hospital and a non-government organisation.

Key words: Risk factors, South Africa, traumatic stress, posttraumatic stress disorder, psychometric instrument / questionnaire, international reviews, national studies, content validity, expert review, primary health care professionals

Edwards (2005a) briefly surveyed the extent to which traumatic events are a feature of life all over Africa and provided a comprehensive review of research that indicates the pervasiveness of traumatic events in South Africa specifically. Norman, Matzopoulos, Groenewald, and Bradshaw (2007) suggested that South Africa is one of the most violent countries in the world, with male and female homicide rates respectively more than eight and five times higher than global averages (Matzopoulos, Bowman, Butchart, & Mercy, 2008). Kaminer (2008) indicated that over a third of the South African population has been exposed to some form of violence. Traumatic experiences and their consequences are therefore common in South Africa (Edwards, 2005a) and many South Africans are exposed to one or more traumatic events or experiences in their life.

Traumatic exposure has been found in South African samples to have a cumulative effect on general distress (Williams, Williams, Stein, Seedat, Jackson, & Moomal, 2007), mental health problems (Matzopoulos et al., 2008) and general psychological problems (Hirschowitz & Orkin, 1997). Of these problems, posttraumatic stress disorder (PTSD) is one major under-diagnosed disorder and continues to be a significant public health problem in South Africa (Edwards, 2005a).

Despite the extent of exposures, it is also apparent that South African PTSD prevalence rates are not as high as exposure rates would suggest (cf. Stein, Seedat, Herman, Moomal, Heeringa, Kessler, & Williams, 2008). One side of the coin is the fact that not everyone that is exposed to a traumatic stressor will develop PTSD, but the other side is just as important. In the South African context, PTSD in primary care settings and even mental health settings are often highly prevalent but undiagnosed when traumatic exposure is not the presenting problem (Carey, Stein, Zungu-Dirwayi, & Seedat, 2003; Mkize, 2008). In the Carey et al. (2003) and Mkize (2008) studies the PTSD rates were 20% and 22% respectively and in both studies all cases were undiagnosed. If we consider that not everyone will develop

PTSD, but that we seem to miss many of those that do develop it, it seems pertinent to ask the question: how do we identify individuals at risk?

Apart from the obvious advantages to identify those at risk for any disease early on, PTSD is also specifically important in this regard due to the benefits of early intervention. PTSD is only diagnosed after symptoms persist for a month, but once the disease becomes chronic, it requires intensive treatment due to the severe impairment it causes (Seedat, Lochner, Vythilingum, & Stein, 2006). The distinction between acute and chronic forms of PTSD has recently been deleted from the new Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric Association, APA, 2013). However, it is still believed that PTSD has a course (if left untreated) that can become complex and chronic. Therefore, in resource taxed settings like South Africa it becomes imperative to identify individuals at risk early on because it leads to more affordable and less time-consuming treatments.

Another part of the problem with identifying those who are at risk for developing traumatic stress may be that these traumatised individuals do not present at psychological practitioners as a first point of contact. Many psychologists have the requisite knowledge and experience to identify individuals at risk, but this may not be true for first line primary health care practitioners (Bisson & Cohen, 2006). Trauma and emergency units mainly focus on stabilising a patient or dealing with immediate life threatening injuries rather than on prioritising psychological screening procedures. To truly be in a position to accurately identify the majority of individuals at risk for developing PTSD, one would need to have a method that can be objectively used and implemented by first line and primary health care practitioners, and which is relatively easy and quick to administer. Therefore, this research reports the initial stages of the development of a measure that can be used by first-line practitioners such as RCs and nursing staff to deliver the risk assessment. Bisson and Cohen

(2006) indicate that this kind of approach is necessary for “allowing more individuals to be treated in total” (p.592).

The rest of this chapter contextualises the overall project by reviewing the theoretical and conceptual constructs that grounded the current study (including risk factor concepts, PTSD definition, and psychometric considerations). These theoretical and conceptual constructs are generally expanded on in their respective chapters and are presented here to present the general conceptual framework. Furthermore, the overall rationale and methodology and specific methodological considerations (mainly the description and analysis of the samples’ characteristics) are dealt with and discussed in this chapter. Subsequent chapters therefore focus more on their specific findings than methodological issues. A synthesis is presented finally, but for brevity many methodological issues are not highlighted again in their respective chapters.

According to Ingram and Price (1997), “in a broad sense, it is difficult to envision an effective effort to understand the causes of disorder that does not include an examination of the processes that give rise to the disorder” (p.3). Theory and research on the processes associated with PTSD are examined in the various chapters, each of which focuses on the stress and vulnerability relationship. “‘Diathesis’ signifies a predisposition to illness” (Ingram & Price, 1997, p.10), and will now be discussed further.

Literature Review and Theoretical Considerations

Diathesis-Stress

The diathesis-stress model is one of the early accepted models for reflecting on the key determinants of the onset of disorders (Ingram & Luxton, 2005). Such models have led to important advances in understanding psychopathology.

Models such as the diathesis-stress model suggest that negative events of significant severity (in this case traumatic stressors) could precipitate psychological disorders even

without reference to individual psychological or biological characteristics (Ingram & Luxton, 2005; Mazure, 1998). Not all individuals who experience significant stressors develop a disorder and this has led, in part, to the recognition that there are other important components of psychopathology such as vulnerability processes or factors that predispose some individuals to psychopathology when a stressor is encountered. Ingram and Luxton (2005) indicated this as follows:

Although vulnerability and stress can be reasonably considered to be conceptually distinct constructs, separately, their power to describe key aspects of psychopathology is limited. Thus, most modern models of psychopathology explicitly combine vulnerability and stress in their descriptions of the functional processes leading to a disorder. (p.34)

A diathesis or vulnerability is typically conceptualised (Ingram & Luxton, 2005) as a “predispositional factor” (p.34). Formerly, the diathesis-stress model was used in medicine, and it referred to a latent biological mechanism that remained suppressed until triggered by sufficient stress (Ingram, Miranda, & Segal, 1998) which affected systemic functioning and led to the development of a disorder. Currently, the concept has been expanded to include psychological (Meehl, 1962; Zubin & Spring, 1977; Ingram & Price, 2001) factors (i.e., cognitive and interpersonal variables) that make a person susceptible to psychopathology (Monroe & Simons, 1991).

To better understand this phenomenon it is useful to conceptualise “vulnerability” as an element endogenous to individuals. This means that “vulnerability” exists within the person regardless of whether it was genetically, biologically, psychologically, or otherwise acquired. These predisposing factors (diatheses) are often, therefore, not easily recognised, because they are often considered to be latent, and necessitating stimulation by a stressor (Ingram & Luxton, 2005) before psychopathology can occur.

A variety of diathesis-stress models have been proposed for various types of psychopathology (Ingram & Price, 2001). Dichotomous diathesis suggests that one either has the diathesis or not; if the diathesis is absent, there is no effect for stress. Hence, even severe stress will not lead to the development of the disorder. On the other hand, “when the diathesis is present, the expression of disorder will be conditional on the degree of stress” (Hankin & Abela, 2005, p.39). This means as the severity of the stressor increases, so does the risk for the disorder in those who possess the diathesis. A dichotomous diathesis conceptualisation is more appropriate in the context of clear genetic (or similar) underpinnings. In the context of PTSD in this research, a more continuous contextualisation is more appropriate, because a variety of vulnerabilities will be explored. Many disorders, therefore, suggest polygenic models that allow for varying degrees of diathesis (Zuckerman, 1999). Instead of being dichotomous, the diathesis is “quasi-continuous” (Monroe & Simons, 1991) which translates as there is a point beyond which a disorder will occur, but there is also a continuous effect of diathesis once the threshold is passed (Hankin & Abela, 2005). In other words, a very minimal level of diathesis may be insufficient to produce the disorder even under high stress, but the probability of disorder increases as a function of both severity of stressor and strength of the diathesis beyond a minimal level (Zuckerman, 1999).

Some models suggest that the synergism between the diathesis and stress yields an effect beyond their combined separate effects (Monroe & Simons, 1991; Rothman, 1976). The diathesis continuum interacts with a continuum of stress to produce the possibility that a disordered state will occur (Hankin & Abela, 2005). This model, therefore, takes into account not only the continuum of vulnerability, ranging from vulnerable to resilient, but also a continuum of stressor severity (Hankin & Abela, 2005).

This research used both elements of diathesis continuum and stressor continuum. Certain factors relate to pre-existing diatheses (such as psychiatric history, gender or age, for

example), but others are related to elements attached to the actual (mostly subjective) severity of the stressor (such as trauma type, emotional response, perceived life threat, etcetera). The diathesis-stress dynamic is inherently accepted as a theoretical underpinning, but a combined term for both elements (diathesis and stress) is more adequately termed risk factors.

It would now be appropriate and also meaningful to define PTSD according to its diagnostic criteria, as it is the quintessential stressor induced disorder. The “essential feature of PTSD is the development of the characteristic symptoms following exposure to one or more traumatic events” (APA, 2013, p.274); PTSD is, therefore, stressor dependent.

It is important to note that some of the diagnostic criteria have recently changed. Appendix A provides a detailed review of the diagnostic criteria for PTSD as it appears in the DSM-5 (APA, 2013). The clinical presentation of PTSD has been altered slightly, in terms of PTSD symptoms: there are currently four distinct diagnostic clusters according to the DSM-5 (APA, 2013) as opposed to the three main categories in the previous DSM-IV-TR (APA, 2000).

The four PTSD symptom clusters are summarised below in relation to the traumatic event(s).

1. Intrusion symptoms are recurrent, involuntary, and distressing memories and/or dreams (e.g., in which the content of both memory or dream is related to the incident), dissociative reactions (e.g., flashbacks, which may occur on a continuum with the most extreme expression being a complete loss of awareness of present surroundings), intense or prolonged psychological distress and/or marked physiological reactions (e.g., at exposure to internal or external cues that symbolise or resemble an aspect of the event).
2. Avoidance symptoms are persistent efforts to ‘avoid’ distressing memories, thoughts, or feelings, and/or external or physical reminders (e.g., such as people, places,

conversations, activities, objects, situations) that are about or closely associated with or that arouse recollections of the event.

3. Negative alterations in cognitions and mood symptoms are inability to remember an important aspect of the event (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs), persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., “I am bad”, “no one can be trusted”, “the world is completely dangerous”, “my whole nervous system is permanently ruined”), persistent, distorted cognitions about the cause or consequences of the event that lead the individual to blame himself/herself or others, persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame), markedly diminished interest or participation in significant activities, feelings of detachment or estrangement from others, persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).
4. Marked alterations in arousal and reactivity symptoms are irritable behaviour and angry outbursts (with little or no provocation), typically expressed as verbal or physical aggression toward people or objects, reckless or self-destructive behaviour, hypervigilance, exaggerated startle response, problems with concentration, and sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep) associated with the event.

To have some of these symptoms is natural after a traumatic event. When these symptoms become an ongoing feature and last for more than a few weeks, it usually becomes problematic for the person to function as optimally as they did before the event. The DSM-5 (APA, 2013), therefore, presumes that a PTSD diagnosis can only be made if symptoms persist for longer than a month after the initial stressor or “serious traumatic event” (Mkize, 2008, p.51). The disturbance should also cause clinically significant distress or impairment

in social, occupational, or other important areas of functioning (APA, 2013), and is not attributable to the physiological effects of a substance (for example, medication, alcohol) or another medical condition.

In conclusion, “spontaneous recovery is a normal response to a traumatic event” (Bisson & Cohen, 2006, p.588); hence, there is an “acceptance of the idea that exposure to a trauma may not always be sufficient to explain the development of PTSD and that vulnerability [or risk] factors have a role to play in understanding this condition” (in Brewin, Andrews & Valentine, 2000, p.748; Yehuda, 1999; Yehuda & McFarlane, 1995).

A comprehensive overview of the literature relevant to potential PTSD risk factors will be discussed in chapter 2 – the risk factors cited in this chapter are merely examples to describe the conceptual principles.

Nature of Risk Factors

Risk factors are any characteristic of a person (such as age), a situation (such as the severity of a traumatic event), or the environment of the person (such as family life) that increases the likelihood that that person will eventually develop a disorder (in this case, that they will develop PTSD) (Shuttleworth, 2009). As mentioned above, vulnerability (diathesis) factors and stressor factors interact in a dynamic manner in order to produce greater symptom or disorder severity (Ingram & Luxton, 2005). For example, once activated, vulnerability factors may influence the processing of threat related information (increased subjective stressor magnitude), the use of coping styles and strategies, the conditionability to threat stimuli, or the engagement of the individual with his or her social support network (Barlow, 1988, 2000; Beck & Emery, 1985). Recent research also highlights the reciprocal influence between vulnerability factors and environmental influences, and in so doing has begun to emphasise both the transactional nature of diathesis-stress interactions and the interactions between multiple vulnerability process, environmental stressors, and developmental context

(Cicchetti & Cohen, 1995; Ingram & Price, 1997; Stroufe, 1997). The important point here is that both diathesis and stress factors may be useful in predicting traumatic stress severity.

For the purpose of the current research, both were therefore considered risk factors.

Many factors, thus, play a part in whether a person will develop PTSD. These risk factors – some present before the trauma and others during and/or after a traumatic event (National Institute of Mental Health, NIMH, 2008) – make a person more likely to develop PTSD. Risk factors are, therefore, unique influences that predict the development of PTSD (Chiu, Niles, Webber, Zeig-Owens, Gustave, Lee, Rizzotto, Kelly, Cohen & Prezant, 2011) and have subsequently been divided into the following categories: (a) pre-, (b) peri-, and (c) post-exposure aetiologic factors (Maes, Delmeire, Mylle & Altamura, 2001).

Pre-, Peri- and Post-Trauma Risk Factors

“Pre-traumatic factors exist prior to the traumatic event and are viewed as predisposing vulnerability factors in those exposed, such as previous experiences of traumatic events, history of psychiatric disorder, personality traits, and demographic variables” (Gil, Caspi, Ben-Ari, & Klein, 2006, p.604) such as female gender (Maes et al., 2001), and lower level of education (Shalev, 1996). Unrelated to the traumatic event (Phillips, Leardmann, Gumbs & Smith, 2010), other strong predictors for developing PTSD include younger age at the time of the trauma, lower socio-economic status, family psychiatric history (cf. also Maes et al., 2001), difficulties in childhood, female gender, minority status and race.

Peri-traumatic factors are those linked to the actual traumatic event, including type and severity of the event, degree of exposure, the magnitude of the initial response, presence of physical injury, and dissociation (Ozer, Best, Lipsey, & Weiss, 2003). Being hurt or seeing people hurt or killed is also a strong predictor for developing PTSD as well as the subjective horror of the trauma or threatened death (Maes et al., 2001).

Post-traumatic factors are related to the long-term course of the traumatic stress response, including the coping abilities of the survivors and their support network (McFarlane, 2000; Ballenger, Davidson, & Jonathan, 2000; Ozer et al., 2003) or lack of social support after the event (Phillips et al., 2010). Dealing with extra stress after the event such as loss of a loved one or pain or injury (cf. also Maes et al., 2001) or loss of a job or home also contributes to the development of PTSD (Phillips et al., 2010).

Not all factors were explored and eventually used in this research due to the specific risk factor contexts that were considered. The rationale and process of selecting specific risk factors is explored fully in chapter 2.

Risk factors can further be divided into proximal and distal elements pertaining to PTSD development – this means the impact of certain risk factors may be diluted by one or more intervening risk variables and not all factors are directly related to the development of PTSD (Brewin et al., 2000; Phillips et al., 2010).

Proximal and Distal Elements

Proximal effects are those that have a direct influence on and cause the development of PTSD, whereas distal effects do not have direct influence on the progression of PTSD. For example, it has been shown that association between childhood abuse and later PTSD is mediated by the experience of shame (Andrews, Sunderland, & Kemp, 2010), with childhood abuse being the distal factor and shame the proximal influence. Emotional responses such as shame and anger (Andrews et al., 2010), dissociation during the traumatic event (Koopman, Classen, & Spiegel, 1994; Shalev, Peri, Canetti, & Schreiber, 1996) and acute stress disorder (Brewin, Andrews, Rose, & Kirk, 1999; Classen, Koopman, Hales, & Spiegel, 1998; Harvey & Bryant, 1998) have been found to predict later PTSD in prospective studies. These are examples of proximal factors and are directly related to the traumatic event. Many researchers have also, for example, found that peri-traumatic evaluation is more important

than actual threat during a traumatic stressor (i.e., the belief that one is about to die as the proximal factor is more important than whether one is objectively about to die as the distal trauma event) (McNally, 2003).

Also, factors such as social and economic conditions seem to play a role in the development of PTSD in South Africa and further illustrate the interaction between proximal and distal factors. A relationship between socio-economic status (SES) and PTSD in South Africa has been proposed (Stein et al., 2008), and this has been reported by numerous studies (Carey et al., 2003; Lalloo, Myburgh, Smith & Solanki, 2004; National Guideline Clearinghouse, 2005; Patel & Kleinman, 2003; Rumble, Swartz, Parry & Zwarenstein, 1996; Stein et al., 2008). Even though SES seems to be an indicator of risk for PTSD, it cannot in itself be seen to be causally related to the development of PTSD in an individual, and is therefore termed a distal element. At best it can be seen as an indicator of the probability that other factors that are more directly related to the development of PTSD may be present. Likewise, when unemployed, women proved more vulnerable to emotional distress and in particular, more vulnerable than men to the memory of the traumatic event (Beckerman & Auerbach, 2011). Males and females who worked full-time were found to actually report lower levels of “feeling cut off and distant”, and – regardless of gender – the unemployed had a higher score on feeling cut off (Beckerman & Auerbach, 2011). Therefore, the employment status of an individual would be considered the distal element, whereas memory and “feeling cut off and distant” would be the closer, nearer or proximal factor.

It is not clear whether proximal or distal risk factors will predict traumatic stress severity more accurately. While it seems logical to assume that proximal factors will predict more strongly because of their more direct causal influence, certain distal factors can be very robust indicators of PTSD risk because they encapsulate a variety of proximal factors (for example, SES which can be associated with, amongst others, more traumatic exposure, less

resources, more life problems and less social support). For example, “younger age may be attributed to differences in perception of trauma (Polatinsky & Esprey, 2000) and proximity to death (Davis, Nolen-Hoeksema, & Larson, 1998) between younger and older responders” (Dekel, Mandl, & Solomon, 2011, p.242).

The current research focused on both proximal and distal elements that would be accessible soon after the traumatic event in order to facilitate identification of key markers of acutely traumatised people who will develop PTSD (Bryant, 2003). The full process and rationale is explored in chapter 2.

Since this research involved the initial process in developing a psychometric instrument or rating scale that will eventually be utilised in calculating risk for PTSD in a South African context, it was important to ensure rigour in its development. Attention was given to appropriate psychometric theory and methodology to ensure that the eventual assessment measure was of good psychometric quality (Eid, Larsson, Johnsen, Laberg, Bartone, & Carlstedt, 2009; Zeolla, Brodeur, Dominelli, Haines, & Allie, 2006).

Test-Construction Methods

A “primary goal of scale development is to create a valid measure of an underlying construct” (Clark & Watson, 1995, p.309). Hence, the questionnaire needs to be developed according to standard questionnaire development guidelines and methodologies (International Test Commission, ITC, 2000; Millos, Gordon, Issenberg, Reynolds, Lewis, McGaghie, & Petrusa, 2003; Millman & Green, 1989; Foxcroft & Roodt, 2001; McGaghie, Van Horn, Fitzgibbon, Telser, Thompson, Kushner, & Prystowsky, 2001).

McIntire and Miller (2000) affirmed that a statement of the purpose of a test should include an indication of the construct to be tapped (such as, PTSD risk factors) as well as how the outcome (results) of the test will be used (for example, to predict the development of traumatic stress). When a construct is defined in a test plan such as this, the objectives of the

psychological test are specified (Foxcroft & Roodt, 2001; Smit, 1996) and “test developers consult a variety of sources to assist in concisely defining and operationalising it” (Foxcroft, 2004, p.10) in a clinical setting by means of an extensive literature review. Other researchers term this item identification (Ruzafa-Martínez, López-Iborra, & Madrigal-Torres, 2011; While, Ullman, & Forbes, 2007) or domain specification (Millos et al., 2003; Millman & Green, 1989; McGaghie et al., 2001) or even identifying “domain features” (Millos et al., 2003, p.p.S52).

Three major reviews of international risk factors (Brewin, 2005a¹; Ozer et al., 2003; and Weisæth, 1998) were used as a starting point and compared to South African research on known risk factors, and in combination with literature on PTSD risk assessment considerations (Brewin, 2005b), the planning phase of the psychometric instrument was finalised and an initial item bank or item pool (Clark & Watson, 1995) established.

Chapter 2 will carefully and meticulously discuss the wide-ranging research that was sourced and included in this item selection phase, with specific reference to the risk assessment considerations (Brewin, 2005b) that form the foundation or underpinning for this pilot risk assessment instrument.

Items were further reviewed in terms of whether they met the content specifications of the test and whether they were well written (Foxcroft & Roodt, 2001; Foxcroft, 2004). A panel of experts with research and/or clinical experience with PTSD in a South African context was used to guide the development of content specifications (Millos et al., 2003) by the evaluation of item content, structure, consistency, and validity (i.e., item relevance).

¹ **Please Note:** Two articles of Brewin (2005) are referred to regularly throughout this document, however, depending on the consecutive order and focus of each of the articles within a specific chapter (article), 2005a and 2005b may in different chapters refer to different articles. Because of the potential confusion that this may cause, a reference technique contrary to APA guidelines was employed. Brewin (2005a) and Brewin (2005b) will always refer to the following respective articles consistently throughout the entire document:
Brewin, C.R. (2005a). Risk Factor Effect Sizes in PTSD: What This Means for Intervention. *Journal of Trauma & Dissociation*, 6(2), 123–130.
Brewin, C.R. (2005b). Systematic Review of Screening Instruments for Adults at Risk of PTSD. *Journal of Traumatic Stress*, 18(1), 53–62.

Chapter 3 will discuss how expert criticism helped to refine the draft scale and, moreover, helped establish content validity (Ruzafa-Martínez et al., 2011; While et al., 2007) by explicitly evaluating item relevance to the specified domain.

Chapter 4 will successively and logically discuss how a second review panel was used (i.e., the intended test administrators) to elicit feedback on the subjective meaning of the questionnaire, comprehension (cf. Johnston, 2003), and readability. This further emphasised the objectives of the instrument to be user-friendly and quick and easy to complete, and helped to identify problems with unclear instructions or problematic response formats (for example) that are avoided in the final scale (Clark & Watson, 1995).

While it is always important to consider the overall construction process, sight should never be lost of two guiding principles in all test construction endeavours – validity and reliability.

Validity

According to Sireci (2007), “validity is not a property of a test ... rather it refers to the use of a test for a particular purpose” (p.477). It is the relationship between theoretical concept and empirical indicators. The main question being addressed, therefore, is: “Are we measuring what we think we are measuring?” (Kerlinger, 1973, p.457) or that which was intended to be measured? (Carmines & Zeller, 1979; DeVellis, 1991; Messick, 1989; Kane, 1992, 2006).

Since validity is not a test property per se, it is realistically and understandably difficult to measure and/or prove (Sireci, 2007). It then makes sense to motivate the underlining purpose of the assessment (in this case, PTSD risk) and, in so doing, supporting its role in featuring as a risk assessment for PTSD with consideration to specific factors in the South African context where it would be functional. Sireci (2007) argued that “a serious validation endeavour requires integration of construct theory, subjective analysis of test

content, and empirical analysis of item and test score data” (p.477). The following factors could also be added to this list: “adequate score reliability, appropriate test administration and scoring, accurate score scaling ... careful attention to fairness for all ...” (American Educational Research Association (AERA), American Psychological Association (APA), & National Council on Measurement in Education (NCME), 1999, p.17).

Thus, instrument validity is essentially the substantiation or validation of an instrument; validation being explicitly referred to “as a process ... (of accumulating evidence to provide a sound scientific basis for the proposed score interpretations)” (AERA et al., 1999, p.9) as well as matter of degree (Messick, 1989) means that there is no absolute or finite valid or invalid class. Over time evidence will continue to either develop or challenge previous findings; therefore, “validity is an evolving property and a continuing process” (Messick, 1989, p.13). It is ideally established by comparing the new instrument being developed with a gold standard (Zeolla et al., 2006), but it is worth taking into account that even this single validation method is not likely to be effective and that an instrument validation should be based on multiple validation criteria (Kline, 2005).

Since a gold standard does not exist in this case, there are various methods for assessing aspects of validity; three major types of validity are usually differentiated and generally examined to support the soundness or validity of an assessment instrument (Moskal & Leydens, 2000). These are based on validation methods rather than types of validity (Landy, 1986), and are namely (i) criterion validity, (ii) content validity, and (iii) construct validity.

Firstly, construct validity defines how well a test measures up to its claims, and it is this that determines the ability of an instrument to function for its intended purpose (Kline, 1986); therefore, “construct validity is closely tied to a valid test as one measuring what it purports to measure” (Kline, 1986, p.7). Secondly, content validity estimates how much a

measure represents every single element of a construct, and adequately samples the content domain (Moskal & Leydens, 2000) – it ensures comprehensive content coverage (Trochim & Donnelly, 2007) as well as content relevance (Streiner & Norman, 1995), and refers to the “extent to which a set of items reflects the intended content domain” (Zeolla et al., 2006, p.1; cf. also Devellis, 1991).

Lastly, criterion validity assesses whether a test reflects a certain set of external criteria and relies on these selected parts of the test or the external structure of the instrument. It is further divided into concurrent validity (which measures the test against a benchmark test and high correlation indicates and supports the extent to which the test has a strong relationship with a current set of criteria), and predictive validity (which is a measure of how well a test predicts criteria and involves testing a group of subjects for a certain construct to indicate and support the correlation between the results of the assessment and an indicator). (Shuttleworth, 2009).

In terms of this research, each above-mentioned element has been addressed to some degree.

The primary aim was to start a process of designing an instrument that is valid in predicting traumatic stress severity and subsequently the development of PTSD, and as a result, PTSD risk is roughly the construct under study. This construct is explained above and is further defined in chapter 2. Furthermore, ensuring content validity is a recognised and appropriate method to develop the assessment instrument. The content estimates and represents every single element of this risk construct, and is discussed in chapter 3.

Predictive validity (as a type of criterion validity) can be defined as the extent to which the measure being used will allow one to predict future behaviours, and is therefore important to determine whether criteria after a traumatic experience as measured by the instrument can forecast risk for certain individuals in developing more severe PTSD

symptoms. To confirm this, the final instrument would need to be administered to a group of trauma individuals which is the anticipated course for this research.

According to Clark and Watson (1995), “both the target of measurement and measurement of the target are important for optimal scale development, as later stages will proceed more smoothly if the earlier stages have been marked by both theoretical clarity (i.e., careful definition of the construct) and empirical precision (i.e., careful consideration of psychometric principles and procedures)” (p.19). The more care that is taken in constructing items, the better they will act in making predictions from scores (Coaley, 2010). This, indirectly, lends itself to advances in the reliability of instruments.

Reliability

Reliability is basically an empirical issue, focusing on the performance of empirical measures, whereas validity is usually more a theoretically oriented issue. To make the distinction, it is worth noting that a test can be reliable but not valid, whereas a test cannot be valid yet unreliable. Reliability, in simple terms, describes the consistency of a test (Shuttleworth, 2009).

Test reliability refers to the steadiness or constancy of a measure; a test is considered reliable if the same result is obtained repeatedly. The simplest method for testing reliability is the test-retest method and involves testing the same subjects at a later date, ensuring that there is a correlation between the results (Shuttleworth, 2009). The difficulty with this method is that it assumes that nothing has changed in that time period. While this is adequate in most cases, the proposed measure is intended specifically for measurement at a specific point in time and consistency over time is not completely appropriate.

Interrater reliability is where two different administrators perform the same measurement procedure under similar conditions and achieve similar results. Interrater reliability, interrater agreement, or concordance is the degree of agreement among raters

(Tinsley & Weiss, 1975). It gives a score of how much homogeneity, or consensus, there is in the ratings given by judges. It is useful in refining the tools given to human judges. This is therefore appropriate for the current study because the intent is to construct a measure based on risk factors which will need to be judged as present or to which degree a factor is present. A risk assessment instrument that needs to be consistent at a specific point in time needs a high degree of agreement between raters at that point in time. If various raters do not agree, either the scale is defective or the raters need to be re-trained.

While the importance of reliability is noted here for the sake of comprehensiveness, it must be noted that the current study will not directly assess interrater reliability. However, information and feedback from the intended users of the instrument (chapter 4) (as well as the rigour included in the methodology of the study) will contribute to the instrument being understood in similar ways by administrators.

In conclusion, it is important that this measure be reliable and valid (Eid et al., 2009).

Problem Statement and Aims

As already mentioned, many people in South Africa possibly suffer from PTSD purely based on the extent of trauma exposure that is apparent within the South African population. Of these traumatised individuals, very few have contact with mental health professionals shortly after the event and, consequently, the initial risk of many individuals is unknown and they may remain undiagnosed and untreated. Most of the South African population who are exposed to great degrees of violence cannot necessarily afford private mental health services, and are often only referred for intervention once PTSD symptoms have severely impacted their level of functioning. Thus, it makes sense for primary health care practitioners to screen for risk, but realistically personnel dealing with survivors in trauma clinics and/or emergency and crisis centres often have more pressing responsibilities.

A relatively easy method or screening instrument that can be administered time efficiently by first line and primary health care practitioners (i.e., not highly qualified psychological practitioners) (Brewin, 2005b), however, may help to alleviate this situation. In this way, traumatised individuals are proposed to have access to quality mental health services through early identification, immediate and appropriate referrals, and specifically tailored intervention and (further) prevention services. This is in accordance with research that suggests “integrating behavioural health, chronic disease management and prevention services into primary health care” (Goodheart, 2010, p.5) which will in essence lead “to better and more cost-effective outcomes” (Goodheart, 2010, p.5).

Since no such measure or instrument currently exists, especially within a South African context and for a population that are exposed to one or more traumatic events or experiences in their life (Edwards, 2005a), it became the principal objective and motivation for this research to start the development of such a measure.

More specifically, the overall purpose was to be achieved, by three distinct objectives:

- to write initial items for a psychometric instrument for assessing PTSD risk, based on a range of well-known international, but also nationally or South African researched risk factors, for PTSD, with due consideration of the PTSD risk assessment issues and the purpose of the instrument (chapter 2);
- to subject these items to a review by experts within the field of traumatic stress for content validity and their appropriateness for the purpose of the measure as a departure point (chapter 3); and
- to subject these items to the intended users to investigate whether they would be able to reach the targeted behaviours using the instrument (chapter 4).

Research Methodology

Research Design

Since the main emphasis was on the development of a conceptually sound and successful research measure, content validity as specified was imperative. Therefore, after item identification and selection, the items for the preliminary pilot questionnaire (Appendix B) were evaluated both quantitatively and qualitatively by an expert review panel and the intended administrators of this measure.

Hence, a mixed-method research design was utilised in which a quantitative and qualitative method was applied: “there is an increasing interest in combining qualitative and quantitative approaches to health and social research” (Farquhar, Ewing, & Booth, 2011, p.748). Mixed methods research capitalises on the strengths of both quantitative and qualitative methodologies by combining approaches in a single research study to increase the comprehensiveness and quality of phased studies such as the current research (Brannen, 1992; Creswell & Plano Clark, 2011; Wisdom, Cavaleri, Onwuegbuzie & Greene, 2012). One of the five purposes for mixing methods (Greene, 2007) is measurement development, where results from one method are used to inform the development of another method (in this case, instrument development and implementation).

Quantitative research can be summarised as a “formal, objective, systematic process in which numerical data is utilised to obtain information about the world” (Cormack, 1991, p.51). The advantage of the quantitative part of this research was that it enables the multiplicity of the collected data to be measured and reported on a numerical scale, permitting categorisation of pooled data, numerical reporting, statistical analysis and mathematic modelling (Carroll & Rothe, 2010) and the data is presented in a logical and functional way (Bless & Kutheria, 1993; Struwig & Stead, 2001). The focus here was on the

quantification of the relevance or appropriateness of the items (Foxcroft & Roodt, 2001) by an expert panel as an indication of content validity.

Qualitative data, on the other hand, tells us about subjective experiences, understandings, effects and impacts; thus, it can augment quantitative data in questionnaire or instrument design (Farquhar et al., 2011). Qualitative data is non-numerical and studies frequently use primary data. In short, qualitative research stays at the level of observation (Babbie & Mouton, 2010). Certain characteristics are typical of qualitative research, including a naturalistic setting, a focus on the perspectives of the participants and their meaning, the outcome as a process rather than a product, and data collected as words (Padgett, 2008). This deeper understanding can inform the process of development and potential barriers to implementation of an instrument (Farquhar et al., 2011). Qualitative comments and recommendations were implemented as an extension of content validity; expert suggestions evaluated items in terms of whether they meet the content specifications of the said instrument, and primary health care professionals or professionals working on a first contact basis with trauma individuals (i.e., the intended test administrators) reported on the understandability of the measure (i.e., whether items were clear, how items might work differently in practice, and what could be improved).

This feedback was seriously considered in either omitting or modifying certain items to facilitate refinement and rigorous improvement of the pilot risk assessment measure in order to increase its effectiveness in achieving the holistic goal and purpose of designing a risk assessment to be objectively, quickly and easily administered by primary health care professionals. Additionally, the research can also be described as exploratory-descriptive in nature.

Exploratory research involves research into an area that has not been studied, and the purpose of this is to gain insight into a relatively new area (De Vos, 1998; Neuman, 2003; cf.

also Bless & Higson-Smith, 2004; Terreblanche & Durrheim, 2002). It seems appropriate as there is currently no quick and easy way of measuring at-risk individuals in South Africa; hence, this is a primary and necessary goal for the development of scientific knowledge (Cozby, 1993).

Descriptive research refers to research in which “a picture is painted” (cf. also Neuman, 2006) or a profile presented (Babbie & Mouton, 2010), and the purpose is to describe phenomena or the relationships between the variables that may emerge in the process of research (Terreblanche & Durrheim, 1999).

The exploratory-descriptive design was identified as best suited to the overall aim of this research with the intent that this is just an initial exploration of the psychometric properties of content validity of a potential risk assessment or measure.

Research Procedure

All necessary permission was obtained before the research study commenced, including institutional ethics approval and permission from the Director of Clinical Governance at a participating general governmental hospital. Subsequent authorisation was also required from the respective medical superintendents at this hospital and a participating NGO that assists trauma victims, and consent obtained for making use of the staff members.

Expert reviewers were emailed and contacted telephonically to inform them of the research study and to elicit their participation. The PTSD risk schedule (Appendix B), the feedback questionnaire (Appendix D), and a consent form (Appendix E) together with an information letter (Appendix C) was emailed to subject matter experts in the form of an expert review package (Appendix F). Due to the geographic location of these expert reviewers, feedback questionnaires (Appendix D) together with consent forms (Appendix E) were returned electronically to a private email account to ensure confidentiality. An

alphabetical coding system was utilised where each expert was assigned a numerical digit (1 to 31) to further assure and guarantee professional privacy.

The primary health care professionals were also informed about the nature of the study per email; an information letter (Appendix G) as well as a consent form (Appendix H) was attached to a detailed email describing the nature of the research. The consent forms (Appendix H) were signed and collected before the interview took place; the feedback was tape recorded, assigning numerical values (1 to 8) to each participant, and using these values as coded names during the respective interviews. Again, this ensured confidentiality between the researcher and each of the participants, and guaranteed personal as well as academic privacy.

Participants and Sampling

In the initial stage of test construction (i.e., first phase of content validation), 31 expert reviewers (Lynn, 1986; Sikich & Lerman, 2004) were required. In the next stage of test construction (i.e., second phase of content validation), 8 primary health care personnel, such as RCs and nursing staff, were interviewed.

First Phase of Content Validation

31 expert reviewers were non-randomly selected by means of a convenience and purposive sampling method. “Convenience sampling is whereby elements are drawn from a subpopulation according to its accessibility and research interests” (Gelo, Braakmann, & Benetka, 2008, p.275). Experts from across the country who have a wide range of academic knowledge and/or clinical experience in the field of PTSD in South Africa were sourced.

The expert review panel consisted of 31 experienced and knowledgeable professionals in the field of trauma in South Africa, as can be seen in Table 1.

Table 1. A Summary of the Expert Review Panel Participants

Expert Categories (general)	Provinces	Expert Categories (detailed)
16 academics at the different universities	8 in Western Cape	2 clinical psychologists
		2 clinical researchers in PTSD
		2 psychiatrists
		1 clinical social worker
		1 counselling psychologist
	7 in Gauteng	4 clinical psychologists
		3 research psychologists
10 registered psychologists	1 in Eastern Cape	1 clinical psychologist
	4 in Western Cape	4 private practices
		2 government institutions
	3 in Eastern Cape	1 private practice
		2 government institutions
	2 in KwaZulu-Natal	1 private practice
5 registered counsellors	4 in Gauteng	3 government institutions
		1 social worker private practice
	1 in Western Cape	1 private practice

Some of these expert reviewers were obtained during the early stage of the research process. While South African literature was being scrutinised in search of studies focusing on risk factors for PTSD, a list was compiled of authors found from published articles in South Africa (i.e., 40 professionals with a special interest in trauma and a wide range of academic knowledge of PTSD in South Africa were identified). The different universities were approached with predominant attention to the psychology departments, but also liaising with respective psychiatric departments and/or trauma centres. Of the initial 40 potential professional candidates identified and emailed, only 10 agreed to participate; most of those who declined the request reported time constraints and more pressing responsibilities and 2 did not feel competent enough to comment towards the specific aims of the current study.

Initial identified experts, regardless of their commitment to the research process, were asked (personally, telephonically, and/or per email) to recommend colleagues known to have experience with PTSD either in research or treatment settings; this snowball method of sampling and recruitment provided a continuous flow or introduction of new professionals

and potential participants to the process. In the end this resulted in a fairly balanced sample if one considers the relative contribution of academics and clinicians.

Furthermore, the composition of the expert review panel is given in Table 2.

Table 2. Composition of Panel of Experts.

Category	Number	Doctorates	Masters or Equivalent	Ave Years Experience
Academics	16	9	7	16 years
Clinical Psychologists	10	1	9	22 years
Registered Counsellors	5	1	–	13 years
TOTAL	31	11	16	17 years

As can be seen in Table 1, there was a balance of expert reviewers – 16 were from academia and 15 from more clinical practice areas (of whom 10 were clinical psychologists and 5 registered counsellors). This balance is well aligned with the purpose of the review (whilst academics may have been more capable of highlighting missing information or comment on the applicability of an item in terms of its research base, clinicians may have been in a better position to highlight the practicalities or impracticalities of items).

Academics at the respective universities consisted of 7 clinical psychologists, 5 clinical researchers in PTSD, 2 psychiatrists, 1 clinical social worker, and 1 counselling psychologist. Of the 15 clinicians, there were 9 clinical psychologists, 1 educational psychologist, 2 registered counsellors, 1 social worker, and 1 traumatologist; additionally, 8 were in private practice and 7 in public services or government institutions, such as correctional services, psychiatric hospitals and/or clinics.

Furthermore, an uneven distribution of expert reviewers across South Africa was reported; 13 in the Western Cape, 12 in Gauteng, 4 in the Eastern Cape, and 2 in KwaZulu-Natal. Regardless the sample composition and geographical distribution differences, the expert review panel collectively shared a special foundation in trauma and in PTSD, factors affecting individuals exposed to trauma, as well as the psychological effects of trauma and violence.

If we consider that the average years of experience is 17 years of traumatic stress research and trauma support and treatment, we can easily consider the sample to be an expert one that would be able to comment on the questions posed to them, and much of their individual professional psychological practices target human development amenities (such as comprehensive psychological services) at a community level. Their experience ranges from patients and/or clients in state and private settings, community and hospital sites, outpatient services and inpatient programs, the health care industry as well as a more academic lecturing milieu.

Second Phase of Content Validation

8 primary health care professionals were also non-randomly selected by means of a convenience and purposive sampling method.

This group of participants (i.e., the intended administrators) consisted of 6 RCs, 1 lay- or crisis counsellor, and 1 registered nurse, as can be seen by Table 3.

Table 3. A Summary of the Intended Administrators of the Risk Assessment

Participant Categories (general)	From (Location)	Place of Employment
6 registered counsellors	NMMU	5 currently training
		2 government institutions
1 lay- or crisis counsellor	Rape Crisis Centre	1 government institution
1 registered nursing staff member	Rape Crisis Centre	1 government institution

5 of the 6 RCs were obtained through the RC program being run at NMMU; the class representative was approached with regards to an emailing list of all current training RCs. Of the initial 19 potential primary candidates identified and emailed, only 5 agreed to participate; most of those who declined the request reported time constraints and more pressing responsibilities, such as assignments and examinations.

1 RC was still volunteering, after their internship was successfully completed last year, at the respective RC training institutions.

Furthermore, the lay- or crisis counsellor and registered nurse were approached at the Rape Crisis Centre.

Regardless of the composition of the sample and possible different academic backgrounds, the primary health care professionals collectively shared a mutual interest at offering and providing a service based at a community level of public health. Each of these professionals brought with them a distinct awareness of the implications and possible void of working in a primary health care sector.

Their experience ranges from currently training in the field of counselling, to approximately 7 or 8 years of medical familiarity of working in the public, state, community, and/or hospital settings within the health care industry. The definition for the proper registration category for registered nurses can be found in the South African Nursing Council (SANC) regulations (1978).

For both the expert and the primary health care professionals, it seemed apt to ask them to participate in this endeavour to design and develop an appropriate community level psychometric test or PTSD screening instrument for the identification of at-risk as well as not at-risk individuals at a primary health care level to facilitate early intervention actions.

Research Measures

The international risk factors by Brewin (2005a), Ozer, et al. (2003) and Weisæth (1998) were applied to pilot the PTSD questionnaire or risk assessment (Appendix B). It consisted of 21 short demographic, biological, and self-report items, in accordance with specified standards for the particular item selection based on the three psychometric properties (Brewin, 2005b) and principles of the intended screening instrument: (a) the instrument should be easily measurable, (b) quick to be administered (Brewin, 2005b) and (c) able to be objectively implemented by first line and primary health care professionals. For this reason items that were straightforward factors such as gender were included, while

factors such as IQ and personality traits were excluded in relation to the principles mentioned above.

This preliminary item pool that was assembled was still thought to be too extensive, and needed to be further evaluated in agreement with the test construction guidelines (ITC, 2000) by subject matter experts; items are reviewed in terms of whether each item, independently, meets the content specifications of the test (Foxcroft & Roodt, 2001; Foxcroft, 2004) – as mentioned above – or adequately represents and is relevant (Haynes, Richard, & Kubany, 1995) to PTSD being measured. The subject matter experts (Haynes et al., 1995) or expert review panel professionals were asked to assist in establishing content validity of the generated items according to specified criteria, and their level of relevance. The information letter as part of the expert review package (Appendix F) stipulated the criteria against which each item was to be assessed.

Data was collected from the expert reviewers by means of a feedback questionnaire (Appendix D) which made use of Likert Scale- (ordinal) type questions. A Likert Scale, which is a type of psychometric response scale, is widely used in survey research (Carifio & Perla, 2007; McDowell & Newell, 1996). Data is ranked such that there is an order to the data, but there is no definite interval (Stevens, 1946; Walker, 2010). The items have an “inherent order” (Romano, Kromrey, Coraggio, & Skowronek, 2006, p.3); for example, (1) “not at all relevant”, (2) “slightly relevant”, (3) “relevant”, and (4) “very relevant”. The reviewers were asked to rank the overall quality of each item on this scale. Item-writing was quantitatively assessed in this way to offer critical feedback needed to modify the questionnaire accordingly (i.e., by omission of any irrelevant and/or inappropriate item). Subsequently, the recommendation and/or comments section at the end of each item allowed for qualitative feedback; the qualitative comments functioned as specific guidelines or expert suggestions on how some of the current items on the questionnaire could be edited (i.e., how

they could be reworded or phrased so as to improve understandability and clarity). At the end of the feedback questionnaire (Item 8 of Appendix D), the expert reviewers were asked to add any other risk factor(s) that they felt had been overlooked.

The final part of the content validation phase was to consider whether items were well-written and user-friendly to the intended administrators of this assessment instrument. The main subquestions that were qualitatively explored, tape recorded, and subsequently transcribed were:

- What is their understanding of the item?
- How would this item be asked to a traumatised individual?
- When given a manual, is the administration of this item better explained? (Do they now have a clearer understanding of what is required of them?)
- Do they think the traumatised individual will understand what is being asked?
- Does the table or format of the item provide them with some form of guideline as to how to ask the question?
- Or is the table confusing?
- Could they suggest how this question be changed to improve its understandability?
- And efficiency?

All the quantitative and qualitative feedback reported lead to the improvement of the pilot risk questionnaire (Appendix I).

Data Collection and Data Analysis

Both these sections will be discussed separately and extensively in each successive chapter.

Chapter 2 will report on the synthesis of data collected from respective international reviews (Brewin, 2005; Ozer, et al., 2003; and Weisæth, 1998) and South African research on known risk factors for PTSD, and will analyse these selected items within the context of

literature on PTSD risk assessment considerations, referring to the functional and pragmatic guide by Brewin (2005b) in designing a screening instrument that maintains the focus on fewer items, easier response scales and scoring methods.

Chapter 3 will report on data collected from the expert reviewers by means of the feedback questionnaire (Appendix D). The Likert Scale- (ordinal) type response format facilitated the quantification of individual item relevance as evaluated by an overall agreement among the expert reviewers. Items were analysed in terms of a statistical property, called the content validity ratio (CVR); the CVRs of each of the 21 items were averaged to obtain the general content validity index (CVI) of the pilot risk assessment.

Chapter 4 will report on the data collection process of qualitative feedback which is recorded, and further interpreted in terms of item- or thematic-analysis. Simply translated, each item becomes its own theme (so to speak) to clarify any ambiguity.

Ethical Considerations

Firstly, the proposed research was submitted to the Research Ethics Committee (Human) of NMMU in order to obtain ethical approval.

The main ethical issues included the following:

1. Explaining the aims, risks and benefits: initially, the aims, risks and benefits of participating in this research study was conveyed to all expert reviewers and primary health care professionals (respondents) before they consented to partake in the process. Hence, an honest and trusting relationship was formulated where no deception was used before, during or after the duration of the research procedure.
2. Obtaining voluntary participation: obtaining voluntary participation was very important. The introductory or information letters (Appendix C and G) clearly stated that their participation was voluntary and that their participation or non-participation would in no sense affect their clinical reputation in the field of psychology, or their

employment at the respective hospital. This was also verbally communicated and explained to each participant on a one-to-one basis. A decline to participate and/or to withdraw at any time during the research process was respected.

3. Obtaining informed consent: informed consent was obtained from all the participants involved in this research. Participants were provided with an opportunity to officially respond with a written consent as to their participation agreement in the research, and at this time they were given the opportunity to ask questions.
4. Ensuring confidentiality: finally, ensuring confidentiality of all participants was of utmost importance. Personal identities of participants were not revealed at any stage during the research process; even during data collection, specific codes were used to safeguard identities. Furthermore, the personal identities of participants will also not be revealed upon reporting the findings of the research in this dissertation.

Dissemination of Results

This research treatise does not follow the traditional format. Each chapter is written in an article format to facilitate a process towards publication. Chapter 1 provides an introduction and an overview of the study. Chapters 2 to 4 represent articles 1 to 3. This treatise document ends in Chapter 5 providing a summary of the findings and conclusions. Every chapter includes the sections normally found in a published article: title page, abstract, literature review, context of the research, methodology, results, discussion, conclusions, limitations, recommendations, references, and also any relevant tables and figures. Headers are used to assist the reader to track which chapter (article) is being read.

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Chapter 2: Posttraumatic Stress Disorder Risk Assessment in South Africa: What Do We Need, What Do We Know, and What Should We Do?

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Abstract

Background: Traumatic events are a common feature of life in South Africa. Many people in South Africa possibly suffer from PTSD if we consider the extent of trauma exposures that is apparent within the South African population. Many traumatised individuals are at risk but may remain undiagnosed and untreated. It makes sense for first line and primary health care practitioners (i.e., not highly qualified psychological practitioners) to screen for risk since they have the initial contact with trauma individuals. A relatively easy screening instrument that can be administered time efficiently would be useful in this regard. No consistent measure – geared towards identifying risk factors in an objective, quick and easy assessable method immediately post trauma – currently exists in South Africa.

Objectives: The purpose of this article is to review the initial process of designing an instrument that is valid in predicting the development of Posttraumatic Stress Disorder (PTSD) by evaluating risk factors sought both internationally and nationally. Content validity was ensured by making sure all inclusive factors were tapped. The purpose was to generate a list of items that could be subjected to further research scrutiny. It is anticipated that this scrutiny will eventually lead to an instrument that can effectively identify those who may be at risk for developing PTSD.

Method: A preliminary item pool was assembled using a combination of three well-known reviews of international risk factors. Risk factors within a South African context were also reviewed to make sure all possible features for developing PTSD were included. South African studies focused on single or few direct risk factors, whereas the international reviews were broader and more inclusive. A final compilation of potential risk factors for PTSD were completed in the form of a pilot risk assessment.

Key words: Risk factors, South Africa, traumatic stress, posttraumatic stress disorder, psychometric instrument / questionnaire, international reviews, national studies

Edwards (2005a) surveyed the extent to which traumatic events are a feature of life all over Africa and provided a comprehensive review of research that indicates the pervasiveness of traumatic events in South Africa specifically. Norman, Matzopoulos, Groenewald, and Bradshaw (2007) suggested that South Africa is one of the most violent countries in the world, while Kaminer (2008) indicated that over a third of the South African population has been exposed to some form of violence. Traumatic experiences and their consequences are therefore common in South Africa (Edwards, 2005a) and many South Africans are exposed to one or more traumatic events or experiences in their life.

Traumatic exposure has been found in South African samples to have a cumulative effect on general distress (Williams, Williams, Stein, Seedat, Jackson, & Moomal, 2007), mental health problems (Matzopoulos, Bowman, Butchart, & Mercy, 2008) and general psychological problems (Hirschowitz & Orkin, 1997). Of these problems, posttraumatic stress disorder (PTSD) is one major under-diagnosed disorder and continues to be a significant public health problem in South Africa (Edwards, 2005a).

A part of the problem that contributes to the under-diagnosis of PTSD may lie with early identification procedures. Traumatized individuals do not present at psychological practitioners as a first point of contact and while many psychologists have the requisite knowledge and experience to identify individuals at risk, this may not be true for first line primary health care practitioners (Bisson & Cohen, 2006). Trauma and emergency units often focus on stabilising a patient or dealing with immediate life threatening injuries rather than on psychological screening procedures. To truly be in a position to accurately identify the majority of individuals at risk, one would need to have a method that could be objectively implemented by first line and primary health care practitioners, and that is relatively easily measured and quick to be administered.

Bisson and Cohen (2006) indicate that this kind of approach is necessary for “allowing more individuals to be treated in total” (p.592). In resource taxed settings like South Africa it becomes imperative to identify individuals at risk early on because it leads to more affordable and less time intensive treatments.

To start working towards such an approach it is necessary to answer a range of questions. Firstly, what exactly do we need in terms of risk assessment of PTSD, that is, what are the methodological issues that we need to consider? Secondly, what is it that we already know in terms of risk factors that can be measured in first contact situations (considering both the international and national literature)? And finally, once we know the answers to the first two questions, what do we do with this information? These questions are of course iterative, but this review based paper attempts to answer each in turn.

We depart by exploring the first question: What do we need in terms of risk assessment?

A Review of the Screening Issues

Brewin (2005b) highlighted important concerns and challenges of screening for PTSD within mental health services; of these, the unavailability of specialist trauma clinicians and services emphasised the significance of a screening instrument that could be used by non-trauma specialists. Brewin (2005b) was addressing the situation in high income countries and whilst specific data on the matter is not available, it is very likely that the restricted availability of trauma specialists is also a feature of low- to middle-income context such as in the South African situation. Therefore, one of the first elements that is needed is an instrument that can be used by non-psychological trauma specialists (such as nursing staff, registered counsellors or even lay counsellors).

A review by Brewin (2005b) concluded that “the performance of some currently available instruments is near to their maximal potential effectiveness, and that instruments

with fewer items, simpler response scales, and simpler scoring methods perform as well as if not better than longer and more complex measures” (p.53). Brewin (2005b) highlights the importance of a short, time-efficient and user-friendly screening instrument (that is still thorough and accurate in distinguishing at-risk from not at-risk individuals). This may be especially relevant in contexts where the envisioned users may not be psychologically trained professionals. The argument of the researcher is also that if a strategy is short and user friendly, it may be more useful and welcome in contexts where psychological trauma may not be the primary concern (for example, disaster contexts where the safety of masses of individuals may have priority, or medical emergency units where stabilisation of patients may be at the top of the treatment list). The second element, therefore, that is needed is a strategy that is fairly short and relatively simplistic. This translates into having a scoring method of fewer alternative scale points that would widen the application amongst primary health care professionals (i.e., nonspecialists) (Brewin, 2005b).

Brewin (2005b) highlights that the majority of current screening measures are symptom-based and that such measures are generally effective because the effect sizes of such symptom-based predictors are fairly large. This is especially salient when compared to the effect sizes of non-symptom based criteria (which may sometimes be too small to be useful in screening individuals) (Brewin, 2005b). However, non symptom-based screening strategies have the advantage of measuring any criteria (for example, demographic, biological, or self-report items) that successfully predicts the principle diagnosis, in comparison to diagnostic measures such as clinical interviews which focus on specific, symptom-based diagnostic criteria (Brewin, 2005b). Symptom based strategies would also have the added drawback of possibly needing a higher level of psychological training and expertise and often symptoms have not emerged until some time has lapsed. Brewin (2005b) indicates a gap in the literature when he indicates that “no consideration being given to how

information from risk factors, associated features, or symptoms could be effectively combined in a single instrument” (p.55). The third element that would be needed in a useful strategy to predict risk is to be able to use factors or elements that are available immediately after a traumatic event (such as history and other objective demographic variables) rather than a strict adherence to symptom-based strategies.

An additional fourth element that would be important if uncomplicated strategies are considered is to have factors or items that are acceptable to trauma individuals (Brewin, 2005b) (i.e., if it is possible to avoid highly controversial or sensitive topics this would be preferable). Finally, it would be useful to have a strategy that can be applied over a wide variety of traumatic events rather than being limited to only a few specific kinds.

In summary, what we need are strategies that are short and easy to administer containing the minimal number of items necessary for accurate case identification in contexts where there is little specific psychological expertise (i.e., medical, social, or primary care) (Brewin, 2005b). The focus should be on producing easily understood items that are acceptable to traumatised individuals from a wide variety of populations and traumatic experiences. Finally, the strategies need to be proven to be effective in identifying at-risk as well as not at-risk individuals in a South African context. Therefore, one of the requirements would be to ultimately test these strategies based on the above stipulated elements.

In terms of risk assessment, it becomes important to consider the second question: What do we know about risk factors in South Africa? To answer this question, international and national literature on risk factors that have been found to predict PTSD were explored.

A Summary and Synthesis of Relevant Articles

Three major international reviews were utilised as a departure point (Brewin, 2005a; Ozer, Best, Lipsey, & Weiss, 2003; & Weisæth, 1998) in the initial process of examining risk factors that would fit the above identified needs.

Brewin (2005a) summarised the review evidence concerning 14 risk factors identified for PTSD based on a meta-analysis by Brewin, Andrews, and Valentine (2000). Articles were specifically selected to ensure a homogenous set of studies; studies had to be “conducted on populations containing non-disordered as well as disordered participants who had all been exposed to a traumatic event in adulthood, each risk factor had to be studied in at least four separate articles, and PTSD had to be measured” (Brewin, 2005a, p.124) according to the diagnostic criteria as stipulated in the Fourth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) (American Psychiatric Association, APA, 2000).

Meta-analyses were conducted separately on each of the 14 risk factors, and three categories of risk factors emerged:

1. factors such as gender (female), age (younger) at trauma, and race (minority status) predicted PTSD in some populations but not in others;
2. factors such as SES (low), education (lack of), intelligence (low), previous trauma (other), general childhood adversity (i.e., other adverse childhood factors), (trauma severity), (lack of social support), and (life stress) predicted PTSD more consistently but to varying extents according to the populations studied and the methods used; and
3. factors such as psychiatric history, reported childhood abuse, and family psychiatric history had more uniform and homogenous predictive effects (Brewin, 2005a; Brewin et al., 2000).

Although Brewin et al. (2000) recognised that factors such as “trauma severity, lack of social support, and additional life stress” (p.748) operating during (peri-) or after (post-) trauma had in fact stronger predictive effects than pre-trauma factors, it was the pre-trauma factors “such as psychiatric history, reported childhood abuse, and family psychiatric history” (p.748) which showed more consistent results across different populations. According to the

needs identified above, the third category of factors that predicted consistently across populations was the best fit for the current study.

Some of the above findings, as reported by Brewin (2005a) but initially concluded by Brewin et al. (2000), were replicated in a meta-analysis by Ozer et al. (2003) based on a review of 2647 studies. This review yielded 476 potential articles of which only 68 met the inclusion criteria, and the following seven predictors were identified as producing significant effect sizes: (a) prior trauma; (b) prior psychological adjustment; (c) family history of psychopathology; (d) perceived life threat during the trauma; (e) posttrauma social support; (f) peritraumatic emotional responses; and (g) peritraumatic dissociation. Ozer et al. (2003) concluded that additional risk factors occurring during the trauma itself, such as peritraumatic psychological processes, were the strongest predictors of PTSD; Brewin (2005a), likewise, acknowledged that “perceived threat to life, intense peritraumatic emotions, and greater peritraumatic dissociation (depersonalisation, derealisation, out-of-body experiences, etc.)” were all associated with a greater risk of subsequent PTSD (p.127). However, Brewin (2005a) also purposefully commented on the moderate effect sizes of these peri-traumatic factors, and posed the argument that – although these peri-traumatic reactions adequately influence and predict PTSD development – their occurrence immediately after the trauma acts as a disadvantage since their predictive effect changes with an increase in recovery time. This can be further explained by pre-trauma characteristics having elevated effect sizes immediately after a traumatic event; however, these effect sizes naturally decrease when the recovery processes of trauma individuals are taken into account.

The review by Weisæth (1998) focused on the clinical evaluation of individual patients rather than focusing on the strong empirical focus of the Brewin (2005a) and Ozer et al. (2003) systematic reviews. Similarly to the more empirical reviews, Weisæth (1998) noted that the development of PTSD is a “multifactorial” process and the interaction of “both

vulnerability and protective factors (such as variables related to the individual, their life situation at the time of exposure, the stressor, as well as the recovery environment)” (p.S39) is crucial in identifying at-risk individuals. These predisposing individual characteristics that were highlighted are: (a) gender, (b) age, (c) children, (d) family factors, (e) family history, (f) prior life events, (g) childhood problems, (h) prior trauma, (i) premorbid personality, and (j) previous psychiatric disorders.

Noticeably, uniformity exists between these three international reviews regarding most of the risk factors for PTSD. Whilst Brewin (2005a) and Ozer et al. (2003) were useful in identifying strong predictors (i.e., based on adequate consistency and effect sizes), Weisæth (1998) highlighted elements that could reasonably be explored within an interview setting. Adequate predictors and ease of administration have been noted above as necessary elements for the assessment of risk in a South African setting. Interestingly, there was also consensus with regards to the consideration of the importance of the complex or multifaceted nature of PTSD in different populations and across different studies. It is, therefore, emphasised that risk factors essentially need to be evaluated in practice and in correlation to each other to be useful.

Table 1 consists of all the summarised risk factors identified by the above-mentioned international reviews.

Table 1: Risk factors as by Brewin (2005a), Ozer, et al. (2003) and Weisæth (1998).

Brewin (2005a) (based on Brewin, Andrews, & Valentine, 2000)	Ozer, et al. (2003)	Weisæth (1998)
(a) previous trauma	prior trauma	prior trauma
(b) psychiatric history	prior psychological adjustment	previous psychiatric disorders
(c) family psychiatric history	family history of psychopathology	family history
(d) social support	posttrauma social support	family factors
Other factors:	Other factors:	Other factors:
(e) trauma severity	perceived life threat during the trauma	premorbid personality
(f) life stress	peritraumatic emotional responses	prior life events

(g) childhood abuse and general or other adverse childhood factors	peritraumatic dissociation	childhood problems
(h) race (minority status)		Children
(i) age at trauma		Age
(j) gender		Gender
(k) education		
(l) intelligence		
(m) SES		

To maintain the focus of this study within a South African context and to ensure maximum content validity, these risk factors (Table 1) were compared to some recent (2001 to present) South African studies. The following section discusses the procedure and results of the review of South African literature. The reference list contains asterisked articles of studies that have been included in this section. Risk factors that predict traumatic stress severity as found by these South African studies are also comprehensively summarised and illustrated in Appendix J.

As already mentioned, majority of the population are affected either directly, or indirectly, due to the incidence of violent crime being an everyday occurrence in South Africa (MacRitchie & Leibowitz, 2010, echoing Edwards, 2005b). It is known that when exposed to violence (Mostert, 2001) or a number of traumatic events (Marais & Stuart, 2005), PTSD symptoms are experienced (Williams et al., 2007; Matzopoulos et al., 2008; Hirschowitz & Orkin, 1997; Edwards, 2005a); there is an agreed and recognised linear relationship between PTSD and traumatic events. Literature further postulates that a variety of biological, psychodynamic, social and cultural factors are also related to the development of PTSD; “various dependent and independent variables” (Jansen van Vuuren, 2001, p.) such as biological dynamics, type of trauma, and the involvement of the victim have also been considered. Below is a brief synthesis of the risk factors for PTSD development as studied in a South African context.

It was found that people involved in the trauma were more prone to develop PTSD than those who were only eyewitnesses or friends or family of the victim (Jansen van Vuuren,

2001). The experience of the trauma by the individual was found to be associated with “symptom severity and more specifically PTSD severity” (Marais & Stuart, 2005, p. 101; Sikkema, Watt, Meade, Ranby, Kalichman, Skinner, & Pieterse, 2011), and emotional reactions and/or temperament traits such as pre-trauma neuroticism or anxiety were also indicated as vulnerability factors in the development of PTSD) (Marais & Stuart, 2005).

Furthermore, a sense of coherence (SOC) (Kassen, 2002; Marais & Stuart, 2005; Wissing, de Waal, & de Beer, 1992), coping strategies (Marais & Stuart, 2005), cognitive or defense styles (Kassen, 2002), personal beliefs and/or spirituality (Govender, 2010) buffer the effects of trauma and reduce the risk of developing PTSD, together with moderating social support (Vythilingum, 2009). However, psychiatric conditions (such as major depressive disorder, suicidality, and social anxiety disorder) (Olley, Zeier, Seedat, & Stein, 2011a; Vythilingum, 2009), depression symptoms in conjunction with traumatic experiences, sexual behaviour, and substance use (Sikkema et al., 2011) as well as work impairment (Olley et al., 2011a; Vythilingum, 2009) were more likely to be reported with PTSD.

Lastly, the prevalence of and factors associated with PTSD in recently diagnosed HIV/AIDS patients in South Africa has also been extensively researched, and similarly so female gender (Olley, Gxamza, Seedat, Theron, Taljaard, Reid, Reuter, & Stein, 2011b; Olley et al., 2011a; Pingo & Seedat, 2009; Seedat, Stein, & Carey, 2005), a history of sexual, and intimate partner violence (Pingo & Seedat, 2009; Seedat, Stein, & Carey, 2005; Sikkema et al., 2011; Vythilingum, 2009). For men it was found that PTSD was associated with being hit by a sex partner, physical child abuse (van Niekerk, 2010), sexual child abuse (Olley et al., 2011b; Olley et al., 2011a; Pingo & Seedat, 2009; Seedat, Stein, & Carey, 2005), and HIV diagnosis (Sikkema et al., 2011), whereas for women, it was found that PTSD was predominantly associated with being hit by a sex partner, forced sex, and physical child abuse (Olley et al., 2011b; Olley et al., 2011a; Sikkema et al., 2011). Trauma history has been red-

flagged as a primary and significant risk factor for developing PTSD, and the pervasiveness of rape as a feature of the phenomenology of PTSD has also been repeatedly emphasised.

As mentioned, these risk factors for PTSD can be reviewed in Appendix J, while a comparison found between international and national risk factors for the development of PTSD relevant to the purpose of this research is highlighted accordingly in the following table.

Table 2: PTSD risk factors compared: International and South African studies.

International Risk Factors for PTSD	South African Risk Factors for PTSD
(a) demographic factors: i. age at trauma ii. education iii. gender iv. intelligence v. race (minority status) vi. SES	gender (female) work impairment
(b) previous psychiatric history	previous psychiatric disorders (MDD, suicidality, social anxiety disorder)
(c) family psychiatric history	–
(d) previous trauma (e) adverse childhood factors or problems (childhood abuse) (f) prior life events or life stress	prior trauma (i.e., history of trauma): number of traumatic events physical / sexual child abuse (history of sexual violation) coping skills and strategies, that is, cognitive styles and beliefs
(f) trauma severity: perceived life threat during the trauma	experience of trauma: trauma type (forced sex / rape, physical abuse by intimate partner), involvement (for example, victim / witness / family / friend), trauma severity
(g) peritraumatic emotional responses	emotional reactions / defence styles (for example, maladaptive / adaptive)
(h) peritraumatic dissociation	–
(i) posstrauma social support	social support / sense of coherence (SOC)

As is evident, there was a clear correlation between the risk factors that were found internationally and nationally; South African studies, however, just performed progressively specific and detailed explorations into the individual risk (or vulnerability) factors to test their role in the development of PTSD. The influence of definite protective factors on the development of PTSD (i.e., coping mechanisms, ego defense styles, and SOC) was also investigated, and the sample population very particular.

Context of the Research

According to Coaley (2010), for any assessment to be a “good measure” (p.29), it needs enough appropriate items and a scale which measures only the attribute and nothing else, a principle known as unidimensionality (Nunnally, 1978).

The objective or purpose of item selection was to establish an initial item bank or item pool (Clark & Watson, 1995), where the aim of the risk assessment measure and the context of a screening instrument within a South African context was defined according to three major international reviews (Brewin, 2005a; Ozer et al., 2003; and Weisæth, 1998), South African research on known risk factors, and literature on PTSD risk assessment considerations (Brewin, 2005b).

This article functions to report on the rationale and motivation for the specific item selection as found in the pilot PTSD risk assessment (Appendix B) (van Rooyen, 2011).

Methodology

Three major international reviews were matched against recent national or South African-based research in a short two-staged examination with regards to risk factors that have been considered for the development of PTSD (as per table 2).

International Reviews

Brewin (2005a), Ozer et al. (2003) and Weisæth (1998) were utilised as these are well-known international reviews by renowned researchers (Brewin, Andrews, Valentine, Ozer, Best, Lipsey, Weiss, and Weisæth); Brewin, especially, is notorious in PTSD risk literature.

Brewin (2005a) and Ozer et al. (2003) are both meta-analyses. Brewin (2005a) used a meta-analytic technique to study the regulating effects of a number of sample and study characteristics across a large variety of retrospective and partly longitudinal studies of PTSD risk factors (Brewin et al., 2000). Reported since 1980, these heterogeneous studies differed

in their design, sampling and measurement; they were conducted on populations exposed to a traumatic event in adulthood, containing non-disordered as well as disordered participants, where PTSD had to be measured according to diagnostic criteria, and each risk factor had to be studied in at least four separate articles. Hence, the presence or absence of a PTSD diagnosis determined the subsequent risk factor analysis, and effect sizes were carefully observed to determine whether they were homogeneous or whether they were affected by characteristics of the study or the sample. Brewin (2005a) concluded that “their effects tend to be small and to vary according to the nature of the study” (p.123).

An alternative meta-analysis by Ozer, et al. (2003) reviewed 2647 studies (as mentioned previously) where additional risk factors occurring during the trauma itself were also identified. This approach also relied on the diagnostic criteria for early symptoms of PTSD as stipulated in the DSM-IV (American Psychiatric Association, 2000) where the presence of re-experiencing, avoidance, numbing, and arousal indicators were acknowledged. The predictors recognised by Ozer et al. (2003) yielded significant effect sizes.

Additionally, Weisæth (1998) documented a more clinical picture of pre-, peri- and post-traumatic factors that are important in the early identification of high-risk individuals for the development of PTSD. Weisæth (1998) reported on epidemiological and prospective studies with regards to the vulnerability and protective factors associated with PTSD. It was concluded that many differing variables – variables that are related to the individual, the event, as well as the environment – affect the development of PTSD. Weisæth (1998), therefore, based PTSD knowledge on a biopsychosocial model, which also takes into consideration relevant predisposing, precipitating, perpetuating, and protective factors.

South African Reviews

The revision of South African-based studies documented cannot compare to the large meta-analyses described.

Databases that were used in the literature review included NEXUS (National Research Foundation Database), Sabinet (African Digital Repository), NDLTD (Networked Digital Library of Theses and Dissertations), SACat (SA Catalogue), SANB (South African Bibliographic Network), SA-ePublications, and EBSCOHost. The EBSCOHost research databases that were used in this study included: Academic Search Premier, CINAHL, Education Resource, E-journals, ERIC, Health, Humanities, MasterFilePremier, MEDLINE, PsycINFO, and Teacher Reference.

A multistage search was used to select the relevant studies. In the first stage of the search, each database was examined individually and limited to English and Afrikaans peer-reviewed documents that were published anywhere within the time frame of January 2006 (as recent as possible, approximately seven years prior) to March 2013 (when the data collection was carried out) by using the following keywords: *“risk adj factor* and traumatic adj stress* and south adj Africa*”*.

NEXUS was used to search for theses and dissertations in South Africa and yielded no results, even with a different combination of the keywords: *“risk (adj factor)* and traumatic (adj stress)* and south adj Africa*”* or *“risk adj factor* and post adj trauma*”*. Using the same keywords also produced unsuccessful findings in NDLTD and SANB.

Sabinet (African Digital Repository), SACat (SA Catalogue), SA-ePublications, and EBSCOHost, however, did yield results.

African Digital Repository yielded nine results using the key words *“risk factor* and traumatic stress* and south Africa*”* of which one was a letter, four were articles, two were theses, one was irretrievable, and one was not relevant. As part of the second stage of the search, the abstract of each publication obtained was scrutinised to determine the relevance of the article to the study.

SACat was used to search over 90 books using the same key words “*risk factor* and traumatic stress* and south Africa***” and yielded four results (2007 - 2013) of which none were successfully recovered.

Sabinet was used to search current and completed research which yielded five results (2001 – 2002) of which four were retrieved.

SA-ePublications also used the key words “*risk factor* and traumatic stress* and south Africa***” and yielded nine results of 736 publications (2007 - 2013): South African Journal of Psychology (x2), South African Journal of HIV Medicine, African Journal of Psychiatry (x2), CME: Your SA Journal of CPD: Women’s Health, South African Journal of Education, and Child Abuse Research in South Africa, with only one exact phrase found.

After reviewing all the relevant South African studies, it became evident that no exploration of the relationships between the many different risk factors and their combined predictive properties in the development of PTSD has been accomplished in South Africa.

Measures

The international risk factors (as per table 1) by Brewin (2005b), Ozer, et al. (2003) and Weisæth (1998) were applied to pilot the PTSD questionnaire or risk assessment (Appendix B); Brewin (2005a) was functional and pragmatic in guiding the design of the instrument and maintaining the focus on fewer items, easier response scales and scoring methods. Although Brewin (2005a) resolved that “simpler instruments perform as well as if not better than longer and more complex measures” (p.53) with reference to diagnostic assessments of PTSD symptomology specifically, the main principle of “fewer items, simpler response rates, and simpler scoring methods” of Brewin (2005a, p.53) has been applied and expanded to a more general form of assessment immediately post-trauma by primary health care professionals. The motivation and rationale for such an instrument remains.

Thus, the main principle and central value of this research was to design an instrument that could be objectively implemented by primary health professions (for example, factors such as personality traits were excluded as these require qualified psychological professionals to ethically evaluate these constructs), easily measured (for example, identifying straightforward factors such as gender), and quick to be administered (Brewin, 2005a). These guidelines underlined and accentuated the thought and reasoning for particular item selection in the pilot PTSD risk assessment (Appendix B).

Results and Discussion

As revealed by epidemiological evidence by Edward (2005b), traumatising events are a common occurrence in South Africa. It is a known fact that exposure to violence (MacRitchie & Leibowitz, 2010; Mostert, 2001; Ward, Flisher, Zissis, Muller, & Lombard, 2001; Kopel & Friedman, 1999, 1997) is a “significant contributing factor to the high incidence of PTSD” (Edwards, 2005b, p.132). However, this bold claim can unfortunately not be generalised to any other risk factors for PTSD, and there remains this apparent uneasiness about the lack of consistency when it comes to investigating risk factors in respective studies, both internationally as well as nationally.

Brewin et al. (2000) acknowledged and cautioned that the effect of most of the risk factors (reported by Brewin, 2005a) varied according to the different parameters of the studies in which they were investigated. For example, three factors were influenced by whether the design was retrospective or prospective, six factors by whether investigators used a diagnosis or continuous scores, four factors by the use of an interview versus a questionnaire, six factors by whether participants with childhood traumas were included, and three factors by the gender of participants. Particularly, it was mentioned that the risk associated with gender, age, and trauma severity varied extensively across the different study parameters, while other pre-trauma factors such as previous psychiatric history, a family

psychiatric history, or reported abuse in childhood were the most reliable in their moderate effect sizes remaining consistent across different types of studies. This data revealed minor consistent associations (Brewin, 2005b; Bremner, Southwick, & Charney, 1995) across different trauma types and in the measure of PTSD in the different studies, owing to the fact that a “dichotomous variable” (Brewin et al., 2000, p.749) which reflects whether or not the person meets formal diagnostic criteria for the disorder as stipulated in the DSM–IV was still embedded in extremely heterogeneous studies. These varying effect sizes of risk factors according to the type of study being conducted (Brewin, 2005b; Ozer et al., 2003; Weisæth, 1998) decrease the reliability of effect size estimates within the different studies.

Furthermore, the meta-analyses were carried out on a single risk factor across the different studies, as opposed to allowing for the consideration of relationships between variables and examining their combined effect sizes within a specific study.

Large epidemiological samples have also been utilised where a variety of trauma types (male combat veterans and female civilian trauma victims, specifically) were assessed in the studies evaluating lifetime PTSD in adults. Although some epidemiological studies did include events in childhood in relation to PTSD development, PTSD arising as a result of traumas in childhood and in adulthood (Breslau, Davis, Andreski, & Peterson, 1991) has not yet fully been illustrated due to the smaller sample sizes of these studies and the focus on a single type of trauma occurring in adulthood.

Also, some of the effect sizes of the risk factors discovered (though varying) were believed to be inflated by retrospective bias; that is, “whereas dissociative reactions that specifically occur during or in the immediate aftermath of the trauma are consistently related to later PTSD, the occurrence of similar reactions in the days and weeks after the trauma is over does not always have the same predictive value” (Brewin, 2005b, p. 127; c.f. Brewin, Andrews, Rose, & Kirk, 1999). For this reason, and also for studies that were conducted on

(for example) combat veterans and/or male samples, findings cannot be ethically generalised to civilian and female samples.

Much of the research obtained has attempted to deduce possible risk factors for PTSD by comparing a group of people who have already contracted PTSD to a control group, or those without PTSD; few longitudinal studies were reported on identifying risk factors from scratch, that is, over a period of time where individuals either exponentially progress from being asymptomatic (immediately post trauma) to displaying PTSD symptoms diagnostically within one, three or six months of the incident. Current studies, therefore, rely heavily on the presence of early symptoms of re-experiencing, avoidance and numbing, and arousal taken from the *DSM-IV* (American Psychiatric Association, 2000) with regards to identifying PTSD risk factors. The disadvantage of this assessment is that symptoms cannot be measured too soon post-trauma, although the results obtained have been consistent and have shown relatively strong predictive effects (Brewin et al., 2003).

Consequently, few prospective studies of PTSD exist (with the exception of Macklin, Metzger, Litz, McNally, Lasko, Orr, & Pitman, 1998; and Weisæth, 1998) where risk factors have been measured before the traumatic event; interestingly, only a few studies have also measured risk factors post trauma but prior to the onset of PTSD (Andrews, Brewin, Rose, & Kirk, 2000). Although the results of Brewin (2005b) and Ozer et al. (2003) suggest that it is probably impractical to attempt to identify individuals at risk for PTSD from their pre-trauma characteristics, their subjective accounts of trauma severity, their peri-traumatic reactions, and later environmental factors, researchers such as Weisæth (1998) believed otherwise. Regardless, uniformity existed between these three international reviews concerning some of the risk factors for PTSD which not only authenticated the choice of certain risk factors for the pilot questionnaire (Appendix B), but also inspired the design of a more promising approach able to identify at-risk individuals.

Resonating Brewin et al. (2000), an urgency and need to build comprehensive models of PTSD arose, “taking into consideration the rapidly growing numbers of empirical studies and, also, the value of more broadly based quantitative estimates of the absolute and relative effect sizes associated with possible risk factors” (p.748).

Still, it became evident that, when scrutinising the different international and South African studies, the focus of so many deliberations on very specific dimensions of PTSD.

Sample populations studied were particular; for example, trauma workers (MacRitchie & Leibowitz, 2010), correctional officers (Mostert, 2001), journalists (Marais & Stuart, 2005), HIV/AIDS patients in South Africa (Sikkema et al., 2011; Olley et al., 2011b; Olley et al., 2011a; Pingo & Seedat, 2009; Bakelaar, Rosenstein, Kagee, & Seedat, 2011; Sall, Salamon, Allgulander, & Owe-Larsson, 2009), South African Police Service (SAPS) (Kassen, 2002; Wissing, de Waal, & de Beer, 1992), pregnant women (Vythilingum, 2009), mine workers (Sall et al., 2009), medical service personnel (Nortje, Roberts, & Moller, 2011), and fire fighters (Seedat, La Grange, Niehaus, & Stein, 2011). Furthermore, a substantial amount of research has been completed on trauma and PTSD in children (van Niekerk, 2010; Ogina, 2012; Venter, 2001; Carey, Stein, Zungu-Dirwayi, & Seedat, 2003; Seedat, Nyamai, Njenga, Vythilingum, & Stein, 2004; Dawes & Tredoux, 1989; Dawes, Tredoux, & Feinstein, 1989; Dinicola, 1996; Ensink, Robertson, Zissis, & Leger, 1997; Govender & Killian, 2001; Peltzer, 1999; Smith & Holford, 1993; Simpson, 1993b; Leibowitz-Levy, 2005; Leibowitz, Mendelsohn, & Michelson, 1999; and Magwaza, Killian, Petersen, & Pillay, 1993) and, to a lesser degree, adolescents (Seedat, van Nood, Vythilingum, Stein, & Kaminer, 2000).

Studies also focused specifically on women sample populations, looking at female rape survivors (Makumana, 2004), domestic violence (Marais, de Villiers, Möller, & Stein, 1999), and township violence (Michelson, 1994).

Besides conducting research in a particular context and on specific sample populations, South African studies also examined detailed constructs that required specific psychological knowledge to complete accurate evaluations and/or assessments. For example, temperament (i.e., neuroticism and compulsiveness) amongst journalists was also a surprisingly specific focus (Marais & Stuart, 2005), as well as coping and/or defense styles, and SOC). For example, the sense of coherence (SOC) construct is defined as a global and stable orientation to the internal and external environment of a person (Antonovsky, 1983) and acts as a resilience factor or stable temperament trait (Geyer, 1997) that gives an indication of “how the individual might respond to intensely stressful situations” (Marais & Stuart, 2005, p.91). Although this may be a worthwhile risk factor to take into consideration, it would not be easily obtainable from trauma individuals by primary health care professionals.

Consistent with deductions from international studies, results obtained from these studies can regrettably not be generalised to a broader context. South African studies on risk factors were conducted in too a unique context. The subsequent supplementary studies act as further confirmation, where studies were based in combat (Brewin, 2005b), military service (Kaylor, King, & King, 1987), the South African National Defence Force (Seedat, le Roux, & Stein, 2004), police services (Jones & Kagee, 2005; Kopel & Friedman, 1997; Peltzer, 2001), war (de Jong, Mulhem, Ford, van der Kam, & Kleber, 2000), hostile circumstances such as torture (Dowdall, 1992; Simpson, 1993a; Simpson, 1993c; Simpson, 1995), and a political environment (Solomons, 1989) during the apartheid years (Silove & Schweitzer, 1993), and specific factors, such as perceived life threat and exposure to abusive violence within a harsh environment (King, King, Gudanowski, & Vreven, 1995) or suicide ideation in the SAPS (Pienaar & Rothmann, 2005), were investigated in relation to this context.

Finally, much of the South African research expended time and effort in identifying intervention possibilities: providing mental health services to trauma survivors (Pillay, 2000) from psychological trauma debriefing (Mayou, Ehlers, & Hobbs, 2000) to intensive trauma support in the aftermath of traumatising events (van Wyk & Edwards, 2005), while integrating African and western healing practices in South Africa (Straker, 1994) in order to minimise posttraumatic stress in specific (i.e., mining) critical incidents (Badenhorst & van Schalkwyk, 1992) through post-traumatic stress therapy (Eagle, 2005).

It is adept to verbalise the complexity of the psychological consequences of trauma, and also the range of different paths it can take (Edwards, 2005a; Brewin et al., 2000; hence, it makes sense to dominate research both internationally and nationally focused to identify an “increasingly differentiated psychological understanding of the sequelae of traumatising events” (Edwards, 2005a, p.120). According to Edwards (2005a), this comprehension of this sequelae of traumatising events extends beyond the ordinary discourses of PTSD, encompassing not only the “traditional cultures, but (also) developing non-professionals contexts within Western culture” (p.120).

It has been concluded that women are more prone to PTSD, as they are more susceptible to early childhood trauma and other life traumas (such as rape, partner violence, as well as traumatic pregnancy-related procedures).

Conclusions, Recommendations, and Limitations

For any assessment to be a “good measure” (Coaley, 2010, p.29) it needs enough appropriate items and a scale which measures only the attribute and nothing else, a principle known as unidimensionality (Nunnally, 1978). Both the target of measurement and measurement of the target are important for optimal scale development, as later stages will proceed more smoothly if the earlier stages have been marked by both theoretical clarity (i.e.,

Careful definition of the construct) and empirical precision (i.e., careful consideration of psychometric principles and procedures) (Clark & Watson, 1995).

This was specifically obtained by the three international reviews employed. Brewin (2005b), Ozer et al. (2003) and Weisæth (1998) ensured the careful definition of the construct, and Brewin (2005a) fulfilled the cautious consideration of psychometric principles and procedures. The aim of this paper was to call for appropriate strategic planning with regards to addressing PTSD as the significant public health problem in South Africa (Edwards, 2005a) which it is.

The meta-analyses (Brewin, 2005b; Ozer et al., 2003; Weisæth, 1998) were suggested to be “not well suited to identify individuals who require early intervention following a traumatic event” (Brewin, 2005a, p.123) as they do not allow for the consideration of relationships between variables within a specific study. It is imperative that vulnerability to PTSD is understood across different traumatised groups and that careful consideration of the relationship between individual risk factors or variables in prospective as well as longitudinal studies is taken into account.

Brewin et al. (2000) recognised that factors such as “trauma severity, lack of social support, and additional life stress” (p.748) operating during (peri-) or after (post-) trauma had in fact stronger predictive effects than pre-trauma factors. However, it was the pre-trauma factors “such as psychiatric history, reported childhood abuse, and family psychiatric history” (p.748) which showed more consistent results across different populations. Although Brewin (2005b) suggested that attempts to identify a common set of pre-trauma predictors of PTSD that will be equally valid across different traumatised groups are premature, Brewin (2005a) also specially emphasised the need for screening instruments to be appropriate and relevant to all populations having experienced different traumas and with varying incidence rates of

PTSD and, most importantly, for the instrument to be effective in identifying at-risk as well as not at-risk individuals.

Since there was no consistent instrument geared towards identifying risk factors in this objective, quick and easily assessable method immediately post trauma and across different traumatised groups, the pilot questionnaire (Appendix B) formed the rubric in the process of developing a new psychometric instrument. It consists of demographic, biological, and self-report items; risk factors that can be assessed effortlessly in a straightforward manner by first contact or primary health care professionals are included.

This pilot risk assessment (Appendix B) is an alternative approach offered to evaluate and identify risk factors that predict traumatic stress severity in South Africa in a simple and brief manner; it is not based on symptom reports, but more so encapsulates pre-, peri-, and post-traumatic risk factors. It is postulated to provide much more sensitive results in screening for PTSD in the future, as factors such as the experience of the trauma (i.e., perceived life threat during the trauma, peritraumatic emotional responses, and peritraumatic dissociation), as well as the constant pre-trauma factors such as psychiatric history, reported childhood abuse, and family psychiatric history are captured.

The eventual PTSD screening instrument is intended to estimate risk factors within a South African context with regards to predicting future risk for PTSD. It is likely that that this form of early identification will become imperative for the provision of more comprehensive forms of intervention targeted at vulnerable individuals, specifically, in the future. This will subsequently lead to more efficient targeting of resources, while at the same time capitalising on natural recovery processes and reaping the benefit of addressing symptoms before they have become chronic.

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Chapter 3: The Content Validation of a Newly Constructed Risk Measure of Posttraumatic Stress Disorder

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Abstract

Background: Many people in South Africa that suffer from PTSD probably remain undiagnosed and untreated due to the absence of screening. It makes sense for primary health care practitioners to screen for risk using a relatively easy screening instrument that can be administered time efficiently to alleviate this situation. No such measure or instrument currently exists in South Africa.

Objectives: The purpose of this article is to review the initial process of validating a newly designed PTSD risk assessment instrument. Since this was the initial stage of constructing a new measure, content validity was of utmost importance and the process attempted to ensure that items are relevant and appropriate.

Method: A preliminary item pool was assembled using a combination of three well-known reviews of international risk factors, and presented to a panel of 31 expert reviewers who have research and/or clinical experience with PTSD in a South African context. This item pool was evaluated quantitatively by a 4-point Likert scale with regards to the relevance of each item, as well as qualitatively. The feedback resulted in one of 21 items being omitted, and the flagging of potential problem items. The qualitative critique allowed for recommendations as to how items could possibly be improved by re-wording or re-phrasing. Items were modified in the end rendering a more content valid and content appropriate risk assessment.

Key words: Risk factors, South Africa, traumatic stress, posttraumatic stress disorder, psychometric instrument / questionnaire, expert reviewers, content validity index

The purpose of this article is to report the results of a process of content validation of a newly constructed pilot PTSD risk assessment instrument. A preliminary item pool was assembled by means of an extensive literature review using a combination of three major international reviews (Brewin, 2005a; Ozer, Best, Lipsey, & Weiss, 2003; and Weisæth, 1998), South African research on known risk factors, and literature on PTSD risk assessment considerations (Brewin, 2005b). Chapter 2 provides more information regarding the methodology behind the process of compiling these risk factors as they are currently presented in the pilot PTSD risk assessment (Appendix B).

According to Clark and Watson (1995), both the “target of measurement and measurement of the target are important for optimal scale development, as later stages will proceed more smoothly if the earlier stages have been marked by both theoretical clarity (i.e., careful definition of the construct) and empirical precision (i.e., careful consideration of psychometric principles and procedures)” (p.19).

The thorough literature studies identified a gap in current screening measures, where “no consideration [was] given to how information from risk factors, associated features, or symptoms could be effectively combined in a single instrument” (Brewin, 2005b, p.55). The international meta-analyses (Brewin, 2005a; Ozer et al., 2003; Weisæth, 1998) provided a range of extensive risk factors found to influence the course or development of PTSD; however, they lacked the consideration of possible relationships between variables within a specific study, and did not examine their combined effect properties. Most of the risk factors were also acknowledged to display unpredictable effect sizes, and these discrepancies decrease the reliability of effect size estimates within the international and national studies. These minor consistent associations (Brewin, 2005b; Bremner, Southwick, & Charney, 1995) revealed a dearth in longitudinal and prospective studies, studies measuring risk factors post trauma but prior to the onset of PTSD (Andrews, Brewin, Rose, & Kirk, 2000), and in the

generalisation of risk factors to civilian or a broader South African context. The trauma model has been criticised with regards to it representing a Western conceptualisation, and not being tested within a South African context (Kagee, 2004) to determine significant symptoms and psychiatric phenomena for a South African population. Since traumatising events are a common occurrence in South Africa (Edwards, 2005a), it is imperative that vulnerability to PTSD is understood across different traumatised groups (reiterating Brewin, 2005b), and that careful consideration of the complexity of the disorder and the relationship between individual risk factors is also taken into account.

Brewin (2005b) was discussed in chapter 1 and 2, and employed to assist in “concisely operationalising” (Foxcroft, 2004, p.10) this assessment instrument within a clinical setting, as this psychometric rating scale will be utilised in calculating risk for PTSD by predicting traumatic stress severity from specific risk factors in a South African context.

Brewin (2005b) specially considered effective methods of screening for PTSD due to the unavailability of specialist trauma clinicians. Many psychologists have the requisite knowledge and experience to identify individuals at risk, but the problem is that trauma individuals usually present at first line primary health care practitioners, who do not have those skills or psychological background (Bisson & Cohen, 2006). Trauma and emergency units often also focus on stabilising a patient or dealing with immediate life threatening injuries, rather than on psychological screening procedures.

The majority of current diagnostic measures (Brewin, 2005a) focus specifically on symptom-based criteria, such as in clinical interviews. The disadvantage of this is that symptoms of re-experiencing, avoidance and numbing, and arousal taken from the DSM-IV (American Psychiatric Association, 2000) cannot be measured too soon post-trauma (Brewin, 2005b), and also a certain degree of psychological knowledge is required to be able to assess diagnostic PTSD symptomology accurately.

There is an urgent need for a screening instrument; one that is relatively easy and quick to administer, but that could be objectively implemented and used by non-trauma specialists, such as first line health care practitioners (i.e., registered counsellors and nursing staff) within the context of mental health services and of mass trauma. Bisson and Cohen (2006) also indicate that this kind of approach is necessary for “allowing more individuals to be treated in total” (p.592), given that the screening instrument accurately identifies the majority of individuals at risk.

Hence, a specific yet universal screening instrument was temporarily designed for this purpose: one that would be appropriate and relevant to all populations having experienced different traumas and with varying incidence rates of PTSD. The pilot risk assessment (Appendix B) is an alternative approach proposed to evaluate and identify risk factors that predict traumatic stress severity in South Africa in a simple and brief manner.

In this article, the comprised preliminary item pool in the pilot risk assessment (Appendix B) was utilised as a departure point for further content validation, and presented to a panel of 31 expert reviewers who have research and/or clinical experience with PTSD in a South African context. This item pool (i.e., risk factors) was critiqued and evaluated quantitatively by a 4-point Likert scale with regards to the relevance of each item, as well as qualitatively in accordance to the proposed screening instrument criteria or features by Brewin (2005b):

- short, containing the minimum number of items necessary for accurate case identification,
- easy to administer, in contexts where there is little specific psychological expertise (i.e., nonspecialists),
- consisting of demographic, biological, as well as self-report items that can be assessed effortlessly and in a straightforward manner,

- producing easily understood items that are acceptable to trauma individuals,
- a scoring method of fewer alternative scale points that would widen the application amongst first contact or primary health care professionals, and,
- most importantly, effective in identifying at-risk as well as not at-risk individuals.

Predominantly the focus is on “well-designed items” (Coaley, 2010, p.29), since they are more likely to measure the intended domain (i.e., PTSD risk factors that influence traumatic stress severity, and subsequently PTSD development). So, the more care is taken in constructing items, the better they will act in making predictions from scores (Coaley, 2010).

It is likely that this form of early identification will become imperative for the provision of more comprehensive forms of intervention targeted at vulnerable individuals in the future. This will subsequently lead to more efficient targeting of resources, while at the same time capitalising on natural recovery processes and reaping the benefit of addressing symptoms before they have become chronic. In resource taxed settings like South Africa it becomes important to identify individuals at risk early on, because it leads to more economic and less time intensive treatments.

Literature Review of Test-Construction Theory

A “primary goal of scale development is to create a valid measure of an underlying construct” (Clark & Watson, 1995, p.309). *Validity* focuses attention on the “extent of matching, congruence, or ‘goodness of fit’ between an operational definition and the [construct] it is purported to measure” (Singleton, Straits, & Straits, 1993, p.115). Instrument validity is ideally established by comparing the new instrument being developed with a gold standard (Zeolla, Brodeur, Dominelli, Haines, & Allie, 2006); however, since one does not exist, safeguarding content validity was a more than suitable method to develop this PTSD screening instrument.

Content validity is the determination of the content representativeness or content relevance of the elements or items of an instrument; it is “fundamental to the validation of virtually all instrumentation” (Lynn, 1986). Furthermore, Loevinger (1957) affirmed “if theory is fully to profit from test construction ... every item [on a scale] must be accounted for” (p.657). In the words of Kerlinger (1973), “Are we measuring what we think we are measuring?” (p.457) (Carmines & Zeller, 1979; DeVellis, 1991).

To ensure rigour in its development, the pilot questionnaire (Appendix B) was presented to an expert review panel. The panel of experts were used to guide the development of content specifications; this coincided with Millos, Gordon, Issenberg, Reynolds, Lewis, McGaghie, & Petrusa (2003) who proposed that items be reviewed by external experts who will evaluate question content, item structure, consistency, and validity. The expert panel focused on evaluating each item with regards to its relevance to the specified domain only; items were revised by these PTSD specialists in terms of whether they met the content specifications of the test (Foxcroft & Roodt, 2001; Foxcroft, 2004), as well as the psychometric principles and procedures of the intended PTSD risk assessment, and in terms of whether they were well written.

Content validity requiring the involvement of recognised trauma and PTSD experts is essentially a method for measuring or quantifying the agreement among raters or judges regarding how relevant an item is (Lawshe, 1975). According to Lawshe (1975), content validity has a linear relationship with the number of experts; the greater the agreement between experts, the greater degree of content validity.

This expert criticism helped refine the draft scale by eliciting if there were any problems with the specified criteria (Comrey, 1988) and, in so doing, helped to establish content validity (Ruzafa-Martínez, López-Iborra, & Madrigal-Torres, 2011; While, Ullman, & Forbes, 2007).

Context of the Research

In summary, content validity estimates how much a measure represents every single element of a construct and ensures comprehensive content coverage (Trochim & Donnelly, 2007) as well as content relevance (Streiner & Norman, 1995). Instrument validity was based on content validity in the overall process of developing a psychometric instrument that will accurately predict future risk for PTSD. This article reports on the first stage of the content validation phase and asked the overall question of whether items generated in a previous phase gave adequate coverage of the assessment of PTSD risk, given the criteria (for example, ease of measurement, understandability of items, appropriateness to trauma individuals, et cetera) as reported above. The question, “What constitutes a good item?” was addressed. The main subquestion was: How relevant are the items that have been generated?

Additionally: “Do the items meet the criteria that have been explicated as relevant to the assessment of PTSD risk? What improvements can be made to the existing items? Are there any items that need to be included as far as domain coverage and content validity is concerned?”

The answers to the above questions lead to further refinement of the pilot risk questionnaire (Appendix B).

Methodology

Since the main emphasis was on the development of a conceptually sound and successful research measure or instrument, content validity was imperative and ensured by an expert review panel in agreement with test-construction guidelines (ITC, 2000; Millos et al., 2003; Millman & Green, 1989; Foxcroft & Roodt, 2001; McGaghie, Van Horn, Fitzgibbon, Telser, Thompson, Kushner, & Prystowsky, 2001).

The pilot questionnaire (Appendix B) was subjected to both quantitative and qualitative evaluation by a feedback questionnaire (Appendix D) in a mixed-method research

design to facilitate its refinement, and so increasing its effectiveness. The expert panel evaluated all 21 items in terms of whether each item met the content specifications of this said instrument.

Description of Sample

As can be seen in table 1, there was an equal distribution of expert reviewers – 16 academics and 15 clinicians (of whom 10 were clinical psychologists and 5 registered counsellors). It is to be noted that the most appropriate categorisation was applied to facilitate generalisation of results interpreted.

Academics at the respective universities are grouped according to their proper registration categories in psychology: 7 clinical psychologists, 5 clinical researchers in PTSD, 2 psychiatrists, 1 clinical social worker, and 1 counselling psychologist. Of the 15 clinicians, there were 9 clinical psychologists, 1 educational psychologist, 2 registered counsellors, 1 social worker, and 1 traumatologist; of these 15 clinicians 8 were in private practice and 7 in public services or government institutions, such as correctional services, psychiatric hospitals and/or clinics.

Furthermore, an uneven distribution of expert reviewers across South Africa was reported; 13 in the Western Cape, 12 in Gauteng, 4 in the Eastern Cape, and 2 in KwaZulu-Natal. Regardless the sample composition and geographical distribution differences, the expert review panel collectively shared a special foundation in trauma and in PTSD, factors affecting individuals exposed to trauma, as well as the psychological effects of trauma and violence. Each of the professionals has brought a distinct awareness to the clinical and translational work of the development of PTSD in a high violence community.

Between all 31 professionals on the expert review panel, there is an average of 17 years of experience in psychological trauma and trauma support, and much of their individual professional psychological practices target human development amenities (such as

comprehensive psychological services) at a community level. Their experience ranged between patients and/or clients in state and private settings, community and hospital sites, outpatient services and inpatient programs, the health care industry as well as a more academic lecturing milieu. Thus, it seemed apt to ask them to participate in this endeavour to design and develop an appropriate community level psychometric test or PTSD screening instrument for the identification of at-risk as well as not at-risk individuals at a primary health care level to facilitate early intervention actions.

The definitions for the proper registration categories in psychology are familiar, but can be obtained from the most recent Health Professions Council of South Africa (HPCSA) Ethical Code of Conduct (Tomu, 2013) and in the HPCSA Practice Framework for Psychologists, Psychometrists, Registered Counsellors and Mental Health Assistants (HPCSA, 2008).

Administrative Procedure

The necessary permission was obtained from the relevant entities, before the research study commenced, including institutional ethics approval.

Expert reviewers were emailed and contacted telephonically to inform them of the research study and to encourage their participation. The PTSD risk schedule (Appendix B), the feedback questionnaire (Appendix D), and a consent form (Appendix E) together with an information letter (Appendix C) were emailed to each subject matter expert in the form of an expert review package (Appendix F). Where possible, appointments with the prospective expert participants were organised to personally speak to them about the study, its primary aim and subsequent goals and objectives.

Participant Recruitment

The expert review panel consisted of 31 experienced and knowledgeable professionals in the field of trauma in South Africa, as can be seen in table 1. It is to be noted that this is a

broad overview of professional categories congruent with the aim and objectives of the study to facilitate more meaningful interpretation of the results.

Table 1: A Summary of the Expert Review Panel Participants

Expert Categories (general)	Provinces	Expert Categories (detailed)
16 academics at the different universities	8 in Western Cape	2 clinical psychologists
		2 clinical researchers in PTSD
		2 psychiatrists
		1 clinical social worker
		1 counselling psychologist
	7 in Gauteng	4 clinical psychologists
		3 research psychologists
10 registered psychologists	1 in Eastern Cape	1 clinical psychologist
	4 in Western Cape	4 private practices
		2 government institutions
	3 in Eastern Cape	1 private practice
	2 in KwaZulu-Natal	2 government institutions
5 registered counsellors	1 in Gauteng	1 private practice
	4 in Gauteng	3 government institutions
		1 social worker private practice
	1 in Western Cape	1 private practice

Some of these expert reviewers were obtained during the early stage of the research process. While South African literature was being scrutinised in search of studies focusing on risk factors for PTSD, a list was compiled of authors found from published articles in South Africa (i.e., 40 professionals with a special interest in trauma and a wide range of academic knowledge of PTSD in South Africa were identified). The different universities were approached with predominant attention to the psychology departments, but also liaising with respective psychiatric departments and/or trauma centres. Of the initial 40 potential professional candidates identified and emailed, only 10 agreed to participate; most of those who declined the request reported time constraints and more pressing responsibilities, but only 2 did not feel competent enough in the field.

Initial identified experts, regardless of their commitment to the research process, were asked (personally, telephonically, and/or per email) to recommend colleagues known to have experience with PTSD; this snowball method of sampling and recruitment provided a

continuous flow or introduction of new professionals and potential participants to the process. Of these, majority fulfilled a more clinical and applied experience of PTSD in South Africa as opposed to the more academic and theoretical practise.

Furthermore, the composition of the expert review panel is given in table 2.

Table 2: Composition of Panel of Experts.

Category	Number	Doctorates	Masters or Equivalent	Ave Years Experience
Academics	16	9	7	16 years
Clinical Psychologists	10	1	9	22 years
Registered Counsellors	5	1	–	13 years
TOTAL	31	11	16	

Measures

Validity “cannot be assessed directly” (Singleton et al., 1993, p. 121); it can only be “inferred from the manner in which [a measurement instrument] was constructed [that is, *content validity*]” (DeVellis, 1991, p. 43). The preliminary item pool that was assembled was still thought to be too extensive, and needed to be further evaluated in agreement with the item writing phase in test construction guidelines (ITC, 2000) by subject matter experts; items are reviewed in terms of whether each item, independently, meets the content specifications of the test (Foxcroft & Roodt, 2001; Foxcroft, 2004) or adequately represents and is relevant (Haynes, Richard, & Kubany, 1995) to PTSD being measured.

The pilot risk assessment (Appendix B), containing demographic, biological, and self-report items, was examined quantitatively by 30 and qualitatively by 31 expert reviewers. An *assessment instrument* refers to the particular method of acquiring data in psychological assessment, for example questionnaires. An assessment instrument includes all aspects of the measurement process that can affect the data obtained – instructions to participants, situational aspects of instrument stimuli, individual behaviour codes, and questionnaire items (Haynes et al., 1995, p.238). Items were evaluated separately to ascertain whether they

sufficiently tap and meet the criteria for possible risk factors for predicting traumatic stress severity in South Africa.

Since the subject matter experts have many years of experience in and a wide range of knowledge of trauma in South Africa, the expert review panel professionals were asked to assist in establishing content validity of the pilot risk assessment (Appendix B) as part of evaluating the quality of generated items according to specified criteria, and their level of relevance. This ensured that items are not only noted as relevant and appropriate, but – more importantly – that they are also accurate and capable in identifying at-risk individuals.

The information letter (Appendix C) as part of the expert review package (Appendix F) stipulated the criteria against which each item was to be assessed. The principles of the screening instrument are: (a) the instrument should be easily measurable, (b) quick to be administered (Brewin, 2005b) and (c) able to be objectively implemented by first line and primary health care professionals. Specified standards for the particular item selection and item writing are based on these psychometric properties (Brewin, 2005b): straightforward factors such as gender have been included, while factors such as IQ and personality traits have been excluded in accordance to the principles mentioned above. At this time, only 21 short items constituted the pilot questionnaire (Appendix B).

Data was collected from the expert reviewers by means of a feedback questionnaire (Appendix D) which made use of Likert Scale- (ordinal) type questions for the item analysis. A Likert Scale, which is a type of psychometric response scale, is widely used in survey research (Carifio & Perla, 2007; McDowell & Newell, 1996). Data is ranked such that there is an order to the data, but there is no definite interval (Stevens, 1946; Walker, 2010). The items have an “inherent order” (Romano, Kromrey, Coraggio, & Skowronek, 2006, p.3); for example, (1) “not at all relevant”, (2) “slightly relevant”, (3) “relevant”, and (4) “very relevant”. The reviewers were asked to rank the overall quality of each item on this scale.

Item-writing was quantitatively assessed in this way to offer critical feedback needed to modify the questionnaire accordingly (i.e., by omission of any irrelevant and/or inappropriate item). Subsequently, the recommendation and/or comments section at the end of each item allowed for qualitative feedback; the qualitative comments functioned as specific guidelines or expert suggestions on how some of the current items on the questionnaire could be edited (i.e., how they could be reworded or phrased so as to improve understandability and clarity). At the end of the feedback questionnaire (Item 8 of Appendix D), the expert reviewers were asked to add any other risk factor(s) that they felt had been overlooked.

Feedback questionnaires (Appendix D) together with consent forms (Appendix E) were returned electronically to a private email account to ensure confidentiality. An alphabetical coding system was utilised where each expert was assigned a numerical digit (1 to 31) to further assure and guarantee professional privacy. Once all the data was captured, statistical computation and analysis took place.

All feedback was taken into consideration and the data used to compile the item statistic called the Content Validity Ratio (CVR) for each item. The CVR was determined by the proportion of items receiving a rating of at least (3) “relevant” or (4) “very relevant” across majority of all expert judges (Streiner & Norman, 1995; Lynn, 1986; Sikich & Lerman, 2004). This dichotomy of the combination of (3) “relevant” and (4) “very relevant” responses for each item was necessary as the question asked: “Is this item relevant in terms of predicting traumatic stress severity within a South African context?” elicits a nominal “Yes/No” response – “Yes (item) is relevant”, “No (item) is not relevant”.

The CVR was calculated using the following formula:

$$\text{CVR} = \frac{n_r - N/2}{N/2}$$

where n_r is the number of subject matter experts indicating “relevant” (i.e., the dichotomy effect of the combined number of (3) “relevant” or (4) “very relevant” upper spectrum responses) and N is the total number of experts that responded to the specific item in question. The statistical Content Validity Index (CVI) for the whole test is simply the mean of the CVR values of all the items retained in the final questionnaire.

The aim was that 100% of the judges would endorse each of the items included with no further suggestions for additions, deletions, or rewording, thus meeting the ideal criteria for content validity (Lynn, 1986; Weaver, Maislin, Dinges, Younger, Cantor, McCloskey, & Pack, 2003). However, this model scenario was neither practical nor realistic.

Results and Discussion

The CVR computed for each item yielded values ranging from -1 to +1. The mean CVR across all 21 items was employed as an indicator of not only individual item relevance, but also the overall content validity (CVI) of the test (Lawshe, 1975). The CVR is a direct linear transformation from the percentage; the more experts (beyond 50%) perceived an item as “relevant”, the greater the degree of its content validity.

In short, the CVR judged an item content relevant if its value was positive, greater than or equal to 0 ($CVR \geq 0$); positive values indicated that at least half of the experts rated the item relevant. When fewer than half of the experts rated an item "relevant," the CVR was negative, and when half of the experts rated an item "relevant" and half did not, the CVR was zero. As a result then in validating a test, the CVR value for each item became critical in determining whether the item was included or excluded in the final screening instrument.

According to Lawshe (1975) (in Wilson, Pan, & Schumsky, 2012), “the CVR is one of the earliest and most widely used methods for quantifying content validity” (p.197). Importantly, this type of item selection does not prevent the use of a discrimination index or any other traditional item analysis procedure (Lawshe, 1975).

The respective statistical calculations for each item are displayed in Appendix J. A summary of the statistical quantification of the content validity of items is divided into a *content validity ratio* (CVR) of each item, a *mean* value of the *average response* rating across all experts, a *median* response or the *central tendency* of the response ratings of all the experts, a *mode* or the *most frequent response* rating obtained for each item, and, finally, a *percentage* depicting the *agreement* between individual expert responses.

As is illustrated in Appendix J, almost all (20 out of 21) of the items were quantitatively considered relevant, but each with fluctuating CVR, mean, median, mode and percentage values. Each of the items, although considered relevant, was still comprehensively evaluated with regards to the qualitative feedback and recommendations obtained, which consequently led to the necessary and crucial adaptation and refinement of the items in the improved assessment instrument (Appendix I).

Both quantitative and qualitative data obtained from expert reviews and recommendations are summarised in Appendix K. The qualitative feedback and comments for each item is displayed in such a way to facilitate an easy to understand flow of the modified items.

Items have been discussed collectively; individual items (i.e., risk factors) are grouped according to their respective divisions. 1 item specifically was rated as not relevant by 62.07% expert reviewers; it is the only item (1 out of 21) that obtained a negative CVR of -0.24. The second lowest CVR value (0.07) was the other item in the *Socio-economic Status* division, and these two items were regarded as problematic in terms of item relevance, and will be discussed first. Following, the remaining 19 relevant items will now be discussed as per their divisions.

Both the *Socio-economic Status* items were omitted, although only the *number of people living in household* (CVR = -0.24) was rated not relevant. Feedback for both the

number of people living in household and *total household income* (CVR = 0.07) included the consideration that these may be alternatives for support (i.e., professional, social and/or financial support), rather than a “*direct risk factor*”, and that this may indicate a person that is financially struggling or comes from a low SES. For example, “*Is this a proxy of support*” or a “*link(s) to something else (access to health care, exposure to traumatic events)*” which “*could speak to a low SES and general life stressors*”. These items were reported to be intrusive, and substituted with an improved version of assessing SES by asking *employment* instead (i.e., *employment status* and *type of employment*) to further explore the association between SES and PTSD, but in a refined and subtle manner. This modification was further included in *Demographic Information*.

Other items in *Demographic Information* included *home language(s)* (CVR = 0.13), *education* (CVR = 0.20), and *own ethnic identity* (CVR = 0.20). These were identified as relevant, but not in terms of risk factors in a psychometric measure or risk assessment instrument; rather, as an indicator for further management and intervention. Again, *home language(s)*, *education*, and *own ethnic identity* were thought to be proxies for SES; “*(language) may speak to minority group status*”, “*(education) influence(s) understanding, meaning and reactions to life events*”, and “*(own ethnic identity) associated with past negative experiences*”. A question was identified which could possibly link *home language(s)*, *education*, and *own ethnic identity* enquiring about the “*impact (on) other factors ... (for example, access to treatment)*?”

The changes that were implemented included: (1). *home language(s)* underwent a slight format change to make it more user-friendly and to maintain a consistent response organisation of checkboxes, (2). *education* was reported to be too detailed, and condensed to only the necessary sub-items, which incorporated *highest grade passed at school* and *tertiary education*, and (3). *own ethnic identity* was criticised as being too vague (“*is the question*

asking about the race of the client or the client's cultural background?") and was simply changed to *ethnicity*. It also became useful to convert this item into an "*objective 'ethnicity'*", which addressed the sensitivity of this question; "*social and cultural constraints ... concerned that some groups may take offence ... maybe a "✓" system will (also) save time*".

All three items were retained in terms of needing further exploration into their relevance or insignificance in relation to PTSD risk; "*some research link(ing) education to risk of PTSD*", "*there is (also) some evidence that social minorities respond less well to traumatic exposure than others ... some traumatic experiences may have an ethnic component to them*", and it is "*important to know in terms of looking at patterns of exposure in SA*" which may be "*interesting for research*".

With *ethnicity* it became crucial to investigate potential practical and administrative difficulties, and intended administrators were interviewed qualitatively with regards to their subjective opinion on whether this item is found to be biased or intrusive at a primary health care level (discussed in Chapter 4). This will hopefully facilitate future resolution around the predictive validity debate of demographic risk factors. One expert reviewer commented on that this item has been "*identified in the literature as a risk factor and supported by empirical data from LMIC (low- to middle-income countries) including SA*"; therefore, it warranted further consideration to research the effect of *ethnicity* on the development of PTSD.

It is important to take into account, at this point, that the above discussed items all fell below the adapted Lawshe (1975) $CVR_{critical}$ value of 0.358 specifically for 30 expert reviewers (Wilson et al., 2012), but were not all omitted. Because of even the slightest possible contribution in predicting PTSD or trauma severity, items with a positive CVR (≥ 0) – with the exception for *total household income* – were retained in the modified and improved version of the PTSD risk assessment (covered in Appendix I) and further

exploration, thus, justified. Although items also displayed inconsistent mode and median values, any one of these may potentially still be deleted from the final product or refined PTSD risk assessment instrument if proven to have no quantitative contribution in the predictive validity calculations and statistical analyses. It is to be kept in mind that these items are not finite, and form part of a continuous development process.

Now, the remaining items will be discussed in terms of being validated as item or content relevant by the quantification of expert feedback, as depicted by the individual CVR values in both Appendix J and Appendix K. All of the CVR values of these items fell above their respective $CVR_{critical}$ values, rendering them retainable. Since quantitative expert feedback was only implemented as the first part in justifying inclusion of items as potential risk factors in the risk assessment instrument, a more in depth psychometric analysis and discussion is not necessary. However, the qualitative comments and recommendations will now be the main focus, as the second part of the evaluation process, whereby relevant items are now adapted to improve comprehension and administration.

Appendix K provides a comprehensive and concise summary of quantitative and qualitative data for each item, with $CVR_{critical}$ values included, as well as percentage expert agreement.

Gender ($CVR = 0.80$) as the last item in *Demographic Information* was reported and distinguished in 3 separate categories, namely (1) relevant as risk factor, (2) relevant in association with and as causation of exposure, and (3) professional experience contrary to its reported relevance. *Gender* was identified as a risk factor by 90.00% expert agreement, and supported as such by research and empirical data; “*there is considerable theory to indicate that gender does play a role in both patterns of exposure (2) and responses (1)*” and “*there is (also) fairly strong evidence that women are more vulnerable to PTSD than men*” (1).

Furthermore, it was observed that expert comments and recommendations, although the item

was deemed relevant, pivoted the direct and independent relationship between gender (as a risk factor) and PTSD development; expert reviewers were not fully convinced regarding its independent relevance and importance in the contribution to the course of PTSD, and as highlighted above, *gender* seemed to be more important in terms of its cumulative and combined effect (i.e., predictive power) with other risk factors (such as trauma type and emotional response to a traumatic event). It was retained with no changes made to the item to further investigate its relevance/irrelevance and/or presence/absence in predicting traumatic stress severity.

As with *Demographic Information* discussed above, *Contact Information* (*name, date of birth*(DoB), *postal address, contact number(s), significant other contact number, email, and best time to contact telephonically*)” was rated relevant (CVR = 0.53) by 76.67% expert agreement, but for no other reason than it being information that is necessary to be gathered to facilitate future contact. Expert reviewers reported that it is not relevant in terms of predicting risk, but that it served an important administrative function; “*it has no significance in predicting risk of developing PTSD*”, but is “*useful ... to gather*” “*for other reasons*” such as “*for future contact*” “*if the person is judged to be high risk*”.

Recommendations were based on item format, and suggested that “*one could possibly add In/Outpatient status if the screening is to be used at hospital settings*”, “*for ease of use in hospital or clinic settings, you may include space for a file or reference number*” or “*just ask for a pt sticker – all this info is there*”. This inspired a complete change in the administration of this item, further compelling consideration of the trauma context. In the words of one of the expert reviewers, “*when visiting any healthcare practitioner this information will already have been completed and thus repetition is unnecessary*”; therefore, the item was modified accordingly and (i) a space provided for the patient sticker, (ii) In/Out patient status included under this sticker, and (iii) a space also created for the file or reference number. Furthermore,

“name”, “DoB”, “postal address”, “contact number(s)”, “significant other contact number”, and “best time to contact telephonically” were still included; however, the “email” address was omitted, and the suggested “current age” was placed under *Demographic and Socioeconomic Information* in addition to “DoB” under *Contact Information*.

With the availability of the patient sticker and/or file number, *Contact Information* is proposed to be completed beforehand by the administrator. This again lends to administering only the relevant and important items to a trauma individual in a time efficient manner, but will be further explored with the intended administrators.

The following 5 items received expert agreement on item relevance in the *Psychiatric and Emotional History* section: *family psychiatric history* (CVR = 0.40 with 70.00% expert agreement), *psychiatric history* (CVR = 0.93 with 96.67% expert agreement), *significant (non-trauma) difficulties as a child* (CVR = 0.59 with 79.31% expert agreement), *significant (non-trauma) difficulties as an adult* (CVR = 0.85 with 92.59% expert agreement), and *current significant (non-trauma) difficulties* (CVR = 1.00 with 100.00% expert agreement). Expert reviewers thought these items to be relevant and to remain in the PTSD risk assessment instrument.

Here it is worth highlighting the CVR values for each item. Note how each CVR value suggestively increases closer in proximity to the trauma individual at that point in time; as conferred in Chapter 1, these items are known as distal elements and “do not have a direct influence on the progression of PTSD” (van Wyk, 2013, p.13). Also discussed in chapter 1, “it is not clear whether proximal or distal risk factors will predict traumatic stress severity more accurately” (van Wyk, 2013, p.14); however, it is of importance how their degree of relevance escalated, as reported to be progressively more significant by expert reviewers, depending on the immediacy of the item in relation to the trauma individual.

Expert comments positively described *family psychiatric history* and *psychiatric history* as known risk factors for PTSD; *family psychiatric history* “may point to a family vulnerability” having “some relevance”, and *psychiatric history* as a “very important” “vulnerability factor” in predisposing individuals to developing PTSD. Both are said to be “important pre-trauma consideration(s)” that “increases PTSD risk” (Chapter 1 clearly distinguished the different risk factor categories).

A few expert reviewers reported concern about over the comprehension of these items and queried whether they would be understood by both primary health care professional (if they did not “have any training in defining psychiatric disorders”) and the layperson; “the word ‘psychiatric’ (is) very sophisticated and not always understood ... especially also in different cultures”, and it was anticipated as “difficult for a primary health professional to administer”. Hence, these items were suggested to be revised and expert reviewers thought that to define *psychiatric history* in lay terms or a more user-friendly word would be a subtle and less intrusive way of administering the items. Also, changes to the format were recommended; for *family psychiatric history* “‘relationship, diagnosis, clinician, dates’ – instead ‘relationship, problem, type of treatment, by who and when – e.g. year’”, and for *psychiatric history* “to perhaps ‘has the participant been treated for any stress-related illness/problems?’”.

These modifications were considered and implemented in order to clarify these items for both administrators and trauma individuals, and subsequently restated in a table format with columns for relationship, diagnosis / “problem”, clinician / “type of treatment”, and date / “when”, and examples were included in grey-scale for each to facilitate accurate administration. Furthermore, the question was rephrased to ask “have (you) ever been to a nurse, doctor, counsellor, psychologist, psychiatrist?” “for any problems with anxiety or depression/low mood, substance abuse, suicide attempts, etc.?”. This presentation was

thought to provide examples of how to ask *family psychiatric history* and *psychiatric history* and, in effect, guide proper and quick execution of the risk assessment, but still eliciting accurate information from the trauma individual time efficiently.

Since concern significantly centred around whether “*those administering the questionnaire (would) be able to identify psychiatric/psychological disorders?*” and whether “*in a primary care setting how accurate would be the information gathered by this item (be)?*”, it was further explored qualitatively with the intended administrators (in Chapter 4) to ascertain their understanding of and familiarity with psychiatric history, as well as to obtain their subjective contribution on further improvement of this item. The value of a manual and a proposed training session for primary health care professionals was also evaluated.

Furthermore, *significant (non-trauma) difficulties as a child, significant (non-trauma) difficulties as an adult*, as well as *current significant (non-trauma) difficulties* were also reported as known risk factors for PTSD and associated with vulnerability; “*research is showing early environmental experiences to be important in vulnerability to PTSD*”, for example “*multiple and prolonged early life adversity*” “*... especially attachment style and experiences*” in childhood, “*previous life stressors, in particular, cumulative life stressors*” in adulthood, as well as “*persons (at this time) under stress seem to be more vulnerable*”. These items are considered important “*peritrauma ... (negative life events)*” or features of any traumatic event, since they “*are known to contribute to increased risk*” by being “*important (factors) to adversity*” or hardships. Expert reviewers agreed that these difficulties or “*negative life events*” or “*co-stressors are important ... in compounding traumatic experiences*” and play a significant role in depleting coping resources which “*can (also) predispose, precipitate and perpetuate vulnerability*”. It was reported as such; “*both distal and proximal stressful life events*” (discussed in Chapter 1) “*could indicate resilience, vulnerability/unresolved issues ...*” and “*seem to be a strong predictor of PTSD*”. One expert

reviewer commented on *“those clients who experience more transient and short-term posttraumatic symptoms seem to have less daily life stressors than those who develop more protracted and severe PTSD”*.

However, these items were collectively critiqued with regards to their ambiguity; expert reviewers highlighted the vagueness of the term *“significant non-traumatic experience”* and again, as mentioned above, the difficulty for primary health care professionals (or layperson) in administering, but more so, also the confusion for the trauma individuals. It was suggested that the term *“‘significant’ (as it) is very imprecise”* and rather *“broad”* be clarified by rewriting and defining it possibly as *“non-trauma difficulties”*, potentially *“negative experiences”*, or *“past difficulties ... or negative life events ...”*

All items (*significant (non-trauma) difficulties as a child, significant (non-trauma) difficulties as an adult, and current significant (non-trauma) difficulties*) were recommended to be reworded to help primary health care professionals with administration, but also to assist trauma individuals in explaining, *“What is meant with difficulties?”* Since these items were said to be *“repetitive”* and *“ambiguous”*, it was suggested to *“consider combining previous ‘significant non-trauma difficulties’ to explore all past difficulties”*.

Furthermore, it was proposed that a list of possible examples also be provided to facilitate understanding and administration. This was specifically implemented in the format of these items; similar to the *psychiatric history* items, the question examples provided *“Do you remember any negative event or experience when you were a child/as an adult?”* or *“Are you experiencing any difficulties at the moment?”* gave guidance to administering the items effectively. Examples were included, such as *“negative parenting”* as an example of a *“negative experience during childhood”* and *“divorce or retrenchment”* as examples of *“negative experience(s) as an adult/currently”*, as appropriate modifications according to the overall qualitative expert feedback.

Each item was improved separately by said application of a table format, with examples of possible questions provided to guide or direct appropriate administration, and grey-scale examples acted as potential descriptors to further clarify individual items for both intended administrators and trauma individuals. This was further examined by the intended administrators (in Chapter 4) with attention to the understanding and administration of these items, and indirectly the implications of a possible checklist of examples.

Similarly, *traumatic stressors in childhood* (CVR = 0.93 with 96.55% expert agreement) and *traumatic stressors in adulthood* (CVR = 1.00 with 100.00% expert agreement) can be seen to be regarded as relevant in relation to performing as identified risk factors in predicting traumatic stress severity by the received expert agreement, and were reported to be associated with vulnerability and “*strongly related to PTSD risk*”. One expert reviewer specifically commented, “*clients who have had more than one ... exposure to a traumatic event (e.g. more than one incident of crime victimization) seem to be more vulnerable to developing PTSD*”. However, both items were critiqued with regards to understandability, anticipated administration difficulties, as well as question format.

Traumatic stressors in childhood and *traumatic stressors in adulthood* were described as “*confusing*” and difficult to administer, in combination with the above-mentioned *significant (non-trauma) difficulties* items, because how could one “*distinguish between ‘traumatic’ and non-traumatic experiences?*” Expert reviewers repeatedly mentioned the provision of a list of possible experiences that would distinguish traumatic and non-traumatic difficulties so as to assist both the administrator and the trauma individual. Furthermore, a DSM-5 definition of ‘trauma’ was suggested to further clarify what is meant by *traumatic stressors*.

Also, all of these items were reported to be “*repetitive*” and concern anticipated for the increase in length of the risk assessment. To take this into consideration, items were

again changed to a table format, where examples of potential questions and examples of trauma difficulties and/or experiences in the form of a list were provided, to make administration easier for intended administrators. Examples of possible questions were provided to guide or direct appropriate administration, and grey-scale examples acted as potential descriptors to further clarify individual items for both intended administrators and trauma individuals.

The thorough evaluation and criticism by expert reviewers rendered items “*worth keeping*”, but that they needed to be “*understood*”, and that one would need to improve them to ensure comprehension. The above noted modifications for each item supported this; items were changed to facilitate accurate and sensitive administration, and improved by means of examples provided as possible descriptors or experiences. This ensured the administration of a time-efficient risk assessment. Items were further explored with intended administrators to additionally clarify and expand the understanding of items, and to advance the administration of this risk assessment (discussed in Chapter 4).

An administrative concern was identified, and is worth noting. Expert reviewers were seemingly perturbed that “*these questions are also likely to elicit considerable amounts of material*”, and that “*it must first be established that the individual is currently contained and trusts the interviewer which is difficult for a brief first time meeting*”. Subsequently, a fear “*is that the sequence and focus of the questions, together with its timing in the period after a stressful event occurred, can per se add to the development of traumatic stress*”. This will be deliberated later on (in the Conclusions section).

Next, items under the heading *Description of the Event* (i.e., *weapon used* and *trauma type*) were rated as relevant; *weapon used* (CVR = 0.67 and 83.33% expert agreement) was reported to be associated with degree of threat, while *trauma type* (CVR = 0.80 and 90.00% expert agreement) was summarised as “*important*”, for example “*rape of course is a*

particularly high risk event” and is reported to result in prolonged treatment or “*permanent disability or pain*”.

Still, expert reviewers alleged that the subjective experience of the person was more important in terms of “*it is not the event (i.e., the weapon used or the trauma type), but the perception of the event and its meaning that is important. Any event can have a subjective experience of traumatic stress ...*” Therefore, by example, the subjective experience of “*perceived threat could be heightened with more ‘severe’ weapon used or threatened with*”.

Recommendations for these items were purely administrative and included to clarify the instructions; expert reviewers scrutinised *weapon used* to have unclear instructions and that “*does the weapon used refer to the traumatic event?*”, and *trauma type* was said to be limited in terms of the “*crime-related traumas*” given as examples. Suggestions for *weapon used* included that primary health care professionals may not “*get the significance of the N/A (presumably for accidents)?*” and for *trauma type* included to “*define the difference between assault, attempted and completed rape*”, and were aimed to increase understandability and administration.

Only slight modifications to these items were implemented; predominantly, the item format for *weapon used* was changed (i.e., “*other (specify)*” was removed, but “*N/A*” was left unchanged to be further explored with intended administrators. Furthermore, expert reviewers proposed that “*perhaps the examples may be expanded to include non-crime related traumas as well*”, such as natural disasters, house fires, building collapses, etcetera. These were recorded under “*Other (please specify)*” and included in a manual (as per Appendix L).

The objective for these items was to evaluate comprehension in a practical setting; concerns that were highlighted by expert reviewers were tested qualitatively with the

intended administrators in individual interviews. This exploration will be further evaluated and reported on in chapter 4.

Final suggestions for the overall *Description of the Event* section were to “*add number of attackers*” and “*extent of injuries*”, and to “*establish whether there were any physical injuries sustained during the event*” and “*the severity of this*”. It is believed that a serious physical injury can increase risk for PTSD, because the person may feel “*out of control*”. These modifications were duly made.

Qualitative feedback for items in the *Subjective Experience during the Event* division (i.e., *most salient emotion*, *strength of emotions*, *dissociation*, *degree of control*, and *perceived life threat*) reiterated that PTSD stems predominantly from this *subjective experience* of the situation by the person. Therefore, *most salient emotion* and *strength of emotions* (both with equal values of CVR = 0.63 and 81.48% expert agreement), *dissociation* (CVR = 0.71 and 85.71% expert agreement), *degree of control* (CVR = 0.86 and 92.86% expert agreement), and *perceived life threat* (CVR = 1.00 and 100.00% expert agreement) were all rated as relevant.

Most salient emotion, *strength of emotions*, *dissociation*, *degree of control*, and *perceived life threat* have been identified as risk factors “*either in individual studies or in meta-analyses*”, and expert reviewers also confirmed this from their professional and private practice experiences, that is, “*feeling powerless seems to be a strong predictor*” and “*clients with PTSD ... report very intense fear*” or “*feeling quite numb during the trauma*”. “*The feelings may be one of the most important indications for the development of possible PTSD*”.

As relevant as these items were described, they were also criticised as being challenging in terms of clarity; *most salient emotion* and *perceived life threat* were termed “*very unclear*” descriptors, “*salient*” was said to be an uncommon word, *strength of emotions* was said to be imprecise as “*what you mean by ‘strength of emotions?’*”, *dissociation* was

also said to be an unfamiliar concept and that “*will the interviewer/participant ... first line personnel ... understand what is meant by ‘dissociation’?*” or “*how might (someone) recognise if they had experienced this*”, and *degree of control* was thought to be “*too vague*” as “*‘degree of control’ – meaning what?*” Is it “*‘degree of control’ over ... what – self, the event?*”

Recommendations for these items were aimed at “*clear description(s) for test users*” by: defining a few examples for *most salient emotion* since it “*may be too sophisticated?*” or “*a little tricky for both the participant and perhaps the administrator*”, to clarify “*strength*” as well as the response format which was reported to be confusing for *strength of emotions*, to briefly describe and/or clarify *dissociation* with “*examples*” for the administrator as well as the trauma individual or to rephrase and/or simplify it to lay terms, to explain *degree of control* by ensuring “*that both ‘interviewer’ and ‘participant’ understands that this question pertains to the ‘degree of control the participant experienced during the event i.e. the participant’s level of control over what was happening to him/her’*”, and lastly, “*the wording may be clarified to clarify the inclusion of both a threat to one’s own life as well as the threat of another’s life*” and that the “*crux (could also be psychological life threat) ... threat to the core of the person’s being*” for *perceived life threat*.

Most salient emotion was improved by specifying a list of emotions, whereby “*secondary emotions*” were also included, such as guilty, ashamed, angry, irritable, etcetera. This was suggested to help the trauma individual identify a feeling more easily, as “*many traumatised clients, particularly those exposed to repeated trauma, may not have the vocabulary to describe emotional responses*”. Separate assessment of ‘intensity’ or *strength of emotions* and ‘duration’ was also proposed; however, only *strength of emotions* was already included, and not ‘duration’.

Strength of emotions was changed to improve the understandability of the item by considering a “*more useful term*”; “*to what degree?*” and “*how strong?*” was the emotion were used to explain *strength of emotions*, and a familiar and appropriate rating scale or response format of 1 (no emotion) – 10 (extreme emotion) as an alternative to the original format (“*not at all*” – “*very strongly*”) which did not make sense was implemented. “*Some examples in brackets (fear, anger, horror)*” were also included to benefit people in knowing what is being referred to.

Dissociation is one of the “*early symptom(s)*” and/or an “*avoidance tactic*” that is common in clients with PTSD; however, it was still assumed to be a difficult term for non-psychological and/or even psychological professionals. “*Examples*” were included to further explain *dissociation* to the intended administrator as well as the trauma individual; it was rephrased and explained in lay terms as “*feel(ing) detached / removed / not part of ...*” and “*as if in a dream or in slow motion*”.

Both *degree of control* and *perceived life threat* were also further specified; *degree of control* was further explained by the addition of “*to what extent did you feel in control during the event?*” and, for *perceived life threat*, “*how great did you think the danger was that you would die?*” was included.

Although these items received expert agreement on item relevance in relation to performing as risk factors in predicting traumatic stress severity, they were primarily critiqued with regards to clarity and comprehension. Once again, all items were modified and improved by the application of a table format which was provided – for intended administrators – to guide or direct appropriate administration. Due to their significant relevance but also foreseen difficulty in administration, expert feedback emphasised the urgency to ensure that these items be understood by primary health care professionals as well as the layperson so to measure these accurately.

Since these are considered important features, it was imperative to ensure clarity and understanding of items, so that intended administrators would know what is meant, in order to facilitate and guide appropriate administration to elicit specific and accurate information from trauma individuals that would be considered worthwhile in PTSD research. Further scrutiny and evaluation on a primary health care level with intended administrators is discussed in chapter 4. Also, consideration for an accompanying manual, as well as a possible training session, was contemplated. The manual was aimed to act as leeway for providing comprehensive definitions, explanations, meanings, and/or instructions. This possibility was further explored and tested with intended administrators (also discussed in chapter 4).

It is worth noting that each item statistic equally presented a congruent trend; for example, the CVR of each item consistently increased with the percentage agreement between individual expert responses, and where there were similar ratings or values, other psychometric properties were used to discern a principal trend.

In summary, the following items had the same CVR values: *education* and *own ethnic identity* (0.20), *most salient emotion* and *strength of emotions* (0.63), *gender* and *trauma type* (0.80), *traumatic stressors in childhood* and *psychiatric history* (0.93), and lastly *current significant (non-trauma) difficulties*, *perceived life threat* and *traumatic stressors as an adult* (1.00). These items also had the same percentage agreement between expert responses: *education* and *own ethnic identity* (60.00%), *most salient emotion* and *strength of emotions* (81.48%), *gender* and *trauma type* (90.00%), and *current significant (non-trauma) difficulties*, *perceived life threat* and *traumatic stressors as an adult* (100%).

The following statistic was primarily utilised to define the level of importance; the mean (as the *average response* rating across all experts) for each item was largely inconsistent and haphazard, but was used to differentiate between *education* (2.73) and *own*

ethnic identity (2.87), *most salient emotion* (3.22) and *strength of emotions* (3.33), *gender* (3.37) and *trauma type* (3.63), and, finally, *current significant (non-trauma) difficulties* (3.69), *perceived life threat* (3.86) and *traumatic stressors as an adult* (3.90).

Alternatively, the median (as the *central tendency* of the response ratings of all the experts) and the mode (as the *most frequent response* rating obtained for each item) were also considered in setting certain items apart. For example, the mode for *education* (3/4) and *own ethnic identity* (4) positioned *own ethnic identity* (4) as slightly more relevant than *education* (3/4). Similarly, the median for *strength of emotions* (4) and *trauma type* (4) positioned these items as slightly more relevant than their counterparts, *most salient emotion* (3) and *gender* (3), where all items had an equal mode value of 4.

Unfortunately, as items were rated increasingly relevant by expert reviewers, the median and mode values plateaued at 4; as discriminating between items became gradually more difficult, simple and straightforward mean values were essentially utilised, for example (as mentioned above) *current significant (non-trauma) difficulties* (3.69), *perceived life threat* (3.86) and *traumatic stressors as an adult* (3.90).

Two items worth highlighting separately are *traumatic stressors in childhood* and *psychiatric history*. Both items have a CVR of 0.93 and both a median and mode of 4; when mean values are considered, the item *traumatic stressors in childhood* (3.76) is seemingly more relevant than the item *psychiatric history* (3.70), but when percentage expert agreement was impartially and more justifiably applied, *psychiatric history* (96.67%) was rated more relevant than *traumatic stressors in childhood* (96.55%). This goes to show the extensive data synthesis and analysis that took place to determine the specific weight assigned to each item that was not just reasonably appropriate or relevant, but more so reliable and valid to advance the methodological rigour of developing and improving a newly designed risk assessment instrument.

Finally, all items with a mean value greater than and equal to 3 (mean ≥ 3), also received a majority expert rating of (4) ‘very relevant’, and expert agreement of greater than and equal to 79.31%. These items include: *significant (non-trauma) difficulties as a child, most salient emotion, strength of emotions, weapon used, dissociation, gender, trauma type, significant (non-trauma) difficulties as an adult, degree of control, traumatic stressors in childhood, psychiatric history, current significant (non-trauma) difficulties, perceived life threat, and traumatic stressors as an adult*. These are almost comparable to items in Table 2 of which all were above their CVR_{critical} value; the two items missing from this list are *Contact Information* and *family psychiatric history*. As with *traumatic stressors in childhood* and *psychiatric history* explained above, *Contact Information* (2.90) has a mean value less than that of *family psychiatric history* (2.97), but percentage expert agreement places *Contact Information* (76.67%) as slightly more relevant than *family psychiatric history* (70.00%). Both have mean and mode values of (3) ‘relevant’.

The remaining items include: *own ethnic identity, education* and *home language(s)*. Taking all psychometric calculations and properties into consideration, *own ethnic identity* and *education* were the only 2 items not accounted for; regardless of a received mode response of (4) ‘very relevant’ for both items, it appeared to be a joint CVR of 0.20 as well as a below and equal to 60.00% expert agreement that placed *own ethnic identity* and *education* at the bottom spectrum of item relevance. This ambiguity was also reflected by the qualitative comments already addressed previously.

Additionally, expert reviewers were given the opportunity to include risk factors that were potentially missed. Some of these will be discussed now, but Appendix M provides the complete original list.

The following factors were proposed to be included in the risk assessment:

“*neuroticism, lower intellectual capacity (IQ), non-specific central nervous system function*

abnormalities (“neurological soft signs”), negative interpretation of acute symptoms (such as thinking flashbacks may be impending psychosis), use of benzodiazepines and other sedating substances, pre-trauma schema rigidity about the self (completely in/capable of protecting self) or world (completely dangerous/safe). However, these require specialised professionals to be assessed accurately, and, thus, did not meet the principles of this specific risk assessment.

Moreover, majority of expert reviewers stressed the impact of a social support structure; *“immediate post-trauma support or lack of it is very important”* in *“dealing with negative/pathological indicators”*, for example (i) family support or lack of support, *“especially being blamed for an assault or dismissed as being a ‘troublemaker’”*, (ii) *“marital status”* as being to PTSD in literature, (iii) religious and cultural support in terms of *“sense of positive future possibilities”*, (iv) environmental stressors or support, for example *“Are they currently still in danger? ... Do they have to return to a home where abuse occurs or has the perpetrator been arrested?”*

Social support was suggested to be explored in more detail as it was believed to be *“beneficial”* in determining the *“the nature and quality of social support in the client’s present environment”*, because *“the less social support the patient has within her community the higher the risk”* of developing PTSD. This was considered and an additional item *Social Support* added at the end of the risk assessment, to very briefly define whether the trauma individual has someone to talk to if they so wish, but also to ascertain whether they felt that their family would understand and be considerate to what happened.

Again, consistent concern for the ability of primary health care professionals to assess this accurately arose, and will be evaluated and explored in Chapter 4.

More ideas to be included were integrated into the following sets: (1) *“In the event that the client has indicated prior exposure to trauma, it may be useful to determine how they*

coped with the traumatic event (e.g. how they dealt with flashbacks, feelings of guilt and shame, etc). Use of avoidant coping strategies is predictive of PTSD so if the client has a history of using avoidant coping, it is more likely that they would use this strategy following the most recent trauma". (2) "Number of traumatic events" as an "additional variable" was referred to. (3) "Where event happened can be important, i.e. higher risk if at home or workplace or place they need to go frequently". (4) "Proximity is important ... duration of exposure to trauma ... extent of brutality ... betrayal (was trauma perpetrated by trusted person / family member) ... unpredictability of event ... significant injury / mutilation? ... loss (personal – "did the person witness someone dying during the traumatic event?" and/or material) ... Was victim feeling trapped?" are some "indication(s) ... associated with greater vulnerability". (5) "Any symptoms of acute stress or dissociation present yet (after trauma)?" ... "to help flag patients for follow-up appointments" as well as "current psychiatric disorder ... current treatment and medication ... or has the person ever had PTSD or another anxiety disorder or received treatment for PTSD or other anxiety difficulty?" (6) "Criteria for PTSD can be included", "re-experiencing symptoms, avoidance symptoms, arousal symptoms". (7) "Cognitions (perceived lack of control, and giving up during the trauma – helplessness) are risk factors and should be included. The degree to which the persons perception of danger in the world has changed." Also, "what thoughts went through your mind when it happened? ... It is these thoughts that get stuck and greatly enhance the risk for developing PTSD". (8) "The subjective experience of feeling 'guilt'". (9) "Did what happened remind you of anything else that happened in your life? Such associations will show that a previous trauma is still "active" and not resolved, and that can increase the risk for developing PTSD". (10) "Post-trauma sleep disturbances".

In relation to (4), as mentioned previously in the discussion of *Description of the Event* items, "number of attackers" and "physical injuries" and "extent of injuries" have been

included. Similarly, in relation to (8), “*secondary emotions*” (such as *guilt*) have been included as examples for *most salient emotion* in the *Subjective Experience during the Event* division, and the “*intensity*” of arousal responses is also being assessed separately in *strength of emotions*.

General comments from expert reviewers focused on the administration of the measure; “*it is not clear how you intend to administer this measure*” as well as “*it is also not clear how this questionnaire will be scored*”. These remarks are worth clarification in the overall purpose of this risk assessment: to be objectively implemented, and administered quickly and easily by primary health care professionals. As such, non-psychological or first-contact professionals are anticipated to only assess for risk, at this time. The interpretation of this questionnaire or risk assessment will follow in future research studies, which will concentrate primarily on the predictive validity obtained when combining different clusters of risk factors. The aim of this research, therefore, is not to comment on psychometric analyses of values or to go into depth regarding a scoring system.

Valid statements were made about the “*objective*” nature of this risk assessment, and, subsequently, “*to screen (using DSM criteria) the patient for PTSD before or after completing the questionnaire or maybe incorporating the symptoms of PTSD in some or other way?*” Unfortunately, scepticism “*given the conditions in many primary care clinics in terms of getting accurate information, some of it quite subtle and even difficult to get in an interview by a trained psychologist*” was the primary concern. And referring back to Chapter 2, the use of “*current checklists based on key symptoms*”, according to Brewin (2005b), was concluded to be “*potentially highly effective in a wide variety of trauma populations and that significant further gains are unlikely to be achieved by incorporating other risk factors or symptoms into the measures*” (p.). Other deductions from this review also emphasised the “*fewer items, simpler response scales, and simpler methods of scoring perform as well as if*

not better than longer measures requiring more complex ratings” (Brewin, 2005b, p.), and one expert reviewer questioned the success of this new risk assessment or instrument when compared to “*those already out there (including the one developed by Lang and Stein, 2005, which has a two item and six item version)*” within a South African setting.

Conclusions, Recommendations, and Limitations

Each item was analysed individually, according to: (1) item relevance, as a proposed risk factor, and (2) item format, as understandable and not ambiguous.

After the relevant items were identified for inclusion in the improved risk assessment instrument, the content validity index (CVI) was computed for the whole test; the CVI is simply the mean of the CVR values of the retained items.

For this measure, the CVI was calculated to be 0.68. Consequently, the Fleiss *kappa* was calculated at 0.10, which interprets into an overall slight agreement (0.0 – 0.20) between the quantitative ratings of the expert reviewers. This infers that expert reviewers did not agree consistently or reliably across the 21 items. This could have been influenced by their respective backgrounds, as expert reviewers were essentially divided into 3 categories, namely (1) academics, (2) registered psychologists, and (3) registered counsellors. For example, academics plausibly would have evaluated individual items as risk factors in accordance with known research published with which they would be familiar, whereas registered psychologists and registered counsellors would have credibly evaluated individual items in accordance with a more clinical experience and/or practical expertise.

Besides, it was also observed that expert reviewers rated certain items as relevant, not with regards to content validity, but more so with regards to a conflicting operationalisation of the item; for example, *Contact Information* was rated as relevant by 76.67% of the expert reviewers (with a CVR of 0.53 and cut-off CVR_{critical} of 0.358), but for no other reason than it being information that is necessary to be gathered to facilitate future contact. This expresses

the first potential limitation of this research; item relevance in terms of content validity (i.e., for accurately tapping the construct of PTSD risk factors) was misunderstood and/or misread in the instructions, or instructions to evaluate items accordingly were not clear enough. This should be re-evaluated, given the opportunity.

Also, qualitative comments appeared more negatively skewed, but this is owing to the fact that expert reviewers rating an item as relevant often did not substantiate their rating with an explanation, but assumed feedback as self-explanatory. In general, 2 items (i.e., *total household income* and *number of people living in household*) were omitted and replaced by an alternative, and more appropriate, item (i.e., *employment* divided into *employment status* and *employment type*). Correspondingly, 2 items were reduced to only considering pertinent information (i.e., *email* was excluded in *Contact Information* and only *highest grade passed* and *tertiary* were retained in *education*). Individually, all items were modified in some or other way; items were improved to ensure clarity and understanding, so that intended administrators would know what is meant, in order to facilitate and guide appropriate administration, and so that trauma individuals would know what is being asked, in order to obtain accurate and informative evidence that would be considered crucial in identifying valid risk factors with significant cumulative effects on traumatic stress severity and PTSD development.

From this stems a second potential limitation; an expert reviewer questioned the effective prediction of at-risk individuals to developing PTSD from post-trauma factors. The argument was presented that some people either develop delayed onset PTSD, or, alternatively and according to other expert reviewers, do not develop PTSD at all. Confusion was accentuated around the proposed screening instrument to be administered by first contact or primary health care professionals with no or limited psychological training.

It should be noted, though, that according to HPCSA guidelines (2013), the registered counsellor category was created to meet the needs of the South African population at primary intervention level (HPCSA, 2013), and that psychological assessment (HPCSA, 2013, 2.2.) is stipulated in their scope of practice; RCs are required to “perform psychological screening ... basic assessment ... with a range of individuals ... in a variety of sectors and contexts ... community ... in which they have been trained ... excluding diagnostic test ...” and have the “ability to identify clients ... requiring more sophisticated or advanced psychological assessment ... refer ... to appropriately qualified and registered professionals (HPCSA, 2013). Therefore, this intended PTSD screening instrument is appropriate and in-line with the professional practice guidelines of the HPCSA.

Hopefully, this also answers the question, “*If someone screens positive, how will this be followed up? Screening only makes sense if those who come out positive get meaningful treatment*”. By having primary health care professionals screen for at-risk individuals, it is believed that more precise referrals will follow. Trauma individuals that are not identified as at risk will continue to receive counselling or trauma support from volunteer crisis counsellors, lay-counsellors, registered counsellors, or even maybe registered nurses (depending on demand), and, most probably, will recover on their own. However, trauma individuals that are identified as at risk, or otherwise termed experiencing either elevated traumatic stress and/or are “*very distressed and their functioning is significantly compromised*” (according to a qualitative expert reviewer), may potentially already be displaying early PTSD symptomology, but not yet necessarily PTSD diagnosable. These traumatised individuals now become the target for early intervention, and referral.

“By increasing the coverage and impact of services, and the possibility of more people receiving help sooner, this approach seeks to alleviate the ever-mounting pressure on

mental hospitals. This represents a shift from the waiting-mode of mainstream psychotherapeutic practice” (Seedat, Cloete, & Shochet, 1988, p.40; Connery, 1968).

In conclusion, this risk assessment by no means is intended to either reinforce or assume that every trauma leads to PTSD (as concern raised by a qualitative expert reviewer). Moreover, it is acknowledged from the onset that not every individual having experienced a traumatic event will necessarily develop PTSD. In Chapter 1, it was mentioned that it is also apparent that South African PTSD prevalence rates are not as high as exposure rates would suggest (cf. Stein, Seedat, Herman, Moomal, Heeringa, Kessler, & Williams, 2008), and that one side of the coin is the fact that not everyone that is exposed to a traumatic stressor will develop PTSD, but the other side is just as important (van Wyk, 2013).

This other side is the reality that in South Africa PTSD is highly prevalent and undiagnosed in primary care settings where traumatic exposure is not the presenting problem (Carey, Stein, Zungu-Dirwayi, & Seedat, 2003; Mkize, 2008). In the Carey et al. (2003) and Mkize (2008) studies, the PTSD rates were 20% and 22% respectively and in both studies all cases were undiagnosed (from Chapter 1). For this reason, little is known about risk factors and their predictive influence in a South African context, and, therefore, this risk assessment is only an initial exploration of potential risk factors that could influence PTSD development.

A third limitation echoed was that of *trauma type*, which narrows traumatic experiences in South Africa to (as stated by a qualitative expert reviewer) “*traumas that are more prevalent in an affluent community*”, and omits broader traumatic experiences such as “*witness to murder, caught in cross fire, bullets entering family home, family member murdered, torture?*” to mention but a few.

Expert feedback also touched on the notion that people who live in violent contexts or systems, those who are exposed to continuous life threatening events, do not necessarily experience or develop PTSD. So the question then is: Does demographics and

socioeconomic status (i.e., increased chance of exposure to a traumatic event in the township) play a role in the course of PTSD? Or does the lack of access to health care influence traumatic stress?

Finally, this risk assessment was termed “*more useful as a research instrument, than a screening instrument within primary practice*”. The improved scale with factors derived from this process (Appendix I) was further subjected to supplementary item analysis (du Plessis, 2004) and evaluation by intended administrators.

Certain diagnostic expert knowledge was needed to frame the picture of identifying risk factors in a South African population; but to integrate this into community, the intended administrators also needed to be interviewed so as to obtain valuable insight from a primary health care perspective.

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**Chapter 4: Supplementary Content Validation of an Adapted and Improved Risk
Measure of Posttraumatic Stress Disorder**

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Abstract

Background: Many people in South Africa that suffer from PTSD probably remain undiagnosed and untreated due to the absence of screening. It makes sense for primary health care practitioners to screen for risk using a relatively easy screening instrument that can be administered time efficiently to alleviate this situation. The fundamental principle is to identify potential risk factors that will contribute to the development of Posttraumatic Stress Disorder (PTSD) which will facilitate the motivation of further intervention on at-risk individuals. The idea is not to further injure (hurt or harm) the traumatised individual, so it is imperative to identify only the essential questions to be asked.

Objectives: The purpose of this article is to review the supplementary process of validating an adapted and improved PTSD risk assessment instrument. Each successive phase attempted to ensure that items are relevant and appropriate, as content validity is of utmost importance in test construction. At a community level, the intended instrument users or administrators were asked to further assist in the improvement of this risk assessment based on their subjective opinion and judgement.

Method: The modified items, according to expert review in a previous phase, were subjected to qualitative critique and evaluation. Their feedback specifically focused on some of the practical issues around test construction and aided in the design of a risk assessment that is easily measured, quick to be administered, and able to be objectively implemented by primary health care professionals. It was imperative that the measure be as user-friendly as possible within the context of mass trauma in a clinical setting, yet still proficient in identifying at-risk individuals.

Key words: Risk factors, South Africa, traumatic stress, posttraumatic stress disorder, psychometric instrument / questionnaire, expert reviewers, content validity index

The purpose of this article is to report the results of a second phase of content validation of a newly constructed PTSD risk assessment instrument. A preliminary item pool (Appendix B) was assembled by means of an extensive literature review using a combination of three major international reviews (Brewin, 2005a; Ozer, Best, Lipsey, & Weiss, 2003; and Weisæth, 1998), South African research on known risk factors, and literature on PTSD risk assessment considerations (Brewin, 2005b). Please review Chapter 2 for more information regarding the methodology behind the process of compiling these risk factors as they were presented in the preliminary version of the PTSD risk assessment (Appendix B).

This preliminary item pool in the risk assessment (Appendix B) was then utilised as a departure point for further content validation; a panel of 31 expert reviewers who have research and/or clinical experience with PTSD in a South African context critically evaluated this item pool or potential PTSD risk quantitatively with regards to the relevance of each item, and qualitatively in accordance to the proposed screening instrument criteria by Brewin (2005b). Please review chapter 3 for more information regarding the modification of the demographic, biological, and self-report items as they appeared in the pilot risk assessment (Appendix B), and the consequent improvement of these items as they are now presented in the adapted risk assessment (Appendix I).

Brewin (2005b) considered effective methods of screening for PTSD, due to the unavailability of specialist trauma clinicians. The problem with identification of at-risk individuals is that traumatised individuals do not present at psychological practitioners as a first point of contact, but also that although many psychologists have the requisite knowledge and experience to identify individuals at risk, this may not be true for first line primary health care practitioners (Bisson & Cohen, 2006). The reality is that trauma and emergency units often also focus on stabilising a patient or dealing with immediate life threatening injuries, rather than on psychological screening procedures.

Majority of current diagnostic measures (Brewin, 2005b) focus specifically on symptom-based criteria, such as in clinical interviews. The disadvantage of this is that symptoms of re-experiencing, avoidance and numbing, and arousal taken from the DSM-IV (American Psychiatric Association, 2000) cannot be measured too soon post-trauma (Brewin, 2005b), and also a certain degree of psychological knowledge is required to be able to assess diagnostic PTSD symptomology accurately.

There is an urgent need for a screening instrument that is relatively easy and quick to administer, but that could be objectively implemented and used by non-trauma specialists, such as first line health care practitioners (i.e., registered counsellors and nursing staff) within mental health services, and within the context of mass trauma to accurately identify the majority of individuals at risk. Bisson and Cohen (2006) also indicate that this kind of approach is necessary for “allowing more individuals to be treated in total” (p.592).

Since traumatising events are a common occurrence in South Africa (Edwards, 2005b), it is imperative that vulnerability to PTSD is understood across different traumatised groups (reiterating Brewin, 2005b), and that careful consideration of the relationship between individual risk factors is also taken into account. Hence, a specific yet universal screening instrument was temporarily designed for this purpose; one that would be appropriate and relevant to all populations having experienced different traumas and with varying incidence rates of PTSD. The adapted risk assessment (Appendix I) is an alternative approach proposed to evaluate and identify risk factors that predict traumatic stress severity in South Africa in a simple and brief manner within a primary health care setting. It is likely that this form of early identification will become imperative for the provision of more comprehensive forms of intervention targeted at vulnerable individuals in the future. This will subsequently lead to more efficient targeting of resources, while at the same time capitalising on natural recovery processes and reaping the benefit of addressing symptoms before they have become

chronic. In resource taxed settings like South Africa it becomes important to identify individuals at risk early on, because it leads to more affordable and less time intensive treatments.

To reiterate the focus on “well-designed items” (Coaley, 2010, p.29), this article will report on additional care that was taken in constructing these items by presenting them to intended administrators for qualitative feedback. The proposed aim remains to assimilate only the necessary items or PTSD risk factors for a successful prediction of traumatic stress severity, and subsequently PTSD development, from scores (Coaley, 2010).

Literature Review of Content Validation

A “primary goal of scale development is to create a valid measure of an underlying construct” (Clark & Watson, 1995, p.309). Instrument validity is ideally established by comparing the new instrument being developed with a gold standard (Zeolla, Brodeur, Dominelli, Haines, & Allie, 2006); however, since the latter does not exist, safeguarding content validity was a more than suitable method to develop the PTSD screening instrument.

In the words of Kerlinger (1973), “Are we measuring what we think we are measuring?” (p.457).

For any assessment to be a “good measure” (Coaley, 2010, p.29) it needs enough appropriate items and a scale which measures only the attribute and nothing else, a principle known as unidimensionality (Nunnally, 1978). Building on this, McIntire and Miller (2000) proposed that a statement of the purpose of a test should include an indication of the construct to be tapped (in this case, PTSD risk factors) as well as how the outcome (results) of the test will be used. Since this psychometric instrument and rating scale will be utilised in calculating risk for PTSD predicting traumatic stress severity in a South African context, it is prudent to ensure that an assessment measure is valid for testing specific objectives (Eid,

Larsson, Johnsen, Laberg, Bartone, & Carlstedt, 2009; Zeolla et al., 2006), and that it actually measures what it alleges to measure (Carmines and Zeller, 1979, pp. 12, 17).

Validity focuses attention on the “extent of matching, congruence, or ‘goodness of fit’ between an operational definition and the [construct] it is purported to measure” (Singleton, Straits & Straits, 1993, p. 115). The assessment of the *validity* of a measurement instrument, in this sense, corresponded to the evaluation of the accuracy and adequacy of the measurement instrument as an operational definition for a particular construct (DeVellis, 1991, p. 43).

Loevinger (1957), furthermore, affirmed that content issues must always be considered in defining the domain; “if theory is fully to profit from test construction ... every item [on a scale] must be accounted for” (Loevinger, 1957, p.657). To ensure further rigour in its development, the improved risk assessment (Appendix I) was presented to intended administrators, and items were considered in terms of comprehension and clarity (i.e., whether they were well written), and administration.

Literature on item writing (Angleitner & Wiggins, 1985; Comrey, 1988; Kline, 1986) was initially sourced and the question, “What constitutes a good item?” addressed. Since the intended use for the scale is in general clinical samples, aspects such as straightforward and appropriate language was crucial, and needed to be readily understandable by respondents with only a modest education (Brewin, 2005b; Clark & Watson, 1995). The International Test Commission (ITC, 2000) guidelines stipulate the following important points: (i) language use should be appropriate in the directions, rubrics, and items themselves as well as in the handbook for all populations for whom the test or instrument is intended, (ii) the choice of testing techniques, item formats, test conventions, and procedures should be familiar to all intended populations, (iii) item content and stimulus materials should be familiar to all

intended populations, and (iv) systematic judgmental evidence, both linguistic and psychological, should have been implemented to improve the accuracy.

Intended administrators were used to further guide development of content specifications; items were initially reviewed by external experts (Millos, Gordon, Issenberg, Reynolds, Lewis, McGaghie, & Petrusa, 2003) who evaluated question content, item structure, consistency, and validity specifically focusing on item relevance to the specified domain, and then refined items were subjected to qualitative scrutiny with primary health care professionals, such as registered counsellors and nurses working at a first point of contact with trauma individuals. Expert criticism helped improve the draft scale by eliciting if there were any problems with the specified criteria (Comrey, 1988) and, in so doing, helped to establish content validity (Ruzafa-Martínez, López-Iborra, & Madrigal-Torres, 2011; While, Ullman, & Forbes, 2007); administrator criticism helped improve the draft scale by eliciting if there were any problems with the understandability and administration of the risk assessment.

Context of the Research

In summary, content validity estimates how much a measure represents every single element of a construct and ensures comprehensive content coverage (Trochim & Donnelly, 2007) as well as content relevance (Streiner & Norman, 1995). Consequently, instrument validity was based on content validity in the overall process of developing a psychometric instrument that will accurately predict future risk for PTSD. This article reports on the final part of the content validation phase and asked the overall question of whether items generated in an initial phase and assessed according to the adequacy of content coverage of PTSD risk in a previous phase are well-written and user-friendly to the intended administrators of this assessment instrument. The criteria for all items in the risk assessment are ease of

measurement, understandability of items, appropriateness to trauma individuals, etcetera.

These were discussed in chapter 2.

The main subquestions here were:

- What is their understanding of the item?
- How would they ask this item to a traumatised individual?
- When given the manual, is the administration of this item better explained? (Do they now have a clearer understanding of what is required of them?)
- Do they think the traumatised individual will understand what is being asked?
- Does the table or format of the item provide them with some form of guideline as to how to ask the question?
- Or is the table confusing?
- Could they suggest how this question be changed to improve its understandability?
- And efficiency?

The answers to the above questions lead to further refinement of the pilot risk questionnaire (Appendix I).

Methodology

Since the main emphasis was on the development of a conceptually sound and successful research measure or instrument, content validity was imperative in agreement with test-construction guidelines (ITC, 2000; Millos et al., 2003; Millman & Green, 1989; Foxcroft & Roodt, 2001; McGaghie, Van Horn, Fitzgibbon, Telser, Thompson, Kushner, & Prystowsky, 2001). The adapted and improved questionnaire (Appendix I) underwent several verification processes: firstly, an extensive literature review was completed to ensure sufficient content coverage of PTSD risk of identifying elements to be included in the risk assessment instrument (discussed in chapter 2); secondly, the pilot questionnaire (Appendix B) was then evaluated both quantitatively and qualitatively by an expert review panel of 31

professionals with a wide range of academic knowledge and/or clinical experience in the field of PTSD in South Africa (discussed in chapter 3). The validity of the items at this stage formed part of the assessment tool development process (Du Plessis, 2004) to facilitate refinement, and increase effectiveness.

Furthermore, expert comments, recommendations, as well as concerns, were taken into consideration and further explored or qualitatively evaluated with intended administrators.

Description of Sample

Overall, 8 primary health care professionals were obtained; 6 RCs, 1 crisis counsellor and/or volunteer, and 1 registered nurse.

Administrative Procedure

Intended administrators were emailed with an information letter (Appendix G) to inform them of the research study and to implore their participation, as well as a consent form (Appendix H). For the participants who agreed to partake in this research, a date and time was arranged for the interview to take place. Each participant, before the interview commenced, was given a consent form (Appendix H) to complete and sign. This ensured voluntary participation and informed consent. Each participant was briefed on the aim or fundamental principle of the research, the role of their participation in the study, the intended goal on which their feedback was to be focused, and the individual objectives to be assessed for each items. Please view the qualitative interview (Appendix N).

Participant Recruitment

Registered counsellors (RCs) obtained fell into 2 categories: (1) training, and (2) volunteering. Training RCs were identified through the department, whereas volunteering RCs were known from previous workshop encounters. Registered nurses and crisis

counsellors or volunteers were approached at the general government hospital and at the participating NGO that assists trauma victims.

Measures

Validity “cannot be assessed directly” (Singleton et al., 1993, p. 121); it can only be “inferred from the manner in which [a measurement instrument] was constructed [that is, *content validity*]” (DeVellis, 1991, p. 43). In accordance with Zeolla et al. (2006) and DeVellis (1991), content validity refers to the extent to which a set of items reflects the intended domain (i.e., risk factors predicting traumatic stress severity).

Content validity refers to comprehensiveness (Haynes, Richard, & Kubany, 1995). An *assessment instrument* refers to the particular method of acquiring data in psychological assessment (for example, questionnaires), and includes “all aspects of the measurement process that can affect the data obtained (for example, instructions to participants, situational aspects of instrument stimuli, individual behaviour codes, and questionnaire items)” (Haynes et al., 1995, p.238). The adapted risk assessment (Appendix I), containing modified demographic, biological, and self-report items, was further examined qualitatively in interviewing sessions with intended administrators.

Items were evaluated separately in accordance with the principles of the screening instrument: (a) the instrument should be easily measured, (b) quick to be administered (Brewin, 2005b) and (c) able to be objectively implemented by first line and primary health care professionals. Specified standards for the particular item selection and item writing were originally based on these psychometric properties (Brewin, 2005b): (a) straightforward factors such as gender have been included, (b) table format response style implemented to facilitate administration (Brewin, 2005b) and (c) factors such as IQ and personality traits have been excluded, as these require involvement from qualified psychological professionals to ethically evaluate these constructs.

Interviewing sessions were tape-recorded, and very specific questions addressed (either concerns raised or queried by expert reviewers) as mentioned earlier. Please review Appendix N for the qualitative interview. These sessions were transcribed, and thematic analysis employed afterwards.

Intended administrators, as participants in this second phase of content validation, assisted in the final improvement of this risk assessment for the scope of this research by evaluating items on how to improve comprehension and clarity. Modifications to items were based on the subjective opinion and judgement of intended administrators on how items could be reworded or phrased differently, or response formats altered to facilitate easy administration to and further understanding by trauma individuals.

Results and Discussion

In the previous phase (as discussed in chapter 3), the aim was that 100% of the judges would endorse each of the items included with no further suggestions for additions, deletions, or rewording, thus meeting the ideal criteria for content validity (Lynn, 1986; Weaver, Maislin, Dinges, Younger, Cantor, McCloskey, & Pack, 2003). Each item was analysed individually, according to: **1.** Item relevance, as a proposed risk factor, and **2.** Item format, as understandable and not ambiguous.

This described model scenario was neither practical nor realistic, and only 3 of the original 21 items received a 100% expert agreement with a perfect or complete CVR of 1.00. These 3 items were: *current significant (non-trauma) difficulties*, *perceived life threat*, and *traumatic stressors in adulthood*, and each received a 100% expert agreement, a CVR of 1.00, and with both a ‘*very relevant*’ median and mode of (4). However, besides receiving what could be termed ‘perfect scores’, each item received some kind of qualitative recommendation and, hence, all items were altered or modified in some way. Please review Appendix J as well as Appendix K for more detail.

As mentioned in chapter 3 and also illustrated in both Appendix J and Appendix K, an item was initially considered quantitatively relevant with a positive CVR (≥ 0); nevertheless, each individual item still displayed fluctuating CVR, mean, median, mode and percentage values. Although considered relevant by a Likert scale ranking system, each item was still evaluated carefully with regards to the qualitative feedback and recommendations from expert reviewers. As shown in Appendix K, expert comments facilitated the refinement process, and items were altered accordingly in the improved assessment instrument (Appendix I).

Please note: The respective statistical calculations for each item are displayed in Appendix J. A summary of the statistical quantification of the content validity of items is divided into a *content validity ratio* (CVR) of each item, a *mean* value of the *average response* rating across all experts, a *median* response or the *central tendency* of the response ratings of all the experts, a *mode* or the *most frequent response* rating obtained for each item, and, finally, a *percentage* depicting the *agreement* between individual expert responses.

It is also important to take into account that not all the items had CVR values above their respective and adapted Lawshe (1975) $CVR_{critical}$ values (Wilson, Pan, & Schumsky, 2012); due to even the slightest possible contribution in predicting PTSD or trauma severity, majority of the items were retained in the modified and improved version of the PTSD risk assessment (Appendix I) and further exploration, thus, justified. After the relevant items were identified for inclusion in the improved risk assessment instrument (Appendix I), the content validity index (CVI) was then computed for the whole test; the CVI being simply the mean of the CVR values of the retained items.

In summary, the CVI was calculated to be 0.68. Consequently, the Fleiss *kappa* was calculated at 0.10, which interprets into an overall slight agreement (0.0 – 0.20) between the expert reviewers. 2 items (i.e., *total household income* and *number of people living in*

household) were omitted and replaced by an alternative, and more appropriate, item (i.e., *employment* divided into *employment status* and *employment type*). The remaining 19 items were all modified:

- *Demographic Information* included *home language(s)*, *education*, and *own ethnic identity*. These were thought to be proxies for SES and rated relevant, but as indicators for further management and intervention, and not necessarily as identified risk factors for PTSD. The changes that were implemented included: (1) *home language(s)* underwent a slight format change to make it more user-friendly and to maintain a consistent response, (2) *education* was reported to be too detailed, and condensed to only the necessary sub-items, and (3) *own ethnic identity* was criticised as being too vague and was simply changed to *ethnicity*.
- *Gender* was identified as a risk factor, but it was observed that expert comments and recommendations questioned the direct and independent relationship between *gender* and PTSD development. Expert reviewers were not fully convinced regarding its importance in the contribution to the course of PTSD, and *gender* was reported to be more important in terms of its cumulative and combined effect (i.e., predictive power) with other risk factors.
- *Contact Information* was rated relevant, but also for the reason that it served an important purpose or administrative function; it is information that is necessary to be gathered to facilitate future contact. Recommendations were based on item format, and suggestions were implemented to modify the item; a space was provided for the patient sticker, In/Out patient status was included under the patient sticker, and a space was also created for the file or reference number. Furthermore, the “*email*” address was omitted, and the suggested “*current age*” was placed under *Demographic and Socioeconomic Information*.

- *Psychiatric and Emotional History* included: *family psychiatric history, psychiatric history, significant (non-trauma) difficulties as a child, significant (non-trauma) difficulties as an adult, and current significant (non-trauma) difficulties*. Expert reviewers reported these items as known risk factors for PTSD; however, they also emphasised concern regarding the comprehension of these items. Hence, these items were suggested to be revised and expert reviewers thought that to define and clarify both *psychiatric history* and *significant (non-trauma) difficulties* in more user-friendly terms. Changes to the format were implemented, and this presentation was thought to provide examples and, in effect, guide proper and quick execution of the risk assessment. It was proposed to facilitate understanding and administration, but still eliciting accurate information from the trauma individual time efficiently.
- *Traumatic stressors in childhood* and *traumatic stressors in adulthood* were regarded as relevant and reported to be associated with vulnerability. Items, again, were critiqued with regards to understandability, anticipated administration difficulties, as well as question format. Expert reviewers repeatedly mentioned the provision of a list of possible experiences that would distinguish *traumatic* and *non-traumatic* difficulties so as to assist both the administrator and the trauma individual. Items were reported to be repetitive and concern anticipated for the increase in length of the risk assessment. Items were again changed to a table format to facilitate appropriate administration.
- *Weapon used* and *trauma type* were the items under the heading *Description of the Event*. They were reported to be associated with degree of threat, and expert reviewers described the subjective experience of the trauma individual as one of the more important risk factors. Recommendations for these items were mainly administrative; the instructions were said to be unclear and the response format

limiting in terms of only crime-related trauma examples being given as options.

Suggestions were intended to increase the understandability and administration of these items.

- *Subjective Experience during the Event* included *most salient emotion, strength of emotions, dissociation, degree of control, and perceived life threat*. Expert reviewers reiterated that PTSD stems predominantly from this *subjective experience* of the situation by the person. These items have all been identified as risk factors in individual studies or meta-analyses. However, as relevant as these items were described, they were also critiqued as being challenging in terms of clarity.

Recommendations were aimed at defining the specific items to clarify the terms for administrators as well as the trauma individuals. Items were rephrased and/or simplified, and the wording clarified by specifying a list of examples.

- *Social support* was added as an important post-traumatic risk factor. It was suggested that this item be explored in more detail as it was believed to be crucial in determining the course of PTSD development; expert reviewers reported that the less social support trauma individuals have within their community, the higher the risk of them developing PTSD.

All items were modified in some or other way; items were improved for clarity and understanding, so that intended administrators would know what is meant, in order to facilitate proper administration, and so that trauma individuals would know what is being asked, in order to obtain accurate and informative evidence that would be considered crucial in identifying valid risk factors with significant cumulative effects on traumatic stress severity and PTSD development.

Demographic Information included *home language(s), education, and own ethnic identity*. All three items were retained in terms of needing further exploration into their

relevance or insignificance in relation to PTSD risk; “*some research link(ing) education to risk of PTSD*”, “*there is (also) some evidence that social minorities respond less well to traumatic exposure than others ... some traumatic experiences may have an ethnic component to them*”, and it is “*important to know in terms of looking at patterns of exposure in SA*” which may be “*interesting for research*”.

With *ethnicity* it became crucial to investigate potential practical and administrative difficulties, and intended administrators were interviewed qualitatively with regards to their subjective opinion on whether this item was found to be biased or intrusive at a primary health care level. This will hopefully facilitate future resolution around the predictive validity debate of demographic risk factors. One expert reviewer commented on that this item has been “*identified in the literature as a risk factor and supported by empirical data from LMIC (low- to middle-income countries) including SA*”; therefore, it warranted further consideration to research the effect of *ethnicity* on the development of PTSD.

Gender was retained with no changes made to the item to further investigate its role in predicting traumatic stress severity.

With the availability of the patient sticker and/or file number, *Contact Information* is proposed to be completed beforehand by the administrator. This again lends to administering only the relevant and important items to a trauma individual in a time efficient manner, but will be further explored with the intended administrators.

Expert reviewers reported concern regarding the comprehension of *family psychiatric history, psychiatric history, significant (non-trauma) difficulties as a child, significant (non-trauma) difficulties as an adult, and current significant (non-trauma) difficulties*. It was queried whether they would be understood by both primary health care professional (if they did not “*have any training in defining psychiatric disorders*”) and the layperson; “*the word ‘psychiatric’ (is) very sophisticated and not always understood ... especially also in different*

cultures”, and it was anticipated as “*difficult for a primary health professional to administer*”.

These items were collectively critiqued for being ambiguous, and were further explored qualitatively with the intended administrators to ascertain their understanding of and familiarity with these items. The value of a manual and a proposed training session for primary health care professionals was also evaluated.

Traumatic stressors in childhood and *traumatic stressors in adulthood* thoroughly evaluated and criticised by expert reviewers, and that one would need to improve them to ensure comprehension. The above noted modifications for each item supported this; items were changed to facilitate accurate and sensitive administration, and improved by means of examples provided as possible descriptors or experiences. This ensured the administration of a time-efficient risk assessment. Items were further explored with intended administrators to additionally clarify and expand the understanding of items, and to advance the administration of this risk assessment (discussed in Chapter 4).

Additionally, an administrative concern was identified, and expert reviewers were seemingly perturbed that these items would elicit considerable amounts of information. Subsequently, they verbalised a fear with regards to the sequence and focus of these items in possibly adding to the development of traumatic stress.

Only slight modifications were made to the *Description of the Event* items (*weapon used* and *trauma type*). The item format for *weapon used* was changed (i.e., “*other (specify)*” was removed, but “*N/A*” was left unchanged to be further explored with intended administrators. Furthermore, expert reviewers proposed that the examples be expanded to include non crime-related traumas, such as natural disasters, house fires, building collapses, etcetera. These were recorded under “*Other (please specify)*” and included in the administrator manual (Appendix L). The objective for these items was to evaluate comprehension in a practical setting; concerns that were highlighted by expert reviewers were

tested qualitatively with the intended administrators in individual interviews. Finally, “*number of attackers*” and “*extent of injuries*” were added, as well as “*physical injuries*” and “*extent of injuries*”.

Subjective Experience during the Event included *most salient emotion*, *strength of emotions*, *dissociation*, *degree of control*, and *perceived life threat*. Separate assessment of ‘intensity’ or *strength of emotions* and ‘duration’ was also proposed; however, only *strength of emotions* was already included, and not ‘duration’. Furthermore, *strength of emotions* was changed to improve the understandability of the item, and a familiar and appropriate rating scale or response format of 1 (no emotion) – 10 (extreme emotion) was implemented as an alternative to the original format (“*not at all*” – “*very strongly*”). Examples were also included to benefit people in knowing what is being referred to.

Dissociation was assumed to be a difficult term for non-psychological and/or even psychological professionals. Examples were also included for further explanation, such as “*feel(ing) detached / removed / not part of ...*” and “*as if in a dream or in slow motion*”. Both *degree of control* and *perceived life threat* were also further specified; *degree of control* was further explained by the addition of “*to what extent did you feel in control during the event?*” and, for *perceived life threat*, “*how great did you think the danger was that you would die?*” was included.

Since these are considered important PTSD features and expert reviewers agreed on item relevance, items were primarily critiqued with regards to clarity and comprehension. All the items were modified and improved by the application of a table format to facilitate appropriate administration; due to their significant relevance but also foreseen difficulty in administration, it was imperative to ensure clarity and understanding of items by primary health care professionals. This was further explored and tested with intended administrators.

Please view the qualitative interview (Appendix N) administered to the primary health care professionals. Questions focused on the understandability of each item for intended administrators, the administration of these items to traumatised individuals, and their understanding of what is being asked, the presentation of the questions as well as the response format which, in essence, was supposed to guide accurate administration. Intended administrators were also asked to comment on whether table formats were confusing, and encouraged to suggest ways to improve these items so as to increase comprehension and efficiency in eliciting accurate information. The administrator manual (Appendix L) was offered to intended administrators, and was similarly evaluated in terms of clarifying specific items. Qualitative feedback from intended administrators is summarised in Appendix O.

Each item will now be discussed separately, but in the order as presented in the modified PTSD risk assessment (Appendix I).

For item 1, intended administrators understood *Contact information* and reported it to be “*straightforward*” and “*specific information asked*”. They concurred that it was basic details and, like an intake form, “*not confusing*”. However, it was observed that administration of the item proved difficult; a few of the intended administrators reported the manual to be “*unclear*”, but majority verbalised that with practice “*most of the information is there*” and “*instructions clear*”. Intended administrators felt that trauma individuals would be able to answer this item as it was said to be “*self-explanatory*”. Suggestions were made to include an introduction in the manual which explains the purpose of the research as well as an “*outline*” for the session; “*explain to them why it is important so they don’t feel anxious*”.

Item 2, *Demographic and socioeconomic information*, was also understood by all intended administrators. Comments varied between them administering it “*directly*” as “*standard questions*” to objectively assessing an item such as *gender*; “*necessary to ask?*” *Sometimes obvious*”. Instructions were reported to be “*pretty clear*” and “*straightforward*”,

except for *age*. It was highlighted that the response format was confusing – “*Years Months*” – but understood when explained. For example, “*What do you mean, years and months? Are you meaning like thirteen years and six months old or one and three?*”

Mixed opinions were verbalised with *ethnicity*; some intended administrators felt that *gender* and *ethnicity* were the 2 items that would not “*need to be asked*” and could be gaged, while others reasoned this to be “*information that you can share with everyone*”. “*Information can also calm the person because it is stuff they know. They can understand. It is not a difficult question you know, so I think maybe that could be a means of establishing rapport even.*” Feedback was positive with regards to evaluating *ethnicity* objectively, and then concentrating more on *home language(s)*; “*a very nice way of asking it and it is easier*”. Majority of intended administrators agreed that *ethnicity* was important and “*necessary*”, and both the registered nurse and one of the registered counsellors emphasised the fact that primary health care professionals are “*trained to assess a patient*”.

Recommendations were made to rephrase *highest grade passed* to possibly, “Which year did you leave school?”, to clarify *Years Months* for the item *current age*, and to reword *tertiary* and put “*University or college*” instead; “*because even people who go to University don’t know that it is actually tertiary, so they might be ... confused about that.*” Concern was also raised – taking into consideration the quick administration principle of the risk assessment – that working out the *current age* for trauma individuals might be time-consuming. “*If you want to work it out in your own time you can*”.

Next, majority of intended administrators understood item 3, *psychiatric and emotional history*, and described it as “*past mental difficulties or mental disorders*” or “*history of mental deviation or mental illness*”. However, most of the feedback linked this with *education* in explaining the administration of this item to a trauma individual. Some intended administrators thought to “*ask it as it is*”, “*Do you have any psychiatric history?*”;

while some preferred “*mental health disorder*” and others mentioned to use the term “*emotional wellness*”. The question “*Have you ever been to a nurse, doctor, counsellor, psychologist, or psychiatrist*” was criticised for being too vague, and suggestions were made to improve it by utilising area-specific names for psychiatric clinics and institutions, as well as local government hospitals. The response format was reported to be “*straightforward*” and “*easy to answer*” and the grey-scale said to “*explain it*” making “*complete sense*”. “*Like the fact that there is a block underneath, give them those examples, there is options*”.

Recommendations were to include medication, institutions / clinic, to rephrase the question to “*Have you ever been treated by ...*” or “*Have you been to see ... for more major health issues?*”, to start with asking family psychiatric history first, and to explain ‘*anxiety*’ as it is not a commonly understood term.

Significant stressor(s) as a child, adult, and currently (an extension of item 3) was also understood by intended administrators, but majority predicted the administration of these questions to be difficult and reported that an explanation would be needed for trauma individuals. For example, “*negative event or experience*” instead of *stressor*. It was recommended that a definition be provided for both intended administrators and trauma individuals. Furthermore, the response format with the example was said to be “*helpful*” and added to the understanding of the item. However, the table and instructions appeared to be confusing; “you don’t need to tell me what happened” and “please give me an example” are contradicting. Suggestions were made to change and clarify this by rephrasing or restructuring the question, and also to add 1 or 2 extra examples. For example, “*Something that is worrying you?*”

Following is *trauma history*, item 4. Most of the comments referred back to the previous item, *significant stressor(s)*. Recommendations were made to include a definition for *stressor* to differentiate between these items. Majority of intended administrators

understood *traumatic stressor(s) as a child* and *traumatic stressor(s) as an adult*. However, criticism was that items were too similar; “*immediate problem, using the word stressor in both*”. This was reported to add to the ambiguity and confusion of the item; “*But I have already asked this?*” Other than that, intended administrators reported the response format of the questionnaire as well as the definition of *trauma* in the manual to be “*good and valid and strong*” and “*really clear*” and, in general, this item to be “*straightforward*” and examples “*good*”. It was additionally suggested that the headings, the cue question, and “*Please give an example*” are made “*bold*”, but “*then just normal*” for the rest.

Intended administrators were observed to understand *Description of the event* or item 5; this item appeared self-explanatory and feedback was that it could be administered directly, for example “*straightforward*” and making use of the grey-scale examples. This item was described as “*basically the run-down of what happened*”. It was requested that ‘*MVA*’ and ‘*N/A*’ be clarified by spelling them out respectively as ‘*motor vehicle accident*’ and ‘*not applicable*’, as these abbreviations were not familiar to some intended administrators. The manual was also said to be “*self-explanatory*” and “*not complicated*”; likewise with the *trauma type, physical injuries, and extent of injuries*. “*Examples are easier to retain, and remember*”, “*plain and simple*”, and “*these are clear*”. Suggestions were made to add an introduction of “*May we talk about what happened?*” and some intended administrators mentioned including “*familiarity with attacker*”.

Next, item 6 is *Subjective experience during the event*, and this includes *perceived life threat, degree of control, dissociation, numbing, most salient emotion, and strength of emotions*. Each will now be discussed shortly.

Perceived life threat was understood by intended administrators; “*How likely do you think that you would have died or that you could have died?*” and “*Did you fear for your life?*” Majority reported that this was “*very clear*”, although primary health care

professionals with limited psychological background appeared to struggle slightly. It was suggested that the response format be changed to “*rate from 1 to 7 or rate from 1 to 4*” or “*used to scale of 1 to 10*” as it was reported that trauma individuals or “*people (would) understand that*”. Also, it was said that *perceived* should be clarified; “*need to know what ‘perceived’ means*”, otherwise it could be understood incorrectly and interpreted as insensitive if one did not know the psychological theory or background of PTSD and its potential risk factors. A suggestion was made to explain or “*apply definition*” in the administrators manual as a likely solution.

Degree of control was reported to be clear and simple by intended administrators. It was said to be “*asked how is needs to be asked*”. However, majority of intended administrators commented on *degree of control* being a difficult concept to describe and explain to trauma individuals. Rephrasing the question to “*there was no way to stop what was happening*” was suggested or, alternatively, to reword feeling in *control* to feeling *powerless* as a “*good synonym*”. Intended administrators noticed the inversed response format for this question, and most agreed that “*powerless might be better*”. They reported it to be “*a little difficult*” and “*confusing*”, and suggested “*chang(ing) the wording around, not the numbers*” and also using the word “*change situation*” instead of “*influence*”.

Dissociation was also understood by intended administrators within the psychological theory and in terms of “*out of body experience*”, “*feeling removed, like it is happening over there*”, “*de-personalisation, de-realisation*”, “*see it a lot with ‘numbing’*”, “*being detached; ‘dreamlike state’*”, and “*maybe feel nothing going on*” descriptions. It was reported that trauma individuals would relate more to the explanation of “*out of body experience*” and “*not part of the experience*”, as opposed to “*not part of the event*”. Majority preferred the example, “*did it feel as if you were in a dream or in slow motion?*” Feedback from intended administrators with regards to the definition of *dissociation* in the manual was that it was

understandable. However, it was also said to be confusing and “*slightly ... a lot of big words for some*”. Some intended administrators reported that the definition was more in terms of “*what it does, with its purpose*” than with actually “*explaining*” the word. Recommendations were to shorten the description, so that it reads easier and in this way “*clarifies it*”.

Numbing was understood by intended administrators and reported to be clear in its administration. Feedback was that the “*example is a good way to ask that*”, and mention was made to the similarity or association between *dissociation* and *numbing*. However, it was also noticed that one intended administrator particularly struggled with the word or concept of *numbing*. Although it was reported as “*straightforward*”, “*table worked really well*” and “*scale really comes in handy*”, it was still considered for rephrasing and training kept in mind as a possible solution.

Most salient emotion was described accurately as *the emotion that you felt the most or the strongest*” or “*the biggest emotion you have*” by intended administrators. The table format was reported to facilitate this understanding and said to be “*very nice*”. However, some intended administrators voiced concern; “*I don’t know how people will understand*”, “*too many*”, and “*client will be shocked*”. Controversially, others described the response format options as a “*good range*” and, although “*some of them overlap*”, “*they are still different*” and “*understandable*”. Even though majority of the intended administrators reported *most salient emotion* as straightforward and “*not confusing*”, the response format was further explored and scrutinised. Feedback was that trauma individuals might “*want to fill in more than one*”, and some confusion was mentioned regarding the following emotions: “*shocked, stunned, surprised, horrified, frightened, irritable, and agitated*”. “*I mean, ‘horrified’ is just ‘very frightened’, you know and ‘stunned’ and ‘shocked’ I will use interchangeably*”. Suggestions were focused on rewording some emotions to more lay terms, while “*angry, frightened, helpless, horrified, numb, and shocked*” were generally approved.

Lastly, *strength of emotions* was understood by intended administrators and said to be “self-explanatory”. The table format was also reported to be user-friendly and “not confusing”, and “*the example would be my question that I would use*”. However, some intended administrators highlighted the word *degree* in the grey-scale question example as not understandable by trauma individuals. Again this appeared debatable, as other intended administrators thought that “*they will understand*”. The response format also elicited mixed opinions from intended administrators; “*table is not confusing*” compared to “*would not have considered Likert – personal scale, into set scale*”. Although *strength of emotion* was reported as “*very clear*” and made “*sense*” and “*great just as it is*”, it was still reviewed in terms of clarifying it further.

The next item 7, *Social support*, was understood by intended administrators. However, suggestions were made to “*maybe elaborate*” “*who you are able to rely on?*” It was suggested that “*maybe it should be more a ‘yes’, ‘no’*” response, and then “*Okay, who?*” Intended administrators also reported that trauma individuals would understand *support*, but mentioned that if *social support* was broken down to “*family, friends, community*”, trauma individuals would be able to relate more. Further suggestions were regarding formatting; “*the example becomes your preferred question*”. Other than that, *social support* was reported to be straightforward and “*it makes sense*”.

The final item 8, *General comments and recommendations*, was explored with intended administrators. In general, short definitions were preferred for item 3, *significant stressor(s)* and *traumatic stressor(s)*, and item 6, *Subjective experience during the event*. These were suggested to be included as “*examples*” either before or part of the table format. It was further noticed that for item 6, *Subjective experience during the event*, intended administrators found the question provided in the table format as well as the grey-scale example question to be comprehensive and understandable, and actually acting as

“*definition(s)*” for the respective items, *perceived life threat*, *degree of control*, *dissociation*, *numbing*, *most salient emotion*, and *strength of emotion*.

The overall format of the questionnaire or risk assessment (Appendix I) as well as the administrator manual (Appendix L) was also evaluated. Intended administrators reported that, in general, the risk assessment was well-designed and straight forward; it was said to be “*well put together*” and “*asks basic information*” that one “*need(s) to know*”. Feedback from intended administrators was that the examples helped explain the question, making it “*clear*” and self-explanatory. It was mentioned that it was “*very systematic*” and “*not difficult*”; however, areas have been identified that need “*more understanding*” and improvement.

Intended administrators acknowledged the need for an administrator manual, and the one provided in Appendix L was commended for being “*well laid out*” and “*understandable to everyone*”. Intended administrators reported preference for the format of the manual – “*user-friendly*” and “*easy to implement*”. A suggestion was made to review the italics and the bold of the font in the headings and to edit some of these layouts – “*some ... heavy*”, “*the italics is quite strong*”. Furthermore, it was advised that the most important instructions – for intended administrators to pay attention to – also be written out on the first page of the manual. Overall, “*it has got a nice flow to it*” and “*I think administering it would be easy*” and “*it is user-friendly*” and “*I don’t think it will take that long*”. These feedback comments have clearly summarised the aim of this specific risk assessment – easily measurable, quick to be administered, and able to be objectively implemented by first line and primary health care professionals.

Improvements implemented are as follows.

1. Item 1: *Contact information – postal address* has been modified to include *residential address* as well. Trauma individuals are now given the option to answer either one.

2. Item 2: *Demographic and socioeconomic information* – the response format for *age* has not been changed, *ethnicity* is still retained, and *tertiary* has now been reworded as “*University or college*”.
3. Item 3: *Psychiatric and emotional history* – this has been improved to *psychiatric and psychological history* as the heading, and is now described as “*past mental difficulties or mental disorders*” or “*history of mental deviation or mental illness*”. The response format has also been altered to include *medication*, and *psychiatric clinics and/or institutions and/or local government hospitals*, and the question has been rephrased to “*Have you ever been treated by ...*” or “*Have you been to see ... for more major health issues?*” The order of asking these items has also been swapped to asking *family psychiatric history* first, and then just *psychiatric history*.

Extension of item 3: *Significant stressor(s) as a child, adult, and currently – negative event or experience* has been used instead of *stressor*, and a definition has been provided for both intended administrators and trauma individuals. For example, “*Something that is worrying you?*” The question has been restructured to “”, and extra examples such as has also been added.
4. Item 4: *Trauma history* – this item has been linked to *significant stressor(s)* from item 3 in terms of setting them apart by the inclusion of instructions and definitions. The headings, the cue question, and “*Please give an example*” have been changed to “*bold*”.
5. Item 5: *Description of the event* – *MVA* and *N/A* have been written out as *motor vehicle accident* and *not applicable*. *Familiarity with attacker* has been added, and an introduction included, such as “*May we talk about what happened?*”
6. Item 6: *Subjective experience during the event* – the response format has been changed so that trauma individuals can now rate their *perceived life threat, degree of*

control, dissociation, numbing, most salient emotion, and strength of emotion on a 0 to 10 Likert-scale. *Degree of control* has been rephrased to *powerless*. All the possible examples for *dissociation* have been included. *Numbing* and *strength of emotion* have been kept in their original formats and definitions. Examples for *most salient emotion*, however, have been changed. *Angry, frightened, helpless, horrified, numb, and shocked* have been retained, while *shocked, stunned, surprised, horrified, frightened, irritable, and agitated* have been considered.

7. Item 7: *Social support* – this has been changed to include, “*Who you are able to rely on?*”
8. Item 8: *General comments and recommendations* – the above-mentioned improvements have been implemented in the improved risk assessment (Appendix P). Modifications in the administrator manual (Appendix L) include adding an introduction before *significant stressor(s)* and *traumatic stressor(s)* to help focus and guide intended administrators as well as trauma individuals. Items that intended administrators became more comfortable administering in terms of familiarity were: *contact information, ethnicity, employment, age, family psychiatric history* (after *psychiatric history*), *significant stressor(s)* and *traumatic stressor(s) as an adult* and *significant stressor(s) currently, strength of emotion, and*

Furthermore, the definition for *dissociation* in the manual was reported to “*cause more confusion*” – “*the first definition that you wrote down there, it is very abstract*” – and has been rephrased changed accordingly. The question in the risk assessment (Appendix I) was reported to be “*very well worded and you completely understand what ‘dissociation’ is by the wording*”, so this has been transferred to and incorporated in the definition in the administrator manual (Appendix L).

Intended administrators appeared to understand the rationale for completing *contact information* from the patient sticker, the inclusion of *ethnicity* as “*certain groups are more exposed to certain things*” or have a “*tendency to deal better with them*”, and also for the sensitive items such as *significant stressor(s)* and *traumatic stressor(s)*.

In summary, intended administrators repeatedly displayed concern regarding the interpretation of some of the questions by trauma individuals; *education* or *highest grade passed* as well as *ethnicity* were thought to elicit feelings of “*they are going to judge me*”, “*What could I have done to prevent this?*”, being “*a statistic*” and trauma individuals might “*wonder about services to be provided*” to them. *Employment* was thought to be an additional stressor, and caution needs to be ensured to not cause further distress; for example, “*they are not employed and they realise they need to be employed*” or, alternatively, “*Now what does this have to do with what I am doing here?*” Similarly, *significant stressor(s)* and *trauma history* was reported to be difficult questions, since trauma individuals are currently experiencing distress. Intended administrators were reluctant to include a list of potential stressors; they reported that “*a list leads into the trap of having them say that it was a stressor when it wasn't*”. Also, with *traumatic stressor(s)*, intended administrators felt that trauma individuals could potentially misinterpret the question and “*they might describe the actual trauma*”.

Some questions were rephrased to allow trauma individuals to feel a sense of empowerment in being given the option to answer or not to answer questions asked by intended administrators. For example, “*May I ask you what your ethnicity is?*” and “*May I ask you what your employment status is?*” and “*Please give an example if you are comfortable but you don't have to*” and “*May we talk about what happened?*”, as well as instructions, such as “*Please contain the patient where necessary because these questions are directly linked to ...*” and “*Please ask sensitively*”. Attention paid to this specific kind of

detail reverses or contradicts critique from expert reviewers that some questions are insensitive and/or intrusive.

Here the manual combined with a training session would be sufficient; response formats of the questions in the risk assessment together with the instructions and explanations in the manual, as well as the probability of having a training session, is thought to provide specific examples in terms of proper and accurate administration. With majority of the definitions and explanations in the manual – “*the detail*” – and a training session to prepare them efficiently, intended administrators are given the opportunity to “*engage*” with the trauma individuals, “*to maintain eye contact*”, and to build rapport which facilitates a trusting therapeutic relationship.

A topic to be discussed in the training or discussion session is *trauma type*. It was reiterated that the purpose and aim of the risk assessment will need to be clearly defined, that emphasis will need to be placed on the fact that this is an initial process of risk assessment, and, hence, it is still a developing concept in learning more about PTSD in South Africa. It is to be kept in mind that these questions or items are not finite, and form part of a continuous development process, and, therefore, more non crime-related traumas can be included at a later stage to further generalise to even a broader trauma population. So, the the purpose and the procedure (i.e., the following up and the referral) has been clearly conveyed in the manual and, likewise, will need to be addressed at the discussion session.

Furthermore, the use of *home language(s)* rather than *ethnicity* will be explained, as well as the instruction of “*use at your own discretion*” in either administering *ethnicity* objectively or actually asking the trauma individual. A point worth emphasising is that majority of intended administrators were observed to become more comfortable in administering the risk assessment as they increasingly gained familiarity with this tool. Some even reported that they would change the sequence of questions asked depending on the

trauma individual and information obtained from them. For example, with the more sensitive items like *ethnicity* or *employment status*, “Ask at the end of interview” or maybe “Ask at the end of the interview if it hasn’t been picked up during the interview”.

Further evaluation of the improved risk assessment (Appendix P) will need to be explored with potentially more intended administrators, but inevitably also trauma individuals themselves to continue the development and improvement of this risk assessment.

Conclusions, Recommendations, and Limitations

Items were initially evaluated quantitatively by expert reviewers by means of a feedback questionnaire (Appendix D) in relation to their level of relevance. Certain diagnostic expert knowledge was needed to frame the picture of identifying risk factors in a South African population, and this ensured that items that were deemed relevant, appropriate, accurate, and capable of identifying at-risk individuals were identified. Items were then further evaluated qualitatively by intended administrators as discussed throughout this chapter. This focused on integrating the risk assessment into community, where intended administrators offered valuable insight from a primary health care perspective. As quoted in Chapter 3, “this represents a shift from the waiting-mode of mainstream psychotherapeutic practice” (Seedat, Cloete, & Shochet, 1988, p.40; Connery, 1968), and places the onus at a primary health care sector so as to attempt to alleviate the pressure that is experienced on mental hospitals, but also, to increase the impact of services in facilitating more trauma individuals being treated at an earlier stage.

A prime example of the difference between expert knowledge and primary health care administration became evident in the following example. The intensity of the item *dissociation* or rating the degree included the word “*transient*”. A *transient dissociative quality* is interpreted as a moderate degree of experiencing *dissociation*, where the trauma individual is said to have a *definite feeling of detachment*, but they are still *aware of their*

surroundings (i.e., a *daydreaming quality*). However, one of the intended administrators reported that “*transient*” – in medical terms – refers to something that “*happened within 24-hours*”. Hence, it was important to balance the development and refinement of this risk assessment based on both specialised and expert knowledge as well as practical and primary administration.

A main concern that was identified during this qualitative process was that crisis, lay- and/or some training registered counsellors were perplexed by the idea of the risk assessment, particularly with the administration of *psychiatric history*. The feedback was that only a medical doctor would ask trauma individuals about their prior mental health, and a few intended administrators thought some of these questions to be irrelevant. For example, “*I don’t think I have to. I see it as an irrelevant question to ask. I only hear the nurses and the doctors will ask*” and “*I don’t know if I really have to ask those questions*”. The conclusion that can be drawn is that they are predominantly more trauma focused, and essentially not risk assessment trained. However, this can be improved by providing sufficient and the necessary training through a discussion group to ensure the understanding of what is expected from them falls ethically within their scope of practice. For example, with *psychiatric history*, one of the columns is divided into *diagnosis / problem*, “*so if I am not comfortable writing the actual and I know what the diagnosis is, I would write there the symptoms*”. This is also acceptable for the purpose of the risk assessment.

It is to be noted that when intended administrators were asked whether they would be able to administer the risk assessment if they needed to, the response was “*I think yes, I can. I can ask it*”. It was also noticed that even when some questions were not understood by intended administrators or when some questions appeared overwhelming, majority of them were confident enough to explore the different concepts presented to them, and the discussion that took place allowed them to debate the relevance or sensitivity of some item, the format

of other items, and also the structure of the risk assessment as a whole. This facilitated a certain familiarity – an understanding and acquaintance and awareness – of how the risk assessment had been developed to that point in time.

Therefore, the idea of having the administrator manual to work through beforehand, and then to follow-up with a discussion group possibly the next day, was suggested. *“I am gaining a lot just from you just talking about it than I would have if going and reading and thinking!”* *“When you have familiarised yourself with the manual, you will know.”*

A limitation of this research is that social workers were not considered, and this would be a recommendation for future phases. Furthermore, *trauma type* was reported by both expert reviewers and intended administrators to be limiting; *“witnessing in itself could sometimes be traumatic to certain people”*. Unfortunately, the purpose of the risk assessment focuses on immediate post trauma evaluations in trauma clinics and/or emergency centres. Therefore, the probability that witnesses to traumatic experiences would be admitted to either trauma clinics and/or emergency centres is negligible in this research. *Dissociation* was reported to be defined as best as it could be – *“not going to be able to make clearer”* – so it will need to be further evaluated, either with more intended administrators or with trauma individuals. Also, *dissociation*, *degree of control*, and *threat to life* were said to be *“difficult to explain”*, and the comprehension of these concepts by intended administrators was repeatedly emphasised.

Finally, focus groups are suggested to explore ways of further refining the improved risk assessment (Appendix P) to continue validating this tool in terms of content, but also in terms of the emphasised principles of a risk assessment at the primary health care level.

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Chapter 5: Conclusion of Study

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Abstract

Background: Many people in South Africa that suffer from PTSD probably remain undiagnosed and untreated due to the absence of screening. It makes sense for primary health care practitioners to screen for risk using a relatively easy screening instrument that can be administered time efficiently to alleviate this situation. The fundamental principle is to identify potential risk factors that will contribute to the development of Posttraumatic Stress Disorder (PTSD) which will facilitate the motivation of further intervention on at-risk individuals, specifically.

Objectives: The purpose of this article is to emphasise and summarise the crucial and key findings of this research. In validating, adapting and improving this PTSD risk assessment instrument, each phase attempted to ensure that items retained in the risk assessment are relevant and appropriate, as content validity is of utmost importance in test construction. This was ensured by obtaining feedback from expert reviewers. At a community level, the intended instrument users or administrators were asked to further assist in the improvement of this risk assessment based on their subjective opinion and judgement.

Method: Modified items, according to expert review in a previous phase, were subjected to qualitative critique and evaluation by intended administrators. In essence, both reviewers and intended administrators were asked to comment on certain PTSD items or risk factors, focusing predominantly on the principles of the risk assessment that is easily measured, quick to be administered, and able to be objectively implemented by primary health care professionals. It was imperative that the measure be as user-friendly as possible within the context of mass trauma in a clinical setting, yet still proficient in identifying at-risk individuals.

Key words: Risk factors, South Africa, traumatic stress, posttraumatic stress disorder, psychometric instrument / questionnaire, expert reviewers, content validity index

The purpose of this article is to report the results of this research study based on identifying and evaluating risk factors that predict traumatic stress severity in South Africa. There is currently no applicable PTSD risk assessment in South Africa focused at a primary health care level.

Majority of current diagnostic measures (Brewin, 2005b) focus specifically on symptom-based criteria, and the disadvantage of this is that symptoms of re-experiencing, avoidance and numbing, and arousal taken from the DSM-5 (American Psychiatric Association, 2000) cannot be measured too soon post-trauma (Brewin, 2005b). Also, a certain degree of psychological knowledge is required to be able to assess diagnostic PTSD symptomology accurately.

As mentioned in previous chapters, the main problem with identification of at-risk individuals is that traumatised individuals do not present at psychological practitioners with the requisite knowledge and experience as a first point of contact. Additionally, places of first contact like trauma and emergency units often also focus on stabilising a patient or dealing with immediate life threatening injuries, rather than on psychological screening procedures. Hence, the urgency arose of producing a screening instrument that is relatively easy and quick to administer, but that could be objectively implemented and used by non-trauma specialists, such as first line health care practitioners (i.e., registered counsellors and nursing staff) within mental health services, and within the context of mass trauma to accurately identify the majority of individuals at risk. Bisson and Cohen (2006) also indicate that this kind of approach is necessary for “allowing more individuals to be treated in total” (p.592).

Literature Review of Risk Assessment in South Africa

A gap was identified in current screening measures, where “no consideration (was) given to how information from risk factors, associated features, or symptoms could be

effectively combined in a single instrument” (Brewin, 2005b, p.55). As mentioned in chapter 2, meta-analyses (Brewin, 2005a; Ozer et al., 2003; Weisæth, 1998) and research studies conducted both internationally and nationally lacked the consideration of possible relationships between variables within a particular study, and did not examine their combined effect properties. This revealed a dearth in longitudinal and prospective studies, studies measuring risk factors post trauma but prior to the onset of PTSD (Andrews, Brewin, Rose, & Kirk, 2000), and in the generalisation of risk factors to civilian or a broader context. Since traumatising events are a common occurrence in South Africa (Edwards, 2005b), it is imperative that vulnerability to PTSD is understood across different traumatised groups (reiterating Brewin, 2005b), and that careful consideration of the relationship between individual risk factors is also taken into account.

It is estimated that some 72% of the Black population in South Africa use traditional health practitioners. Unfortunately, the socio-economic status of an individual in South Africa is the primary determinant of the system through which he or she will receive access to health care. Socio-economic status is very often also a determinant of the level and quality of health care that a person is able to access (Editorial).

According to Bisson, Brayne, Ochberg, & Everly (2007, cited in Weisæth, Dyb, & Heir, 2007), it was maintained that applied and reasonable support for trauma individuals is important, almost moreso than the “automatic provision of counselling for people affected by potentially traumatic events” (p.338). Bisson et al. (2007) emphasised the significance of features of trauma response immediately after the traumatic experience and/or event, which is then followed by the more formal psychological intervention. The focus that Bisson et al. (2007) have expressed is parallel to the purpose of this study – that early intervention is based on accurate assessment, and that the subsequent psychological intervention is then attentive to at-risk individuals or individuals that have been assessed to require mediation.

Hobfoll and colleagues also mention the point that was stressed in Chapter 1 by Brewin (2005b), where it is supposed and very likely that the availability of trauma specialists is restricted, and maybe more so a feature of a low- to middle-income context such as in South Africa (Weisæth et al., 2007).

Weisæth et al. (2007) emphasised the important implications for prevention and treatment (Shepard, 2000) in trauma-related disorders; “psychic trauma is an overriding etiological factor ... and often a contributing factor to other psychiatric morbidity” (p.341).

The above-mentioned points are generally important, and when community psychology is considered, these arguments become pertinent. When Seedat, Cloete & Shochet (1988) was reviewed, “4 models of community psychology was reported to have been developed; mental health, social action, ecological and organisational” (p. 39). 2 models worth being mentioned is the mental health model and the social action model. Firstly, the mental health model addressed the development and strengthening of human resources (Dorkei, 1969; Hobbs & Smith, 1969; Hunter & Reiger, 1986; Shore, 1974) in order for the “explicit intention to prevent mental illness and its consequent disruption of the usual patterns of living” (Seedat et al., 1988, p.39). As mentioned in Chapter 1 (van Wyk, 2013), traumatic exposure has been found in South African samples to have a cumulative effect on general distress (Williams, Williams, Stein, Seedat, Jackson, & Moomal, 2007), mental health problems (Matzopoulos et al., 2008) and general psychological problems (Hirschowitz & Orkin, 1997).

It was reported that to alleviate the pressure on mental health hospitals, “the coverage and impact of services (Seedat et al., 1988)” would need to be increased in order for more trauma individuals (in this study) to receive assistance sooner, and for more specific means of intervention to be implemented. According to Bolman (1969) and reported in Heller & Monahan (1977), to “identify and treat at the earliest possible moment” (p.116), reduces the

severity and duration of a disorder (Seedat et al., 1988). The idea that this research, in its entirety, proposes is that by way of early detection further intervention on at-risk individuals, specifically, is facilitated. The end goal is to reduce the cumulative effect of trauma before it becomes severe and difficult to treat, hence, the focus on utilising primary health care professionals (Mann, 1978). As reported by Seedat et al. (1988), “the natural care-givers in the community include people like health nurses, teachers, parents and ministers who are physically and psychologically available” (p.39). This links with the already-mentioned point by Bisson and Cohen (2006) where this model is committed to rendering mental health services to an entire community through a community mental health centre (Mann, 1978), and whereby “allowing more individuals to be treated in total” (Bisson & Cohen, 2006, p.592).

Secondly, the social action model builds onto the mental health model in that it focuses on an intervention strategy which exploits natural support systems. According to Mann (1978), it employs the services of local nonspecialists who are sensitive to the needs of the community. It was argued that they are able to concentrate on providing informal support and communication within the community itself (Guerney, 1969; Zax & Specter, 1974).

What may be a sensitive topic worth being addressed and mentioned by Seedat et al. (1988), is that “the professional/non-professional relationship is often unidirectional, [and] non-professionals are not always accorded equal status and are perceived to be in need of training and upgrading” (p.44). The idea that this research also attempted was to incorporate intended administrators or primary health care professionals into a professional framework based on expert reviews, but also allowing intended administrators to guide the practicality and/or logistics of administering a risk assessment at the primary health care level. It is concluded that one cannot operate without the other, and that both have invaluable contributions with regards to assessing or screening for PTSD.

In the mental health model, the control or power (so to speak) is entrusted with the expert who understandably has the requisite knowledge and expertise. However, on the other hand, social action experts such as Rappaport (1981) argue that in the empowerment process the professional as an advocate of change should become a “collaborator” (cited in Seedat et al., 1988, p.47).

Context of the Research

As already mentioned in Chapter 1 and throughout this study, many people in South Africa possibly suffer from PTSD purely based on the extent of trauma exposure that is apparent within the South African population. Most of the South African population who are exposed to great degrees of violence cannot necessarily afford private mental health services, and are often only referred for intervention once PTSD symptoms have severely impacted their level of functioning. Of these traumatised individuals, very few have contact with mental health professionals shortly after the event and, consequently, the initial risk of many individuals is unknown and they may remain undiagnosed and untreated. Thus, it makes sense for primary health care practitioners to screen for risk, but realistically personnel dealing with survivors in trauma clinics and/or emergency and crisis centres often have more pressing responsibilities.

A relatively easy method or screening instrument that can be administered time efficiently by first line and primary health care practitioners (i.e., not highly qualified psychological practitioners) (Brewin, 2005b), however, may help to alleviate this situation. In this way, traumatised individuals are proposed to have access to quality mental health services through early identification, immediate and appropriate referrals, and specifically tailored intervention and (further) prevention services. This is in accordance with research that suggests “integrating behavioural health, chronic disease management and prevention

services into primary health care” (Goodheart, 2010, p.5) which will in essence lead “to better and more cost-effective outcomes” (Goodheart, 2010, p.5).

Since no such measure or instrument currently exists, especially within a South African context and for a population that are exposed to one or more traumatic events or experiences in their life (Edwards, 2005a), it became the principal objective and motivation to start the development of such a measure.

Since the focus was on test-construction, the overall purpose was to achieve psychometric validation for the items retained in the modified and improved version of the risk assessment. The 3 distinct objectives were:

- to write initial items for a psychometric instrument for assessing PTSD risk, based on a range of well-known international, but also nationally or South African researched risk factors, for PTSD, with due consideration of the PTSD risk assessment issues and the purpose of the instrument (chapter 2);
- to subject these items to a review by experts within the field of traumatic stress for content validity and their appropriateness for the purpose of the measure as a departure point (chapter 3); and
- to subject these items to the intended users to investigate whether they would be able to reach the targeted behaviours using the instrument (chapter 4).

In summary, the preliminary version of the risk assessment (Appendix B) was evaluated according to its content validity both quantitatively and qualitatively. According to Trochim and Donnelly (2007), content validity estimates how much a measure represents every single element of a construct and ensures comprehensive content coverage as well as content relevance (Streiner & Norman, 1995). Consequently, instrument validity was based on content validity in the overall process of developing a psychometric instrument that will accurately predict future risk for PTSD.

Items that were generated in an initial phase from 3 major international reviews (Brewin, 2005a; Ozer, Best, Lipsey, & Weiss, 2003; & Weisæth, 1998) were utilised as a departure point in the process of examining risk factors in a South African context and being assessed at a primary health care level. Items were assessed by expert reviewers according to the adequacy of content coverage of PTSD risk in Chapter 3, and were further evaluated in terms of whether they were well-written and user-friendly to the intended administrators of this assessment instrument (Chapter 4). The criteria for all items in the risk assessment were ease of measurement, understandability of items, appropriateness to trauma individuals, et cetera.

Methodology

Administrative Procedure

All necessary permission was obtained before the research study commenced, including institutional ethics approval and permission from the Director of Clinical Governance at a participating general governmental hospital. Subsequent authorisation was also required from the respective medical superintendents at this hospital and a participating NGO that assists trauma victims, and consent obtained for making use of the staff members.

Description of Sample

The 31 expert reviewers – as can be seen in Table 1 (Chapter 1) – were balanced in the sense that there were 16 from academia and 15 from more clinical practice areas (of whom 10 were clinical psychologists and 5 registered counsellors). This balance is well aligned with the purpose of the review (whilst academics may have been more capable of highlighting missing information or comment on the applicability of an item in terms of its research base, clinicians may have been in a better position to highlight the practicalities or impracticalities of items) (Chapter 1).

Furthermore, an uneven distribution of expert reviewers across South Africa was reported; 13 in the Western Cape, 12 in Gauteng, 4 in the Eastern Cape, and 2 in KwaZulu-Natal. Regardless the sample composition and geographical distribution differences, the expert review panel collectively shared a special foundation in trauma and in PTSD, factors affecting individuals exposed to trauma, as well as the psychological effects of trauma and violence.

If we consider that the average years of experience is 17 years of traumatic stress research and trauma support and treatment, we can easily consider the sample to be an expert one that would be able to comment on the questions posed to them, and much of their individual professional psychological practices target human development amenities (such as comprehensive psychological services) at a community level. Their experience ranges from patients and/or clients in state and private settings, community and hospital sites, outpatient services and inpatient programs, the health care industry as well as a more academic lecturing milieu.

8 primary health care professionals were obtained. 5 of the 6 RCs were obtained through the RC program being run at NMMU, while 1 RC was still volunteering, after their internship was successfully completed last year, at the respective RC training institutions.

Furthermore, the lay- or crisis counsellor and registered nurse were approached at the NGO.

Regardless of the composition of the sample and possible different academic backgrounds, the primary health care professionals collectively shared a mutual interest at offering and providing a service based at a community level of public health. Each of these professionals brought with them a distinct awareness of the implications and possible void of working in a primary health care sector.

Their experience ranges from currently training in the field of counselling, to approximately 7 or 8 years of medical familiarity of working in the public, state, community, and/or hospital settings within the health care industry.

For both the expert and the primary health care professionals, it seemed apt to ask them to participate in this endeavour to design and develop an appropriate community level psychometric test or PTSD screening instrument for the identification of at-risk as well as not at-risk individuals at a primary health care level to facilitate early intervention actions.

Measures

Content validity was established by “design and evaluated by rational analysis of test content by qualified experts in the domain of content to be assessed” (Wilson et al., 2012, p.198; Allen & Yen, 2002). This process was facilitated by the development of “methods for quantification of the expert’s judgements, the first of which was the content validity ratio (CVR; Lawshe, 1975)” (Wilson et al., 2012, p.198).

The principles of the screening instrument were – as discussed in Chapter 2: (a) the instrument should be easily measured, (b) quick to be administered (Brewin, 2005b) and (c) able to be objectively implemented by first line and primary health care professionals.

Specified standards for the particular item selection and item writing were based on these psychometric properties (Brewin, 2005b): (a) straightforward factors such as gender have been included, (b) quick to be administered (Brewin, 2005b) and (c) factors such as IQ and personality traits have been excluded, as these require qualified psychological professionals to ethically evaluate these constructs. This formed the preliminary version of the PTSD risk assessment (Appendix B).

Furhermore, content validity also refers to comprehensiveness (Haynes, Richard, & Kubany, 1995). An *assessment instrument* refers to the particular method of acquiring data in psychological assessment (for example, questionnaires), and includes “all aspects of the

measurement process that can affect the data obtained (for example, instructions to participants, situational aspects of instrument stimuli, individual behaviour codes, and questionnaire items)” (Haynes et al., 1995, p.238). The adapted risk assessment (Appendix I), containing modified demographic, biological, and self-report items, was further examined qualitatively in interviewing sessions with intended administrators.

Items were evaluated separately in accordance with the above-stipulated principles of the screening instrument: (a) the instrument should be easily measured, (b) quick to be administered (Brewin, 2005b) and (c) able to be objectively implemented by first line and primary health care professionals.

Results and Discussion

Psychometric statistics utilised are provided in Appendix J and included: (1) the *content validity ratio* (CVR) of each item, (2) the mean or *average response* rating across all experts, (3) the *central tendency* or median of the response ratings of all the experts, (4) the mode or *most frequent response* rating obtained for each item, and (5) the percentage or *agreement* between individual expert responses.

Compared with alternative methods for quantifying content validity, indices that were more computationally complex than the CVR calculation as postulated by Lawshe (1975) was not employed. These indices focused on interrater agreement, in general, rather than on the fundamental issue of agreement that an item is “relevant” (Wilson, Pan, & Schumsky, 2012). The CVR statistic of Lawshe (1975) has been reported to fill a void, “becoming an internationally recognised method for establishing the content validity of instrumentation across many disciplines” (Wilson et al., 2012, p.198).

In this research, expert reviewers assisted in exploring the content validity of the instrument as part of evaluating the quality of generated items according to above-specified criteria, and their level of relevance, both quantitatively and qualitatively. This ensured that

items are not only noted as relevant and appropriate, but – more importantly – that they are also accurate and capable in identifying at-risk individuals.

As emphasised in Chapter 4, certain diagnostic expert knowledge was needed to frame the picture of identifying risk factors in a South African population. Items were then further evaluated qualitatively by intended administrators as discussed throughout this study, and focused on integrating the risk assessment into community, where intended administrators offered valuable insight from a primary health care perspective. As quoted in Chapter 3 and touched on in this chapter, “this represents a shift from the waiting-mode of mainstream psychotherapeutic practice” (Seedat, Cloete, & Shochet, 1988, p.40; Connery, 1968).

Conclusions, Recommendations, and Limitations

With the reality of having inadequate psychological practitioners with the requisite knowledge and experience to diagnose at-risk individuals, it makes sense to adjust the health system structure, by considering and involving “primary health care, secondary services, and public health services” (Weisæth et al., 2007, p.339), and in so doing, it is anticipated that fewer trauma individuals will remain undiagnosed and untreated.

Primary screening portrays the impression that PTSD risk assessment, in a South African context, should take place by those who first receive and have first contact with trauma individuals. This instantaneously directs the responsibility to trauma clinics and/or emergency centres, and their staff.

Some interesting points worth highlighting are as follows.

Firstly: where does the level of expertise reside?

As was emphasised in Chapter 3, the CVI was calculated to be 0.68 and, consequently, the Fleiss *kappa* was calculated at 0.10, which interprets into an overall slight agreement (0.0 – 0.20) between the quantitative ratings of the expert reviewers. This infers

that expert reviewers did not agree consistently or reliably across the 21 items. This could have been influenced by their respective backgrounds, as expert reviewers were essentially divided into 3 categories, namely (1) academics, (2) registered psychologists, and (3) registered counsellors. For example, academics plausibly would have evaluated individual items as risk factors in accordance with known research published with which they would be familiar, whereas registered psychologists and registered counsellors would have credibly evaluated individual items in accordance with a more clinical experience and/or practical expertise.

Secondly: what is being evaluated – relevance or operationalisation?

It was also observed that expert reviewers rated certain items as relevant, not with regards to content validity, but more so with regards to a conflicting operationalisation of the item; for example, *Contact Information* was rated as relevant by 76.67% of the expert reviewers (with a CVR of 0.53 and cut-off $CVR_{critical}$ of 0.358), but for no other reason than it being information that is necessary to be gathered to facilitate future contact. This expressed a potential limitation of this research; item relevance in terms of content validity (i.e., for accurately tapping the construct of PTSD risk factors) was misunderstood and/or misread in the instructions, or instructions to evaluate items accordingly were not clear enough, and should be re-evaluated, given the opportunity.

Thirdly: which is more important – expert knowledge or primary administration?

It was observed that intended administrators did not always agree with expert reviewers with regards to items that were flagged as being insensitive or intrusive. In the field, for example, it was reported that an item such as *ethnicity* is a standard question in a primary setting (i.e., trauma clinics and/or emergency centres) asked to trauma individuals. Nevertheless, comments and recommendations from both expert reviewers and intended

administrators were considered and fairly accommodated to ensure rigour in the development of the risk assessment.

Fourthly, as difficult as it is to admit: what benefit does early debriefing have for trauma individuals?

Research on the preventive intervention of psychological debriefing has reported it to have no effect (Weisæth et al., 2007). Studies overseas, such as the Norwegian Knowledge Centre for the Health Services, conducted a systematic review of the effects of psychosocial interventions after large accidents and disasters (cf. Weisæth et al., 2007) and it was reported that “several types of psychosocial interventions may be beneficial” (p.341). So, the focus again is attentive to increasing and strengthening social support for trauma individuals as opposed to a general post-trauma debriefing.

Such interventions, especially in a South African context, are hoped to alleviate the distress experienced by a trauma population.

As cited by Rungtusanatham (1998), “content validity of a measurement instrument for a theoretical construct reflects the degree to which the measurement instrument spans the domain of the construct’s theoretical definition; it is the extent to which a measurement instrument captures the different facets of a construct” (p.11). Just so, this research hopes to capture the different facets of trauma in South Africa, and address the different issues that have been identified.

As cited by Kagee (2004): “Consequently, critiques of the trauma discourse as a Western phenomenon need to be tempered with evidence of the lived reality of psychological sequelae experienced by this population” (p.323), a South African population.

It is recommended that this risk assessment be further scrutinised, by primary health care focus groups, and eventually then administered to trauma individuals, so as to develop

an appropriate, effective and accurate screening tool in which trauma individuals could benefit from early and more cost-effective intervention.

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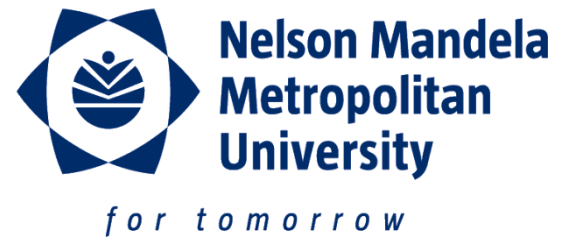
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Appendix A

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DIAGNOSTIC CRITERIA**Posttraumatic Stress Disorder – 309.81 (F43.10)****Posttraumatic Stress Disorder (American Psychiatric Association, APA, 2013)**

Exposure to actual or threatened death, serious injury, or sexual violence, in one (or more) of the following ways:

1. Directly experiencing the traumatic event(s).
2. Witnessing, in person, the event(s) as they occurred to others.
3. Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.
4. Experiencing repeated or extreme exposure to aversive details of the event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).

Note: Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.

Presence of one (or more) intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:

Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).

Note: In children older than 6 years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.

Recurrent distressing dreams in which the content and/or affect of the dream are related to the event(s).

Note: In children, there may be frightening dreams without recognisable content.

Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.)

Note: In children, trauma-specific reenactment may occur in play.

Intense or prolonged psychological distress at exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event(s).

Marked physiological reactions to internal or external cues that symbolise or resemble an aspect of the traumatic event(s).

Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:

Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).

Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).

Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).

Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., “I am bad,” “No one can be trusted,” “The world is completely dangerous,” “My whole nervous system is permanently ruined”).

Persistent distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others.

Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame).

Markedly diminished interest or participation in significant activities.

Feelings of detachment or estrangement from others.

Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).

Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

Irritable behaviour and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects.

Reckless or self-destructive behaviour.

Hypervigilance.

Exaggerated startle response.

Problems with concentration.

Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).

Duration of the disturbance (Criteria B, C, D, and E) is more than 1 month.

The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

The disturbance is not attributable to the physiological effects of a substance (e.g., medication, alcohol) or another medical condition.

Specify whether:

With dissociative symptoms: The individual's symptoms meet the criteria for posttraumatic stress disorder, and in addition, in response to the stressor, the individual experiences persistent or recurrent symptoms of either of the following:

1. Depersonalisation: Persistent or recurrent experiences of feeling detached from and as if one were an outside observer of, one's mental processes or body (e.g., feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).
2. Derealisation: Persistent or recurrent experiences of unreality of surroundings (e.g., the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

Note: To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g., blackouts, behaviour during alcohol intoxication) or another medical condition (e.g., complex partial seizures).

Specify if:

With delayed expression: If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate).

Posttraumatic Stress Disorder

DIAGNOSTIC CRITERIA – 309.81 (F43.10)

Posttraumatic Stress Disorder (American Psychiatric Association, APA, 2013)

A. Exposure to actual or threatened death, serious injury, or sexual violence, in one (or more) of the following ways:

1. Directly experiencing the traumatic event(s).
2. Witnessing, in person, the event(s) as they occurred to others.
3. Learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.
4. Experiencing repeated or extreme exposure to aversive details of the event(s) (e.g., first responders collecting human remains; police officers repeatedly exposed to details of child abuse).

Note: Criterion A4 does not apply to exposure through electronic media, television, movies, or pictures, unless this exposure is work related.

B. Presence of one (or more) intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred:

1. Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s).

Note: In children older than 6 years, repetitive play may occur in which themes or aspects of the traumatic event(s) are expressed.

2. Recurrent distressing dreams in which the content and/or affect of the dream are related to the event(s).

Note: In children, there may be frightening dreams without recognisable content.

3. Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings.)

Note: In children, trauma-specific reenactment may occur in play.

4. Intense or prolonged psychological distress at exposure to internal or external cues that symbolise or resemble an aspect of the traumatic event(s).

5. Marked physiological reactions to internal or external cues that symbolise or resemble an aspect of the traumatic event(s).

C. Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following:

1. Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).
2. Avoidance of or efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s).

D. Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:

1. Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia and not to other factors such as head injury, alcohol, or drugs).

2. Persistent and exaggerated negative beliefs or expectations about oneself, others, or the world (e.g., “I am bad,” “No one can be trusted,” “The world is completely dangerous,” “My whole nervous system is permanently ruined”).
 3. Persistent distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others.
 4. Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame).
 5. Markedly diminished interest or participation in significant activities.
 6. Feelings of detachment or estrangement from others.
 7. Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).
- E. Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following:
1. Irritable behaviour and angry outbursts (with little or no provocation) typically expressed as verbal or physical aggression toward people or objects.

2. Reckless or self-destructive behaviour.
3. Hypervigilance.
4. Exaggerated startle response.
5. Problems with concentration.
6. Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).

F. Duration of the disturbance (Criteria B, C, D, and E) is more than 1 month.

G. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

H. The disturbance is not attributable to the physiological effects of a substance (e.g., medication, alcohol) or another medical condition.

Specify whether:

With dissociative symptoms: The individual's symptoms meet the criteria for posttraumatic stress disorder, and in addition, in response to the stressor, the individual experiences persistent or recurrent symptoms of either of the following:

1. **Depersonalisation:** Persistent or recurrent experiences of feeling detached from and as if one were an outside observer of, one's mental processes or body (e.g., feeling as though one were in a dream; feeling a sense of unreality of self or body or of time moving slowly).
2. **Derealisation:** Persistent or recurrent experiences of unreality of surroundings (e.g., the world around the individual is experienced as unreal, dreamlike, distant, or distorted).

Note: To use this subtype, the dissociative symptoms must not be attributable to the physiological effects of a substance (e.g., blackouts, behaviour during alcohol intoxication) or another medical condition (e.g., complex partial seizures).

Specify if:

With delayed expression: If the full diagnostic criteria are not met until at least 6 months after the event (although the onset and expression of some symptoms may be immediate).

Appendix B



for tomorrow

SOUTH CAMPUS

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Tel: +27 (0)41 504 2330 / 4560 Fax: +27 (0)41 583 5324

PTSD RISK ASSESSMENT

Preliminary Version

Participant
Code

Checklist:	Study explained	Questions answered	Consent signed	Referral information given

Date: Interviewer: Start time:

Contact information

Name: Date of Birth:

Postal address: Contact number(s):

..... Significant other contact number:

.....

Email: Best time to contact telephonically:

Demographic information

Own ethnic identity: Gender:

Home language(s) Xhosa Afrikaans English Other (specify):

Education Primary Secondary Highest grade passed Tertiary Degree:

Total number years of education

Psychiatric and emotional history

Has the participant ever been treated for any psychiatric/psychological disorder?	<input type="text" value="Y"/>	<input type="text" value="N"/>
---	--------------------------------	--------------------------------

If "yes", briefly describe (diagnosis, clinician, dates)

.....

Has anyone in the participant's immediate family (siblings and parents) ever been treated for any psychiatric disorder?	<input type="text" value="Y"/>	<input type="text" value="N"/>
---	--------------------------------	--------------------------------

If "yes", briefly describe (relationship, diagnosis, clinician, dates)

.....

Has the participant experienced any significant (non-trauma) difficulties as a child? (e.g negative parenting experiences or any other experience they see as negative during childhood)	<input type="text" value="Y"/>	<input type="text" value="N"/>
--	--------------------------------	--------------------------------

Strictly Private and Confidential

If “yes”, briefly describe

Has the participant experienced any significant (non-trauma) difficulties as an adult? (e.g divorce, retrenchment or any other experience they see as negative during adulthood)	Y	N
--	---	---

If “yes”, briefly describe

Is the participant experiencing any significant (non-trauma) difficulties currently? (e.g divorce, retrenchment or any other experience they see as negative that is current)	Y	N
---	---	---

If “yes”, briefly describe

Trauma history

Has the participant experienced any traumatic stressors as a child? (e.g physical/sexual abuse or any other traumatic experience before the age of 18)	Y	N
--	---	---

If “yes”, briefly describe

Has the participant experienced any other traumatic events as an adult? (e.g assault, rape, armed robbery, hijacking)	Y	N
---	---	---

If “yes”, briefly describe

Socioeconomic status

Total household income: Number of people living in household:

Income per member:

R xxx,xx

Description of the event

Trauma type

Hijacking	<input type="checkbox"/>	Home invasion	<input type="checkbox"/>	Armed robbery	<input type="checkbox"/>	Rape (completed)	<input type="checkbox"/>
MVA	<input type="checkbox"/>	Industrial accident	<input type="checkbox"/>	Assault	<input type="checkbox"/>	Rape (attempted)	<input type="checkbox"/>

Other: (specify)

Code

Weapon used

N/A	<input type="checkbox"/>	None	<input type="checkbox"/>	Firearm	<input type="checkbox"/>	Knife	<input type="checkbox"/>
-----	--------------------------	------	--------------------------	---------	--------------------------	-------	--------------------------

Other: (specify)

Code

Subjective experience during the event

Perceived life threat	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>
Dissociation	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>
Degree of control	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>
Strength of emotions	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>

The most salient emotion that the participant experienced during the event:

Code

Appendix C



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INFORMATION LETTER

The proposed study intends to identify risk factors that can be measured in the peri-traumatic period which will eventually aid in predicting the development of traumatic stress.

Traumatic events are a common feature of life in South Africa. Many people in South Africa possibly suffer from Posttraumatic Stress Disorder (PTSD) purely based on the extent of trauma exposures that is apparent within the South African population. Of these traumatised individuals, very few have contact with mental health professionals shortly after the event and, consequently, many individual's initial risk is unknown and they may remain undiagnosed and untreated. It makes sense for primary health care practitioners to screen for risk, but personnel dealing with survivors often have more pressing needs.

The aim is to start a process of designing a psychometric instrument that is valid in predicting the development of traumatic stress. The principles of this instrument are that it needs to be objectively measurable, quick and easy to administer. The screening instrument needs to be administered time efficiently by first line and primary health care practitioners (i.e. not highly qualified psychological practitioners) to attempt to alleviate this situation. To my knowledge, no such measure or instrument currently exists in South Africa.

The psychometric questionnaire was designed using a combination of three well-known reviews of international risk factors (Brewin, 2005; Ozer, Best, Lipsey, & Weiss, 2003; and Weisæth, 2000) as a starting point in the initial item writing phase. A preliminary item pool has been assembled and needs to be evaluated quantitatively and qualitatively by expert reviewers who have experience in dealing with individuals who are diagnosed with PTSD in a South African context.

According to Clark and Watson (1995), the item writing step in which an item bank or item pool is developed involves items being reviewed in terms of whether they meet the content specifications of the test (Foxcroft & Roodt, 2001; Foxcroft, 2004). Since this is the initial stage of constructing a new measure, content validity is of utmost importance.

Content validity estimates how much a measure represents every single element of a construct, and it ensures comprehensive content coverage (Trochim & Donnelly, 2007) as well as content relevance (Streiner & Norman, 1995); it refers to the "extent to which a set of items reflects the intended content domain" (Zeolla, Brodeur, Dominelli, Haines, & Allie, 2006; Devellis, 1991). It must ensure that items are relevant and appropriate, but also accurate and capable in identifying at-risk individuals.

Both quantitative and qualitative comments will help refine the instrument to increase its effectiveness.

Since you have a wide range of clinical experience of treating individuals who are diagnosed with PTSD, I would appreciate it if you could assist me in evaluating whether the items sufficiently tap the content domain (i.e. risk factors for traumatic stress in South Africa). Your critique of the item pool will lend specifically to the rigour of the development of the instrument, and I will be relying on your expertise to guide the development of content specifications. According to Ruzafa-Martínez, López-Iborra, and Madrigal-Torres (2011) and While, Ullman, and Forbes (2007), this expert criticism will help refine the draft scale and establish face and content validity.

The following principles were used in item selection and writing: the instrument should be easily measured (for example, identifying straightforward factors such as gender), quick to be administered (Brewin, 2005) and able to be objectively implemented by primary health professions (for example, factors such as IQ and personality traits have been excluded as these require qualified professionals to ethically evaluate these constructs). The prototype questionnaire follows shortly for your perusal, but it may still be too extensive. The specified criteria include demographic, biological, and self-report items. For example, some questions on the questionnaire elicit either a 'yes' or 'no' response; some questions require participants to rate certain criteria on a scale from 'not at all' to 'very strongly'; some other questions involve participants to give a certain degree of self-report or explanation of the criterion asked (for example, family history of psychiatric disorders).

My motivation is:

"A primary goal of scale development is to create a valid measure of an underlying construct" (Clark & Watson, 1995, p.309). Loevinger (1957) affirmed that content issues must always be considered in defining the domain; "if theory is fully to profit from test construction ... every item [on a scale] must be accounted for" (Loevinger, 1957, p.657).

Please will you be so kind as to assist me in exploring the face and content validity of the instrument as part of evaluating the quality of generated items and their level of relevance.

Your consideration is much appreciated.

Please feel free to ask either myself or my supervisor anything about this letter that is unclear.

Yours sincerely

Miss Rozelle van Wyk

Primary Researcher

(email) rozelle.van.wyk@gmail.com

(cell) +27 71 362 0158

Mr. Kempie van Rooyen

Clinical Psychologist and Supervisor

Kempie.VanRooyen@nmmu.ac.za

+27 83 501 3842

Prof. Diane Elkonin

Head of Department: Psychology

Appendix D



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FEEDBACK QUESTIONNAIRE

Checklist:

Study explained	
-----------------	--

Questions answered	
--------------------	--

Consent signed	
----------------	--

Date:

YYYY/MM/DD

 Expert Reviewer: Time:

2400 format

Please rate the following items according to the degree of relevance.

Item 1: Contact information

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Name: Date of Birth:

YYYY/MM/DD

 Postal address: Contact number(s):

 Significant other contact number:
 Email: Best time to contact telephonically:

Comments / Recommendations

.....

Item 2: Demographic information**2.1. Own ethnic identity**

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

2.2. Gender

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

2.3. Home language(s)

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

2.4. Education

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

Item 3: Psychiatric and emotional history**3.1. Has the participant ever been treated for any psychiatric / psychological disorder?**

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

3.2. Has anyone in the participant's immediate family (siblings and parents) ever been treated for any psychiatric disorder?

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

**3.3. Has the participant experienced any significant (non-trauma) difficulties as a child?
(e.g. negative parenting experiences or any other experience they see as negative during childhood)**

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

**3.4. Has the participant experienced any significant (non-trauma) difficulties as an adult?
(e.g. divorce, retrenchment or any other experience they see as negative during adulthood)**

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

3.5. *Is the participant experiencing any significant (non-trauma) difficulties currently?*

(e.g divorce, retrenchment or any other experience they see as negative that is current)

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

Item 4: **Trauma history**

4.1. *Has the participant experienced any traumatic stressors as a child?*

(e.g physical / sexual abuse or any other traumatic experience before the age of 18)

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

4.2. *Has the participant experienced any other traumatic events as an adult?*

(e.g assault, rape, armed robbery, hijacking)

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

Item 5: **Socioeconomic status**

5.1. *Total household income*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

5.2. *Number of people living in household*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

Item 6: Description of the event**6.1. Trauma type**

(e.g. hijacking, home invasion, armed robbery, rape attempted, rape completed, MVA, industrial accident, assault, other)

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

6.2. Weapon used

(e.g. N/A, none, firearm, knife, other)

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

Item 7: Subjective experience during the event**7.1. Perceived life threat**

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

7.2. Dissociation

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

7.3. Degree of control

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

7.4. *Strength of emotions*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

7.5. *The most salient emotion that the participant experienced during the event*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
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Comments / Recommendations

.....

.....

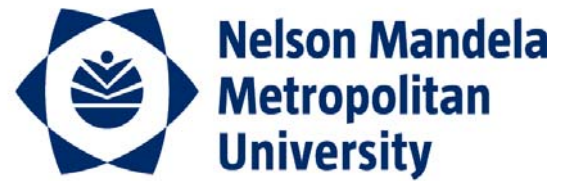
Item 8: Any other risk factor(s) you would like to add that may have been overlooked?

Comments / Recommendations

.....

.....

Appendix E

*for tomorrow*

SOUTH CAMPUS

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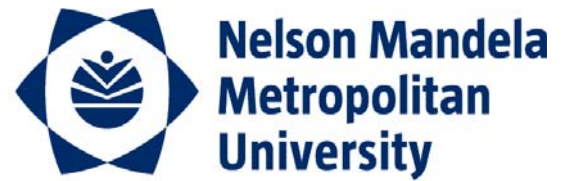
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CONSENT FORM

Researcher's Details		
Title of the research project	Identifying and Evaluating Risk Factors that Predict Traumatic Stress Severity in South Africa.	
Reference number		
Principal investigator	Miss Rozelle van Wyk	
Address	Department of Psychology P.O. Box 77000 Nelson Mandela Metropolitan University	
Postal code	6031	
Contact telephone number	+27 71 362 0158	
A. Declaration by expert reviewer		<u>Initial</u>
I, the undersigned	(full names)	
ID number		
Address		
Contact number		
A.1. Hereby confirm as follows:		
I was invited to participate in the above-mentioned research project		
that is being undertaken by	Miss Rozelle van Wyk	
From	Department of Psychology in the Faculty of Health Sciences	
of the Nelson Mandela Metropolitan University (NNMU)		
A.2. The following aspects have been explained to me:		<u>Initial</u>
2.1 Aim:	To write items that will measure risk factors in a simple and objective manner. To explore face and content validity as part of evaluating the quality of generated items and their level of relevance, and eliminating those proving to be inadequate.	
2.2 Procedures:	Give quantitative feedback in the form of a 4–point Likert Scale. Give qualitative feedback in the form of written comments / recommendations. Feedback will be captured on a Feedback Questionnaire.	

2.3	Risks:	None anticipated.				
2.4	Possible benefits:	No tangible benefits.				
2.5	Confidentiality:	My identity will not be revealed in any discussion, description or scientific publications by the investigators.				
2.6	Access to findings:	A copy of the research will be placed in the library of the Nelson Mandela Metropolitan University (NMMU) and feedback regarding the findings of the study will be provided to the participants in the form of generalised feedback, if requested.				
2.7	Voluntary participation / refusal / discontinuation:	My participation is voluntary	YES	NO		
		My decision whether or not to participate will in no way affect my present or future career / employment / lifestyle	TRUE	FALSE		
A.3. The information above was explained to me by:					Initial	
In	Afrikaans		English			
and I am in command of this language.						
I was given the opportunity to ask questions and all these questions were answered satisfactorily.						
A.4.	No pressure was exerted on me to consent to participation and I understand that I may withdraw at any stage without penalisation.					
A.5.	Participation in this study will not result in any additional cost to me.					
B. I, hereby, voluntarily consent to participate in the above-mentioned project:						
Signed / confirmed at		On		20		
Signature of expert reviewer		Signature of witness:				
		Full name of witness:				
C. Statement by or on behalf of investigator(s)						
I,				declare that:		
1.	I have explained the information given in this document to			(name of participant)		
2.	He / she was encouraged and given ample time to ask me any questions;					
3.	This conversation was conducted in	Afrikaans		English		
4.	I have detached Section D and handed it to the participant		YES	NO		
Signed/confirmed at		on		20		
Signature of interviewer		Signature of witness:				
		Full name of witness:				

Appendix F



for tomorrow

SOUTH CAMPUS

FACULTY OF HEALTH SCIENCES / DEPARTMENT OF PSYCHOLOGY

Tel: +27 (0)41 504 2330 / 4560 Fax: +27 (0)41 583 5324

• PO Box 77000 • Nelson Mandela Metropolitan University
• Port Elizabeth • 6031 • South Africa • www.nmmu.ac.za

INFORMATION LETTER

The proposed study intends to identify risk factors that can be measured in the peri-traumatic period which will eventually aid in predicting the development of traumatic stress.

Traumatic events are a common feature of life in South Africa. Many people in South Africa possibly suffer from Posttraumatic Stress Disorder (PTSD) purely based on the extent of trauma exposures that is apparent within the South African population. Of these traumatised individuals, very few have contact with mental health professionals shortly after the event and, consequently, many individual's initial risk is unknown and they may remain undiagnosed and untreated. It makes sense for primary health care practitioners to screen for risk, but personnel dealing with survivors often have more pressing needs.

The aim is to start a process of designing a psychometric instrument that is valid in predicting the development of traumatic stress. The principles of this instrument are that it needs to be objectively measurable, quick and easy to administer. The screening instrument needs to be administered time efficiently by first line and primary health care practitioners (i.e. not highly qualified psychological practitioners) to attempt to alleviate this situation. To my knowledge, no such measure or instrument currently exists in South Africa.

The psychometric questionnaire was designed using a combination of three well-known reviews of international risk factors (Brewin, 2005; Ozer, Best, Lipsey, & Weiss, 2003; and Weisæth, 2000) as a starting point in the initial item writing phase. A preliminary item pool has been assembled and needs to be evaluated quantitatively and qualitatively by expert reviewers who have experience in dealing with individuals who are diagnosed with PTSD in a South African context.

According to Clark and Watson (1995), the item writing step in which an item bank or item pool is developed involves items being reviewed in terms of whether they meet the content specifications of the test (Foxcroft & Roodt, 2001; Foxcroft, 2004). Since this is the initial stage of constructing a new measure, content validity is of utmost importance.

Content validity estimates how much a measure represents every single element of a construct, and it ensures comprehensive content coverage (Trochim & Donnelly, 2007) as well as content relevance (Streiner & Norman, 1995); it refers to the "extent to which a set of items reflects the intended content domain" (Zeolla, Brodeur, Dominelli, Haines, & Allie, 2006; Devellis, 1991). It must ensure that items are relevant and appropriate, but also accurate and capable in identifying at-risk individuals.

Both quantitative and qualitative comments will help refine the instrument to increase its effectiveness.

Since you have a wide range of clinical experience of treating individuals who are diagnosed with PTSD, I would appreciate it if you could assist me in evaluating whether the items sufficiently tap the content domain (i.e. risk factors for traumatic stress in South Africa). Your critique of the item pool will lend specifically to the rigour of the development of the instrument, and I will be relying on your expertise to guide the development of content specifications. According to Ruzafa-Martínez, López-Iborra, and Madrigal-Torres (2011) and While, Ullman, and Forbes (2007), this expert criticism will help refine the draft scale and establish face and content validity.

The following principles were used in item selection and writing: the instrument should be easily measured (for example, identifying straightforward factors such as gender), quick to be administered (Brewin, 2005) and able to be objectively implemented by primary health professions (for example, factors such as IQ and personality traits have been excluded as these require qualified professionals to ethically evaluate these constructs). The prototype questionnaire follows shortly for your perusal, but it may still be too extensive. The specified criteria include demographic, biological, and self-report items. For example, some questions on the questionnaire elicit either a 'yes' or 'no' response; some questions require participants to rate certain criteria on a scale from 'not at all' to 'very strongly'; some other questions involve participants to give a certain degree of self-report or explanation of the criterion asked (for example, family history of psychiatric disorders).

My motivation is:

"A primary goal of scale development is to create a valid measure of an underlying construct" (Clark & Watson, 1995, p.309). Loevinger (1957) affirmed that content issues must always be considered in defining the domain; "if theory is fully to profit from test construction ... every item [on a scale] must be accounted for" (Loevinger, 1957, p.657).

Please will you be so kind as to assist me in exploring the face and content validity of the instrument as part of evaluating the quality of generated items and their level of relevance.

Your consideration is much appreciated.

Please feel free to ask either myself or my supervisor anything about this letter that is unclear.

Yours sincerely

Miss Rozelle van Wyk
Primary Researcher
(email) rozelle.van.wyk@gmail.com
(cell) +27 71 362 0158

Mr. Kempie van Rooyen
Clinical Psychologist and Supervisor
Kempie.VanRooyen@nmmu.ac.za
+27 83 501 3842

Prof. Diane Elkonin
Head of Department: Psychology

PTSD RISK ASSESSMENT

Participant
Code

Checklist:	Study explained	Questions answered	Consent signed	Referral information given
------------	-----------------	--------------------	----------------	----------------------------

Date: Interviewer: Start time:

Contact information

Name: Date of Birth:

Postal address: Contact number(s):

..... Significant other contact number:

.....

Email: Best time to contact telephonically:

Demographic information

Own ethnic identity: **Gender:**

Home language(s) Xhosa Afrikaans English Other (specify):

Education Primary Secondary Highest grade passed Tertiary Degree:

Total number years of education

Psychiatric and emotional history

Has the participant ever been treated for any psychiatric/psychological disorder?	<input type="text" value="Y"/>	<input type="text" value="N"/>
---	--------------------------------	--------------------------------

If “yes”, briefly describe (diagnosis, clinician, dates)

.....

Has anyone in the participant’s immediate family (siblings and parents) ever been treated for any psychiatric disorder?	<input type="text" value="Y"/>	<input type="text" value="N"/>
---	--------------------------------	--------------------------------

If “yes”, briefly describe (relationship, diagnosis, clinician, dates)

.....

Has the participant experienced any significant (non-trauma) difficulties as a child? (e.g negative parenting experiences or any other experience they see as negative during childhood)	<input type="text" value="Y"/>	<input type="text" value="N"/>
--	--------------------------------	--------------------------------

If “yes”, briefly describe

.....

Has the participant experienced any significant (non-trauma) difficulties as an adult? (e.g divorce, retrenchment or any other experience they see as negative during adulthood)	<input type="text" value="Y"/>	<input type="text" value="N"/>
--	--------------------------------	--------------------------------

If “yes”, briefly describe

.....

Is the participant experiencing any significant (non-trauma) difficulties currently? (e.g divorce, retrenchment or any other experience they see as negative that is current)	<input type="text" value="Y"/>	<input type="text" value="N"/>
---	--------------------------------	--------------------------------

If “yes”, briefly describe

Trauma history

Has the participant experienced any traumatic stressors as a child? (e.g physical/sexual abuse or any other traumatic experience before the age of 18)

Y

N

If "yes", briefly describe

Has the participant experienced any other traumatic events as an adult? (e.g assault, rape, armed robbery, hijacking)

Y

N

If "yes", briefly describe

Socioeconomic status

Total household income: Number of people living in household:

Income per member:

R xxx,xx

Description of the event**Trauma type**Hijacking ☐Home invasion ☐Armed robbery ☐Rape (completed) ☐MVA ☐Industrial accident ☐Assault ☐Rape (attempted) ☐

Other: (specify)

Code

Weapon usedN/A ☐None ☐Firearm ☐Knife ☐

Other: (specify)

Code

Subjective experience during the event**Perceived life threat**

Not at all

A little bit

Intermediate

Strongly

Very strongly

☐☐☐☐☐**Dissociation**

Not at all

A little bit

Intermediate

Strongly

Very strongly

☐☐☐☐☐**Degree of control**

Not at all

A little bit

Intermediate

Strongly

Very strongly

☐☐☐☐☐**Strength of emotions**

Not at all

A little bit

Intermediate

Strongly

Very strongly

☐☐☐☐☐

The most salient emotion that the participant experienced during the event:

Code

FEEDBACK QUESTIONNAIRE

Checklist:	Study explained	Questions answered	Consent signed
------------	-----------------	--------------------	----------------

Date:

Expert Reviewer:

Time: **Please rate the following items according to the degree of relevance.****Item 1: Contact information**

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Name: Date of Birth:

Postal address: Contact number(s):

..... Significant other contact number:

Email: Best time to contact telephonically:

Comments / Recommendations**Item 2: Demographic information****2.1. Own ethnic identity**

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations**2.2. Gender**

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations**2.3. Home language(s)**

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

2.4. *Education*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

Item 3: **Psychiatric and emotional history**3.1. *Has the participant ever been treated for any psychiatric / psychological disorder?*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

3.2. *Has anyone in the participant's immediate family (siblings and parents) ever been treated for any psychiatric disorder?*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

3.3. *Has the participant experienced any significant (non-trauma) difficulties as a child?*
(e.g. negative parenting experiences or any other experience they see as negative during childhood)

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

3.4. *Has the participant experienced any significant (non-trauma) difficulties as an adult?*
(e.g. divorce, retrenchment or any other experience they see as negative during adulthood)

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

3.5. *Is the participant experiencing any significant (non-trauma) difficulties currently?**(e.g divorce, retrenchment or any other experience they see as negative that is current)*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

Item 4: **Trauma history**4.1. *Has the participant experienced any traumatic stressors as a child?**(e.g physical / sexual abuse or any other traumatic experience before the age of 18)*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

4.2. *Has the participant experienced any other traumatic events as an adult?**(e.g assault, rape, armed robbery, hijacking)*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

Item 5: **Socioeconomic status**5.1. *Total household income*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

5.2. *Number of people living in household*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

Item 6: **Description of the event**6.1. *Trauma type*

(e.g. *hijacking, home invasion, armed robbery, rape attempted, rape completed, MVA, industrial accident, assault, other*)

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

6.2. *Weapon used*

(e.g. *N/A, none, firearm, knife, other*)

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

Item 7: **Subjective experience during the event**7.1. *Perceived life threat*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

7.2. *Dissociation*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

7.3. *Degree of control*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

7.4. *Strength of emotions*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

7.5. *The most salient emotion that the participant experienced during the event*

Not at All Relevant	Slightly Relevant	Relevant	Very Relevant
---------------------	-------------------	----------	---------------

Comments / Recommendations

.....

.....

Item 8: Any other risk factor(s) you would like to add that may have been overlooked?

Comments / Recommendations

.....

.....

CONSENT FORM

Researcher's Details		
Title of the research project	Identifying and Evaluating Risk Factors that Predict Traumatic Stress Severity in South Africa.	
Reference number		
Principal investigator	Miss Rozelle van Wyk	
Address	Department of Psychology P.O. Box 77000 Nelson Mandela Metropolitan University	
Postal code	6031	
Contact telephone number	+27 71 362 0158	
A. Declaration by expert reviewer		<u>Initial</u>
I, the undersigned	(full names)	
ID number		
Address		
Contact number		
A.1. Hereby confirm as follows:		
I was invited to participate in the above-mentioned research project		
that is being undertaken by	Miss Rozelle van Wyk	
From	Department of Psychology in the Faculty of Health Sciences	
of the Nelson Mandela Metropolitan University (NNMU)		
A.2. The following aspects have been explained to me:		<u>Initial</u>
2.1 Aim:	To write items that will measure risk factors in a simple and objective manner. To explore face and content validity as part of evaluating the quality of generated items and their level of relevance, and eliminating those proving to be inadequate.	
2.2 Procedures:	Give quantitative feedback in the form of a 4–point Likert Scale. Give qualitative feedback in the form of written comments / recommendations. Feedback will be captured on a Feedback Questionnaire.	
2.3 Risks:	None anticipated.	
2.4 Possible benefits:	No tangible benefits.	
2.5 Confidentiality:	My identity will not be revealed in any discussion, description or scientific publications by the investigators.	
2.6 Access to findings:	A copy of the research will be placed in the library of the Nelson Mandela Metropolitan University (NMMU) and feedback regarding the findings of the study will be provided to the participants in the form of generalised feedback, if requested.	

2.7	Voluntary participation / refusal / discontinuation:	My participation is voluntary	YES	NO	
		My decision whether or not to participate will in no way affect my present or future career / employment / lifestyle	TRUE	FALSE	
A.3. The information above was explained to me by:					Initial
In	Afrikaans		English		
and I am in command of this language.					
I was given the opportunity to ask questions and all these questions were answered satisfactorily.					
A.4.	No pressure was exerted on me to consent to participation and I understand that I may withdraw at any stage without penalisation.				
A.5.	Participation in this study will not result in any additional cost to me.				
B. I, hereby, voluntarily consent to participate in the above-mentioned project:					
Signed / confirmed at		On		20	
Signature of expert reviewer		Signature of witness:			
		Full name of witness:			
C. Statement by or on behalf of investigator(s)					
I,					declare that:
1.	I have explained the information given in this document to				(name of participant)
2.	He / she was encouraged and given ample time to ask me any questions;				
3.	This conversation was conducted in	Afrikaans		English	
4.	I have detached Section D and handed it to the participant		YES	NO	
Signed/confirmed at		on		20	
Signature of interviewer		Signature of witness:			
		Full name of witness:			

Yours sincerely

Miss Rozelle van Wyk

Primary Researcher

(email) rozelle.van.wyk@gmail.com

(cell) +27 71 362 0158

Mr. Kempie van Rooyen

Clinical Psychologist and Supervisor

Kempie.VanRooyen@nmmu.ac.za

+27 83 501 3842

Prof. Diane Elkonin (Head of Department: Psychology)

Strictly Private and Confidential

Appendix G

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for tomorrow

SOUTH CAMPUS

FACULTY OF HEALTH SCIENCES / DEPARTMENT OF PSYCHOLOGY

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INFORMATION LETTER

Date _____

Dear Participant

You are being asked to take part in a research project that is aimed at gaining a better understanding of how people react to the kind of traumatic event that they have recently experienced. This is accomplished by identifying and evaluating risk factors that predict traumatic stress severity. You have been asked to participate in this research study which focusses on evaluating and refining the questionnaire. Since, in essence, you may be utilising this risk assessment in the future, it makes sense to obtain your opinion and also critique with regards to some practical issues which will aid in the design of this quick and easy risk assessment.

If you do agree to take part, you will be asked to give feedback in the form of an individual interview as to whether the measure is clear and understandable to all varying population groups. It is of primary concern to clarify these items so that there may be no ambiguity with regards to the questions asked.

If you do agree to take part, you may withdraw at any stage and without any penalty. Your participation or non-participation has absolutely no influence on your current employment (whether permanent or voluntary) at the respective site. You will not be penalised in any way.

All your information will be kept completely confidential. Although the feedback obtained will need to form part of the data collection of this research project, your name will remain anonymous at all times. During the interview, only your first name will be used and transcribed data will make use of 'coded' names.

Your participation will greatly assist in creating a quick and easy instrument that could be used to identify individuals at risk for developing Posttraumatic Stress Disorder (PTSD).

Your consideration is much appreciated. Please feel free to ask either myself or my supervisor anything about this letter that is unclear.

Yours sincerely

Miss Rozelle van Wyk

Primary Researcher

(email) rozelle.van.wyk@gmail.com

(cell) +27 71 362 0158

Mr. Kempie van Rooyen

Clinical Psychologist and Supervisor

Kempie.VanRooyen@nmmu.ac.za

+27 83 501 3842

Prof. Diane Elkonin

Head of Department: Psychology

Appendix H



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SOUTH CAMPUS
FACULTY OF HEALTH SCIENCES / DEPARTMENT OF PSYCHOLOGY
 Tel: +27 (0)41 504 2330 / 4560 Fax: +27 (0)41 583 5324

CONSENT FORM

Researcher's Details		
Title of the research project	Identifying and Evaluating Risk Factors that Predict Traumatic Stress Severity in South Africa.	
Reference number		
Principal investigator	Miss Rozelle van Wyk	
Address	Department of Psychology P.O. Box 77000 Nelson Mandela Metropolitan University	
Postal code	6031	
Contact telephone number	+27 71 362 0158	
A. Declaration by participant		<u>Initial</u>
I, the participant and the undersigned	(full names)	
ID number		
Address		
Contact number		
A.1. Hereby confirm as follows		
I, the participant, was invited to participate in the above-mentioned research project		
that is being undertaken by	Miss Rozelle van Wyk	
From	Department of Psychology in the Faculty of Health Sciences	
of the Nelson Mandela Metropolitan University (NNMU)		
A.2. The following aspects have been explained to me, the participant		<u>Initial</u>
2.1 Aim	To write items that will measure risk factors in a simple and objective manner To explore and describe the clarity of these items To rewrite items that are unclear to a group of individuals that represent the final intended users of the measure	
2.2 Procedures	Give feedback in the form of individual interviews Feedback and criticism will be tape recorded	
2.3 Risks	None anticipated	
2.4 Possible benefits	Familiarity with measure that could possibly be utilised in the near future	

2.5	Confidentiality	My identity will not be revealed in any discussion, description or scientific publications by the investigators.				
2.6	Access to findings	A copy of the research will be placed in the library of the Nelson Mandela Metropolitan University (NMMU) and feedback regarding the findings of the study will be provided to the participants in the form of generalised feedback, if requested.				
2.7	Voluntary participation / refusal / discontinuation	My participation is voluntary	YES	NO		
		My decision whether or not to participate will in no way affect my present or future career / employment / lifestyle	TRUE	FALSE		
A.3. The information above was explained to me / the participant by						Initial
In	Afrikaans			English		
and I am in command of this language.						
I was given the opportunity to ask questions and all these questions were answered satisfactorily.						
A.4.	No pressure was exerted on me to consent to participation and I understand that I may withdraw at any stage without penalisation.					
A.5.	Participation in this study will not result in any additional cost to me.					
B. I, hereby, voluntarily consent to participate in the above-mentioned project						
Signed/confirmed at		on			20	
Signature of participant		Signature of witness:				
		Full name of witness:				
C. Statement by or on behalf of investigator(s)						
I,					declare that:	
1.	I have explained the information given in this document to				(name of participant)	
2.	He / she was encouraged and given ample time to ask me any questions;					
3.	This conversation was conducted in	Afrikaans			English	
4.	I have detached Section D and handed it to the participant			YES	NO	
Signed/confirmed at		on			20	
Signature of interviewer		Signature of witness:				
		Full name of witness:				

Yours sincerely

Miss Rozelle van Wyk

Primary Researcher

(email) rozelle.van.wyk@gmail.com

(cell) +27 71 362 0158

Mr. Kempie van Rooyen

Clinical Psychologist and Supervisor

Kempie.VanRooyen@nmmu.ac.za

+27 83 501 3842

Appendix I



for tomorrow

SOUTH CAMPUS

FACULTY OF HEALTH SCIENCES / DEPARTMENT OF PSYCHOLOGY

Tel: +27 (0)41 504 2330 / 4560 Fax: +27 (0)41 583 5324

PTSD RISK ASSESSMENT

Modified Version

Study explained		Questions answered		Consent signed		Referral information given	
-----------------	--	--------------------	--	----------------	--	----------------------------	--

Date: YYYY / MM / DD

Interviewer:

Start time: 24:00 format

Item 1:**Contact information**

Name:

Date of birth: YYYY / MM / DD

Postal address:

.....

.....

.....

*Contact number(s):

Inpatient: Yes

Outpatient: Yes

*Significant other contact number:

.....

*Best time to contact telephonically:

**Item 2:****Demographic and socioeconomic information****Current age:**

Years	Months
-------	--------

Gender:

M	F
---	---

Ethnicity:

Black	Coloured	Indian	White	Other	(specify)
-------	----------	--------	-------	-------	-----------------

Home language(s):

Xhosa	English	Afrikaans	Other	(specify)
-------	---------	-----------	-------	-----------------

Education: Highest grade passed

1 – 12	Tertiary	Yes	No
--------	----------	-----	----

Employment:

Unemployed	Employed	(specify type of employment)
------------	----------	------------------------------------

Item 3:**Psychiatric and emotional history****3.1.**

Has the participant ever been treated for or diagnosed with any mental health disorder? <i>Q: Have you ever been to a nurse, doctor, counsellor, psychologist, or psychiatrist?</i>	Y	N
--	---	---

<i>Diagnosis / Problem:</i>	<i>Clinician / Type of Treatment:</i>	<i>Date / When:</i>
E.g. anxiety, depression,	E.g. nurse, doctor, counsellor,	E.g. year
low mood, substance abuse	psychologist, psychiatrist, etc.	
suicide attempts, etc.		

3.2.

Has anyone in the participant's immediate family (siblings and parents) ever been treated for or diagnosed with any mental health disorder? <i>Q: Has anyone in your family (brothers, sisters, or parents) ever been to a nurse, counsellor, psychologist, or psychiatrist?</i>	Y	N
---	---	---

<i>Relationship</i>	<i>Diagnosis / Problem:</i>	<i>Clinician / Type of Treatment:</i>	<i>Date / When:</i>
E.g. father, mother,	E.g. anxiety, depression,	E.g. nurse, doctor, counsellor,	E.g. year
sister, brother, etc.	low mood, substance abuse	psychologist, psychiatrist, etc.	
	suicide attempts, etc.		

3.3.

Has the participant experienced any other significant stressor(s) as a child?				
<i>Q: You do not need to tell me what happened. You can simply answer "Yes or No". Is that OK? Do you remember any negative event or experience when you were a child?</i>	Y	N	<i>Please give me an example.</i>	(e.g. negative parenting experiences or any other experience they see as negative during childhood)

3.4.

Has the participant experienced any other significant stressor(s) as an adult?				
<i>Q: Again, you do not need to tell me what happened. You can simply answer "Yes or No". Is that OK? Do you remember any negative event or experience as an adult?</i>	Y	N	<i>Please give me an example.</i>	(e.g. divorce, retrenchment or any other experience they see as negative during adulthood)

3.5.

Is the participant experiencing any significant stressor(s) currently?				
<i>Q: Again, you do not need to tell me what happened. You can simply answer "Yes or No". Is that OK? Are you experiencing any difficulties at the moment?</i>	Y	N	<i>Please give me an example.</i>	(e.g. divorce, retrenchment or any other experience they see as negative that is current)

Item 4:

4.1.

Trauma history

Has the participant experienced any traumatic stressor(s) as a child?				
<i>Q: You do not need to tell me what happened, as I know this must be very difficult for you. You can simply answer "Yes or No". Is that OK?</i> <i>Do you remember any traumatic event or experience when you were a child where you were hurt in any way or felt you were in danger?</i>	Y	N	<i>Please give me an example.</i>	(e.g. physical / sexual abuse or any other traumatic experience before the age of 18)

4.2.

Has the participant experienced any traumatic stressor(s) as an adult?				
<i>Q: You do not need to tell me what happened, as I know this must be very difficult for you. You can simply answer "Yes or No". Is that OK?</i> <i>Do you remember any traumatic event or experience as an adult where you were hurt in any way or felt you were in danger?</i>	Y	N	<i>Please give me an example.</i>	(e.g. assault, rape, armed robbery, hijacking)

Item 5:

Description of the event

<i>Trauma type</i>	Hijacking	<input type="checkbox"/>	Home invasion	<input type="checkbox"/>	Armed robbery	<input type="checkbox"/>	Rape (attempted)	<input type="checkbox"/>
	MVA	<input type="checkbox"/>	Industrial accident	<input type="checkbox"/>	Assault	<input type="checkbox"/>	Rape (completed)	<input type="checkbox"/>
							Other (please specify)	<input type="checkbox"/>

Weapon used

N/A ☐None ☐Knife ☐Firearm ☐

Number of attackers

1 ☐2 ☐3 ☐4+ ☐

Physical injuries

Yes ☐No ☐

Extent of injuries

Minor

None / superficial wounds / bruises – None / little medical attention

Moderate

Open wounds / lacerations – Medical attention is needed

Severe

Open / penetrating wounds (stab / bullet) – Overnight in hospital needed

Item 6:

6.1. Perceived life threat

Subjective experience during the event

Perceived life threat	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: How great did you think the danger was that you would die?</i> <i>E.g. Did you feel that you were in no / slight / reasonable / significant / unbearable danger?</i>					

6.2. Degree of control

Degree of control	None 4	Mild 3	Moderate 2	Severe 1	Extreme 0
<i>Q: To what extent did you feel in control during the event?</i> <i>E.g. Did you feel like you had no / slight / reasonable / significant / extreme control?</i>					

6.3. Dissociation

Dissociation	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: To what degree did you feel detached / removed / or not part of the event?</i> <i>E.g. Did it feel as if you were in a dream or in slow motion?</i>					

6.4. Numbing

Numbing	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: How much trouble did you have experiencing or expressing emotions?</i> <i>E.g. Were you stunned or in shock that you did not feel anything at all? Or to what degree did you feel emotionally numb or have trouble experiencing any kind of feeling / emotion?</i>					

6.5. Most salient emotion

The most salient emotion that the participant experienced during the event	None Nothing	Anxious Worried	Frightened Scared	Horried Shocked	Helpless Vulnerable
<i>Q: What feeling stood out the most / was more prominent / noticeable / significant for you during the traumatic event?</i> <i>E.g. Of all the examples listed to the right, which <u>one</u> emotion or feeling would you choose to best describe how you felt during the event?</i>	Fear Terror	Guilty Embarrassed	Ashamed Humiliated	Angry Aggressive	Stunned Surprised
	Lost Dazed	Numb Emotionless	Irritable Ill-tempered	Agitated Restless	Shocked Shaken

6.6. Strength of emotion

Strength of emotion	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: You just answered (e.g. anxious / frightened / horrified / helpless, etc.). To what degree did you feel (e.g. anxious / frightened / horrified / helpless, etc.) this emotion?</i> <i>E.g. How strong was this feeling of (e.g. anxiety / fear / horror / helplessness)? On a scale from 0 – 10, where 0 is the absence of the emotion and 10 is the most you have ever felt this way.</i>	0	1 – 3	4 – 6	7 – 9	10

Item 7:

Social support		
<i>Q: Do you feel comfortable to talk about what happened to you with your family and / or friends?</i> <i>E.g. If you wanted to speak to someone, do you feel that you have someone you could talk to about what happened?</i>	Y	N
<i>Q: Do you think your family and / or friends will be supportive?</i> <i>E.g. Do you think your family and / or friends will be understanding?</i>	Y	N

Yours sincerely

Miss Rozelle van Wyk

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Appendix J



for tomorrow

SOUTH CAMPUS

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PSYCHOMETRIC PROPERTIES

A summary of the respective statistical calculations for each item are displayed to illustrate or quantify content validity of items.

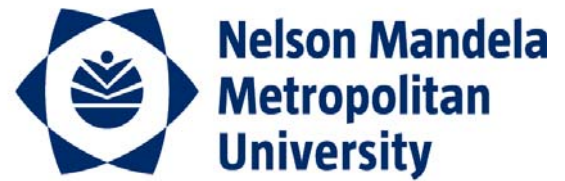
Item and Description	Relevance	Statistics	Description
Item 1: Contact Information			
	Relevant	0.53	CVR
		2.90	Mean
		3	Median
		3	Mode
		76.67	Percentage
Item 2: Demographic Information			
Item 2.1. Own Ethnic Identity	Relevant	0.20	CVR
		2.87	Mean
		3	Median
		4	Mode
		60.00	Percentage
Item 2.2. Gender	Relevant	0.80	CVR
		3.37	Mean
		3	Median
		4	Mode
		90.00	Percentage
Item 2.3. Home language(s)	Relevant	0.13	CVR
		2.57	Mean
		3	Median
		3	Mode
		56.67	Percentage
Item 2.4. Education	Relevant	0.20	CVR
		2.73	Mean
		3	Median
		3 / 4	Mode
		60.00	Percentage
Item 3: Psychiatric and Emotional History			
Item 3.1. Psychiatric History	Relevant	0.93	CVR
		3.70	Mean
		4	Median
		4	Mode

		96.67	Percentage
Item 3.2. Family Psychiatric History	Relevant	0.40	CVR
		2.97	Mean
		3	Median
		3	Mode
		70.00	Percentage
Item 3.3. Non-trauma difficulties (child)	Relevant	0.59	CVR
		3.14	Mean
		3	Median
		4	Mode
		79.31	Percentage
Item 3.4. Non-trauma difficulties (adult)	Relevant	0.85	CVR
		3.44	Mean
		3.5	Median
		4	Mode
		92.59	Percentage
Item 3.5. Non-trauma difficulties (current)	Relevant	1.00	CVR
		3.69	Mean
		4	Median
		4	Mode
		100.00	Percentage
Item 4: Trauma History			
Item 4.1. Traumatic stressors (child)	Relevant	0.93	CVR
		3.76	Mean
		4	Median
		4	Mode
		96.55	Percentage
Item 4.2. Traumatic stressors (adult)	Relevant	1.00	CVR
		3.90	Mean
		4	Median
		4	Mode
		100.00	Percentage
Item 5: Socioeconomic Status			
Item 5.1. Total household income	Relevant	0.07	CVR
		2.53	Mean
		3	Median
		3	Mode
		53.33	Percentage
Item 5.2. Number of people living in household	Not Relevant	-0.24	CVR
		2.28	Mean
		2	Median
		2	Mode
		62.07	Percentage
Item 6: Description of the Event			
Item 6.1. Trauma type	Relevant	0.80	CVR
		3.63	Mean
		4	Median
		4	Mode
		90.00	Percentage

Item 6.2. Weapon used	Relevant	0.67	CVR
		3.27	Mean
		3	Median
		4	Mode
		83.33	Percentage
Item 7: Subjective Experience			
Item 7.1. Perceived life threat	Relevant	1.00	CVR
		3.86	Mean
		4	Median
		4	Mode
		100.00	Percentage
Item 7.2. Dissociation	Relevant	0.71	CVR
		3.46	Mean
		4	Median
		4	Mode
		85.71	Percentage
Item 7.3. Degree of control	Relevant	0.86	CVR
		3.54	Mean
		4	Median
		4	Mode
		92.86	Percentage
Item 7.4. Strength of emotions	Relevant	0.63	CVR
		3.33	Mean
		4	Median
		4	Mode
		81.48	Percentage
Item 7.5. Most salient emotion	Relevant	0.63	CVR
		3.22	Mean
		3	Median
		4	Mode
		81.48	Percentage

where **CVR** is the *content validity ratio* of each item, **mean** is the *average response* rating across all experts, **median** is the *central tendency* of the response ratings of all the experts, **mode** is the *most frequent response* rating obtained for each item, and **percentage** is the *agreement* between individual expert responses.

Appendix K



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QUANTITATIVE and QUALITATIVE FEEDBACK

Expert Reviewers

Table 3: Quantitative and Qualitative Data Summarised from Expert Review.

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 5: Socio-economic Status				
# of people in household	-0.24	62.07%	0.364	2
Qualitative Comments	Not relevant – may be a proxy for support, availability / strength of social support system, financially struggling or low SES			
Recommendations	Agreement – item is not required			
Improved Item?	Omitted, but alternative item created to cover SES domain, together with following item, instead <i>employment</i> asked			
Total household income	0.07	53.33%	0.358	3
Qualitative Comments	Relevant – consider association between SES and PTSD?			
Recommendations	Intrusive, combine items? (previous item), ask about <i>employment</i>			
Improved Item?	Omitted, alternative item created in combination with item above, <i>employment status</i> and <i>employment type</i> asked, less intrusive, improved version of SES included in <i>Demographic Information</i>			
Item 2: Demographic Information				
Home language(s)	0.13	56.67%	0.358	3
Qualitative Comments	Relevant – not necessarily as risk factor per se or in psychometric measure, but may speak to minority group or proxy for SES			
Recommendations	Relevant – indicator for further management and intervention			
Improved Item?	Format change (slight) – more user-friendly, consistent response organisation, checkboxes			
Education	0.20	60.00%	0.358	3 and 4
Qualitative Comments	Relevant – possibly a proxy for SES, and other factors such as trauma exposure, general life stressors, etc., research links education to risk			

	of PTSD			
Recommendations	Condense item to only the necessary sub-items, too detailed, not all important			
Improved Item?	Retained, not much is known about education as a significant factor, worth further exploration Modified, only <i>Highest grade passed at school</i> and <i>Tertiary education</i> asked, others deleted			
Own ethnic identity	0.20	60.00%	0.358	4
Qualitative Comments	Relevant – not significant in predicting risk of developing PTSD per se, may be associated with SES and negative experiences, important to know in terms of looking at patterns of exposure in SA, versus identified in literature			
Recommendations	May offend people, seems vague, race or cultural background?, necessary for further management (i.e. referral, etc.)			
Improved Item?	Retained, more data needed to resolve debate about predictive validity of demographic risk factors Modified, item converted to ‘objective’ <i>ethnicity</i> , tick-box system, to be assessed by administrators, versus asking participant about their race, not offensive Further explored by qualitative interviews with intended administrators, to obtain subjective opinion, biased or intrusive?			
Please note: Above discussed items all fell below the adapted Lawshe (1975) CVR _{critical} value of 0.358 (Wilson et al., ???), but were not all omitted. Due to even the slightest possible contribution in predicting PTSD or trauma severity, items with a positive CVR (≥ 0) were retained in the modified and improved version of the PTSD risk assessment (please view Appendix G) and warranted further exploration. Any one of these items may potentially still be deleted from the final product or future refined PTSD risk assessment instrument if proven to have no quantitative contribution in the predictive validity calculations and statistical analyses.				
Item 3: Psychiatric and Emotional History				
Family psychiatric history	0.40	70.00%	0.358	3
Qualitative Comments	Relevant – family vulnerability, depending on the disorder, mood and anxiety and substance abuse?			
Recommendations	Not understandable by layperson, rephrase to clarify, e.g. <i>problem</i> instead of <i>diagnosis</i> , include examples and checkboxes for time efficiency, proposed training for primary health care professionals			
Improved Item?	Modified, more user-friendly word, changed to <i>relationship, problem, type of treatment, by who and when</i> , also whether participant <i>has been to a counsellor, nurse, psychologist, psychiatrist for any problems with anxiety or depression / low mood, substance abuse, suicidal?</i> , table format with columns for <i>date, diagnosis / problem</i> , etc., provides example of how to ask item, facilitates or guides accurate and quick administration Further explored by qualitative interviews with intended administrators, subjective contribution on possible improvement			
Item 1: Contact Information				
Name, DOB, Postal	0.53	76.67%	0.358	3

Address, Contact #, Significant other #, Email, Best time				
Qualitative Comments	Relevant – other reasons, not predicting risk, necessary information to be gathered, facilitate future contact, follow-up for at-risk individuals			
Recommendations	Administrative function, information probably already completed, repetition unnecessary, file or reference number instead, In/Out patient status (hospital setting), patient sticker? Query: clinic intake versus psychometric measure? Suggested adding <i>Name & Surname, Contact No – Cell Home, Physical Home Address, Age</i> instead of DOB, consider moving to <i>Demographic Information</i>			
Improved Item?	Modified with suggested improvements, <i>In/Out patient status</i> , under <i>patient sticker</i> , space provided for <i>file or reference number, DOB</i> and <i>best time to contact</i> still included, <i>email address</i> omitted though <i>Current Age</i> asked under <i>Demographic and socioeconomic Information</i> in addition to <i>DOB</i> under <i>Contact Information</i> Administration of item changed, with availability of <i>patient sticker</i> and/or <i>file number</i> , able to be completed by administrator beforehand Further explored with intended administrators			
Item 3: Psychiatric and Emotional History				
Significant (non-trauma) difficulties (child)	0.59	79.31	0.364	4
Qualitative Comments	Relevant – research, known risk factor Clarity and understandability – ambiguous, what is meant by <i>significant non-traumatic experience</i> ? Primary health care professionals (or layperson) may find this difficult, confusing for participant (i.e. trauma individual)			
Recommendations	<i>Significant</i> is vague, clarify, rephrase, maybe give examples, to distinguish between <i>trauma and non-trauma</i> , checklist, too much information, length of questionnaire and duration of administration			
Improved Item?	Reworded to <i>negative experiences</i> and defined by possible examples, added in table format, facilitate accurate and easy administration Further explored by qualitative interviews with intended administrators, cope? with this information saturated item			
Item 7: Subjective Experience during the Event				
Most salient emotion	0.63	81.48%	0.377	4
Qualitative Comments	Relevant – appropriateness of strong emotions, subjective experience, most important indication for the development of possible PTSD, identified risk factor, e.g. horror/intense fear, helplessness, numbness, powerless/mental defeat, anger, shame, strong predictors, gender associations?			
Recommendations	Understandability, descriptor is unclear, <i>salient</i> is uncommon, for both administrator and participant, define a few, list of examples, useful to specify emotions, help participant identify a feeling more easily, also assist administrator to obtain accurate information, assess			

'intensity' or <i>strength of emotions</i> and duration separately				
Improved Item?	Modified, table format, more user-friendly, example of how to ask question provided, guide administration, examples of possible emotions added, secondary emotions also listed, broader or wider-ranging options available, checkboxes to facilitate ease and time of administration Further explored with intended administrators, consider developing manual? for definitions, explanations, meanings, and/or instructions			
Strength of emotions	0.63	81.48%	0.377	4
Qualitative Comments	Relevant – identified as risk factor, subjective experience, important indication for the development of PTSD, assess 'intensity' or <i>strength of emotions</i> and duration separately			
Recommendations	Clarity – item is unclear, what is meant by <i>strength of emotions</i> ? Understandability – more useful term, rating or response format is confusing, make it clear for test users, expressed or suppressed? Administration – ensure 'interviewer' and 'participant' understand what is meant, consider <i>severity of emotions experienced</i> , useful to specify the emotions, examples in brackets (i.e. <i>fear, anger, horror</i>), on a scale (1 no emotion – 10 extreme emotion)			
Improved Item?	Modified, table format implemented with option as to how to ask item, facilitate appropriate administration, ' <i>degree</i> ' and ' <i>how strong</i> ' was the feeling were used to explain <i>strength of emotions</i> , 0 – 10 scale applied (0 = none, and 10 = extreme)			
Item 6: Description of the event				
Weapon used	0.67	83.33%	0.358	4
Qualitative Comments	Relevant – associated with degree of threat, subjective experience, intensified with more 'severe' weapon, aggravate symptoms			
Recommendations	Administration – instructions not clear, <i>weapon used</i> ? refers to what traumatic event? Understandability – primary health care professionals might find item difficult, N/A? not clear or understandable, what about injuries sustained? and extent of injuries?			
Improved Item?	Modified, <i>other (specify)</i> was removed, consistent response format Added: <i>number of attackers, physical injuries sustained, severity or extent of injuries</i> Further explored with intended administrators, administration and understandability tested, probed to establish level of difficulty of item			
Item 7: Subjective Experience during the Event				
Dissociation	0.71	85.71%	0.370	4
Qualitative Comments	Relevant – early symptom, identified risk factor, common in clients with PTSD			
Recommendations	Clarity and understandability – difficult term for psychological and/or non-psychological professionals, distinction between <i>dissociation</i> during the event and after the event, consider examples or a brief description, few items to clarify for 'interviewer' and 'participant', suggested rephrasing to simplify in Layman's terms, 'cannot clearly			

	recall aspects of the trauma, standing outside body, watching the trauma happen’, multiple language set? Administration – query ability of primary health care professionals to measure this accurately, also ease and straightforwardness?			
Improved Item?	Modified, rephrasing implemented, <i>feel detached/removed/not a part of it, in a dream or in slow motion</i> , to clarify item for administrators Administration – table format with question examples, reworded, suggested rephrasing implemented Consider manual for problematic items – definitions, explanations, meanings, and/or instructions Further explored and tested with intended administrators			
Item 2: Demographic Information				
Gender	0.80	90.00%	0.358	4
Qualitative Comments	Relevant – identified and supported, by research and empirical data, as risk factor, under <i>Demographic Information</i> , versus personal/professional experience, of gender in association with and as causation of exposure, i.e. gender and exposure versus gender and response?			
Recommendations	Queries: Does <i>gender</i> predict vulnerability to PTSD? Or <i>type of violence</i> more important? Independent relevance?			
Improved Item?	Retained – item was not argued to be lost or omitted, rather its relevance questioned Further examination required, to determine combined predictive power or influence when grouped with other possible risk factors, such as exposure or <i>trauma type</i>			
Item 6: Description of the event				
Trauma type	0.80	90.00%	0.358	4
Qualitative Comments	Relevant – features of event are important, associated with vulnerability to symptoms, maybe not the event per se, rather perception of the event, subjective experience more important? Consider proximity/direct or indirect exposure? Duration?			
Recommendations	Clarity, format and instructions are not clear, referring to past or most current/recent trauma experienced? Specific, crime-related traumas given as examples, non-crime related traumas? Natural disasters, house fires, building collapses, etc.? Understandability, define <i>assault</i> , <i>attempted rape</i> , and <i>completed rape</i> , provide checklist?, more traumas than indicated, listing high risk traumas, easier for both ‘administrator’ and ‘participant’, specify <i>other</i>			
Improved Item?	Retained and modified slightly, addition of non-crime related examples, e.g. <i>natural disasters, house fires, buildings that collapse, etc.</i> , and <i>Other non-crime related traumas</i> , more user-friendly, easier for ‘administrator’ and ‘participant’, without limiting them to only certain examples Further explored with intended administrators			
Item 3: Psychiatric and Emotional History				
Significant (non-	0.85	92.59%	0.377	4

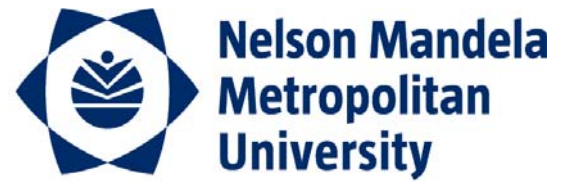
trauma) difficulties (adult)				
Qualitative Comments	Relevant – experiencing negative life events could indicate vulnerability, an accumulation of difficulties, co-stressors, compounding, both distal and proximal stressful life events, depleted coping resources, more vulnerable to developing PTSD			
Recommendations	Understandability – <i>non-trauma</i> is confusing, vague, ambiguous, explain what is meant by <i>significant difficulties</i> ?, <i>significant</i> is not clear, rephrase, list possible <i>non-trauma difficulties</i> , as examples, checkboxes, shown/read to ‘participant’, specifies considered events Administration – ability to accurately assess item?, due to considerable volume of information, duration of administration? Also, ability of primary health care professional to ‘contain’ trauma individual, intent is not to harm or further traumatise participant			
Improved Item?	Modified, table format, user-friendly, example of possible question provided, to guide appropriate administration, examples of <i>non-trauma difficulties</i> , act as possible descriptors, potentially limit administrators or ‘interviewers’ Further explored with intended administrators, understandability and administration specifically discussed in qualitative interviews, subjective interpretation of item sourced, to ensure proper directing of question, so as to not re-traumatise or further harm participant			
Item 7: Subjective Experience during the Event				
Degree of control	0.86	92.86%	0.370	4
Qualitative Comments	Relevant – subjective experience, identified risk factor, important predictor, but difficult to gage			
Recommendations	Clarity, ambivalent, unclear, meaning what?, <i>degree of control</i> over self?, the event?, define <i>degree of control</i> participant <i>experienced during the event</i> , or ‘control over what was happening’, participant might not be able to comment due to traumatisation, primary health care professional may not be able to assess accurately, important that ‘interviewer’ and ‘participant’ understand this item			
Improved Item?	Modified, table format, possible question provided, example, to help clarify what is meant, guide administration Further explored with intended administrators, to improve understandability and accuracy of item			
Item 4: Trauma History				
Trauma history (child)	0.93	96.55%	0.364	4
Qualitative Comments	Relevant – known risk factor, strongly related to PTSD, more vulnerable or high risk			
Recommendations	Understandability, lay-person’s understanding, distinguish between <i>trauma</i> and <i>non-trauma</i> , list of possible experiences, DSM-IV/V, checkboxes, easier for administrator and participant if list provided Administration, competent?, might refer only to examples given?, other trauma experiences excluded, assess ‘duration’ and ‘severity’? Concern, information saturated and sensitive item, may further distress participant, adding to effects of trauma, if not administered correctly			

Improved Item?	Modified, table format, example of expected question provided, to facilitate accurate and sensitive administration of item, examples given of possible <i>trauma</i> experiences <i>in childhood</i> Further explored with intended administrators, evaluate challenge that item presents, subjective interpretation of it, accurate administration, not to add to the development of traumatic stress			
Item 3: Psychiatric and Emotional History				
Psychiatric history	0.93	96.67%	0.358	4
Qualitative Comments	Relevant – more vulnerable, given indication, increase PTSD risk, important pre-trauma consideration, depending on disorders (affective? suicidal?)			
Recommendations	Clarity, vague question, difficult to administer, subjects may not understand what is meant, informative? or accurate information? Suggested item be revised, table with checkboxes, medication? subtle and less intrusive, training recommended?, to define <i>psychiatric disorder</i> , rephrase, layman’s terms, <i>been treated for any stress-related illness/problem</i> , change <i>diagnosis, clinician, dates</i>			
Improved Item?	Modified, table format implemented, with columns for <i>diagnosis/problem, clinician/type of treatment</i> , and <i>date/when</i> , examples provided, e.g. <i>depression, low mood</i> , etc., example of how to ask item, <i>been to a counsellor, nurse, psychologist, psychiatrist for any problems with anxiety or depression/low mood</i> , etc., improve administration efficiency Further explored with intended administrators to improve item			
Item 3: Psychiatric and Emotional History				
Significant (non-trauma) difficulties (current)	1.00	100%	0.364	4
Qualitative Comments	Relevant – persons under stress seem to be more vulnerable, predispose, precipitate, perpetuate vulnerability, important to assess co-stressors or compounding effects, strong predictor, peri-trauma life stressors / negative events			
Recommendations	Clarity, wording is weak, vague, ambiguous, what is meant by <i>negative experience?</i> , term is broad, give examples, list useful to ‘interviewer’ and ‘participant’ Administration, repetitive, considerable amount of information, increase length of questionnaire, combine <i>non-trauma</i> items, explore all past difficulties			
Improved Item?	Modified, term changed to <i>other current stressor(s)</i> , table format, example of potential question, examples provided of <i>non-trauma difficulties</i> , easier for both administrator and participant Further explored with intended administrators			
Item 7: Subjective Experience during the Event				
Perceived life threat	1.00	100%	0.364	4
Qualitative Comments	Relevant – good question, part of the definition of trauma, one of the exposure elements, associated with vulnerability, important diagnostic feature, identified risk factor			

Recommendations	Clarity, descriptor is unclear, wording may be clarified, <i>threat</i> to own life? another's life?, suggested rephrasing, trauma individual may not identify this, challenging to measure			
Improved Item?	Modified, table format implemented, example given as to how to ask question, suggested rephrasing implemented, <i>to what extent did you feel your life was threatened/in danger</i> Further explored with intended administrators			
Item 4: Trauma History				
Trauma history (adult)	1.00	100%	0.364	4
Qualitative Comments	Relevant – known risk factor, greater for developing PTSD, multiple traumatisation, associated with higher rates of PTSD, triggered by new trauma			
Recommendations	Understandability, rephrase with DSM-IV/V criteria, proximity (heard, witnessed, victim), crime-related traumas heavier weight?, create more than one category, primary health care professional may find it difficult, not able to differentiate between <i>trauma</i> and <i>non-trauma</i> , list of examples of <i>traumatic</i> experiences, include more examples, table, checkboxes, useful for both interviewer and participant, easier for administration, time frame? frequency? duration? severity? trauma exposure? time passed since last trauma?			
Improved Item?	Modified, table format applied, example of question to be asked provided, rephrased to <i>current stressors</i> , list of examples available, easier for both administrator and participant, indicative of <i>trauma</i> experiences encapsulated Further explored with intended administrators, subjective interpretation of item			

Appendix L

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ADMINISTRATOR MANUAL

(Primary Health Care Professionals – Registered Nurses and Counsellors)

Dear Administrator,

The sole purpose of this manual is to assist you in and during the interviewing session. The manual is written in such a way that it replicates the actual interviewing questionnaire, so as to make it as user friendly and understandable as possible in its systematic lay-out. The **red bold** or *italicised* writing acts as instructions for you to follow and complete. The black **bold** and *italicised* writing acts as guidance for introducing sensitive data to the trauma patient, for asking the trauma patient certain questions to elicit appropriate information, and for potential examples. The black **bold** writing is for your personal perusal.

Please note that these patients have gone through a traumatic experience, so please be sensitive and patient with them at all times. Be as understanding and reassuring as you possibly can be, and allow them to answer the questions as they see fit. Also, **please** be careful of allowing them to disclose or share too much information or detail as this may re-traumatise them, placing them at risk.

Remember, the aim of this research study is to identify potential risk factors that will contribute to the development of posttraumatic stress disorder (PTSD) **without** any further injury (hurt or harm) to the patient. It is important that you contain the patient as is necessary, but please keep in mind that this is not an appropriate therapy session, and that there is not enough time to discuss all the questions in great length.

Introduction

Administrator – “I am going to be asking you about some sensitive and difficult things. Some of these experiences may be hard to remember or may bring back uncomfortable memories and unhappy feelings. People often find that talking about them can be helpful, but it is up to you to decide how much you want to tell me, and if you want to answer the question or not. As we go along, if you find yourself becoming upset, please let me know. Also, if you have any questions or you do not understand something, please let me know. Do you have any questions before we start?”

PTSD RISK SCHEDULE

For You to Fill In

Reference / File Number

For the Primary Investigator / Researcher to Fill In

Participant Code

Study explained		Questions answered		Consent signed		Referral information given	
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Date: YYYY / MM / DD **Interviewer:** Start time: 24:00 format

Contact information – For You To Fill In From The Patient Sticker Prior To The Interview – some of the information that is not on the Patient Sticker should be asked, e.g.*

Name:

Date of birth: YYYY / MM / DD

Postal address:

.....

.....

.....

*Contact number(s):

*Significant other contact number:

.....

Patient Sticker – Stick Patient Sticker Here

Inpatient: Yes

Outpatient: Yes

*Best time to contact telephonically:

Demographic and socioeconomic information

Current age:

Years	Months	Gender:		M	F
Black	Coloured	Indian	White	Other	(specify)

*Ethnicity:

*Do you feel comfortable asking this question?

Yes No

*Or would you prefer to fill it in objectively?

Yes No

Home language(s):

Xhosa	English	Afrikaans	Other	(specify)
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Education:

Highest grade passed

1 – 12

Tertiary

Yes

No

Employment:

Unemployed	Employed
------------	----------

(specify type of employment)

----- e.g. self-employed = employment -----

Psychiatric and emotional history

Has the participant ever been treated for or diagnosed with any mental health disorder?

Y N

Q: Have you ever been to a nurse, doctor, counsellor, psychologist, or psychiatrist?

Please fill in the table below obtaining as much information from the patient as considerably as possible!

Please make sure the patient understands what is being asked!!!

Diagnosis / Problem:	Clinician / Type of Treatment:	Date / When:
E.g. anxiety, depression,	E.g. nurse, doctor, counsellor,	E.g. year
low mood, substance abuse	psychologist, psychiatrist, etc.	

suicide attempts, etc.		
------------------------	--	--

Has anyone in the participant's immediate family (siblings and parents) ever been treated for or diagnosed with any mental health disorder?

Q: Has anyone in your family (brothers, sisters, or parents) ever been to a nurse, counsellor, psychologist, or psychiatrist?

Y

N

Again, please fill in the table below obtaining as much information from the patient as *considerately* as possible! Please make sure the patient understands what is being asked!!!

Relationship:	Diagnosis / Problem:	Clinician / Type of Treatment:	Date / When:
E.g. father, mother,	E.g. anxiety, depression,	E.g. nurse, doctor, counsellor,	E.g. year
sister, brother, etc.	low mood, substance abuse	psychologist, psychiatrist, etc.	
	suicide attempts, etc.		

Has the participant experienced any other significant stressor(s) as a child?

Q: You do not need to tell me what happened. You can simply answer "Yes or No". Is that OK?
Do you remember any negative event or experience when you were a child?

Y

N

Please give me an example.

(e.g. negative parenting experiences or any other experience they see as negative during childhood)

NB. Other significant stressors that are not related to the presenting traumatic event!

Has the participant experienced any other significant stressor(s) as an adult?

Q: Again, you do not need to tell me what happened. You can simply answer "Yes or No". Is that OK?
Do you remember any negative event or experience as an adult?

Y

N

Please give me an example.

(e.g. divorce, retrenchment or any other experience they see as negative during adulthood)

NB. Other significant stressors that are not related to the presenting traumatic event!

Is the participant experiencing any significant stressor(s) currently?

Q: Again, you do not need to tell me what happened. You can simply answer "Yes or No". Is that OK?
Are you experiencing any difficulties at the moment?

Y

N

Please give me an example.

(e.g. divorce, retrenchment or any other experience they see as negative that is current)

NB. Other significant stressors that are not related to the presenting traumatic event!

Trauma history – PLEASE be careful when asking this section as not to re-traumatise the patient!

Definition: "The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others. The person's response involved intense fear, helplessness, or horror."

Has the participant experienced any traumatic stressor(s) as a child?

Q: You do not need to tell me what happened, as I know this must be very difficult for you. You can simply answer "Yes or No". Is that OK?
Do you remember any traumatic event or experience when you were a child where you were hurt in any way or felt you were in danger?

Y

N

Please give me an example.

(e.g. physical / sexual abuse, death of significant person (family / friend) or any other traumatic experience before the age of 18)

Has the participant experienced any traumatic stressor(s) as an adult?				
<i>Q: You do not need to tell me what happened, as I know this must be very difficult for you. You can simply answer “Yes or No”. Is that OK?</i> <i>Do you remember any traumatic event or experience as an adult where you were hurt in any way or felt you were in danger?</i>	Y	N	Please give me an example.	(e.g. assault, rape, armed robbery, hijacking)

Description of the event – PLEASE BE *ESPECIALLY* CAREFUL when asking these questions! Our intention is *not* to re-traumatise (hurt or harm) the patient. Also, please contain the patient where necessary, as these questions are directly linked or related to the presenting traumatic event, and recapping the experience may upset the patient. Please be sensitive and understanding.

Trauma type	Hijacking <input type="checkbox"/>	Home invasion <input type="checkbox"/>	Armed robbery <input type="checkbox"/>	Rape (attempted) <input type="checkbox"/>
	MVA <input type="checkbox"/>	Industrial accident <input type="checkbox"/>	Assault <input type="checkbox"/>	Rape (completed) <input type="checkbox"/>
				Other (please specify) <input type="checkbox"/>

↓

E.g. natural disasters, house fires, buildings that collapse, etc. Other non-crime related traumas.

Weapon used	N/A <input type="checkbox"/>	None <input type="checkbox"/>	Knife <input type="checkbox"/>	Firearm <input type="checkbox"/>
Number of attackers	1 <input type="checkbox"/>	2 <input type="checkbox"/>	3 <input type="checkbox"/>	4+ <input type="checkbox"/>
Physical injuries	Yes <input type="checkbox"/>	No <input type="checkbox"/>		
*Extent of injuries	Minor <input type="checkbox"/>	Moderate <input type="checkbox"/>	Severe <input type="checkbox"/>	

***Q: Did you suffer minor / moderate / severe injuries during the event? Please see below for definitions.**

Note: An injury is a physiological wound caused by an external source. It is categorised as blunt or penetrating.

“Minor” injuries =	None / superficial wounds / bruises – None / little medical attention	“Moderate” injuries =	Open wounds / lacerations – Medical attention is needed	“Severe” injuries =	Open / penetrating wounds (stab / bullet) – Overnight in hospital needed
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Subjective experience during the event

Perceived life threat	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: How great did you think the danger was that you would die?</i> <i>E.g. Did you feel that you were in slight / reasonable / significant / unbearable danger?</i>					

Rating the Degree / Intensity:

- 0 None – No life threat at all
- 1 Mild – Minimal or slight life threat
- 2 Moderate – Intermediate or reasonable life threat
- 3 Severe – Considerable or significant life threat
- 4 Extreme – Incapacitating or unbearable life threat

Degree of control	None 4	Mild 3	Moderate 2	Severe 1	Extreme 0
<i>Q: To what extent did you feel in control during the event? E.g. Did you feel like you had no / slight / reasonable / significant / extreme control?</i>					

Rating the Degree / Intensity:

- 4 None – No control (complete powerlessness)
- 3 Mild – Minimal / slight degree of control (substantial powerlessness)
- 2 Moderate – Intermediate / reasonable degree of control (modest powerlessness)
- 1 Severe – Considerable / significant degree of control (substantial power)
- 0 Extreme – Excessive / evident degree of control (obvious power)

Dissociation	None 0	Mild 1	Moderate 2	Severe 4	Extreme 5
<i>Q: To what degree did you feel detached / removed / or not part of the event? E.g. Did it feel as if you were in a dream or in slow motion?</i>					

Note: “Dissociation” allow people to have some kind of mastery over uncompromising environmental difficulties. It functions to seal off overwhelming trauma into a compartmentalised area of realisation (i.e. consciousness) until the person is better able to integrate and assimilate it into normal consciousness. “Dissociation (therefore) refers to the avoidance of pain from an external source” (p.26, Steinberg, 1995), and it is used as a means of coping or dealing with distressing pain during a stressful period.

Steinberg, M. (1995). *Handbook for the Assessment of Dissociation: A Clinical Guide* (1st ed.). Washington, DC: American Psychiatric Press, Inc.

Rating the Degree / Intensity:

- 0 None – No dissociation → no feelings of detachment, very “real” and “present” during the event
- 1 Mild – Minimal dissociation → felt slightly “out of synch”, but somewhat still “real” and very aware of the surroundings
- 2 Moderate – Intermediate dissociation → definite feeling of detachment, transient dissociative quality, aware of surroundings, but daydreaming quality
- 3 Severe – Considerable strong dissociation → significant or marked feelings of detachment or estrangement, retained some awareness of surroundings
- 4 Extreme – Debilitating complete dissociation → felt completely detached, unresponsive, no awareness of surroundings, no recollection, reports “blankness” (i.e. loss of memory) during the event

Numbing	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: How much trouble did you have experiencing or expressing emotions?</i> <i>E.g. Were you stunned or in shock that you did not feel anything at all? Or to what degree did you feel emotionally numb or have trouble experiencing any kind of feeling / emotion?</i>					

Rating the Degree / Intensity:

- 0 None – No difficulty expressing emotions → no reduction of emotional experience, no numbing reported
- 1 Mild – Slight difficulty expressing emotions → minor or small reduction of emotional experience, negligible or unimportant (insignificant) increase in numbing reported
- 2 Moderate – Increased difficulty expressing emotions → definite reduction of emotional experience, certain significant increase in numbing reported, but still able to experience most emotions
- 3 Severe – Obvious or noticeable difficulty expressing emotions → marked reduction of emotional experience, recognisable intensification of numbing reported
- 4 Extreme – Pronounced difficulty expressing emotions → totally lacking emotional experience, complete or full numbness reported

The most salient emotion that the participant experienced during the event	None Nothing	Anxious Worried	Frightened Scared	Horried Shocked	Helpless Vulnerable
<i>Q: What feeling stood out the most / was more prominent / noticeable / significant for you during the traumatic event?</i> <i>E.g. Of all the examples listed to the right, which <u>one</u> emotion or feeling would you choose to best describe how you felt during the event?</i>	Fear Terror	Guilty Embarrassed	Ashamed Humiliated	Angry Aggressive	Stunned Surprised
	Lost Dazed	Numb Emotionless	Irritable Ill-tempered	Agitated Restless	Shocked Shaken

Strength of emotion	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: You just answered (e.g. anxious / frightened / horrified / helpless, etc.). To what degree did you feel (e.g. anxious / frightened / horrified / helpless, etc.) this emotion?</i> <i>E.g. How strong was this feeling of (e.g. anxiety / fear / horror / helplessness)? On a scale from 0 – 10, where 0 is the absence of the emotion and 10 is the most you have ever felt this way.</i>	0	1 – 3	4 – 6	7 – 9	10

Rating the Degree / Intensity:

- 0 None – Did not feel (e.g. anxious / frightened / horrified / helpless) at all
- 1 Mild – Felt slightly or marginally (e.g. anxious / frightened / horrified / helpless)
- 2 Moderate – Felt reasonably or increasingly (e.g. anxious / frightened / horrified / helpless)
- 3 Severe – Felt strongly or intensely (e.g. anxious / frightened / horrified / helpless)
- 4 Extreme – Felt incredibly or enormously (e.g. anxious / frightened / horrified / helpless)

We have nearly reached the end of our interview. This is going to be the last question I will ask you.

Social support		
<i>Q: Do you feel comfortable to talk about what happened to you with your family and / or friends?</i> <i>E.g. If you wanted to speak to someone, do you feel that you have someone you could talk to about what happened?</i>	Y	N
<i>Q: Do you think your family and / or friends will be supportive?</i> <i>E.g. Do you think your family and / or friends will be understanding?</i>	Y	N

Thank you very much for your time, and thank you for allowing me to ask you all these questions. I really do appreciate it.

Yours sincerely

Miss Rozelle van Wyk

Primary Researcher

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Mr Kempie van Rooyen

Clinical Psychologist and Supervisor

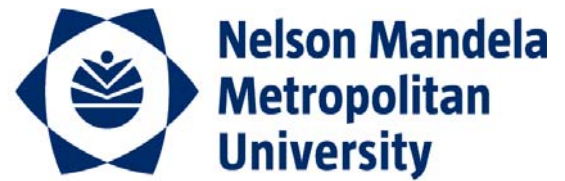
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Appendix M



for tomorrow

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ITEM 8

Any other risk factor(s) you would like to add that may have been overlooked?

1. Men who felt they could not protect their families. (Sense of being out of control; Helplessness; Responsible for ... → ↑ vulnerability).
2. Risk for developing PTSD when exposed to traumatic events. Here's a list of risk factors:
 - a. Female gender
 - b. *Neuroticism
 - c. *Low social support structure
 - d. Lower intellectual capacity (IQ)
 - e. Pre-existing mood and anxiety disorders
 - f. *History of trauma exposure with development of PTSD
 - g. *History of mood, anxiety or substance abuse disorders in family
 - h. *Non-specific central nervous system function abnormalities ("neurological soft signs")
 - i. History of PTSD
 - j. Peritraumatic dissociative responses such as feeling disconnected from your body or experiencing the traumatic event in "slow motion"
 - k. *Negative interpretation of acute symptoms, such as thinking flashbacks may be impending psychosis
 - l. Lower socioeconomic class
 - m. *Neglect by parents
3. Extra 4.3. See question 3.2. Rephrase to mention trauma.
Add 6.3. Extent of injuries. And 6.4. Number of attackers.
General comment: Kodeer vraelys sommer klaar. (Participant Code).
4. I congratulate you working hard to draw together an important tool for mental health practice in South Africa. Unfortunately in my fifteen years+ practice on the Cape Flats outside of Cape Town I have identified very few people with PTSD. In fact I have hardly used this diagnosis at all. Similarly in Sudan, Northern Uganda and Afghanistan I have not seen PTSD but a syndrome that has reduced intrusive symptoms, higher dysregulation and higher levels of avoidance. It has only been in my practice in Sierra Leone and Pakistan that I have found the diagnostic category PTSD useful. My current contention is that people who live in contexts where there is ongoing violence and systems that sustain violence while offering some protection, tend not to experience PTSD after a life

threatening event. Therefore I do not feel sufficiently experienced within the South African context to contribute to your study. In my own study taking place in a context of ongoing violence, very few of my participants recall their previous traumas and there's a complete mismatch in how they describe their lives and the traumatic events. I don't think that what you are proposing will be useful in a context of ongoing trauma – because people don't recall their pasts – including the multiple traumas. But I also find that very few have PTSD – so perhaps those two aspects contribute to this not working anyway. However, these group of people are definitely very distressed and their functioning is significantly compromised – and primary practitioners do need to address these other forms of distress. I think your "trauma type" is a little limited in terms of the much wider experiences of trauma in South Africa. These seem to reflect the traumas that are more prevalent in an affluent community. What about witness to murder, caught in cross fire, bullets entering family home, family member murdered, torture? I also would prefer a screening tool that captures a wider range of distress than PTSD which I think describes a very small percentage of the trauma related distress within South Africa – but perhaps that's beyond your scope. And I see your tool as more useful as a research instrument, than a screening tool within primary practice. I do think such a screening tool for further research practice is extremely useful and to me this seems to be closer to your research question. As I teach within the Primary Health Care Directorate of UCT's Faculty of Health Sciences ... I have some sense of what would work in primary practice and I'm very concerned about reinforcing a primary health practitioner's assumption that 1) trauma leads to PTSD, and 2) we only need to be concerned about PTSD when someone has had a life threatening experience. I am not sure of the value of identifying people who are likely to suffer PTSD (which is relatively small) when as far as I know there is limited evidence on what we should be doing to prevent acute trauma moving into PTSD. And most of those activities are one's that we should do to manage the acute trauma anyway – crisis management, information, support, prevention of further losses being sustained, etc. So I'm sorry to critique your study rather than your instrument – but I do not have the expertise to critique the instrument. I do think your instrument is useful – but that its limitations should be more carefully considered. I think there is great value here – but in being more careful in the conclusions that you are drawing.

5. The questionnaire is predominantly dealing with negative/pathological indicators and little focus is being placed on resilience/strengths/past coping skills, etc. We would also like to see for example a question included on 'level/degree of social support' that the 'participant' experiences/anticipates.
6. There is evidence that the use of benzodiazepines and other sedating substances may increase risk by reducing emotional processing. What about a brief assessment of pre-trauma schema rigidity about the self (completely in/capable of protecting self) or world (completely dangerous/safe).
7. Ek hou van jou measure. Dit is heel user friendly en lyk vinnig genoeg. Meeste van my comments is eintlik vrae wat hopelik jou gedagtes stimuleer. Ek claim glad nie om al die antwoorde te he nie en vra meeste van die tyd want ek is self nie seker nie! Goed wat vir my uitstaan: 1. Demographics and socio-economic: As ek 'n swart vrou is wat in die township bly het ek 'n groter kans om PTSD te ontwikkel of het ek 'n groter kans om expose te wees aan traumatic stress met 'n lack of access to health care? Die vrae is maklik genoeg om te verstaan of in te vul. Ek weet net nie of daai data 'n akkurate voorspelling is vir PTSD nie ... Ek hoop dit maak sin? 2. Subjective experience of the event: Ek het dit in my navorsing met 'n 10 punt likert skaal gemeet. Almal het 10 uit 10 gegee behalwe vir die 3 wat unconscious was gedurende die verkragting. In meeste van die gevalle was daar nie wapens gebruik nie maar hulle het vir hul lewens gevrees net deur wat die boewe gese het. 3. Doel van die measure: ek

het probeer om die doel die hele tyd ingedagte te hou (vinnig, maklik vir non-psych, predict risk). Van die vrae is ek nie seker of dit meer waardevol is as NAVORSINGS vrae nie (bv. die sterkste emosie gedurende die event) of as RISK vrae nie. Ek was nie 100% seker of jy die measure wou apply en "cut off" scores identifiseer nie. Want as jy "cut off" of "high risk" mense wil identifiseer dan is vrae wat subjektiewe ervarings meet of die sterkste emosie gedurende die event nie objektief genoeg om so te doen nie. Hoop die comments help.

8. Useful could be secondary victimization, as immediate post-trauma support or lack of it is very important. Social support is also a protective factor in terms of developing PTSD or not so may want to tap into availability of this. There is also some indication that sustaining physical injury is associated with greater vulnerability so might be worth adding in item on this.
9. Degree of social support (again hard to assess by a primary care worker as it is not just the availability of other people). Bereavement/loss: Did someone known to them die or become permanently disabled as a result of the trauma? My main comment is whether this approach will work given the conditions in many primary care clinics in terms of getting accurate information, some of it quite subtle and even difficult to get in an interview by a trained psychologist. Another question is whether this approach will provide better predictive validity than current checklists based on key symptoms. Brewin (2005) concluded: Screening using a small number of core symptoms is potentially highly effective in a wide variety of trauma populations and that significant further gains are unlikely to be achieved by incorporating other risk factors or symptoms into the measures. The other conclusion from the review is that measures with fewer items, simpler response scales, and simpler methods of scoring perform as well as if not better than longer measures requiring more complex ratings. In a South African primary care setting, will this instrument do better than those already out there (including the one developed by Lang and Stein, 2005 which has a two item and six item version). Two other points. 1) Prediction of subsequent PTSD from immediate post trauma symptoms is not perfect because some people develop delayed onset PTSD. 2) If someone screens positive, how will this be followed up? Screening only makes sense if those who come out positive get meaningful treatment.
- 10.(1). Social support (current) is extremely important. Consider including? (2). Any symptoms of acute stress or dissociation present yet (after trauma)? Also to help flag patients for follow-up appointments. (3). Simplify language and clarify definitions for test users. Phrase questions plainly, with examples of explanations thereof (brief), in different languages? (4). General comment: It is not clear how you intend to administer this measure, which will impact very much on the appropriateness of the wording.
- 11.Criteria for PTSD can be included.
- 12.Levels of social support, Re-experiencing symptoms, Avoidance symptoms, Arousal symptoms.
- 13.Are they currently still in danger? For example, do they have to return to a home where abuse occurs or has the perpetrator been arrested.
- 14.The role of religion/spirituality, degree of responsibility/agency in terms of self, sense of positive future possibilities.
- 15.Duration of the event, injury inflicted during the event, disability resulting from the event, chronic pain resulting from the event, time taken to receive assistance, ongoing media attention, ongoing legal complications, family members responses to the event There are many!

- 16.(1). What thoughts went through your mind when it happened? This is even more important than the emotions or anything mentioned above. It is these thoughts that get stuck and greatly enhance the risk for developing PTSD.
- (2). Did what happened remind you of anything else that happened in your life? Such associations will show that a previous trauma is still “active” and not resolved, and that can increase the risk for developing PTSD.
- 17.Lack of social support, especially being blamed for an assault or dismissed as being a “troublemaker” (which seems to happen very often in families and communities), and having ongoing contact with the perpetrator due to ineffective police and justice system (e.g. seeing rapist in the neighbourhood on a daily basis).
- 18.Current psychiatric disorder or psychological difficulties. Current treatment and medication.
- 19.No comment.
- 20.The subjective experience of feeling ‘guilt’ – you may want to look into the link with PTSD. May want to enquire about ‘marital status’ – links found between this and PTSD in literature.
- 21.No comment.
- 22.How will the practitioner know how to interpret the questionnaire? Will there be values attached to answers which will lead to a scoring system? If the questionnaire should be objective then that might be the best thing to do. Would it not be best to screen (using DSM criteria) the patient for PTSD before or after completing the questionnaire or maybe incorporating the symptoms of PTSD in some or other way? That is if the practitioner suspects that the patient is suffering from PTSD. Generally – it is a well-designed questionnaire that would be very useful in the clinical field. It would be great if practitioners could make the time to administer more of these kinds of measures. It might also be of value to use in research, to evaluate whether these risk factors are actual risk factors for the South African population.
- 23.The presence of social support and the quality of such support have been identified as critical in influencing risk of PTSD. As such, it would be beneficial to add questions focusing on the nature and quality of social support in the client’s present environment. In the event that the client has indicated prior exposure to trauma, it may be useful to determine how they coped with the traumatic event (e.g. how they dealt with flashbacks, feelings of guilt and shame, etc). Use of avoidant coping strategies is predictive of PTSD so if the client has a history of using avoidant coping, it is more likely that they would use this strategy following the most recent trauma.
- 24.I always look at the “whole” picture – family support
- religious and cultural support
 - environmental stressors or support.
- 25.The amount of social support the individual has should be explored in more detail. The less social support the patient has within her community the higher the risk. Cognitions (perceived lack of control, and giving up during the trauma – helplessness) are risk factors and should be included. The degree to which the persons perception of danger in the world has changed. It should also be noted that experiencing a trauma does not necessarily lead to the development of PTSD. It is only a small percentage of people that experience a traumatic event that does eventually develop the disorder.
- 26.(1) Proximity is important – how close to epicentre / only victim (main target). (2) Duration of exposure to trauma – the “dose” experienced. (3) Extent of brutality. (4) Betrayal – was trauma perpetrated by trusted person / family member. (5) Unpredictability of event. (6) Significant injury / mutilation? (7) Loss – personal and material? (8) Was victim feeling trapped? (7.3.)

27. It's not clearly stated but I am assuming that this is risk profile questionnaire specifically for adults? It's also not clear how this questionnaire will be scored. I would suggest referring to Number of traumatic events, post-trauma sleep disturbances and support (the latter particularly relevant to children and adolescents) are additional variables that you may want to consider. These could be briefly explored (i.e. as single item questions)?
28. Where event happened can be important i.e. higher risk if at home or workplace or place they need to go to frequently.
29. No comment.
30. Intensity and duration of arousal responses are very important and should be assessed separately, unless it is somehow encapsulated in 7.4 and 7.5.
31. Has the person ever had PTSD or another anxiety disorder or received treatment for PTSD or other anxiety difficulty? Did the person witness someone dying during the traumatic event? Does the person currently use medication or substances to cope with the symptoms experienced after the trauma?

Appendix N



for tomorrow

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QUALITATIVE INTERVIEW

(Primary Health Care Professionals – Registered Nurses and Counsellors)

Item 1: Contact InformationReference /
File Number

PTSD RISK SCHEDULE

Participant
Code

Study explained		Questions answered		Consent signed		Referral information given	
-----------------	--	--------------------	--	----------------	--	----------------------------	--

Date: YYYY / MM / DD

Interviewer:

Start time: 24:00 format

Contact information

Name:

Date of birth: YYYY / MM / DD

Postal address:

.....

.....

*Contact number(s):

Inpatient: Yes

Outpatient: Yes

*Significant other contact number:

.....

*Best time to contact telephonically:

1. Understanding?
2. Administration? (to traumatised individual)
3. Manual – administration – clearer? i.e. Better explained? Clearer understanding?

Note: The idea is that some of this information is filled in before the time making use of e.g. the patient sticker. Only the information that will not be found on the sticker e.g. contact number, etc. will then be asked.*

Item 2: Demographic and Socioeconomic Information**Demographic and socioeconomic information**

Years

Months

M

F

Strictly Private and Confidential

Current age:**Gender:****Ethnicity:**

Black	Coloured	Indian	White	Other	(specify)
-------	----------	--------	-------	-------	-----------------

Home language(s):

Xhosa	English	Afrikaans	Other	(specify)
-------	---------	-----------	-------	-----------------

Education: Highest grade passed

1 – 12	Tertiary	Yes	No
--------	----------	-----	----

Employment:

Unemployed	Employed	(specify type of employment)
------------	----------	------------------------------------

4. Understanding?

5. Administration? (to traumatised individual)

2.6. Employment

6. “I am self-employed.” – Understanding? Recording? Probing?

2.3. Ethnicity

7. Administration? Comfortable?

8. Administration? Different (more sensitive) way?

9. Administration? Objectively?/Observation?

2.4. Language

10. Administration? (more sensitive and less intrusive – in place of ethnicity)?

Item 3: Psychiatric and Emotional History

11. Understanding?

Psychiatric and emotional history**3.1. Traumatized individual**

Has the participant ever been treated for or diagnosed with any mental health disorder?

Q: Have you ever been to a nurse, doctor, counsellor, psychologist, or psychiatrist?

Y N

Diagnosis / Problem:	Clinician / Type of Treatment:	Date / When:
E.g. anxiety, depression,	E.g. nurse, doctor, counsellor,	E.g. year
low mood, substance abuse	psychologist, psychiatrist, etc.	
suicide attempts, etc.		

12. Administration? (to traumatised individual)

13. Understandability? (of traumatised individual)

14. Administration? (table format)?

15. Response Format? (guideline for administration? or confusing?)

16. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

Note: The main focus of this question is to simply elicit an accurate yes/no response, hence the probing and e.g.**3.2. Family of traumatised individual**

Has anyone in the participant's immediate family (siblings and parents) ever been treated for or diagnosed with any mental health disorder?

Q: Has anyone in your family (brothers, sisters, or parents) ever been to a nurse, counsellor,

Y N

<i>psychologist, or psychiatrist?</i>		
---------------------------------------	--	--

<i>Relationship</i>	<i>Diagnosis / Problem:</i>	<i>Clinician / Type of Treatment:</i>	<i>Date / When:</i>
E.g. father, mother,	E.g. anxiety, depression,	E.g. nurse, doctor, counsellor,	E.g. year
sister, brother, etc.	low mood, substance abuse	psychologist, psychiatrist, etc.	
	suicide attempts, etc.		

17. Administration? (to traumatised individual)

18. Understandability? (of traumatised individual)

19. Administration? (table format)?

20. Response Format? (guideline for administration? or confusing?)

21. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

Note: *The main focus of this question is to simply elicit an accurate yes/no response, hence the probing and e.g.*

3.3. Significant Stressors in Childhood

Has the participant experienced any other significant stressor(s) as a child?				
<i>Q:</i> <i>You do not need to tell me what happened. You can simply answer “Yes or No”. Is that OK?</i> <i>Do you remember any negative event or experience when you were a child?</i>	Y	N	<i>Please give me an example.</i>	(e.g. negative parenting experiences or any other experience they see as negative during childhood)

NB. *Other significant stressors not related to presenting traumatic event.*

22. Understanding?

23. Administration? (to traumatised individual)

24. Understandability? (of traumatised individual)

25. Administration? (table format)?

26. Response Format? (guideline for administration? or confusing?)

27. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

3.4. Significant Stressors in Adulthood

Has the participant experienced any other significant stressor(s) as an adult?				
<i>Q:</i> <i>Again, you do not need to tell me what happened. You can simply answer “Yes or No”. Is that OK?</i> <i>Do you remember any negative event or experience as an adult?</i>	Y	N	<i>Please give me an example.</i>	(e.g. divorce, retrenchment or any other experience they see as negative during adulthood)

NB. *Other significant stressors not related to presenting traumatic event.*

28. Understanding?

29. Administration? (to traumatised individual)

30. Understandability? (of traumatised individual)

31. Administration? (table format)?
32. Response Format? (guideline for administration? or confusing?)
33. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

3.5. Current Significant Stressors

Is the participant experiencing any significant stressor(s) currently?				
<i>Q: Again, you do not need to tell me what happened. You can simply answer “Yes or No”. Is that OK?</i> <i>Are you experiencing any difficulties at the moment?</i>	Y	N	<i>Please give me an example.</i>	(e.g. divorce, retrenchment or any other experience they see as negative that is current)

NB. Other significant stressors not related to presenting traumatic event.

34. Understanding?
35. Administration? (to traumatised individual)
36. Understandability? (of traumatised individual)
37. Administration? (table format)?
38. Response Format? (guideline for administration? or confusing?)
39. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

Item 4: Trauma History

4.1. Trauma History in Childhood

Trauma history

Has the participant experienced any traumatic stressor(s) as a child?				
<i>Q: You do not need to tell me what happened, as I know this must be very difficult for you. You can simply answer “Yes or No”. Is that OK?</i> <i>Do you remember any traumatic event or experience when you were a child where you were hurt in any way or felt you were in danger?</i>	Y	N	<i>Please give me an example.</i>	(e.g. physical / sexual abuse or any other traumatic experience before the age of 18)

40. Understanding?
41. Administration? (to traumatised individual)
42. Understandability? (of traumatised individual)
43. Administration? (table format)?
44. Response Format? (guideline for administration? or confusing?)
45. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

4.2. Trauma History in Adulthood

Has the participant experienced any traumatic stressor(s) as an adult?
--

<i>Q: You do not need to tell me what happened, as I know this must be very difficult for you. You can simply answer “Yes or No”. Is that OK?</i> <i>Do you remember any traumatic event or experience as an adult where you were hurt in any way or felt you were in danger?</i>	Y	N	<i>Please give me an example.</i>	(e.g. assault, rape, armed robbery, hijacking)
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46. Understanding?

47. Administration? (to traumatised individual)

48. Understandability? (of traumatised individual)

49. Administration? (table format)?

50. Response Format? (guideline for administration? or confusing?)

51. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

Item 5: Description of the Event**Description of the event**

Trauma type	Hijacking	<input type="checkbox"/>	Home invasion	<input type="checkbox"/>	Armed robbery	<input type="checkbox"/>	Rape (attempted)	<input type="checkbox"/>
	MVA	<input type="checkbox"/>	Industrial accident	<input type="checkbox"/>	Assault	<input type="checkbox"/>	Rape (completed)	<input type="checkbox"/>
							Other (please specify)	<input type="checkbox"/>

Weapon used

N/A

☐

None

☐

Knife

☐

Firearm

☐**Number of attackers**

1

☐

2

☐

3

☐

4+

☐**Physical injuries**

Yes

☐

No

☐**Extent of injuries**

Minor

☐
 None / superficial wounds / bruises –
 None / little medical attention

Moderate

☐
 Open wounds / lacerations –
 Medical attention is needed

Severe

☐
 Open / penetrating wounds (stab / bullet) – Overnight in hospital needed

52. Understanding?

53. Administration? (to traumatised individual)

54. Manual – administration – clearer? i.e. Better explained? Clearer understanding?

5.1. Trauma type

55. Understanding? (“Other (please specify).”)?

56. Manual – administration – clearer? i.e. Better explained? Clearer understanding? (e.g. natural disasters, house fires, buildings that collapse, etc.)

57. Clarify? in Manual? (add a list of other non-crime related traumas)

5.4. Physical injuries + 5.5. Extent of injuries

58. Administration?

59. Understanding? (extent of injuries: minor? moderate? or severe?)

60. Manual – administration – clearer? i.e. Better explained? Clearer understanding?

Item 6: Subjective Experience during the Event

61. Understanding?

6.1. Perceived Life Threat**Subjective experience during the event**

Perceived life threat	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
Q: How great did you think the danger was that you would die? <i>E.g. Did you feel that you were in no / slight / reasonable / significant / unbearable danger?</i>					

62. Understanding?

63. Administration? (to traumatised individual)

64. Understandability? (of traumatised individual)

65. Administration? (table format)?

66. Response Format? (guideline for administration? or confusing?)

67. Manual – administration? (degree / intensity defined? easier to choose category?)

68. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

6.2. Degree of Control

Degree of control	None 4	Mild 3	Moderate 2	Severe 1	Extreme 0
Q: To what extent did you feel in control during the event? <i>E.g. Did you feel like you had no / slight / reasonable / significant / extreme control?</i>					

69. Understanding?

70. Administration? (to traumatised individual)

71. Understandability? (of traumatised individual)

72. Administration? (table format)?

73. Response Format? (guideline for administration? or confusing?)

74. Manual – administration? (degree / intensity defined? easier to choose category?)

75. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

6.3. Dissociation

Dissociation	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
Q: To what degree did you feel detached / removed / or not part of the event? <i>E.g. Did it feel as if you were in a dream or in slow motion?</i>					

76. Understanding?

77. Administration? (to traumatised individual)

78. Understandability? (of traumatised individual)

79. Administration? (table format)?

80. Response Format? (guideline for administration? or confusing?)

81. Manual – understandability? (dissociation defined? better explained? easier to administer?)

82. Manual – administration? (degree / intensity defined? easier to choose category?)

83. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

6.4. Numbing

Numbing	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: How much trouble did you have experiencing or expressing emotions?</i> <i>E.g. Were you stunned or in shock that you did not feel anything at all? Or to what degree did you feel emotionally numb or have trouble experiencing any kind of feeling / emotion?</i>					

84. Understanding?

85. Administration? (to traumatised individual)

86. Understandability? (of traumatised individual)

87. Administration? (table format)?

88. Response Format? (guideline for administration? or confusing?)

89. Manual – administration? (degree / intensity defined? easier to choose category?)

90. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

6.5. Most Salient Emotion

The most salient emotion that the participant experienced during the event	None Nothing	Anxious Worried	Frightened Scared	Horried Shocked	Helpless Vulnerable
<i>Q: What feeling stood out the most / was more prominent / noticeable / significant for you during the traumatic event?</i> <i>E.g. Of all the examples listed to the right, which <u>one</u> emotion or feeling would you choose to best describe how you felt during the event?</i>	Fear Terror	Guilty Embarrassed	Ashamed Humiliated	Angry Aggressive	Stunned Surprised
	Lost Dazed	Numb Emotionless	Irritable Ill-tempered	Agitated Restless	Shocked Shaken

91. Understanding?

92. Administration? (to traumatised individual)

93. Understandability? (of traumatised individual)

94. Administration? (table format)?

95. Response Format? (guideline for administration? or confusing?)

96. Improvement? (administration and information eliciting efficiency)? (suggestions to change and increase its understandability)?

6.6. Strength of Emotion

Strength of emotion	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: You just answered (e.g. anxious / frightened / horrified / helpless, etc.). To what degree did you feel (e.g. anxious / frightened / horrified / helpless, etc.) this emotion?</i> <i>E.g. How strong was this feeling of (e.g. anxiety / fear / horror / helplessness)? On a scale from 0 – 10, where 0 is the absence of the emotion and 10 is the most you have ever felt this way.</i>	0	1 – 3	4 – 6	7 – 9	10

97. Understanding?

98. Administration? (to traumatised individual)

99. Understandability? (of traumatised individual)

100. Administration? (table format)?
101. Response Format? (guideline for administration? or confusing?)
102. Manual – administration? (degree / intensity defined? easier to choose category?)
103. Improvement? (administration and information eliciting efficiency)?
(suggestions to change and increase its understandability)?

Item 7: Social Support

Social support		
<i>Q: Do you feel comfortable to talk about what happened to you with your family and / or friends?</i> <i>E.g. If you wanted to speak to someone, do you feel that you have someone you could talk to about what happened?</i>	Y	N
<i>Q: Do you think your family and / or friends will be supportive?</i> <i>E.g. Do you think your family and / or friends will be understanding?</i>	Y	N

104. Understanding?
105. Administration? (to traumatised individual)
106. Understandability? (of traumatised individual)
107. Administration? (table format)?
108. Response Format? (guideline for administration? or confusing?)
109. Manual – administration? (degree / intensity defined? easier to choose category?)
110. Improvement? (administration and information eliciting efficiency)?
(suggestions to change and increase its understandability)?

General:

Subjective Experience during the Event

111. Manual? (clarity? understandability?) (short definition of each item?)

Overall Format

Questionnaire / Risk Schedule

112. Opinion? User-friendly? Helpful?

Manual

113. Opinion?
114. Clarity? Understandability?
(simplify items? confusing? Prefer written instructions?)

Administration

115. Short training required?

Final

116. Any other last comments?

Appendix O



for tomorrow

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QUALITATIVE FEEDBACK – EXPERTS – IMPLEMENTED**(Primary Health Care Professionals – Registered Nurses and Counsellors – Interviewed)**Reference /
File Number**PTSD RISK SCHEDULE**Participant
Code

Study explained		Questions answered		Consent signed		Referral information given	
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Date: YYYY / MM / DD

Interviewer:

Start time: 24:00 format

Item 1:**Contact information – Before**

Name:..... Date of Birth: YYYY / MM / DD

Postal address:..... Contact number(s):.....

..... Significant other contact number:.....

Email:..... Best time to contact telephonically:.....

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 1: Contact Information				
Name, DOB, Postal Address, Contact #, Significant other #, Email, Best time	0.53	76.67%	0.358	3
Qualitative Comments Recommendations	Relevant – other reasons, not predicting risk, necessary information to be gathered, facilitate future contact, follow-up for at-risk individuals Administrative function, information probably already completed, repetition unnecessary, file or reference number instead, In/Out patient status (hospital setting), patient sticker? Query: clinic intake versus psychometric measure? Suggested adding <i>Name & Surname, Contact No – Cell Home, Physical Home Address, Age</i> instead of DOB, consider moving to <i>Demographic Information</i>			
Improved Item?	Modified with suggested improvements, <i>In/Out patient status</i> , under <i>patient</i>			

sticker, space provided for *file or reference number*, *DOB* and *best time to contact* still included, *email address* omitted though
Current Age asked under *Demographic and socioeconomic Information* in addition to *DOB* under *Contact Information*
 Administration of item changed, with availability of *patient sticker* and/or *file number*, able to be completed by administrator beforehand
 Further explored with intended administrators

Contact information – After

Name:

Date of birth:

Postal address:

.....

.....

*Contact number(s):

Inpatient:

Outpatient:

*Significant other contact number:

*Best time to contact telephonically:

Participant and Item1	Understand-ability?	Administration?	Manual? / Clarity?
P1	√	√ – Straightforward, specific information asked / basic contact details.	√ – Straightforward (I wonder: maybe not clear enough?) Instructions – clear.
P2	√	√ – Basically ask what is on the form, and fill it in. <i>Date of birth</i> – easier to ask age. <i>Postal address</i> – why not the <i>residential address</i> ?	√ – Still do it exactly the same – Manual unclear! I think if I have used the form once, I wouldn't necessarily use the <i>manual</i> . Familiarity. Item only understood later on. No, it is not confusing. Practice.
P3	√	√ – Like an intake form. Straightforward. Most of the information is there.	√ – Everything is straightforward. Note: Concerned about the administration of this item – administrators appear 'blasé'!
P4	√	√ – Self-explanatory. Intake session. A lot of emotions; I feel they would be able to answer.	√ – Postal address was thought to be a little bit too personal? I think I would put it as optional. Instructions in the Manual: It is clear for me.
P5	√	√ – Straightforward. I think first of all, I would probably explain what needs to happen first, is that we need to fill out the contact information. Just going to go through it. Directly. Know they are in the system. Cutting time.	√ – Basically explain to them why it is important so they don't feel anxious or think: "Why are they taking my details down?" Nothing too long. Straightforward. Simple. Basically written; just spell out details. I understand ... fill that out before, I understand that. I completely get it. Actually very useful.
P6	√	√ – Any information that is necessary or needed to contact an individual. Straightforward. Obviously first have a pep talk ... explain to the participant ...	√ – Straightforward. Include: Outline for the session ... we will be starting with general information regarding you or with regard to yourself. "Okay, what is your name?" Instructions: Clear? It does. (Explained).
P7	√	χ – Understandability: Seems to be confused. Initially responded 'my name, my date of birth, postal address and contact number'! "I would ask the client	√ – Formulate introduction better to lead Administrators into the Questionnaire. Yes, I understand. If I had the sticker then I have all the contact information. Explanation needed: The Manual might also be needed when

		the name, the date of birth and the postal address, where the client lives.” Lots of information.	administering this? What do you mean? ... Okay. Did you find the <i>Manual</i> to be more helpful? The <i>Manual</i> , yes. Overwhelmed?
P8	√	√ – Information that you get. So I am writing the contact’s <i>name</i> here, <i>date of birth</i> , the <i>postal address</i> .	√ – Clarify instructions, introduction, etc. No, it does. It does make sense. That is the ‘ <i>contact information</i> ’ now. Apply sticker: All the details of the patient are there. No, it is valid.

Item 2:**Demographic information – Before**

Own ethnic identity: **Code** **Gender:** ☐ M ☐ F

Home language(s) Xhosa ☐ Afrikaans ☐ English ☐ Other (specify):

Education Primary ☐ Secondary ☐ Highest grade passed Tertiary ☐ Degree:

Total number years of education

Socioeconomic Status – Before (previously Item 5)

Total household income: Number of people living in household:

Income per member:

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 5: Socio-economic Status				
# of people in household	-0.24	62.07%	0.364	2
Qualitative Comments	Not relevant – may be a proxy for support, availability / strength of social support system, financially struggling or low SES			
Recommendations	Agreement – item is not required			
Improved Item?	Omitted, but alternative item created to cover SES domain, together with following item, instead <i>employment</i> asked			
Total household income	0.07	53.33%	0.358	3
Qualitative Comments	Relevant – consider association between SES and PTSD?			
Recommendations	Intrusive, combine items? (previous item), ask about <i>employment</i>			
Improved Item?	Omitted, alternative item created in combination with item above, <i>employment status</i> and <i>employment type</i> asked, less intrusive, improved version of SES included in <i>Demographic Information</i>			
Item 2: Demographic Information				
Home language(s)	0.13	56.67%	0.358	3
Qualitative Comments	Relevant – not necessarily as risk factor per se or in psychometric measure, but may speak to minority group or proxy for SES			
Recommendations	Relevant – indicator for further management and intervention			
Improved Item?	Format change (slight) – more user-friendly, consistent response organisation, checkboxes			

Education	0.20	60.00%	0.358	3 / 4
Qualitative Comments	Relevant – possibly a proxy for SES, and other factors such as trauma exposure, general life stressors, etc., research links education to risk of PTSD			
Recommendations	Condense item to only the necessary sub-items, too detailed, not all important			
Improved Item?	Retained, not much is known about education as a significant factor, worth further exploration Modified, only <i>Highest grade passed at school</i> and <i>Tertiary education</i> asked, others deleted			
Own ethnic identity	0.20	60.00%	0.358	4
Qualitative Comments	Relevant – not significant in predicting risk of developing PTSD per se, may be associated with SES and negative experiences, important to know in terms of looking at patterns of exposure in SA, versus identified in literature			
Recommendations	May offend people, seems vague, race or cultural background?, necessary for further management (i.e. referral, etc.)			
Improved Item?	Retained, more data needed to resolve debate about predictive validity of demographic risk factors Modified, item converted to ‘objective’ <i>ethnicity</i> , tick-box system, to be assessed by administrators, versus asking participant about their race, not offensive Further explored by qualitative interviews with intended administrators, to obtain subjective opinion, biased or intrusive?			
Item 2: Demographic Information				
Gender	0.80	90.00%	0.358	4
Qualitative Comments	Relevant – identified and supported, by research and empirical data, as risk factor, under <i>Demographic Information</i> , versus personal/professional experience, of gender in association with and as causation of exposure, i.e. gender and exposure versus gender and response?			
Recommendations	Queries: Does <i>gender</i> predict vulnerability to PTSD? Or <i>type of violence</i> more important? Independent relevance?			
Improved Item?	Retained – item was not argued to be lost or omitted, rather its relevance questioned Further examination required, to determine combined predictive power or influence when grouped with other possible risk factors, such as exposure or <i>trauma type</i>			

Demographic and socioeconomic information – After (Combined)

Current age:	Years	Months	Gender:	M	F
Ethnicity:	Black	Coloured	Indian	White	Other (specify)
Home language(s):	Xhosa	English	Afrikaans	Other	(specify)
Education:	Highest grade passed	1 – 12	Tertiary	Yes	No
Employment:	Unemployed	Employed	(specify type of employment)		

Participant and Item2	Understand-ability?	Administration?	Manual? / Clarity?	Ethnicity?	Language?	Employment?
P1	√	√ – Used directly, not in subtle manner.	√	Necessary to ask? – Sometimes obvious.	√	√ – specify how self-employed.
P2	√	√ – Won't ask their <i>gender</i> ; if asked <i>Date of birth</i> in the first section, won't ask <i>age</i> here; <i>Gender</i> and <i>ethnicity</i> – mark self unless doubts.	√ – <i>Current age</i> introduces (section – if patient sticker used previously)	I will gage it, I don't feel un-comfortable but I can see.	√ – Would then ask.	√ – Tick <i>employed</i> , and then <i>specify</i> what they do, so that is pretty clear: <i>Employed</i> and then <i>specify</i> .
P3	√	√ – Straight-forward, certain things won't need to be asked, <i>gender</i> .	√	√ – <i>Gender</i> and <i>ethnicity</i> won't need to be asked.	√ – Straight-forward. ↑ <i>Sensitive</i> and ↓ <i>Intrusive</i> .	√ – Categorise as <i>employed</i> ; "What do you do?" <i>Financial security / SES</i> .
P4	√	√ – Standard questions.	√ – <i>Explain 'Other'</i> .	√ – Go for ' <i>language</i> '.	√ – Than ' <i>ethnicity</i> '.	√ – "Where do you work".
P5	√	√ – Information that you can share with everyone. <i>Age</i> – at first a bit confusing; years and months. Understand.	√ – <i>Explain 'Age': yrs and mnths</i> . Now I understand. Straight-forward.	√ – Least important thing. I basically look, but I know can't assume.	√ – A very nice way of asking it and it is easier. <i>Instead of ethnicity</i> ; be offended.	√ – ' <i>Unemployed</i> ', ' <i>employed</i> '. Nothing in-between. Left space here for it, ' <i>specify</i> '.
P6	√	√ – Background, society, come from	√ – Important.	√ – No problem.	√ – Understand.	√ – Self-explanatory.
P7	√	√ – Gender, home language, Grade, if the client is employed.	√ – You can just see if it is male /female.	√ – Sometimes you can ask the client.	√ – <i>It is not so intrusive</i> . Yes. Prefer to ask her.	√ – Cannot say <i>unemployed</i> when <i>self-employed</i> .
P8	√	√ – Area which they live under, population, social state, economic status, community.	√ – Primary health care: trained to assess a pt.	√ – That is very, very important. No, it is not insensitive.	√ – <i>Culture</i> is different. <i>Language</i> is going to be vague.	√ – Social status, money, if she is employed, you say ' <i>employed</i> '.

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>Home language(s)</i> and <i>education</i> is important – guide how to speak to trauma client + interpreter needed? <i>Employment</i> – relevant, have to reschedule or schedule certain meetings, influence when person is available. <i>Ethnicity</i> – I agree, it can be insensitive but it is also necessary; bit of a middle ground (w.r.t. objectively assessing item) – query: <i>own ethnic identity</i> ? Certain ethnicity groups are more exposed to certain things ... tendency to deal better with them.
P2	<i>Ethnicity</i> – But here it might be relative in the sense of the information that you need for risk factors, so there is a relevance. <i>Home language(s)</i> – none. <i>Education</i> – I am just looking at 'Highest grade passed', but I don't know is that's bothering me or not, so I don't know if it is insensitive to ask or not. Rephrase! Rephrase it because ... "Which year did you leave school?" or ... you know, a softer ... I would rephrase that in asking, but I am not sure to what, depending on the person as well that is sitting in front of me. Note in the Manual! <i>Employment</i> – none. Manual? / Training? – Look up to this stage I wouldn't look at the manual per se. Self-explanatory and straightforward!
P3	Okay, I think that this sort of information can also calm the person because it is stuff they know. They can understand. It is not a difficult question you know, so I think maybe that could be a means of establishing rapport even, just in the beginning. <i>Ethnicity</i> – There might be a bit of a difficulty.

	<p>Different perceptions! <i>Home language(s)</i> – Straightforward. <i>Employment</i> – I understand that it would be important for research, but I mean if they are going through a traumatic event, that might just be a <i>stressor</i> further, if they are not employed and they realise they need to be <i>employed</i>. Caution: further distress trauma individual! There is just a question mark ... already traumatic and stressed ... “Now what does this have to do with what I am doing here?” Clarify / explain better?! Straight. Good way ... to get that information. ‘How much do you earn?’ tested – insensitive! Confirmed!</p>
P4	<p><i>Ethnicity</i> – I would go for ‘<i>home language</i>’ more than ‘<i>ethnicity</i>’. I am not sure. I think these are the common ones which is understandable ... very clear. Concerned: Trauma individual will wonder about services to be provided. <i>Home language(s)</i> – Common ones which is understandable ... would be best for me. Referral purpose. <i>Education</i> – ‘<i>Highest grade passed</i>’: “They are going to judge me”. Concern! “What could I have done to prevent this?” Manual – Example of how to ask it! <i>Employment</i> – Different levels of employment? Satisfaction is greater, (example) ... In terms of if unemployed, and then saying you are a stay-at-home mom, that would more of indicate to me that you are seeking to actually further your career development and not just be in that role as a wife or mother, whereas if someone says ‘employed, self, stay at home mom’, it might show to me their satisfaction is greater.</p>
P5	<p>Okay, I understand the years and months, but at first that was a bit confusing, like ‘years and months’, like: “What do you mean, years and months? Are you meaning like thirteen years and six months old or one and three?” NB! Clarify in the Manual: ‘age’ ‘Years Months’! Research: take the client’s name out and their details and that ... could be very helpful to have the months ... because of the norms. So I completely understand that part. Concern: I don’t know if ... you need to do this quickly ... I don’t know if I would necessarily take the time working out the months. NB! If you want to work it out in your own time you can. NB! Discussion group to deliberate. <i>Ethnicity</i> – Concern: You are a statistic and now you are going to fall into a category. You are from different backgrounds ... So it is a bit difficult. I would maybe flag it as ... or put there: “Use at your own discretion”. Example: So they don’t ask it, but they use it at their own discretion. <i>Home language(s)</i> – Nice way of asking it ... I mean ... the last thing I want to be asked what my skin colour is ... quite offended ... tricky ... it has value. <i>Education</i> – That’s ‘<i>Grade</i>’, obviously ... one to twelve? Maybe with ‘<i>tertiary</i>’, I would put there ‘University or college’ because even people who go to University don’t know that it is actually tertiary, so they might be like confused about that. Grey-scale? <i>Employment</i> – They will tell you anyway. Tested: “What’s your monthly income?” Oh, oooh, that might ... Same: expert reviews! It is stress and when you have a traumatic event happen ... if you don’t have the available resources, you are going to struggle so that is very important but the way you have asked it is very ... it is objective and I wouldn’t take offence. Consider: I might leave that option ... towards the end, if I can pick up if they are <i>unemployed</i> or <i>employed</i> because maybe during ... when you are doing the screening, you might pick up ... because mentioned ... <i>unemployed</i>”. Then you don’t even have to ask ... you can just go back. NB! Comfortability and familiarity with the risk assessment! NB! Example: Because they might disclose that information to you during the time. That’s why ‘<i>ethnicity</i>’ and ‘<i>employment</i>’ ... sensitive topic for people ... I know with <i>employment</i>, if just lost job and it is sensitive, might be offended. NB! Leave that towards the end. Then I would go back and address it. To say: “Ask at the end of interview” or maybe: “Ask at the end of the interview if it hasn’t been picked up during the interview”. NB! Could flag it as saying that you know: “Please ask with sensitivity”. Consider: In the <i>Manual</i>, and maybe give them the option, the client, and say: “May I ask you what your ethnicity is? May I ask you what your employment status is?” Good! Instructions in the Manual! Give the clients the option.</p>
P6	<p>Some of these you don’t have to necessarily ask ... some of this information you get on the page that you get from the hospital. Gender: That’s quite obvious. <i>Ethnicity</i> – Problem? No, I won’t. I don’t think so because I think they would be comfortable with their ethnicity ... (experience) ... based on my opinion, I don’t see it as an intrusive question because as far as what I can tell from the race sessions ... it hasn’t been like an issue, colour, race or anything of the sort. Objectively assessed item? Can’t always assume. Mmm. With regards to this, the ‘<i>ethnicity</i>’, to make an objective question, I think it would – majority of the time – work because it is isolated cases. NB! Honestly ... I don’t think I would have an issue with that question. NB! Perspective for them! It is because I am asking this because there is an outcome to this. <i>Home language(s)</i> – none. <i>Education</i> – I guess it is important. <i>Employment</i> – “Could you provide a bit more information of that?” Understood!</p>
P7	<p>Okay, let me start with the <i>gender</i>. You see this client. You can just see if it is a male or a female. So I don’t even have to ask that question. <i>Ethnicity</i> – Sometimes you can ask the client if Coloured or Indian because sometimes you can see she and find out, no ... an Indian but you didn’t know because</p>

	sometimes we did speak English with her you see? Confident and comfortable! Sometimes ask: Discretion of Administrator. Ethnicity? Sensitive question? No. For me, no. Self-reporting or objective observation: gender and ethnicity. Home language(s) – I prefer to ask her the language. And then use your own discretion for the ethnicity? Yes. Very straightforward? Yes. Education – none. Employment – Mark it under? ‘Employed’. Do I have to ask that? Okay. No, I will ask her ... but I won’t go any further. Explanation: Beneficial, regardless. Manual and Discussion Group? NB! Prepared to ask with limits! NB!
P8	<i>Ethnicity</i> – By ‘ <i>demographic</i> ’, it means that that is the area which they live under ... then the <i>demographics</i> now, are checking with the population basically, which kind of area they live in, the population there and all ... and when come to ‘ <i>socio-economic information</i> ’, her economic status, her social state, ‘ <i>socio</i> ’ meaning that which community does she come from... This community, is a well-developed community, suburb, or is it a community or an environment that is lacking in basic necessities. NB! It is a reality. NB! Home language(s) – none. Education – none. Employment – Like social status, the money, like if she is employed, you say ‘ <i>employed</i> ’ and all that kind of things. You see ‘ <i>employed</i> ’, ‘yes’ or ‘ <i>not employed</i> ’ or what. ‘ <i>Not employed</i> ’, what is she doing and then also the ‘ <i>accommodation</i> ’, how many occupants. What kind of house is she staying in or in what kind of room is she staying in. What kind of house? Is she staying in a house or a flat or a room or a shack and how many occupants. Note: In the primary health care setting. There I can ask. That is in the clinics. I am supposed to ask those things, according to the original training. Note: Here we only ask related to the incident. NB! Standard questions in primary setting, i.e. clinics!

Item 3:**Psychiatric and emotional history****3.1. Before**

Has the participant ever been treated for any psychiatric/psychological disorder?	Y	N
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If “yes”, briefly describe (diagnosis, clinician, dates).....

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 3: Psychiatric and Emotional History				
Psychiatric history	0.93	96.67%	0.358	4
Qualitative Comments	Relevant – more vulnerable, given indication, increase PTSD risk, important pre-trauma consideration, depending on disorders (affective? suicidal?)			
Recommendations	Clarity, vague question, difficult to administer, subjects may not understand what is meant, informative? or accurate information? Suggested item be revised, table with checkboxes, medication? subtle and less intrusive, training recommended?, to define <i>psychiatric disorder</i> , rephrase, layman’s terms, <i>been treated for any stress-related illness/problem</i> , change <i>diagnosis, clinician, dates</i>			
Improved Item?	Modified, table format implemented, with columns for <i>diagnosis/problem, clinician/type of treatment</i> , and <i>date/when</i> , examples provided, e.g. <i>depression, low mood</i> , etc., example of how to ask item, <i>been to a counsellor, nurse, psychologist, psychiatrist for any problems with anxiety or depression/low mood</i> , etc., improve administration efficiency Further explored with intended administrators to improve item			

3.1. After

Has the participant ever been treated for or diagnosed with any mental health disorder? <i>Q: Have you ever been to a nurse, doctor, counsellor, psychologist, or psychiatrist?</i>	Y	N
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<i>Diagnosis / Problem:</i>	<i>Clinician / Type of Treatment:</i>	<i>Date / When:</i>
E.g. anxiety, depression,	E.g. nurse, doctor, counsellor,	E.g. year
low mood, substance abuse	psychologist, psychiatrist, etc.	
suicide attempts, etc.		

Participant and Item3	Understand-ability?	Administration? (of Item3.1.)	Understandability? (of trauma client)	Response Format? (administration)	Improvement?
P1	√	√ – ask it as it is.	√ – Use area-specific names? (psychiatric clinic, for example) EC: Dora / EDH?	√ – Guideline, think it does, extra table, <i>clinician / type of treatment</i> .	Needed medication? Also include institution/clinic?
P2	√	√ – Defining <i>emotional history</i> is much harder than <i>psychiatric history</i> .	χ – Question is very broad – ask the top question rather, “Have you ever been treated for or diagnosed with mental health?”	√ – Like the fact that there is a block underneath, give them those examples, there is options.	Suggestion – start with <i>family psychiatric history</i> , (further), “Have you ever been treated by.”
P3	√	√ – “Do you have any psychiatric history?”	χ – Not necessarily. Maybe use term ‘emotional wellness?’	√ – Very straightforward; easy to answer.	Not confusing; definitely understand.
P4	√	√ – Diagnosed. It would come back to <i>education</i> , and knowing what it is.	√ – Always a tricky one. The question is great to me. Traditional healer?	√ – Change: “Diagnosed with mental health disorder”. Helps.	“Have you been to see ... for more major health issues?”
P5	√	χ – Don’t have the <i>training</i> to even understand what ‘ <i>psychiatric</i> ’ entails. Even I can’t, at this stage. Psychopathology is out of our scope of practice.	√ – Exactly how you have it here: “Have you ever been to a nurse, doctor, you know, counsellor or anything like that for ...” I don’t know ... say ‘ <i>mental health disorder</i> ’.	√ – It makes complete sense. That’s perfect. (Grey-scale: ‘low mood’ / ‘depression’, ‘anxiety’) May be a really good idea to do that.	If there is another word ... similar meaning ... and put it there and it is in the scope of practice for a lay counsellor and nurse and a RC. Rephrase!
P6	√	√ – Past mental difficulties or mental disorders. Even suicide.	√ – Depending on the individual. ‘ <i>Anxiety</i> ’ is not a commonly understood term.	√ – Consider rephrasing below! Experience! NB! Explain to them!	Make it more – not simple – but like with depression: “sad”
P7	√	√ – Someone diagnosed with a mental health.	χ – Only the doctor used to ask that. I don’t think I have to.	χ – I see it as an irrelevant question to ask.	I only hear the nurses and the doctors will ask.
P8	√	√ – Any history of mental deviation or mental illness. Rephrased!	√ – Something the patient has gone through ... trauma. Rephrased!	√ – Mental health assessment; visible trauma. “It explains it!”	‘ <i>Emotional history</i> ’: not sure what you mean. “Good enough!”

3.2. Before

Has anyone in the participant's immediate family (siblings and parents) ever been treated for any psychiatric disorder?	Y	N
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If "yes", briefly describe (relationship, diagnosis, clinician, dates).....

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 3: Psychiatric and Emotional History				
Family psychiatric history	0.40	70.00%	0.358	3
Qualitative Comments	Relevant – family vulnerability, depending on the disorder, mood and anxiety and substance abuse?			
Recommendations	Not understandable by layperson, rephrase to clarify, e.g. <i>problem</i> instead of <i>diagnosis</i> , include examples and checkboxes for time efficiency, proposed training for primary health care professionals			
Improved Item?	Modified, more user-friendly word, changed to <i>relationship, problem, type of treatment, by who and when</i> , also whether participant has been to a counsellor, nurse, psychologist, psychiatrist for any problems with anxiety or depression / low mood, substance abuse, suicidal?, table format with columns for date, diagnosis / problem, etc., provides example of how to ask item, facilitates or guides accurate and quick administration Further explored by qualitative interviews with intended administrators, subjective contribution on possible improvement			

3.2. After

Has anyone in the participant's immediate family (siblings and parents) ever been treated for or diagnosed with any mental health disorder? <i>Q: Has anyone in your family (brothers, sisters, or parents) ever been to a nurse, counsellor, psychologist, or psychiatrist?</i>	Y	N
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Relationship	Diagnosis / Problem:	Clinician / Type of Treatment:	Date / When:
E.g. father, mother, sister, brother, etc.	E.g. anxiety, depression, low mood, substance abuse	E.g. nurse, doctor, counsellor, psychologist, psychiatrist, etc.	E.g. year
	suicide attempts, etc.		

Participant and Item3	Understand-ability?	Administration? (of Item3.2.)	Understandability? (of trauma client)	Response Format? (administration)	Improvement?
P1	√	√ – Ask it that way, both relate well.	√ – Should be able to understand, NB! Administrator's prerogative. !	√ – It is clear.	Change: include institution/clinic?
P2	√	χ – So open.	χ – So open.	√ – Put examples in brackets, so question becomes self-explanatory as	Suggestion – start with <i>family psychiatric history</i> ; further

				you ask it.	from person.
P3	√	√ – It is asked very nice. I think it is straightforward.	√ – Straightforward and understandable to anyone.	√ – If patient does not understand, give examples.	They are there so I think it is perfect.
P4	√	√ – I am happy with that one.	√ – It is not (confusing).	√ – Just included ‘relationship’.	None. Format: user-friendly.
P5	√	√ – I understand the question, cue question but I have a feeling some people say: “... participants’ ...”	√ – Why did they receive the help, for what symptoms ... if it is not in your scope of practice, putting the symptoms?	√ – It is straightforward to me. Scared they actually do that; “Has anyone in participants’ ...”	<i>Manual:</i> Maybe just reaffirm the ‘yes’ or ‘no’ question. It just reaffirms what the client knows.
P6	√	√ – Same. Past mental difficulties.	√ – I don’t think there would be any issues.	√ – It gives all the information.	All information needed!
P7	√	χ – Don’t know if I really have to ask those questions. Only doctor.	χ – That somebody is in trauma – I really don’t think I have to ask (mental health).	χ – Irrelevant question to ask; only nurses and doctors will ask.	Trauma focussed: Not <i>risk assessment trained</i> . NB!
P8	√	√ – It is simple. It is plain.	√ – I am the one who is going to ask ...	√ – You can leave it as it is.	It is plain.

3.3. Before

Has the participant experienced any significant (non-trauma) difficulties as a child? (e.g negative parenting experiences or any other experience they see as negative during childhood)	Y	N
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If “yes”, briefly describe

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 3: Psychiatric and Emotional History				
Significant (non-trauma) difficulties (child)	0.59	79.31	0.364	4
Qualitative Comments	Relevant – research, known risk factor Clarity and understandability – ambiguous, what is meant by <i>significant non-traumatic experience</i> ?			
Recommendations	Primary health care professionals (or layperson) may find this difficult, confusing for participant (i.e. trauma individual) <i>Significant</i> is vague, clarify, rephrase, maybe give examples, to distinguish between <i>trauma and non-trauma</i> , checklist, too much information, length of questionnaire and duration of administration			
Improved Item?	Reworded to <i>negative experiences</i> and defined by possible examples, added in table format, facilitate accurate and easy administration Further explored by qualitative interviews with intended administrators, cope? with this information saturated item			

3.3. After

Has the participant experienced any other significant stressor(s) as a child?

Q: You do not need to tell me what happened. You can simply answer “Yes or No”. Is that OK? Do you remember any negative event or experience when you were a child?	Y	N	Please give me an example.	(e.g. negative parenting experiences or any other experience they see as negative during childhood)
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Participant and Item3.3	Understand-ability?	Administration?	Understandability? (trauma client)	Response Format? (administration)	Improvement?
P1	√	√ – Administrators might need to explain.	χ – Administrators might need to explain, just to give them a guide.	√ – More understandable, better if you can get a definition.	Explanation or definition in the Manual – all levels of language.
P2	√	χ – Table appears unclear and instructions are confusing.	χ – More understanding just for the normal person; <i>negative event</i> vs <i>stressor</i> = confusing; “Such as ...” – reads easier.	χ – You don’t need to tell me what happened ... please give me an example? Contradict each other. Change table format! NB!	“Do you remember any negative event or experience when you were a child?” “Such as ...” – divorce, moving town.
P3	√	χ – It would be a difficult question to ask, if currently severe trauma.	√ – Difficult question, if they are currently experiencing severe trauma.	√ – Definition of significant stressors before the question.	Confusion: significant stressor and trauma history!
P4	√	√ – Really impacted ... development ... caused frustration.	√ – “Do you remember a negative event experience when you were child?”	√ – Yes it does. Understandable. No list. Potential to leave out.	Disability, much attention and affection (parents) ...
P5	√	√ – Various factors that ... put pressure on you or they cause ... outside tension or internal.	√ – It is very nice. Straightforward. Given examples. χ – Would a nurse or lay counsellor know what a stressor is?	χ – But they would read it as: “That must mean stress” but a ‘ <i>stressor</i> ’ is factors that brings stress to a person.	Add definition! In the <i>Manual</i> . <i>Training</i> isn’t possible; “Please refer to <i>manual</i> before ...”
P6	√	√ – Comfortable with that.	√ – “Can you just give me a small example?”	√ – Simple ‘yes’ or ‘no’ answer.	Comprehension. Not confusing.
P7	√	√ – Child saw something wrong. I think that’s what can stress a child.	√ – “ Anything negative that’s happened? ” – Relates to word “negative”!	√ – Examples: They are part of it. The box: It helps. Don’t know.	Specify: Clarify! Not a child client, but asking adult client! NB!
P8	√	√ – Peer pressure; posing a challenge or that stressed.	√ – The term ‘stress’; maybe it is broad, but they do understand it.	√ – Include: “stress”, layperson will interpret it.	“Stressed” and “struggled” with in childhood.

3.4. Before

Has the participant experienced any significant (non-trauma) difficulties as an adult? (e.g divorce, retrenchment or any other experience they see as negative during adulthood)	Y	N
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If “yes”, briefly describe

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 3: Psychiatric and Emotional History				

Significant (non-trauma) difficulties (adult)	0.85	92.59%	0.377	4
Qualitative Comments	Relevant – experiencing negative life events could indicate vulnerability, an accumulation of difficulties, co-stressors, compounding, both distal and proximal stressful life events, depleted coping resources, more vulnerable to developing PTSD			
Recommendations	<p>Understandability – <i>non-trauma</i> is confusing, vague, ambiguous, explain what is meant by <i>significant difficulties</i>?, <i>significant</i> is not clear, rephrase, list possible <i>non-trauma difficulties</i>, as examples, checkboxes, shown/read to ‘participant’, specifies considered events</p> <p>Administration – ability to accurately assess item?, due to considerable volume of information, duration of administration?</p> <p>Also, ability of primary health care professional to ‘contain’ trauma individual, intent is not to harm or further traumatise participant</p>			
Improved Item?	<p>Modified, table format, user-friendly, example of possible question provided, to guide appropriate administration, examples of <i>non-trauma difficulties</i>, act as possible descriptors, potentially limit administrators or ‘interviewers’</p> <p>Further explored with intended administrators, understandability and administration specifically discussed in qualitative interviews, subjective interpretation of item sourced, to ensure proper directing of question, so as to not re-traumatise or further harm participant</p>			

3.4. After

Has the participant experienced any other significant stressor(s) as an adult?				
<p>Q: Again, you do not need to tell me what happened. You can simply answer “Yes or No”. Is that OK?</p> <p>Do you remember any negative event or experience as an adult?</p>	Y	N	Please give me an example.	(e.g. divorce, retrenchment or any other experience they see as negative during adulthood)

Participant and Item3.4	Understand-ability?	Administration?	Understandability? (trauma client)	Response Format? (administration)	Improvement?
P1	√	√ – Explained previously, easier.	√ – Explained previously, easier.	√ – Just the definition.	Just the definition.
P2	√	χ – Do need to actually define.	√ – Understanding just for the normal person; <i>negative event vs stressor</i> .	√ – “Such as ...” – reads easier.	Explanation of what it is before introducing (item).
P3	√	√ – Some explanations.	√ – Perfectly explanatory.	√ – It is perfect. Not confusing.	Stressor definition.
P4	√	√ – Maybe one or two examples.	√ – One or two examples.	√ – Examples (added) .	Trusting Administrator!
P5	√	√ – <i>Stressors</i> not related to the <i>trauma</i> .	√ – I like the option again. It is also the exact same. Happy!	√ – Keep the definition for the <i>Manual</i> .	I would put that before ... eyes follow it; on top.
P6	√	√ – Same. Comfortable.	√ – Same critique. It is fine.	√ – It gives everything needed.	Definitely. Examples: idea.
P7	√	√ – Child saw something wrong. I think that’s what	√ – “ Anything negative that’s happened? ” – Relates	√ – Examples: They are part of it. The box: It helps.	Specify: Clarify! Not a child client, but asking

		can stress a child.	to word “ <i>negative</i> ”!	Don’t know.	adult client! NB!
P8	√	√ – “Something that is worrying you”. It is just the negative situation about it is that...	√ – You know the examples. You don’t have to ... sometimes not comfortable discussing things.	√ – It is fine.	Socio-economic circumstances. Most significant stressor: financial.

3.5. Before

Is the participant experiencing any significant (non-trauma) difficulties currently? (e.g divorce, retrenchment or any other experience they see as negative that is current)	Y	N
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If “yes”, briefly describe

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 3: Psychiatric and Emotional History				
Significant (non-trauma) difficulties (current)	1.00	100%	0.364	4
Qualitative Comments	Relevant – persons under stress seem to be more vulnerable, predispose, precipitate, perpetuate vulnerability, important to assess co-stressors or compounding effects, strong predictor, peri-trauma life stressors / negative events			
Recommendations	Clarity, wording is weak, vague, ambiguous, what is meant by <i>negative experience</i> ?, term is broad, give examples, list useful to ‘interviewer’ and ‘participant’ Administration, repetitive, considerable amount of information, increase length of questionnaire, combine <i>non-trauma</i> items, explore all past difficulties			
Improved Item?	Modified, term changed to <i>other current stressor(s)</i> , table format, example of potential question, examples provided of <i>non-trauma difficulties</i> , easier for both administrator and participant Further explored with intended administrators			

3.5. After

Is the participant experiencing any significant stressor(s) currently?				
<i>Q: Again, you do not need to tell me what happened. You can simply answer “Yes or No”. Is that OK? Are you experiencing any difficulties at the moment?</i>	Y	N	<i>Please give me an example.</i>	(e.g. divorce, retrenchment or any other experience they see as negative that is current)

Participant and Item 3.5	Understand-ability?	Administration?	Understandability? (trauma client)	Response Format? (administration)	Improvement?
P1	√	√ – Straight-forward, explained previously, easier.	√ – Explained previously, shouldn’t be a problem.	√ – Just the definition, examples – fine.	Just the definition, no comments.
P2	√	χ – Table appears	χ – Understanding just	√ – “Such as ...” –	Change table

		unclear, instructions are confusing, actually define <i>negative event</i> vs <i>stressor</i> .	for the normal person; <i>negative event</i> vs <i>stressor</i> = confusing.	reads easier.	format! NB! "Such as ..." – divorce, house break-in, moving town.
P3	√	√ – How would you term 'retrenchment'?	√ – Because that's something that happened.	√ – Good.	Job loss ... Explain: adult and current!
P4	√	√ – Understandable.	√ – Understandable, form of guidance.	√ – Not confusing, nothing changed.	Okay, no, it is fine.
P5	√	χ – "Any current difficulties at the moment?"	χ – Opening to counselling session; worried, get stuck.	√ – Definition: "Don't want to harm ..." Perfect.	Short definition! "Don't want to harm or injure".
P6	√	√ – It is still fine.	√ – It is still fine.	√ – It is still fine.	Experience?
P7	√	χ – No way this 'trauma history' can come to this 'significant'?	χ – Definition: 'significant stressor' and 'trauma'; to separate two sections.	√ – Specify, clarify, and define in the Manual! Introduction ...	Understands significant stressor vs traumatic event!
P8	√	√ – It is fine.	√ – "... in the past" puts it 'in the past'.	√ – Right in this order.	Change? "... in the past".

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<p><i>Psychiatric history</i> – might have needed medication; Extra table – <i>clinician / type of treatment</i>: <i>clinician</i> = person seen, <i>type of treatment</i> – medication / clinic / institution – (split + make 2 columns). <i>Family psychiatric history</i> – Administrator do understand (NB!) <i>Significant stressor(s) as a child</i> – note whether they have been able to cope with that and when it has become a continued problem (similar to expert feedback); Maybe get somebody else to maybe answer the question – additional source of information; A list leads into the trap of having them say that it was a stressor when it wasn't; So to elaborate the question and say: "Have you experienced this..." and "this is..." and then you explain what a 'significant stressor' is" (improve understandability and efficiency). <i>Significant stressor(s) as an adult</i> – I think it would be less problematic than the childhood one because as an adult, you can remember your own things; It is more recent and you have a better understanding of things once you are an adult. <i>Current significant stressor(s)</i> – I think it is also straightforward I think and once again, linked (inaudible) significant raised from the first one, but it shouldn't be a problem and also it gives examples and things, so I think it is also ... it is fine; No, no (further) comments.</p>
P2	<p><i>Psychiatric history</i> – Is it not better to start with the family? We did a little risk factor assessment now and I specifically put the family ... (broader to more narrow?) Sensitive question! This question is a little bit like ambiguous in the sense of: "Have you ever <u>been to</u> a nurse, doctor, counsellor?" But that's exactly how I understood it, is that these are just examples of that question. Understandability √ ! One question and your brackets then just indicates the examples of ... "For example low mood, feeling anxious". ? Omit type of treatment? And date? Not important? Example – guide, trauma client but also self, to think quicker. <i>Family psychiatric history</i> – It is because of that mental health disorder, where that's too ... put the examples of in brackets so question becomes self-explanatory as you ask it. Note: Expert recommendation vs administrator opinion vs laymen's terminology! <i>Significant stressor(s) as a child</i> – That's why the "... such as ..." is quite nice, it reads easier, so your 'yes', 'no' is there; Because I only went 'there' later – Change table format! It should be part of the explanation: "... such as divorce". Watch out: Significant stressor or trauma history. Expert concern! It is a really difficult one. Definitely more specific examples, but for the rest, a definition. It depends on the definition. <i>Significant stressor(s) as an adult</i> – When I am filling in a form like this, with a client, I don't want to have to check the manual. And if I read through a manual before the time, I am not going to remember the definition of a 'significant stressor'. Definition on assessment! "Okay, so a significant stressor is ..." and then ask the three questions. Trauma definition also needed! Maybe with a "... such as..." in the definition, but that "... such as..." must be able to apply to all three questions. NB! Because then you have kind of like one, two lines of explaining a 'significant stressor' and giving an example of it and then you can deal with the three questions regarding it. NB! I am not saying there shouldn't be a manual, in the sense of that you would want to read more about certain things for yourself, but in administration, you need to be able to just work off</p>

	one form. NB! So you do need a small explanation and an example to clarify it for the person in front of you and for yourself, very quickly, there, you know. Divorce applies to all three. <i>Current significant stressor(s)</i> – same as above.
P3	<i>Psychiatric history</i> – Flag: Intention of question explained or described. Query: understand question better? Not sure. <i>Family psychiatric history</i> – none. <i>Significant stressor(s) as a child</i> – I think that people don't often realise what <i>stressors</i> are in their childhood. I think they might struggle a bit with understanding what this has to do with anything. Reword: "Do you remember any negative event?" A lot easier than ' <i>any other significant stressors</i> '. I think I would wait and see what the client does. If they understand what you are saying, then I think it is okay, but if you can see that there is a bit of confusion, then I would maybe suggest some examples. Suggested: parenting experiences, car accident, house robbery. <i>Significant stressor(s) as an adult</i> – Introduce stressor definition right at the beginning of the whole section! <i>Current significant stressor(s)</i> – none.
P4	<i>Psychiatric history</i> – Format confusing? Look at that item does this confuse the simplicity of the question? It helps a lot. It does help ... more to focus. With the question there, it does really help and then this helps you focus what you are going to go into. Format. It is quite clear for me ... have those examples, it does help. Maybe ... Takes away the stigma ... of psychiatric care. <i>Family psychiatric history</i> – Keep the format as much as possible, some form of consistency – become familiar with ... type of items ... quicker ... keep it as user-friendly as possible! It does help. <i>Significant stressor(s) as a child</i> – Disability, it could be physical ... stuttering or something ... emotional, didn't receive as much attention and affection or it could be parents ... bullying, social. NB! People's perceptions ... you can't put something in and then for them it wasn't such a big issue, and you actually make them think: "Hey, I didn't receive as much affection as I child. It didn't bother me then, but now you are asking". Valid! <i>Significant stressor(s) as an adult</i> – Manual – I don't know where to slot it in, in the <i>Manual</i> , like the Administrator really needs to know that all the examples are not decisive, conclusive kind of. NB! Training? Administrator would really need to know the format of the <i>Manual</i> ! I definitely would (training)! I am gaining a lot just from you just talking about it than I would have if going and reading and thinking! NB! <i>Current significant stressor(s)</i> – ' <i>Negative Event or Experience</i> '.
P5	<i>Psychiatric history</i> – It is just the word ' <i>psychiatric</i> ' ... it is out of our scope of practice to do anything related to that ... but for nurses and doctors who do deal with that, it is applicable to them ... And you have here ' <i>diagnosis or / problem</i> ', so ' <i>problem</i> ', if I am not comfortable writing the actual and I know what the diagnosis is, I would write there the symptoms. Consider: Maybe perhaps having a section for symptoms ... why did they receive the help, for what symptoms and then maybe if it is not in your scope of practice, putting the symptoms. Examples and/or symptoms described? I mean you have their problem, write it down, maybe more space (format) in case you do write symptoms, but then you know, and then ' <i>type of treatment</i> ', it is straight-forward and then ' <i>date</i> ' is straight-forward. Still explanation needed for the 'Yes'/'No' response! If you have a <i>Manual</i> . Maybe just say something along the line that reaffirms the ' <i>yes</i> ' or ' <i>no</i> ' question. It just reaffirms what the client knows. "Please make sure that the patient understands what is being asked above". Just add in "... asked above by Table below" ! That makes perfect sense. That's what I was trying to say. So there it is in the manual. Familiarise! <i>Family psychiatric history</i> – Training: But does resources allow for <i>training</i> ? Your trainer could be someone in the internships, various internships ... get the nurses together if they are going to administer this ... quick training. It could even be half an hour ... resources ... problem, especially if this is available to anyone and everyone. Training: Specific to profession! If I didn't have prior <i>training</i> I would have asked that literally. <i>Significant stressor(s) as a child</i> – If there was like a nurse or a lay counsellor ... I can't imagine that they would understand what a stressor is. Include: If <i>training</i> isn't possible because of resources, I would say: "Please refer to <i>manual</i> before doing the intake". Table: It is very nice ... glad that there is an option for them because I think what is so important, especially for trauma victims is that they get some kind of sense of empowerment or control, that they can say ' <i>yes</i> ' or ' <i>no</i> ' ... So, it is very straight-forward and you have given examples. It is very straight. If you see they are not sure and they are looking at you blankly then you have got an example here and you can you know – you can write over it. Or I would – or maybe just even saying here: "Being bullied as a child". Dyslexia? Include/add! Very polite and it is broad. I like what you have done here. <i>Significant stressor(s) as an adult</i> – No confusion? No. Nothing that you would change or improve? Change: ' <i>significant stressor</i> ' on top of the table. <i>Current significant stressor(s)</i> – Note: Short definition ... necessary for the Administrator ... "Remember that this interview is to identify risk factors so I don't want to harm or injure you further by you telling me any detail of what has happened" ? I think that's perfect. Required to read the <i>Manual</i> , they will realise

	that's flagged and then they mustn't delve into things you know. Re-emphasise: "As we go along, if you find yourself becoming ..." Standard: "Please keep in mind that this is not an appropriate therapy session ... Include: Appropriate introduction.
P6	<p><i>Psychiatric history</i> – Consider rephrasing: "... a long period of time and you have gone to the doctor and spoke to him about it and he said you have maybe had to take this medication or something" ... something along those lines. Format: Straightforward. Table: I think this would be fine. It is good. NB! Then you have got to explain to them: "Heavy depression and like the example I gave you?" and things like that but I think if you do administer it, then it would just take careful like supervising and just checking: "Do you understand this thing and do you need any help with it or anything of the sort?" NB! Suggestion: Don't have to give a few examples. I think one, maybe two, is more than enough.</p> <p><i>Family psychiatric history</i> – Depending on the individual. Explain to them! It is standard! <i>Significant stressor(s) as a child</i> – none. <i>Significant stressor(s) as an adult</i> – Same critique. It is fine. It gives everything that's needed. Examples? Definitely! <i>Current significant stressor(s)</i> – It is still fine. Query: Hands-on Experience? Confident and familiar with the questions. In the field, knowledge of how items work practically. Comes across as comfortable: both personally and professionally. Recommendation: With regards to comprehension of the difference? 'Stressor' obviously, I think there is a clarification needed. What is a stressor because I think that is from training that you would know what some of the terms mean, but I think that does need clarification with regards to the people that is going to be administering. The <i>Manual</i> is for the interviewer and then this is basically what the interviewer is going to ... Ask? So if they go through it and they become familiar with the manual, which they should do. Definition? Don't need to put it in here. 'Trauma' given a definition. If you do the same thing for the 'stressor', I think that would make things easier.</p>
P7	<p><i>Psychiatric history</i> – Only the doctor used to ask that. I don't think I have to even ask that. I see it as an irrelevant question to ask a traumatised someone. I only hear the nurses and the doctors, they will ask the client. Support specific role. Consider? Nurses vs Counsellors for risk assessment! Note: Do you think there is an easier way to ask them? For me, because I am not going to diagnose the client, I don't think it is easy for me. I think it is easy for the doctor or the nurse. Uncomfortable and uneasy – thought of 'outside of scope of practice'! Probed: You would feel more comfortable for the doctor and the nurse to ask it? I think yes, I can. I can ask it. ! It confuses me! Uncomfortable with the question. Rigid idea(s) of role of different professions → many factors → explore! <i>Family psychiatric history</i> – Concern: I don't know. Oh, I really don't know because that somebody is in trauma. I don't know if I really have to ask her those questions. Trauma focussed: Not risk assessment trained. NB! Motivation for screening instrument needed (in laymen's terms). With Introduction. And Discussion group. NB! Take home – Manual – review at leisure – following day – discussion! <i>Significant stressor(s) as a child</i> – Does the box in itself, does that help you or does that confuse you? No, it helps. It helps because sometimes you don't know nothing. But you see that this client is stressful now (concern!) and you ask her about her childhood. Then maybe really something did happen while she was a child. Then she can tell you straight. <i>Significant stressor(s) as an adult</i> – Explain: Manual and Questionnaire. Okay. Information overwhelming! I am so lost here. Confused, but honest, and admits not understanding – key point in that when overwhelmed, requests for example to better understand the question / format, etc. Can you please just give me an example of what this means? Too much? Yes. Confusing? Mmm. Explanation: Step-by-step and slow; practical example – NB! "A significant stressor is: Something negative that has happened in the trauma individual's life, either in childhood or in adulthood" and then give maybe an example like a child that wasn't loved by his parents.) NB! Okay. NB! Okay, now as you explain to me, now I understand! NB! Explain properly! NB! Examples: child that was neglected, a child that was maybe bullied, maybe it can be something like a divorce or the death of a family member. NB! Current significant stressor(s) – NB! But now you did explain to me, then I understand now what is all these questions about. NB! Note: Careful consideration for explanations, questions (length of questions!), examples, speech, speed, tone, etc. Clearly overwhelmed! Training session? Discussion group? Yes, a discussion group I think it will make it better.</p>
P8	<p><i>Psychiatric history</i> – '<i>Emotional history</i>': not sure what you mean. That falls under '<i>psychological assessment</i>'. Is she visibly traumatised? In emotional distress? ... if you write an '<i>emotional history</i>' now, here ... it is going to be ... I believe it is a bit broad. Consider? But if you write a '<i>psychological assessment</i>' or '<i>psychiatric and psychological</i> ...'? Change? "Okay Madam, have you ever been...", "... have you ever been admitted or been seen by a doctor and the doctor told you that you are mentally ill or have you ever been institutionalised or suffer from this condition or these kind of illnesses, like have you ever been diagnosed that you are actually ill, mentally, whether it is</p>

depression or what not?" You know, we ask those simple questions like that. That's how I will ask them or: "Are you getting sleepless nights?" **NB!** *Family psychiatric history* – It is plain. *Significant stressor(s) as a child* – No, actually, the term 'stress', maybe it is broad, but they do understand it. When you say 'stress', even something that is actually troubling them or something that is a challenge to them, something that actually maybe wakes them up at night or something that worries them. When you say 'stress', a lay person interprets it as 'worry' or a 'concern'. And they understand it. **Replace?** *'Significant stressor' with just 'something negative that stresses you'?* *Significant stressor(s) as an adult* – "Something that is worrying you"? Because necessarily, something that worries a person sometimes is not necessary a negative thing. It could be money. There is nothing negative about money. It is just that the negative situation about it is that she needs money. She doesn't have money. **NB!** *Current significant stressor(s)* – "Other significant stressors not related to the present trauma event?" No, only after the question basically because I think that it is right in this order. **Consider:** "Has the participant experienced any other significant stressors as an adult prior to the current experience?" or "... previous experiences before..." Or: "Does he have a previous experience of this traumatic experience or stressor prior to the present one?" or **NB!** "I think you must say here: "Has the participant experienced any other significant stresses as an adult in the past"? "Has the participant experienced any other significant stressor as an adult prior to the current one?" **NB! Change:** So if you just make that sentence clearer. **NB! Suggestion:** I think maybe in the manual. You should define it in the manual not in the tool.

Item 4:

Trauma history

4.1. Before

Has the participant experienced any traumatic stressors as a child? (e.g physical/sexual abuse or any other traumatic experience before the age of 18)

Y N

If "yes", briefly describe

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 4: Trauma History				
Trauma history (child)	0.93	96.55%	0.364	4
Qualitative Comments	Relevant – known risk factor, strongly related to PTSD, more vulnerable or high risk			
Recommendations	Understandability, lay-person's understanding, distinguish between <i>trauma</i> and <i>non-trauma</i> , list of possible experiences, DSM-IV/V, checkboxes, easier for administrator and participant if list provided Administration, competent?, might refer only to examples given?, other trauma experiences excluded, assess 'duration' and 'severity'? Concern, information saturated and sensitive item, may further distress participant, adding to effects of trauma, if not administered correctly			
Improved Item?	Modified, table format, example of expected question provided, to facilitate accurate and sensitive administration of item, examples given of possible <i>trauma</i> experiences <i>in childhood</i> Further explored with intended administrators, evaluate challenge that item presents, subjective interpretation of it, accurate administration, not to add to the development of traumatic stress			

4.1. After

Has the participant experienced any traumatic stressor(s) as a child?				
<p>Q: You do not need to tell me what happened, as I know this must be very difficult for you. You can simply answer “Yes or No”. Is that OK?</p> <p>Do you remember any traumatic event or experience when you were a child where you were hurt in any way or felt you were in danger?</p>	Y	N	Please give me an example.	(e.g. physical / sexual abuse or any other traumatic experience before the age of 18)

Participant and Item4.1	Understand-ability?	Administration?	Understandability? (trauma client)	Response Format? (administration)	Improvement?
P1	√	√ – Explanation.	χ – Explanation of precisely what a <i>stressor</i> entails.	√ – Explanation, Example (given) might be too much of an extreme.	Explanation – give an example or two; Proper definition
P2	√	χ – Immediate problem, using the word <i>stressor</i> in both, they are already so similar.	χ – Using the word <i>stressor</i> in both; makes them too similar: “But I have already asked this?”	χ – Ambiguous and confusing, Table becomes ... examples become part of question.	Differentiation – reading quickly, “... repeating it”, short line definition.
P3	√	χ – Grey area ... <i>significant stressor</i> to <i>trauma</i> .	√ – If you had a <i>Manual</i> , to have examples.	√ – Questions posed, they are nicely posed.	Definition! <i>Manual</i> – have examples.
P4	√	√ – Threat, danger, integrity, witnessed?	√ – Definition: <i>significant stressor and trauma</i> .	√ – Yes, it would help. That would be great (<i>training</i>).	Manual and training is needed!
P5	√	χ – Big difference between ‘ <i>crisis</i> ’ and ‘ <i>trauma</i> ’. Give the example.	√ – Constantly exposed to <i>trauma</i> , domestic violence. Clear. Understand.	√ – Needs to be a definition of ‘ <i>trauma</i> ’. Perfect. Structure.	Maybe put ‘ <i>crisis</i> ’, definition/example Domestic violence
P6	√	√ – It is good. I am comfortable with that.	√ – That’s fine. Wonder: Rethink another <i>trauma</i> .	χ – I wasn’t aware of the ‘ <i>optional</i> ’ part of that.	Concern: Just thinking; having to rethink another.
P7	√	√ – Don’t feel like it is me, myself; hate myself; don’t know how to do nothing ... am crying, can’t say anything.	√ – Something that happened to you that you had no control of? Yes. Does this definition make sense? Yes, it does. With explanation!	√ – Yes, it might work. Think they would understand that? Yes. Straightforward? Yes. Easier? Yes, yes	Explanation given, again. Or needed! Answered single ‘Yes’ responses to questions asked – not very conversational?
P8	√	√ – There is no confusion to me, to a <i>trauma</i> event and a <i>stressor</i> .	√ – Already knows what is a <i>stressor</i> , what is a <i>traumatic event</i> .	√ – I think it must be added on the <i>Manual</i> , the definitions.	It doesn’t look professional. I think it must be added, <i>Manual</i> .

4.2. Before

Has the participant experienced any other traumatic events as an adult? (e.g assault, rape, armed robbery, hijacking)	Y	N
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If “yes”, briefly describe

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Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 4: Trauma History				
Trauma history (adult)	1.00	100%	0.364	4
Qualitative Comments	Relevant – known risk factor, greater for developing PTSD, multiple traumatisation, associated with higher rates of PTSD, triggered by new trauma			
Recommendations	Understandability, rephrase with DSM-IV/V criteria, proximity (heard, witnessed, victim), crime-related traumas heavier weight?, create more than one category, primary health care professional may find it difficult, not able to differentiate between <i>trauma</i> and <i>non-trauma</i> , list of examples of <i>traumatic</i> experiences, include more examples, table, checkboxes, useful for both interviewer and participant, easier for administration, time frame? frequency? duration? severity? trauma exposure? time passed since last trauma?			
Improved Item?	Modified, table format applied, example of question to be asked provided, rephrased to <i>current stressors</i> , list of examples available, easier for both administrator and participant, indicative of <i>trauma</i> experiences encapsulated Further explored with intended administrators, subjective interpretation of item			

4.2. After

Has the participant experienced any traumatic stressor(s) as an adult?				
<i>Q: You do not need to tell me what happened, as I know this must be very difficult for you. You can simply answer “Yes or No”. Is that OK?</i> <i>Do you remember any traumatic event or experience as an adult where you were hurt in any way or felt you were in danger?</i>	Y	N	<i>Please give me an example.</i>	(e.g. assault, rape, armed robbery, hijacking)

Participant and Item4.2	Understandability?	Administration?	Understandability? (trauma client)	Response Format? (administration)	Improvement?
P1	√	√ – Apply to the <i>stressors</i> ; Good and valid and strong definition.	√ – Definition.	√ – Really clear.	Good and valid and strong definition.
P2	√	χ – Immediate problem, using the word <i>stressor</i> in both, they are already so similar.	χ – Using the word <i>stressor</i> in both; makes them too similar: “But I have already asked this?”	χ – Ambiguous and confusing, examples become part of question, example in front.	Differentiation; also, “Please give me an example?” take that away.
P3	√	√ – Introducing this item; they can also have a chance to understand it.	√ – Introducing item. Definition. I think with the definition, they will understand.	√ – Asked here very ... quite simply and straightforwardly.	With the definition. It is perfectly understandable.
P4	√	χ – It feels like they might describe the actual <i>trauma</i> .	χ – Describe the actual <i>trauma</i> they are presenting at the time.	χ – “Do you remember ...” I would need to put “... other than ...”	“...other than what you are going through”; “... currently”.
P5	√	√ – Already be	√ – Straightforward.	√ – Not checklist.	<i>Manual:</i> Just an

		familiar, examples.	Examples are good.	Description!	example.
P6	√	√ – Self-explanatory.	√ – I am comfortable with that.	√ – Plus, definition on top.	That's fine. Bit more clearer!
P7	√	χ – It's a previous event that you are asking about?	√ – Do you think that they will understand it? Yes.	√ – Instructions: <i>Manual?</i> <i>Guideline?</i> Yes.	"Experience ... previous to ..." " ... happened?"
P8	√	√ – Is there any event that was painful ...	√ – Is there any event ... a memory that is actually too painful?	√ – It is plain. It is fine. That's perfect.	Understandable and clear.

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>Traumatic stressor(s) as a child</i> – Well, I think that's any event that's caused them significant distress; So something that upset them there but then again, that also clashes with the actual definition of 'trauma', which is a threat to bodily integrity or harm, so what I child could see as a trauma is probably different the what an adults sees as a trauma so ... ; Maybe something less intense but something that still has an effect? I think if you can just give a proper definition of a 'traumatic stressor'. It should be easier if you give a definition of the 'significant stressor' and the 'traumatic stressor'. To separate the two might be easier. Confusing – significant stressor and traumatic stressor – distinguish clearly! <i>Traumatic stressor(s) as an adult</i> – Again, it would apply to the stressors. I think if you have been able to give a good and valid and strong definition, it should work.
P2	<i>Traumatic stressor(s) as a child</i> – same for both. <i>Traumatic stressor(s) as an adult</i> – Make sure that they know, you have put the example in front of them, then you have already guided them. Ja.
P3	<i>Traumatic stressor(s) as a child</i> – Directions then for administering: I think just as long as the questions are there and then if you had a <i>Manual</i> , to have examples of 'significant stressors' that don't fall into 'trauma'. That would be the only thing. It is a bit difficult because there are things that influence <i>trauma</i> ... that are <i>stressors</i> . It would be the clinician actually being on top of things and being on the ball. NB! Training session? I would say. Basically run through: "What would you classify as 'significant', what would you classify as 'traumatic'?" Run through a list of potential ... I think that would be a great idea. Definition plus training on this item specifically. <i>Traumatic stressor(s) as an adult</i> – Okay so that would be up until now. I think it is straightforward. I think that's definitely something that needs to be careful ... I got the feeling that they could speak about it ... It sounds like it is an open-ended question unless they feel uncomfortable. I don't know why I feel that way. Valid! Consider! More closed: "You can answer 'yes' or 'no'?" Or: "Please can you answer 'yes' or 'no'?" Manual – I think it should be something that should be prepared before. You need to know what to do, how to ask the questions before they see you. If you explain that clearly enough, then they should understand. Maybe in the explanation, you say: "Okay, we are going to through childhood significant stressors and then we will go through childhood traumatic stress and each one" and if they don't understand then, then they can ask you. But maybe we need to actually speak to them on a level of understanding and say, tell them that, that this is purely just you know, what it's aim is to see: "Are you struggling with it?" What are the risk factors and then you will be referred to a ... "Concerned may develop this disorder, called PTSD ... make sure that get referred to the right therapist." Training – I definitely think that whoever is administering this measure would need to be trained to be told.
P4	<i>Traumatic stressor(s) as a child</i> – Definition for either might be beneficial, that you have 'significant stressor' identified ... 'traumatic history'. Helpful? Definitely. NB! Administrator already then has an idea of and together with the training, that these are the questions, but then there are following ... Break it down. Give a little bit of an introduction ... might feel unprepared if they don't have an introduction! Yes! <i>Traumatic stressor(s) as an adult</i> – "Do you remember ..." I would need to put "... other than ..." Suggestion: "... other than what you are going through currently?" Add that into a question. "...than what you are going through currently", yes! That will be fine.
P5	Clear for any professional. They would understand that, but not a lay counsellor. Then maybe giving the example ... Definition with an example, an appropriate example? <i>Traumatic stressor(s) as a child</i> – Domestic violence ... doesn't have to be a single event ... it can be multiple events, and that is ... in South Africa it is so applicable because people are constantly being exposed to trauma, domestic violence. It is one of the biggest problems ... straight-forward. That's nice though because then you know the client also knows them. It puts them at ease that there is structure to it. Consistency? That's very straight-forward. Happy? Very. Confusion? Maybe format here? Maybe if you make the

	<p>headings bold. Reverse? Put the cue as bold and then just normal and then: “Please give an example”, keep it as bold because they will miss that. Cue will make it stand out. Example: “Practitioner only” or something. Manual? I like it. Yes, ‘Administrator’ in brackets. Fine with the examples for that? Maybe just put in ‘emotional’ as well ... never physically abused or sexually abused ... grew up hearing if your father or mother constantly says that you are useless. So maybe just a verbal or emotional one, so then you have got all three. Examples: Bullying, cyber bullying (leads to children committing suicide). Traumatic stressor(s) as an adult – Note: Experts have years of experience and/or practice; therefore, developed confidence. Volunteers, maybe not so much? Leave a checklist out and maybe just have an example, so when they come to that, they are already saying: “Okay, you know, I know what sort of events need to be picked up here”. NB! Examples, they don’t become all-inclusive! Administrator ... familiar with the Manual! Manual definitely the detail. Want to engage with person. Want to maintain eye contact ... don’t want to disempower them by ... paying attention to the paper. If you have everything in the Manual, will know what to do.</p>
P6	<p>Traumatic stressor(s) as a child – Concern: I am just thinking of someone that has just been through for example, rape or something like that and how/what the effect might be with regards to having experienced the trauma and then having to rethink about another one! NB! Suggestion: “Please give an example?” and then in brackets ‘optional’. NB! Manual: I think if you inform maybe in the Manual, the Administrator that: “Can you try and get a ...” not, ‘try and get a response maybe with regards to the instruction’: “Please give an example if you are comfortable but you don’t have to”. Choice? Exactly! Traumatic stressor(s) as an adult – Examples? I am comfortable with that.</p>
P7	<p>Traumatic stressor(s) as a child – Does this definition make sense to the type of questions that are going to be asked? Yes, it does. Do you think that they would understand that? Yes. It’s more or less straightforward? Yes. Sure, and it is a little bit easier than the ‘significant stressor’? Yes, yes. Traumatic stressor(s) as an adult – Improvement? Do you think that we must maybe put here: “Experience any traumatic as an adult previous to ...” “... what happened?” Yes, I don’t see anything wrong with it.</p>
P8	<p>Traumatic stressor(s) as a child – none (extra). Traumatic stressor(s) as an adult – none.</p>

Item 5:**Description of the event – Before**

Trauma type	Hijacking <input type="checkbox"/>	Home invasion <input type="checkbox"/>	Armed robbery <input type="checkbox"/>	Rape (completed) <input type="checkbox"/>	<div>Code</div>
	MVA <input type="checkbox"/>	Industrial accident <input type="checkbox"/>	Assault <input type="checkbox"/>	Rape (attempted) <input type="checkbox"/>	
	Other: (specify)				<div>Code</div>
Weapon used	N/A <input type="checkbox"/>	None <input type="checkbox"/>	Firearm <input type="checkbox"/>	Knife <input type="checkbox"/>	<div>Code</div>
	Other: (specify)				

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 6: Description of the event				
Weapon used	0.67	83.33%	0.358	4
Qualitative Comments	Relevant – associated with degree of threat, subjective experience, intensified with more ‘severe’ weapon, aggravate symptoms			
Recommendations	Administration – instructions not clear, <i>weapon used?</i> refers to what traumatic event? Understandability – primary health care professionals might find item difficult, N/A? not clear or understandable, what about injuries sustained? and extent of injuries?			
Improved Item?	Modified, <i>other (specify)</i> was removed, consistent response format Added: <i>number of attackers, physical injuries sustained, severity or extent</i>			

<i>of injuries</i> Further explored with intended administrators, administration and understandability tested, probed to establish level of difficulty of item				
Item 6: Description of the event				
Trauma type	0.80	90.00%	0.358	4
Qualitative Comments	Relevant – features of event are important, associated with vulnerability to symptoms, maybe not the event per se, rather perception of the event, subjective experience more important?			
Recommendations	Consider proximity/direct or indirect exposure? Duration? Clarity, format and instructions are not clear, referring to past or most current/recent trauma experienced? Specific, crime-related traumas given as examples, non-crime related traumas? Natural disasters, house fires, building collapses, etc.? Understandability, define <i>assault</i> , <i>attempted rape</i> , and <i>completed rape</i> , provide checklist?, more traumas than indicated, listing high risk traumas, easier for both ‘administrator’ and ‘participant’, specify <i>other</i>			
Improved Item?	Retained and modified slightly, addition of non-crime related examples, e.g. <i>natural disasters, house fires, buildings that collapse, etc.</i> , and <i>Other non-crime related traumas</i> , more user-friendly, easier for ‘administrator’ and ‘participant’, without limiting them to only certain examples Further explored with intended administrators			

Description of the event – After

Trauma type

Hijacking ☐ Home invasion ☐ Armed robbery ☐ Rape (attempted) ☐
MVA ☐ Industrial accident ☐ Assault ☐ Rape (completed) ☐
Other (please specify)

Weapon used

N/A ☐ None ☐ Knife ☐ Firearm ☐
Number of attackers 1 ☐ 2 ☐ 3 ☐ 4+ ☐
Physical injuries Yes ☐ No ☐
Extent of injuries Minor ☐ Moderate ☐ Severe ☐
None / superficial wounds / bruises – None / little medical attention
Open wounds / lacerations – Medical attention is needed
Open / penetrating wounds (stab / bullet) – Overnight in hospital needed

Participant and Item5	Understand-ability?	Administration?	Manual? / Clarity?	Trauma Type? (Item5.1)	Physical Injuries? (Item5.4)	Extent of Injuries? (Item5.5)
P1	√	√ – Straight-forward, grey examples is better.	√ – Grey examples, better; self-explanatory, not complicated.	√ – Straight-forward.	√ – Straight-forward.	√ – Add: able to treat yourself / see doctor.
P2	√	√ – Open-ended question (maybe), not categorised? Not going to need “... such as ...”	√ – It will stick; same as risk assessment / questionnaire, no difference.	√ – Examples are easier to retain, and remember.	√ – Straight-forward.	√ – Straight-forward. Nice, no medical – hospital.
P3	√	√ – Self-explanatory, straightforward.	√ – Specify under ‘Other’. They are fine.	√ – Fits in. You (also) witness it?	√ – Fits in. Examples.	√ – Fits in. Examples (clarify).
P4	√	√ – Clarify ; “What does ‘MVA’ stand	√ – Scared of having a list;	√ – Just motor vehicle	√	√ – Change (see below)!

		for?"	"Other (specify)"	<i>accident!</i>		That helps.
P5	√	√ – Explaining what's happened. Clarify 'MVA' : "Don't even know what 'MVA' is."	√ – Refer back to the <i>Manual</i> . Cannot go: "What <i>traumatic type</i> ? Hijacking"	√ – Not everyone understands abbreviations; 'MVA'/'N/A'!	√ – "May we talk about what happened?" Include!	√ – It makes complete sense to me. It follows, nicely along
P6	√	√ – Basically the run-down of what happened.	√ – If you tell them: " <i>Description ...</i> "	√ – Familiarity with attacker.	√ – Straight-forward. Okay.	√ – Can get that from the file.
P7	√	√ – Can ask them. Maybe the weapon that they used. How many attackers.	√ – I understand as it is. Concern: Found other examples not listed difficult.	√ – 'Home invasion'. I understand as it is.	√	√ – Extent? Maybe reword? Not used to ask.
P8	√	√ – Straight-forward.	√ – It is hundred percent.	√ – These are clear.	√ – Not sure 'moderate'?	√ – Is plain and simple.

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>Trauma type</i> – The other thing is also that you could be a witness to the trauma types mentioned here like the hijacking, the motor vehicle accidents and those things; Witnessing in itself could sometimes be traumatic to certain people. Clarify purpose of risk assessment – immediately post trauma – trauma clinic / emergency centre. BUT consider for later? Maybe. + Checklist for non-crime-related traumas ??? <i>Physical injuries</i> – √. <i>Extent of injuries</i> – I think with the grey examples is better because certain people have a higher tolerance for pain and they might grade it differently. (CONCERN). And I mean, the manual and the questionnaire is quite similar to the explanations anyway. I think a checklist would be – practically, it would be easier.
P2	<i>Trauma type</i> – Also, an inexperienced interviewer might want to push for too much details; out of curiosity or whatever. Also flagged at Workshop! NB! As long as there is a purpose. Then there is a reason. Clarify! NB! Improve the risk assessment at a later stage. Content validation. NB! <i>Physical injuries</i> – <i>Manual</i> , I think the only thing that's extra is the definition of 'injury'. Again ... I am assuming, could stay here? Ja. <i>Extent of injuries</i> – And the classification of 'minor', 'moderate' and 'severe', you are happy with that? Ja. Note: I like just the bottom one, to keep it smaller, this that says: "Medical attention is needed" or "hospitalisation needed". I don't know if very specific. Differentiate between 'minor' and 'moderate'? 'No medical attention needed'. NB! Simplify. Smaller boxes. Compact it – nice if it is even simpler.
P3	<i>Trauma type</i> – More clearly defined? NB! Initial process of risk assessment – learn more about PTSD in SA (non-crime-related traumas) – next phase to possibly generalise to even broader population. Thought: Suggested focus groups (next phase) → Content validation → Inter-rater reliability → Predictive validity. NB! Prepare trauma individual for risk assessment – not all trauma examples included, but NB to gain information! <i>Physical injuries</i> – I think I will understand how to administer it. Definition of 'injury' in Manual – I don't think you would need to. Most people will know what it is. <i>Extent of injuries</i> – Categorised clearly? I would say, with the examples there, it is.
P4	An introduction or an instruction before this might be needed? Manual? In the manual it would need that instruction. Suggestion: "The intention is not to re-traumatise", definitely. I would say: "Please contain the patient where necessary because these questions are directly linked or leading (inaudible – speaks softly). Maybe an example. Consider: Consistent with other table response formats? Maybe. I think that would be beneficial. I am also scared because half the times I know with my volunteering, they do tell you easily. I think the example would just be sufficient. Example above item, in risk assessment or questionnaire, and Manual! <i>Trauma type</i> – Happy to use: 'Other, please specify'? Yes, definitely. Manual! <i>Physical injuries</i> – none. <i>Extent of injuries</i> – Change: 'no medical attention', 'medical attention', and 'hospitalisation'! That helps. Extra: I think it is subjective. ? Subjectivity of the trauma individual to answer it is important, but I think the probing could also be beneficial? Need to probe; might not be as clear. Little more would be needed. So you are saying: "Probe where necessary". They would need an example.

P5	In the <i>Manual</i> , you have to ... maybe put there how they must ask it. Do not cause more damage by rehashing what's been done. Include: Study explained and purpose of the interview. Information letter! Add: Definitely say that the purpose and the procedure, the following up, the referral, to refer them to someone who is in their own language, that will I think, for me that would need to be in the <i>Manual</i> . "Decreasing their anxiety"! People like to know what's going to happen! NB! <i>Trauma type</i> – Introduction: "May we talk about what ..." South African context, why don't you put here xenophobic attack? Reworded: 'Work-related accident' because that even be in an office. <i>Physical injuries</i> – Able to see? <i>Extent of injuries</i> – Perfect. That's self-explanatory. Change? Nothing!
P6	<i>Trauma type</i> – I think if you tell them: "Description of the event?" and then say: "Basically what happened?" that should be sufficient. Not enough space there. Suggestion: You could have the description of the event but that is going to be a bit of explanation because usually they tell you. I think that if you ask the description of the event, and then you indicate what it is, what it was and then with regards to what happened, the aim of this measure is basically to, I would say, decrease the onset of PTSD. NB! Explain: Process – PTSD – Procedure – Referral – Research Aim – Focus and Objectives! NB! <i>Physical injuries</i> – I have seen in the past familiarity with the attacker or association with the attacker because I don't know, maybe that could have an effect because maybe father raped daughter or something. Where would you put it? (very valid and relevant) I would say ... maybe in-between ... 'trauma type' and 'weapon used'. Suggestion: 'Stranger', 'acquaintance' (saw once or twice), 'friend' (actually know , not <i>family</i>), and 'friend / family'. General tick boxes. Straightforward. <i>Extent of injuries</i> – Can get that in the file as well ... or ... then they can just say. Note: Nurses, counsellors, and usually they have social workers as well. Training? Training in being sensitive to the trauma. NB!
P7	<i>Trauma type</i> – 'Home invasion': Fine! Query? Other examples not listed maybe difficult to place? NB! <i>Manual:</i> Understandable and clarity enforced! NB! All categories appear and reported 'fine'! Need definitions? No definitions needed! Yes, I ... I understand as it is. <i>Physical injuries</i> – none. <i>Extent of injuries</i> – Okay, the problem is that now I was never used to ask them, but the thing is we used to see them if the victim has an injury maybe in the eye, whatsoever, but we are really not used to ask them, but sometimes they will tell you themselves that: "He hit me, he did this". But the doctors used to say okay: "Dress off" and the doctor will look at the injuries and everything like that. NB! Observed to still be confident and comfortable. Concern: Professional roles: doctor / nurse vs counsellor. Laymen's terms → rephrase / reword? NB! Does that make more sense? Yes, it does. Explanation needed! Manual!
P8	<i>Trauma type</i> – Understandable. <i>Physical injuries</i> – This is plain and simple. This is plain. 'Injury' in the Manual? That's perfect. <i>Extent of injuries</i> – Definitions: Easier? Yes, they do. (easier for primary health care professionals).

Item 6:**Subjective experience during the event – Before (previously Item 7)**

<i>Perceived life threat</i>	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>
<i>Dissociation</i>	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>
<i>Degree of control</i>	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>
<i>Strength of emotions</i>	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>

The most salient emotion that the participant experienced during the event:.....

Code

6.1. Perceived life threat – Before

<i>Perceived life threat</i>	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>
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Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
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Item 7: Subjective Experience during the Event				
Perceived life threat	1.00	100%	0.364	4
Qualitative Comments	Relevant – good question, part of the definition of trauma, one of the exposure elements, associated with vulnerability, important diagnostic feature, identified risk factor			
Recommendations	Clarity, descriptor is unclear, wording may be clarified, <i>threat</i> to own life? another's life?, suggested rephrasing, trauma individual may not identify this, challenging to measure			
Improved Item?	Modified, table format implemented, example given as to how to ask question, suggested rephrasing implemented, <i>to what extent did you feel your life was threatened/in danger</i> Further explored with intended administrators			

6.1. Perceived life threat – After

Perceived life threat	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
Q: How great did you think the danger was that you would die? <i>E.g. Did you feel that you were in no / slight / reasonable / significant / unbearable danger?</i>					

Participant and Item6.1	Understand-ability?	Administration?	Understand-ability? (trauma.client)	Response Format?	Manual? / Clarity?	Improvement?
				(administration)		
P1	√	√ – Clearer: How likely do you think that you would have died or that you could have died?	√ – How likely do you think that you would have died or that you could have died?	√	χ – It is ambiguous Could be understood incorrectly !!!	“How likely”? Sounds insensitive. Really hard question, if one doesn't really understand the theory behind it. Explain / apply definition – rest of Questions.
P2	√	√ – Did you fear for your life? Explanations are so subjective.	√ – Rate from 1 to 7 or rate from 1 to 4; people understand that.	√ – only realises later; familiarity	√ – Fine. I wonder if it really necessary?	More comprehensive; “Did not feel it”. Or rate it 1 to 7.
P3	√	√ – This section could be healing to someone; it almost ‘normalises’ it.	√ – Asked quite clearly. Understand. Definitely.	√ – Rate it on a scale. Perfectly explained.	√ – It helps, but I don't think necessary.	Stay in Manual – “Danger that you would die”; fine, sentence.
P4	√	√ – That is very clear to me.	√ – I think they would.	√ – OK; that helps.	√ – No, this would.	Note: Used to scale of 1 to 10.
P5	√	√ – It is from their perspective. Trauma individual's perspective!	√ – Need to know what ‘perceived’ means. Clarify! Straightforward.	χ – Add “Must be difficult for you”... ambiguous	√ – Maybe explain what <i>subjective</i> means.	Instructions in the Manual to be very specific to Administrators. Categorise?
P6	√	√ – Think they were going to die.	√ – That's fine. Perfect.	√ – The example.	√ – Com- fortable.	Comfortable with that/this.
P7	√	√ – I would say that a threat is	χ – I don't think that question is	√ – The rating ... it	√ – Rating: It's right.	Observation: Does the rating

		maybe someone; he took out his knife or the gun. He wants to rob me and do all that.	relevant. The client will just tell, as the client is telling you the story.	is the way you saw it, you have to rate it the same.	This is okay. <i>Manual is needed?</i> Yes.	<i>confuse you? ...</i> “No, it’s right”. <i>I can see you are jumping around on the Table?</i>
P8	√	√ – Something that you are thinking. It is your opinion. It is in your mind.	√ – It does explain. “How great <u>did you think ...</u> ”	√ – The questions should be here.	√ – Straight-forward; explained	<i>Consider:</i> The feeling of death. Not too much information. NB!

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>Perceived life threat</i> – I think that would help, but don’t forget that it would be a bit difficult to give it to a lay person but I think that does explain it because I can’t really say I have had an experience with people that have had a very, very recent trauma as in hours or anything, but I know that some people tend to explain the entire thing to you without you even asking. So in cases like that, it might be easier for the Administrator to rate the degree of threat or intensity according to what the person tells them during their story. (CONCERN). I think it might make a difference to the individual that if you ask them the question, to help them judge according to the rating degree and intensity if they knew what the rating is – what the definition of each rating is because as I said, certain people classify certain things in a different way.
P2	<i>Perceived life threat</i> – You cannot take the subjectivity out of the question. They are going to rate it. You can’t guide them too much. I almost want to say this is all unnecessary because it is subjective. These are all descriptive words. They are not a measure. “4 is a lot, 0 is a little” and people will understand that. Well, I quite like ... you have a centre point so you have a neutral. So it has to be either 5 or a 7, so I think this is fine. 0 is nice because it is nothing.
P3	<i>Perceived life threat</i> – No, it is perfect. I think that it is really set out very clearly.
P4	<i>Perceived life threat</i> – No, this would because initially I was like: “‘severe’ and ‘extreme’ – which one?” because I would interchange those to it was very severe kind of experience. <i>Does this help?</i> This helps. So you used some of the examples. That helps as well. <i>Manual!</i> If people felt a little bit <i>overwhelmed</i> by the question and they needed to go and look at it word for word, <i>they could but I have used it in:</i> “‘Did you feel ‘no danger’, ‘slight danger’, ‘reasonable danger’”. It still ties in. I feel like they would really need to phrase the questions depending on the client as well, I mean for someone who, you know, might not be that literate, how would they understand ‘significant’, ‘unbearable’? Maybe they are not terms they use and so maybe it could be you know ... examples ... It is very hard because it depends on your client. <i>Rating: Clearer?</i> The rating scale would. Nominal. Yes, that helps.
P5	<i>Perceived life threat</i> – <i>Read: Does the question explain it?</i> Oh, that is so straight-forward. <i>Still include a description?</i> No, then I wouldn’t ... already told what ‘subjective’ is. Maybe if you perceive ... they don’t need to read the heading ... they can just ask the question. That makes complete sense and they already know ‘subjective’: “Okay, when they talk about life threat, this from their point of view”. No, then I wouldn’t then include. I would include a heading for ‘subjective’ then. NB! <i>Explanation: Manual and Training will be beneficial! For familiarity with risk assessment! Rating scale:</i> That’s ambiguous to me ... if the client – maybe like the client says: “Yes, I did experience a danger” or “No”, it might land up being a ‘yes’ or ‘no’. Okay, after your ‘yes’: “How much was it?” If they say no, then obviously you are not going to ... Confusion! NB! Our predominant population is under-educated. What are they going to understand of ‘mild’? What are they going to understand of ‘moderate’, ‘severe’ and ‘extreme’ ... so yes, we understand it but what do they understand of it? So what terminology could you use that fits in their frame? <i>0 to 10 rating scale?</i> I think it could be (<i>familiar with numerical rating</i>) ... I like that. Keep it simple. I don’t think you put the ‘mild’. Maybe put ... You keep that like it is there. When you have familiarised yourself with the manual, you will know: “Okay, was it a 1, 2, 3 or 4?”, I mean 0 being ‘not at all’ and 4 being ‘definitely’. Simple terms! “I was very very scared.” I would stick to (numbers) and then have ‘moderate’ in the <i>Manual</i> .
P6	<i>Perceived life threat</i> – That’s perfect because the example also. If there is a bit of ‘uncertainty’ or not sure about something, then the example I would say clears that up. I am comfortable. <i>Rating?</i> I don’t know with regards to them (registered nurses) but I would be comfortable with this.
P7	<i>Perceived life threat</i> – I don’t think that question is relevant. Sometimes you don’t even have to ask.

	The client will just tell, as the client is telling you the story. Not answering ‘question’; critiquing ‘relevance’ and struggling with opposing role to ‘counselling’ background. Do I have to ask the client those questions? Understands → observed to move from place of being overwhelmed to understanding and agreeing with format, structure, questions, etc.
P8	<i>Perceived life threat</i> – They should be able to define it because that’s like an introduction to psychology. Note: No, it is not too much information, not for the question, not for the examiner. It is not for the person who examines the victims.

6.2. Degree of control – Before

Degree of control Not at all A little bit Intermediate Strongly Very strongly

☐ ☐ ☐ ☐ ☐

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 7: Subjective Experience during the Event				
Degree of control	0.86	92.86%	0.370	4
Qualitative Comments	Relevant – subjective experience, identified risk factor, important predictor, but difficult to gage			
Recommendations	Clarity, ambivalent, unclear, meaning what?, <i>degree of control</i> over self?, the event?, define <i>degree of control</i> participant <i>experienced during the event</i> , or ‘control over what was happening’, participant might not be able to comment due to traumatised, primary health care professional may not be able to assess accurately, important that ‘interviewer’ and ‘participant’ understand this item			
Improved Item?	Modified, table format, possible question provided, example, to help clarify what is meant, guide administration Further explored with intended administrators, to improve understandability and accuracy of item			

6.2. Degree of control – After

Degree of control	None 4	Mild 3	Moderate 2	Severe 1	Extreme 0
Q: <i>To what extent did you feel in control during the event?</i> <i>E.g. Did you feel like you had no / slight / reasonable / significant / extreme control?</i>					

Participant and Item6.2	Understand-ability?	Administration?	Understand-ability? (trauma.client)	Response Format?	Manual? / Clarity?	Improvement?
				(administration)		
P1	√	√ – No, that’s fine.	χ – I doubt that. Rating degree ≠ more clear.	√ – Categories don’t think need to be different.	√ – Example in Manual.	Get examples in the manual – example to explain (items).
P2	√	χ – Why inverse? People working quickly, mis-score. Confusion.	χ – It can be confusing; ‘none’ is all of a sudden 4.	χ – ‘None’ = 4? ‘None’ must be 0.	χ – ‘None’ almost becomes ‘complete’	‘Powerlessness’ and ‘extreme’ becomes ‘control’; move.
P3	√	√ – Asked how it needs to be asked.	√ – Self-explanatory, but difficult concept to describe and	√ – I did see it (inversed). Not at all	χ – Could have situation (explains)	Change the wording around, not the numbers. Re-write: ‘full’

			explain.	confusing.	– rating?	and ‘extreme’.
P4	√	χ – Now it is going on the reverse.	√ – Yes, ‘powerless’. I would. Good synonym.	χ – I think <i>powerless</i> might be better.	√ – Then explain it in ‘control’.	I would like this changed, so I would rather change question.
P5	√	√ – Simpler.	√ – Simplified.	√ – Nice.	√ – Easily.	Eyes follow.
P6	√	√ – Avoided it? Had an influence?	√ – Example. “Could have ...”	√ – A little difficult.	√	“To what extent ... influence ...”
P7	√	√ – Time of the event there was nothing ... can do.	√ – There was no way to stop what was happening.	√ – Yes, ‘influence’ situation.	√ – Rate it? Make more sense	Yes, it is 4, no control/complete powerless.
P8	√	√ – I understand ... but I don’t know how to put it in words.	√ – ‘Influence’ is a little bit deep. It is a little bit broad.	√ – Make sense. Substantial – complex	√ – Use the word ‘change situation’.	“Were you feeling helpless?” “Take care of...”

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>Degree of control</i> – Like I said, it is the prerogative of each person administering the measure to make sure that the person understands what is being asked so I think that if they see the person is not really understanding, that they would attempt to explain it in their own way. Training? I think it comes with the understanding of a professional also. I think an example would be necessary there as well. Universal example to explain it to the client! For example, in a motor vehicle accident. Let’s say, degree of controls, let’s say they are on a gravel road and there is a kudu in front of the road so your degree of control is: Okay, you are too close. You can’t brake, you can’t swerve, no control. Moderate control, you can brake but you are still going to hit the kudu but you will get less damage because you have had the time to brake. A lot of control would be: Okay, now I am still far. The kudu might just-bump so let’s brake and swerve, so that’s a lot of control, so there was no result, so maybe something like that.
P2	<i>Degree of control</i> – People working quickly and might mis-score because of that. They might not see it. Inversion poses problematic and breaks consistency! NB! You are more at risk / you are less at risk – total ‘score’ needed. “To what extent did you feel powerless during the event?” “Did you feel like you had no control?” ... ‘slight’, ‘extreme’. So now then you actually use both the words. You use the ‘powerless’ in the question and in the example you would use the ‘not in control’. And then I mean, I don’t think that’s unclear then. Either one of the two, they are going to understand. Don’t think it is less understandable. Synonym for powerless? Consider? Training – administer or answer it in the negative!!
P3	<i>Degree of control</i> – I think is quite a difficult thing ... you could have a situation where they go: “But what if I did that or what if I did that ...” ... then I wouldn’t know where they would fall on this scale. I would change the wording around, not the numbers. I would just re-write the wording. The numbers are more what you look at. I feel that the numbers, it makes more sense to me if the numbers are all in line but the words are mixed up. Consistency, understandability, user-friendly.
P4	<i>Degree of control</i> – Note: What I like about the question is that it is not negative. You know, how we always tend to rate: “Did you think you were in danger?” “Did you feel powerless?” “Did you feel ...” and so this one has a bit of a positive side. I don’t know, personally subjective. Experts have said that this section specifically takes a very negative slant! Is it a significant concern? Either or ... Rephrase it and keep to the consistency!
P5	<i>Degree of control</i> – Maybe explain why it is inversed because I wouldn’t know why you have inversed it. Description in the Manual? So you are going to have to explain it ... forced to read the <i>Manual</i> . Prefer? If there was a manual that was required with this, I would read the manual. If you read the manual then there is no need to have the wording on top as well, then it can be a 4 to 0 scale ... you are looking to do this quickly. Consistency: Breaks flow of assessment. Put this at the bottom ... like here? Consider: Rewording! One of the most important features. Try <i>Manual</i> .
P6	<i>Degree of control</i> – Suggestion: “Do you think you could have done something to influence it and then to what extent?” or more comfortable with definition: “To what extent do you feel, you could influence what was happening?” or “... you have changed what has happened?” Wording ... I don’t think that needs too much of a re-working. Format: Inconsistent? If maybe then we move it to the end. ‘Powerlessness’? Everyone would understand. “To what degree did you feel powerless?”

	‘Helpless’, ‘powerless’. ‘You could have helped the situation, you couldn’t have’. Prefer? ‘Powerlessness’, I think would work better.
P7	<i>Degree of control</i> – NB! What are you going to rate it now? Does it make more sense now? Yes, it is 4, no control, was complete powerless. Need the <i>Manual</i> for the rating to become clearer? Ja, ja.
P8	<i>Degree of control</i> – You are helpless, you feel despair. Improve? “So do you think that you were able to change the... or to what degree did you think that you could change the situation?” That’s nice. “ Did you have control of ... ” Nice one. “Do you think you could change the situation?” immediately they will know that: “Okay fine, maybe I could change the situation, maybe I couldn’t change the situation there”, so I think that they will understand. Sensitivity? Re-traumatise or imprint? The word ‘ <i>substantial</i> ’ sounds hard. It sounds complicated. It is difficult. It needs a dictionary. Classifications!

6.3. Dissociation – Before

<i>Dissociation</i>	Not at all	A little bit	Intermediate	Strongly	Very strongly
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 7: Subjective Experience during the Event				
Dissociation	0.71	85.71%	0.370	4
Qualitative Comments	Relevant – early symptom, identified risk factor, common in clients with PTSD			
Recommendations	Clarity and understandability – difficult term for psychological and/or non-psychological professionals, distinction between <i>dissociation</i> during the event and after the event, consider examples or a brief description, few items to clarify for ‘interviewer’ and ‘participant’, suggested rephrasing to simplify in Layman’s terms, ‘cannot clearly recall aspects of the trauma, standing outside body, watching the trauma happen’, multiple language set? Administration – query ability of primary health care professionals to measure this accurately, also ease and straightforwardness?			
Improved Item?	Modified, rephrasing implemented, <i>feel detached/removed/not a part of it, in a dream or in slow motion</i> , to clarify item for administrators Administration – table format with question examples, reworded, suggested rephrasing implemented Consider manual for problematic items – definitions, explanations, meanings, and/or instructions Further explored and tested with intended administrators			

6.3. Dissociation – After

Dissociation	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
Q: To what degree did you feel detached / removed / or not part of the event? <i>E.g. Did it feel as if you were in a dream or in slow motion?</i>					

Participant and Item6.3	Understand-ability?	Administration?	Understand-ability? (trauma.client)	Response Format?	Manual? / Clarity?	Improvement?
				(administration)		
P1	√	√ – Out of body experience.	√ – Easiest way for them to understand; “out of body experience”.	√ – Could work as well. √ – rating, difference.	√ – Good definition, slightly (complex).	With the “out of body experience” example added, dumb it down.

P2	√	√ – Out of body experience.	√ – “To what extent did you not feel a part of what was going on?” You were looking at it and not in it.	√	χ – Deals more with what it does, with its purpose than with explaining.	Detachment = difficult concept. Pretty good – “ <i>in a dream</i> ” or “ <i>not part of it</i> ”. Not going to be able to make clearer.
P3	√	√ – Feeling removed, like it is happening over there.	√ – “Not part of the experience” opposed to “the event”.	√ – Use the example, guideline .	√ – A little bit shorter; actually ... read.	Quite straightforward; I feel that you would know.
P4	√	√ – De-personalisation, de-realisation; see it a lot with ‘ <i>numbing</i> ’.	√ – I go more with the example than the ‘ <i>detached to or not to the event</i> ’.	√ – That’s good. It helps. All the examples!	√ – Would add to it – (definition) ambiguous	I am happy with this; if I didn’t know, that would have made more sense
P5	√	√ – Needs definition, definitely.	√ – That explains it. “... detached, removed ...”	√ – Same rating, in <i>Manual</i> .	√ – Question clarifies it.	Question makes it understandable.
P6	√	√ – Being detached; ‘dreamlike state’.	√ – Fine. People understand ‘ <i>in a dream</i> ’, ‘ <i>slow motion</i> ...’	√ – This I am comfortable with.	χ – A lot of big words for some.	Exclude definition in the Manual! Keep Example asked.
P7	√	√ – Maybe feel nothing going on but something is going on; after a moment ... saw or feel that something has been done.	χ – Yes, there are those people that will tell you: “Nothing happened”, I don’t understand	χ – “Did you feel as if you were in a dream or in slow motion?”	χ – Want to clarify when somebody feels like she was in a dream.	Something like ... and then I don’t know. Understands (Yes. Okay) explanation. NB! Training!
P8	√	√ – Understood perfectly.	√ – Because of the example.	√ – A very simple one	√ – I understand	I understand that clearly.

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>Dissociation</i> – I think it is a good definition, but I think that it might be slightly complicated for everybody to understand. It is a text book example, but it is not communicated that well, I think, to normal layman. There is nothing wrong with the definition, but I think if you could dumb it down maybe into different words. Ratings – especially since you elaborate how aware of their surroundings they were and how unaware. I think that makes a big difference, bringing that into the explanation. I think ‘dissociation’, ‘control’ and ‘threat of life’ is more difficult to explain. NOTE: Administrators understandability vs their idea of trauma individuals understanding!
P2	<i>Dissociation</i> – I don’t feel like I understand more of how the person is going to feel when they feel dissociated by reading the description here. I only feel that I understand more of what it is going to do or what it is doing. Want them to understand what you are asking not what that thing does. Valid! Yes, which should then be more focused on ‘how does the person feel’ when they are detached rather than on what the mechanism is! Nurse doesn’t actually have to know why they feel <i>dissociated</i> .
P3	<i>Dissociation</i> – Quite straight-f... especially the way the question is asked. I feel like then you would know what ‘ <i>dissociation</i> ’ means. <i>Manual</i> – You will still be able the answer the question without it. I think it gives you a good idea. I mean, you feel detached, removed or not part of the event. It is all ... the same sort of meaning, so I think you could pick it up. <i>Manual</i> – ratings: I think having like an explanation of each thing for this one especially is needed. It is more helpful. With the other items: I feel like they haven’t been necessary.
P4	<i>Dissociation</i> – Note: The idea around these questions is that you could actually throw in all of them and whatever the trauma individual hangs onto, it is still relevant. That’s good; it helps. As opposed to ... limit the Administrator to asking it only one way and the trauma individual being lost! I am happy with this. Now, how do you get ‘ <i>dream</i> ’ and ‘ <i>slow motion</i> ’ and you know ‘ <i>trans-like state</i> ’? Take the example here and include! Include it into the definition there. Rating? Not sure if the

	<i>'moderate'</i> one, if it explains. The <i>'transient dissociative quality'</i> threw me off. <i>'Estrangement'</i> is another term. NB! It does help a lot because I feel most of my <i>'mild'</i> would have been <i>'moderate'</i> . But <i>'moderate'</i> just needs a better definition! Understanding.
P5	<i>Dissociation</i> – Do you have to have the definition? I would maybe consider taking this definition out because you might cause more confusion and then keep ... look, the question is very well worded and you completely understand what <i>'dissociation'</i> is by the wording. More confusion: <i>'mastery'</i> , <i>'integrate'</i> , and <i>'assimilate'</i> .
P6	<i>Dissociation</i> – Rating? No, that's fine. Note: Example <i>question</i> is self-explanatory; people would understand <i>'in a dream'</i> , <i>'slow motion'</i> ... definition in the Manual is a lot of big words for some people to understand. Consider changing!
P7	<i>Dissociation</i> – Consider? Something like that and then I don't know anything. Maybe I feel nothing that is going on but something is going on, then after a moment, then I wake up. Then I saw or I feel that something has been done. NB! Yes, there are those people that will tell you: "Nothing happened", but I don't understand: "Did you feel as if you were in a dream or in slow motion?" Having trouble? Yes ... just want you to clarify to me when somebody feels like she was in a dream. Does she feel like there was nothing happening or ... it is a dream. Just a scared dream. Not clear and easily understood! Does not make sense: "in a dream". Flagged as a problematic item and needs to be reviewed thoroughly.
P8	<i>Dissociation</i> – word <i>'dissociate'</i> is difficult. It is an academic term actually. Just give a standard example of a traumatic experience and then just that sense of detachment or feeling nothing. Definition: It is more clear, but that one is more... The first definition ... the first definition that you wrote down there, it is very abstract. NB! Lay counsellor will understand the second one. "... therefore refers to the avoidance of pain..." Have to be clear what is meant!

Subjective experience during the event – Item Before

<i>Perceived life threat</i>	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>
<i>Dissociation</i>	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>
<i>Degree of control</i>	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>
<i>Strength of emotions</i>	Not at all <input type="checkbox"/>	A little bit <input type="checkbox"/>	Intermediate <input type="checkbox"/>	Strongly <input type="checkbox"/>	Very strongly <input type="checkbox"/>

The most salient emotion that the participant experienced during the event:.....

Code

6.4. Numbing – Added

Numbing	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
Q: <i>How much trouble did you have experiencing or expressing emotions?</i> <i>E.g. Were you stunned or in shock that you did not feel anything at all? Or to what degree did you feel emotionally numb or have trouble experiencing any kind of feeling / emotion?</i>					

Participant and Item6.4	Understand-ability?	Administration?	Understand-ability? (trauma.client)	Response Format?	Manual? / Clarity?	Improvement?
				(administration)		
P1	√	√ – Example is a good way to ask that,	√ – It is fine just like that.	√ – Table worked really well	√ – Makes it clearer.	None – comprehensive enough, and understandable.
P2	√	√ – Not feeling of	√ – Did you feel	√ – Rating	√ – Read	None. “You felt

		emotions. Did you feel emotionally numb?	like you weren't feeling anything? Understood!	works for me; makes sense.	<i>Manual</i> in the beginning.	numb, you know, you didn't feel anything."
P3	√	√ – Not feeling anything.	√ – People know what (it) is.	√ – Fine; laid out.	√ – Scales ... good.	It is perfectly laid out.
P4	√	√ – I always put 'numbing' and 'dissociation' together because like they go.	√ – Can't feel; absence of emotion. That would be fine.	√ – Clarify! Definitely now, it does offer.	√ – Scale really comes in handy.	What does 'emotionally numb' mean? That would be fine (question).
P5	√	√ – "Expressing emotions?"	√ – "In shock?" Straightforward.	√ – Stunned?	√	Straightforward.
P6	√	√ – Not there ... don't feel; <i>numb</i> ?	√ – Understand. That's fine.	√ – No problem.	√	Easier to fit into ratings!
P7	√	√ – It is like you don't feel anything happens. You ... feel nothing.	χ – No feeling. Understand? No. Joh! Maybe it is me.	χ – Just way have to say it to the client.	χ – Difficult format! Reword?	Will exclude them. Training? Better understand?
P8	X	√ – 'Dissociation' and 'numbing' are very similar.	√ – It is very clear.	√ – A hundred percent.	√	A pause of emotion. Coping mechanism.

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>Numbing</i> – none.
P2	<i>Numbing</i> – With 'numbing': "You felt numb, you know, you didn't feel anything. You didn't feel sad, you didn't feel happy, you just felt like 'bluur'" and they just get it much easier. Because 'stunned' and 'shock' is once again the reason why you felt numb. It is not actually a description of the feeling 'numb'. ! More 'emotionally numb or didn't experience any kind of feeling or emotion'. So that 'or' is a better example for me. NB! Manual – Note: I would read it in the beginning as a manual but ... as a user tool, I won't. I won't refer to that. It stands on its own ... the risk assessment / questionnaire , which is nice.
P3	<i>Numbing</i> – I think maybe giving ... explaining the different scales ... would be good for the client if they were having problems understanding what you are asking.
P4	<i>Numbing</i> – none.
P5	<i>Numbing</i> – none.
P6	<i>Numbing</i> – none.
P7	<i>Numbing</i> – I will exclude them. Training? Do you think that might help better understand this ... a discussion group? Yes, that's definitely!
P8	<i>Numbing</i> – "How much trouble did you have experiencing or expressing emotions? Were you stunned or in shock that you did not feel anything at all or to what degree did you feel emotionally numb or have trouble experiencing the kind of feeling, emotion". I think it is clear. It is very clear.

6.5. Most salient emotion – Before

The most salient emotion that the participant experienced during the event:.....

Code

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 7: Subjective Experience during the Event				
Most salient emotion	0.63	81.48%	0.377	4
Qualitative Comments	Relevant – appropriateness of strong emotions, subjective experience, most important indication for the development of possible PTSD, identified risk factor, e.g. horror/intense fear, helplessness, numbness,			

Recommendations	powerless/mental defeat, anger, shame, strong predictors, gender associations? Understandability, descriptor is unclear, <i>salient</i> is uncommon, for both administrator and participant, define a few, list of examples, useful to specify emotions, help participant identify a feeling more easily, also assist administrator to obtain accurate information, assess 'intensity' or <i>strength of emotions</i> and duration separately
Improved Item?	Modified, table format, more user-friendly, example of how to ask question provided, guide administration, examples of possible emotions added, secondary emotions also listed, broader or wider-ranging options available, checkboxes to facilitate ease and time of administration Further explored with intended administrators, consider developing manual? for definitions, explanations, meanings, and/or instructions

6.5. Most salient emotion – After

The most salient emotion that the participant experienced during the event	None Nothing	Anxious Worried	Frightened Scared	Horried Shocked	Helpless Vulnerable
<i>Q: What feeling stood out the most / was more prominent / noticeable / significant for you during the traumatic event?</i> <i>E.g. Of all the examples listed to the right, which <u>one</u> emotion or feeling would you choose to best describe how you felt during the event?</i>	Fear Terror	Guilty Embarrassed	Ashamed Humiliated	Angry Aggressive	Stunned Surprised
	Lost Dazed	Numb Emotionless	Irritable Ill-tempered	Agitated Restless	Shocked Shaken

Participant and Item6.5	Understand-ability?	Administration?	Understand-ability? (trauma.client)	Response Format?	Manual? / Clarity?	Improvement?
				(administration)		
P1	√	√ – The emotion that you felt the most or the strongest.	√ – Good range, good as it is, some of them overlap, they are still different.	√ – A lot, necessary to keep all in, not confusing.	√	Can’t really see how to improve, range of trauma types to accommodate.
P2	√	√ – The biggest emotion you have? Nurse, school teacher, anybody would be able to explain that.	√ – ‘Prominent’, ‘noticeable’, and ‘significant’: if you understand those, understand ‘salient’.	χ – So similar, want to fill in more than one.	√	“What feelings did I have the most?” “...emotions... during the event?” Consider!
P3	√	√ – Much better (explained). That’s perfect.	√ – I don’t know how people will understand.	√ – Quite straight-forward.	√	Administrator, nice to have a copy; they plain.
P4	√	√ – First thing that you think ... felt.	√ – Yes, definitely.	√ – Some inversed.	√	I would put ‘ <i>surprised</i> ’.
P5	√	√ – That makes sense. Format: It is very nice.	√ – Now I understand; put them underneath.	√ – Now I under-stand.	√	I wouldn’t; my eyes were following that.
P6	√	√ – Feel the most	√ – Understand-	√ – Give	√ – Don’t	Not in difficult

		or most intensely during the event.	able. <i>Manual or assessment!</i>	you both options.	understand Example.	language to understand.
P7	√	√ – It is when the client have ... when this event is taking place, then the client is frightened ...	χ – Too many. <i>Format!</i> Client will be shocked. They feel frightened, like scared.	χ – Angry Frightened Helpless Horrified Numb Shocked	√ – They feel ... <i>Improve! Assume vs grasping concept?</i>	<i>50/50 understand of 'most salient emotion' – explanation! Concern: Assumptions!</i>
P8	√	√ – Now I know what it is.	√ – That's fine. <i>Example!</i>	√ – Makes sense.	√ – It is fine.	It is scary by looking at it.

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>Most salient emotion</i> – Because there is such a wide range of things that different people could be feeling and because of the different range of traumas, for example a rape person might feel ashamed mostly or guilty mostly, whereas a motor vehicle accident might be horrified or frightened. So I think it is necessary to include all of them, so I think also free-standing, that it is a good range.
P2	<i>Most salient emotion</i> – I would just give them the options and say: “Which one of those was it”. <i>Too many examples?</i> You can't have ‘shocked’ as an explanation for ‘horrified and shocked’. That's weird, but the rest, I think it is absolutely fine because this is big terms that holds a lot of emotions and here you have broken them down which is quite nice, also for the predictive value later in research in this tool. <i>!</i> Quite interesting is that you will be able to correlate some of these to these. <i>!NB!</i> “Okay, here is your choices ...”, so it becomes a multiple-choice thing so they don't have to think too much because ... so I do like it. <i>! Problems: shocked, stunned, surprised, horrified, frightened, irritable, agitated – too similar?</i> I mean, ‘horrified’ is just ‘very frightened’, you know and ‘stunned’ and ‘shocked’ I will use interchangeably. I know you have said it is a scale, but personally, maybe because I am Afrikaans, for me they just ... It is completely interchangeable. But these are all quite clear.
P3	<i>Most salient emotion</i> – I definitely think that as an Administrator, it would be nice to have a copy like this, whereas they have a plain copy. I think the only time that I would say I would need for the <i>Manual</i> would be for the rating and for this question because the rating is ... you can then give them further information if they want to say no, they don't know, what do we? They need to come back to the manual.
P4	<i>Most salient emotion</i> – I would put ‘surprised’ instead of ‘stunned’; inverse that. Same with ‘agitated’, I would put ‘restless’. I think more going layman kind of language. I would rarely say: “I was stunned”. I would more say: “I was surprised”. <i>Does the question explain it clearly how to ask it to the trauma individual?</i> Yes, the question does. <i>Potential problem?</i> Mentioned: ‘stunned’ and ‘shocked’, ‘surprised’. ‘Emotionless’, ‘numb’, that's fine. Okay, ‘agitated’, ‘restless’ ... ‘horrified’, ‘shocked’ ... but ... the rest I can explain. <i>NB!</i> Does it have to be one? Okay no, so I think I would need ... remind ... the most salient emotion at that point. (<i>Example</i>): I could have felt shocked. Now I am starting to feel guilt and what was I doing out so late ... I would need to clarify that! <i>Definition?</i> Yes, I would. I would keep them. I still like having the double. Keeping both in. Because they do explain. <i>NB!</i> At that moment ... I am thinking as a client ... they probably wouldn't be able to differentiate a lot and I would need more input ... even just looking at it ... “Okay, <i>guilt</i> – what do you mean?” or “ <i>embarrassed</i> – okay that makes sense”.
P5	<i>Most salient emotion</i> – Eyes follow directly, so I was like: “Okay ...” so the one that stands out the most, was it ‘none’, was it ‘anxious’, ‘frightened’, ‘horrified’, ‘helpless’. Oh, wait, there's more: “What feelings did I ...” I just answered that. Okay, ‘fear’, okay, so which one is it now? You see. <i>Confusion!</i> So maybe if you could maybe put that underneath it. <i>! Change: One straight line!</i> So ‘none’, ‘fear’, ‘last’. Is it downward like that? That's self-explanatory. That makes sense. I would put the question on top and then put the block there and then you: “Just one”, so all you are going to do is you are going to maybe read it out to them and then tick. <i>Note:</i> As was in the beginning. <i>!</i> The heading on the top and this block, this whole block gets like this block – looks exactly like that block. <i>Administration: Easier!</i> So your eyes follow with it.
P6	<i>Most salient emotion</i> – <i>Short explanation will help: increase understandability.</i> It is very thorough. I don't think there is anything that you would feel that is not there.
P7	<i>Most salient emotion</i> – There are too many.
P8	<i>Most salient emotion</i> – It makes you think of things like ... but the thing is, the message here is very,

very clear. You can't be vague. Be straight to the point.

6.6. Strength of emotion – Before

Strength of emotions Not at all A little bit Intermediate Strongly Very strongly

☐ ☐ ☐ ☐ ☐

Item Description	CVR	% Agreement	CVR _{critical} Value	Mode
Item 7: Subjective Experience during the Event				
Strength of emotions	0.63	81.48%	0.377	4
Qualitative Comments	Relevant – identified as risk factor, subjective experience, important indication for the development of PTSD, assess ‘intensity’ or <i>strength of emotions</i> and duration separately Clarity – item is unclear, what is meant by <i>strength of emotions</i> ? Understandability – more useful term, rating or response format is confusing, make it clear for test users, expressed or suppressed? Administration – ensure ‘interviewer’ and ‘participant’ understand what is meant, consider <i>severity of emotions experienced</i> , useful to specify the emotions, examples in brackets (i.e. <i>fear, anger, horror</i>), on a scale (1 no emotion – 10 extreme emotion)			
Recommendations				
Improved Item?				
	Modified, table format implemented with option as to how to ask item, facilitate appropriate administration, ‘degree’ and ‘how strong’ was the feeling were used to explain <i>strength of emotions</i> , 0 – 10 scale applied (0 = none, and 10 = extreme)			

6.6. Strength of emotion – After

Strength of emotion	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: You just answered (e.g. anxious / frightened / horrified / helpless, etc.). To what degree did you feel (e.g. anxious / frightened / horrified / helpless, etc.) this emotion?</i> <i>E.g. How strong was this feeling of (e.g. anxiety / fear / horror / helplessness)? On a scale from 0 – 10, where 0 is the absence of the emotion and 10 is the most you have ever felt this way.</i>	0	1 – 3	4 – 6	7 – 9	10

Participant and Item6.6	Understand-ability?	Administration?	Understand-ability? (trauma.client)	Response Format?	Manual? / Clarity?	Improvement?
				(administration)		
P1	√	√ – Self-explanatory, how intense emotion was, how strongly you felt it.	√	√ – Would not have considered Like – personal scale, into set scale.	√ – Also free-standing (ratings / degrees), very well done.	None – great just as it is, not confusing.
P2	√	√ – Like example.	√ – The example	√ – Scaled	√	Reword: On a

		Table – not confusing; don't need to like this.	would be my question that I would use.	Table is not confusing.		scale from 0 to 4 where 0 is in the absence.
P3	√	√ – The severity of emotion.	√ – How strong was it?	√ – Sense, completely	√ – It is very clear.	Yes, no, that's perfect.
P4	√	√ – Self-explanatory!	√ – I prefer using this section.	√ – Used to.	√ – No problem.	Yes, that helps. (Format).
P5	√	√ – “To what degree or how strong” you could put in brackets.	√ – Not very educated won't understand ‘degree’.	√ – Rating scale, familiar with.	√ – Say 0 refers to ‘none’ or 1 to 3 ‘mild’.	Maybe explaining 0 being ‘none’. Continue? Circle
P6	√	√ – How intense.	√ – Just said.	√	√	Not confusing!
P7	√	√ – Agrees: “To what degree did you feel anxious or horrified ...?”	√ – Yes, they will understand. Consider: ‘to what degree’.	√ – And rating is fine? 0 to 10? Yes.	√ – 0to10? – Mmm. Is that okay? Yes.	Q – Yes; Q – Mmm... Concern: Long interview?!
P8	√	√ – Emotion ... it is overwhelming.	√ – Degree of emotion.	√ – It does.	√ – Makes sense.	Fine. Subjective and personal.

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>Strength of emotion</i> – I actually like the way that it is categorised because it gives you your personal scale but it fits it into a set scale as well. I think it is actually done really well.
P2	<i>Strength of emotion</i> – You see, if I was Administering this on a regular basis, I would naturally then just go to the ones that's my preference, like there is two options for the question and because I think in examples, I will naturally just ... I definitely like this as the question.
P3	<i>Strength of emotion</i> – Rating: fine the way it is? Yes. I wouldn't change it. 0 to 10, it is perfect. It makes sense. I think if you do training, then you would have that. Training!
P4	<i>Strength of emotion</i> – Would have 1 to 4 as ‘mild’? 5 – ‘moderate’ and 6 to 9 ... I think 6 always shows it is higher than ... just higher than saying it was ‘moderate’ and so I would prefer actually putting 5 and then that would be 1 to 4. Is this confusing? We don't want to complicate it too much but on the other hand, I am okay with it because now I am used to it, and so it helps. Training and a manual? I actually do like this format. If you put the 5 and ... Yes, I actually do like having that. Range? I think it would give you more of an understanding in a sense. NB! 4 never seems extreme ... 4 seems it is below. NB!
P5	<i>Strength of emotion</i> – I got confused: “Why is ‘none’, ‘0’, there, so which one is it then?” I am thinking do I take the top one. Or the bottom one? Would you prefer the ten point scale? I would keep it 0 to 10. I agree with you because some people might say: “My emotions were mixed. One minute I was a bit scared or not scared” and that might be a 5 to them. Wider range? I think 0 to 10 is perfect. The only thing that confused me was that.
P6	<i>Strength of emotion</i> – I would usually say: “When the event happened, did you...” “What did you feel?” Okay: “I felt anger”. “Was it very intense where you really just wanted to rip something apart or was it maybe you felt it but you didn't want to express it?” Then maybe rating scale. Table: Confusing? I don't think it is. It is fairly straightforward. I am comfortable with that. Fairly? It is understandable. There is nothing confusing. It makes sense. It doesn't confuse me. Suggestion: I think 0 to 10 is used more commonly, but I don't think that 0 to 4 would necessarily be that difficult to understand. Prefer? I think the 0 to 10 then might add a bit of ... I think you get more differentiation. Agreed! I am happy with it.
P7	<i>Strength of emotion</i> – none.
P8	<i>Strength of emotion</i> – none.

Item 7:**Social support – Added**

Social support		
Q: Do you feel comfortable to talk about what happened to you with your family and / or friends? <i>E.g. If you wanted to speak to someone, do you feel that you have someone you could talk to about what</i>	Y	N

<i>happened?</i>		
Q: Do you think your family and / or friends will be supportive? <i>E.g. Do you think your family and / or friends will be understanding?</i>	Y	N

Participant and Item7	Understand-ability?	Administration?	Understand-ability? (trauma.client)	Response Format?	Manual? / Clarity?	Improvement?
				(administration)		
P1	√	√ – maybe elaborate that to ‘who’ or ‘how many’ or ‘where are they’	√ – I think so, might also be important to explain	√ – Just also emphasise.	√	Explain: “Will they be supportive”, “Whether or not you will confide in them”.
P2	√	√ – Similar to this. “Your family, have they been there for you and your friends?”	√ – No, it is fine. Not confusing!	√	√	No, it is fine.
P3	√	√ – Who you are able to rely on.	√ – Asked nicely.	√	√	Maybe make it more specific.
P4	√	√ – “Whom you can go to for help?”	√ – “Probably most likely you have gone to?”	√ – I think it is more clarifying.	√ – Makes a lot of sense.	I understand that (two questions as stipulated).
P5	√	√ – Again, maybe a definition.	√ – They understand.	√ – Straight-forward.	√ – Small definition.	Guideline; not confusing. Prefer: Example
P6	√	√ – Family, friends, community.	√ – Understands ‘support’ on its own.	√ – Rephrase? Example.	√ – Com- fortable with that.	Maybe not ‘social support’ specifically!
P7	√	√ – The people that are around you ... support you from what happened to you.	√ – Trauma individual will understand it as well? Yes. Straightforward?	√ – Straight-forward?	√ – Straight-forward?	Appeared comfortable and happy with the question. No changes!
P8	√	√ – Family, etc.	√ – Friends.	√ – Sense.	√	Comfortable?

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>Social support</i> – Then maybe elaborate that to ‘who’ or ‘how many’ or ‘where are they’ and that type of thing, just to elaborate on how well and how big and how structured their support system is. I think that is a valid argument and a valid question !!!!! because I know for example, I had a client that was exactly the same way. She told one person and it was nobody in her family, so ...
P2	<i>Social support</i> – none.
P3	<i>Social support</i> – Just add that into that one (two questions combined). They will be newly traumatised. I think that it is important. I really think that <i>social support</i> in a traumatic event is important. I think maybe if they could just identify who their social support is. Change / rephrase / reword? Maybe it should be more a ‘yes’, ‘no’ ... and then: “Okay, who?” “So if you wanted to speak to someone, do you feel that you have someone that you can talk to?” “Yes”. “Who would be that person?”
P4	<i>Social support</i> – I think it is more clarifying: “This support you are getting, what kind of support are you getting? Is it one where you are able to talk to them about it or is it monetary support because you know you are in hospital” ... and clarifying sort of what exactly and also remembering there is that subjectiveness of not having to talk to ... it might not phase me ... not having someone to talk to ... might not phase me as much as having someone pay my bills as I am recovering ... something like that.
P5	<i>Social support</i> – The example becomes your preferred question. Bold that instead of the

	<i>'family/friends'?</i> And that's my only suggestion for that.
P6	<i>Social support</i> – NB! Maybe not ' <i>social support</i> ' but everyone understands ' <i>support</i> ' on its own and if you say: "Do you get support from family members, friends?" I think everyone would understand that. I am comfortable with that. Maybe rephrase? Consider?
P7	<i>Social support</i> – Consider: "The people that are around you that will support you from what happened to you".
P8	<i>Social support</i> – It makes sense a hundred percent and it is explained simple and it is explained to the point. Straightforward.

Item 8: General comments and recommendations

General:

Subjective Experience during the Event

1. Manual? (clarity? understandability?) (short definition of each item?)

Overall Format

Questionnaire / Risk Schedule

2. Opinion? User-friendly? Helpful?

Manual

3. Opinion?
4. Clarity? Understandability?

(simplify items? confusing? Prefer written instructions?)

Administration

5. Short training required?

Final

6. Any other last comments?

Item 8: General comments and recommendations

Participant and Item8	Understandability? (Item6 specifically) Manual / Clarity?	Overall Format?		Administration?	Final Comments?
		Risk Assessment?	Manual?		
P1	Short definitions – preferable (item6) Short definitions – with the stressors and the trauma.	Well put together, asks basic information, need to know, history, well-designed questions, straightforward.	Well laid out, step by step, good, instead of explaining it, prefer it this way	User-friendly – some suggestions, (but) easy to understand, not much that is complicated Well-designed questions – right questions.	Gap – make it understandable from a professional to a layperson. Easy to implement – examples and definitions.
P2	Definition example – right before. The three ' <i>stressors</i> ' and then before the ' <i>traumatic event</i> '	Question makes it clear, questions quite explanatory, straightforward.	You do need a <i>Manual</i> .	I find it quite straightforward, actually. User-friendly? Yes, I do.	People really don't understand that they mustn't debrief.

	also.				
P3	No, I think it is quite straight-forward by the questions that are asked.	I like it because I am also very systematic; I would use it.	I think it is easy to understand.	It has got a nice flow to it; I think administering it would be easy.	Too long? I don't think it will take that long.
P4	'Dissociation': example here, it helps me. The actual definition didn't seem comprehensive. It was very vague.	Too many definitions might mix things up. When you have examples, helps	Draws my eyes like the red, look out you know. Arrows.	It is user-friendly. It was just that part for the ' <i>significant stressors</i> ' having to give a bit more. Introduction!	I would like to know I am going into – this is where we are focussing now. Introduction!
P5	Definition: ' <i>subjective experience</i> '. The squares are perfect.	Explained in the question. Examples.	Brief and not content	Heavy. The italics is quite strong. Bold the headings.	Consider changing some formats.
P6	Definition of 'dissociation' – Manual (improve)!	Nothing difficult; straightforward	Understand able to everyone.	Easy to understand and work with format.	Administrator needs to explain properly!
P7	↑ Understandable? Look at information as overwhelming?	I think, to me it needs more understanding.	It is too much for me.	Maybe I don't understand some of the things.	But I think it is helpful also! Everything fine!
P8	Coping kind of thing. Make an example. Defining: "It is like a coping kind of thing". NB! ' <i>Transient</i> ': happened within 24-hours. NB!	Heading → Example → Actually ask.	That is fine; no problem. Instrument copied.	Just change that and/or reword it. Different terms might be different – across multiple disciplines. Same words but means different.	Exposed to a lot of things (doctor's field) – leave out! NB! More familiar and comfortable with experience; specialised.

Participant	Qualitative Comments / Recommendations – General for Each Item
P1	<i>General</i> – No, I prefer it this way because it is much easier to understand, where it relates to and I think it is easier to understand what applies where and everything whereas if you read it in just a text form only, you have to go and search for where it applies and in which way. So I think it is actually better as it is here ... Even if it is a bit longer and especially, I like the definitions that you have before the sections and I think I like the way that it is laid out with every question, like the definition and then the question and then how the rating scale works, so it takes you question by question and I think that is much better than with the usual testing manuals. <i>Short training session</i> – once-off training, introductory training, going through everything, making sure there are no questions, don't think it would be anything intense! with <i>Manual</i> – Familiarity, (test you would be using)!
P2	<i>General</i> – Okay, then the 'subjective', the 'perceived life threat', 'degree of control'? 'Dissociation'? Not going to give an example? Because the question makes it clear. I thought these questions were quite explanatory. And the rest, it is form like any other that you need to fill in. I don't like forms, to start with. <i>Short training session</i> – I think that it helps that you know what they are (example ' <i>dissociation</i> '). If people had training in trauma, then they wouldn't need that hour, you know, but if you have volunteers for instance at Life Line – they don't know any symptoms of trauma or anything like that. That would be – have to be explained to them. Tailor the training? – Those with psychological background as opposed to those that don't have any background? Yes ... maybe a psychologist that wants to use this questionnaire but she has already worked with trauma, she has the background you know, a training session will maybe irritate her ... whereas if you have a nurse ... that's not what she does, she will need the have a bit of a better understanding. !NB! Primary health care training! <i>Manual</i> – There's certain things that needs to be explained. I just find in general, like when I worked at Life Line, people really don't understand that they mustn't debrief ... curiosity gets the better of them and they want details, and they don't understand that that can be very traumatic for those patients. So my point with that is that you do need a manual for that. ! I think that the questionnaire

	<p>should be self-explanatory, that that doesn't have to be a fully-included in the manual because what's going to happen, I am going to read the first pages of the manual and I am going to glance at it and say: "Oh, this is just the questions". A written manual? "Important information to know before you administer the <i>Manual</i>". Then I will go through the intake and I will look at the questions and familiarise myself with it. It is not a bad thing to have, in the <i>Manual</i>, have the <i>questionnaire</i> or <i>risk assessment</i> with the little definitions of things. So that all your important information is right at the beginning? Is in the beginning and then if somebody has a specific question problem, because that's almost a general instruction, that they need to know before they even administer. Important instructions brought forward.</p>
P3	<p><i>General</i> – Would instructing '<i>significant stressors</i>' and this in a <i>Manual</i> with regards to preparing the trauma individual be needed ... that you give a little bit of an introduction of: "When asking these questions, prepare the trauma individual that you are not going to be asking him to explain things in detail. You just need them to simply answer 'yes' or 'no' because you understand it is a very difficult time for them, we don't want to re-traumatise them", you know ... empathic ... very caring. I think that would help. I also think it is very important for them to know what the aim is because even if they have gone through a trauma and they feel traumatised, they still might feel like they don't mind sharing it with you because you are a helping professional. Explaining to the individual that it is not a counselling session as such. It is more just for intake and so that maybe the counsellor, it will be spending time with you, can be more informed. NB! NOT to deprive them of therapy or 'would be' debriefing session! Problematic item and Format – contradicting roles! Short training session – Even if there is training involved, it shouldn't be intensive training; people don't have the time to accommodate everyone and to get everyone into one place. Y Manual – Manual needs to be read before the interview! (1) Understanding instructions, etc. (2) Maintain rapport. (3) No Manual used in the session. I like it because it has got for each question laid out. You can see how to answer it.</p>
P4	<p>Note: Not practical – follow-up by Administrator! <i>General</i> – Introduction! Not re-traumatising, not harming? So here, "... that there is not enough time to discuss all the questions in great length", so maybe schedule another session kind of. What happens?" <i>Short training session</i> – Explain purpose and aim of research, also role of administrators and trauma individuals! It is quite well explained. Explanation in the form of <i>Manual</i> or part of the training? <i>Manual</i> as well. I would put both. The training would give a greater idea as to ... hearing it and asking questions. Training = purpose and/or context! <i>Manual</i> – This is way better than ... well, for me ... just some visual guiding. I don't mind the length. Note: I really don't mind the length because it directs me quickly. It still directs me much quicker than it would be if it was just ... because I would have to start from the beginning, trying to find out what I am actually looking for ...</p>
P5	<p><i>General</i> – Contact information: When would it suit you for us to contact you?" ... to give them a little bit of control ... I like that you put the star there to show: Okay, this is where you are going to need to get additional information. It indicates it quite nicely. Terminology: Understand '<i>containment</i>'. Nurse? Explaining what '<i>contain</i>' means. NB! Coming to the end, that they are aware that there is going to be a termination. Nice. <i>Short training session</i> – But if your <i>Manual</i> is comprehensive, won't need the training. <i>Manual</i> – Understandable. Format of assessment / questionnaire: User-friendly and helpful? Bold and italics is quite strong. I would make the headings the bold. Maybe just bold. Change: "Please give me an example?" bold and italics. So ... bold, normal format, italics. The examples will be the italics and bold. (Distracting). In terms of the squares and that, they are perfect. They are understandable. The heading – maybe, I don't know – maybe put it in the middle so you can see it is a break. Format: The whole time, sense of consistency. "<i>Please note ...</i>" and "<i>Remember ...</i>" in bold maybe. Catches attention! Keep (red). Normal writing, except where want to draw attention. Easier to read. Questionnaire format: Very applicable. It makes complete sense! It needs to be a replication! NB! I think we need something like this and it is about time something has come out in South Africa! NB!</p>
P6	<p><i>General</i> – As long as the Administrator understands what they are explaining, then it is fine ... I think if you actually have to give it to the participant then it would make it ... it would make it a bit longer and maybe more pages and just maybe make it a little bit more difficult to administer. Tables: Length? I think it would make it only longer in terms of actual pages ... I don't think it would make it longer in terms of actually administering. Administrator comfortable with working with risk assessment. Recommended: Back to front. If they see it: "Oh, it is just two pages". I think it maybe even adds that easing their mind that I am not going to sit here for the next ... <i>Short training session</i> – I don't think a training session would be that necessary – more like a – I would say maybe like a discussion. NB! First mention of 'discussion group' – Wonder? Implies "difficult", etc. More</p>

	<p><i>equal? Open? Comfortable in sharing knowledge? 'Teaching' not favoured? vs giving / sharing / partaking knowledge?</i> NB! <i>Small groups of people? (aim!) At specific sites?</i> <i>Manual</i> – Basically it tells you exactly what to do. I think if you give this to someone, they should be able to ... administer this. With a bit of background information on it. <i>User-friendly</i>: This is what you are going to be using and this is telling you exactly where what goes, what it means, so I think this is perfect. <i>Easily accessible; able to locate different items quickly. Ease of administration! Include: Information on study! Brief introduction!</i> I am happy with that. You can even like give them these tools and then maybe to read through it at home and then we will have a chat tomorrow about it. NB! <i>Observation: People are put off by 'training' ... They are!</i></p>
P7	<p><i>General</i> – I think, to me it needs more understanding. In other words, it is too much for me because maybe I don't understand some of the things, but I think it is helpful also. <i>Short training session – Discussion group?</i> Yes. <i>Quicker?</i> Yes, it will be. <i>Questionnaire → Manual → Discussion group?</i> Or: <i>Questionnaire together with a Manual, work through the Manual ... beforehand ... been easier?</i> Yes, I think. Yes. <i>Manual</i> – Yes, yes it is. <i>Fine? With instructions?</i> But for me, don't see anything missing, because when come to each ... then I understand the question. NB! The <i>Manual</i> is right. You made the <i>Manual</i> right.</p>
P8	<p><i>General</i> – If for instance in primary health care, if you are trained to assess a patient like take the history, the <i>socio-economic</i> or the '<i>demographic</i>' also comes to part. For instance, write social history. Under social history, there is ... under social history, have ... like accommodation or socio-economic factors. NB! More lay ... explain it. NB! <i>Short training session</i> – I think it is needed. We need even sort of like a workshop or whatever. "Service ready on the tool". <i>Manual</i> – Needed!</p>

Summary

- *Comprehensive* → *thorough* → "well put together"
- *Straightforward* → *easy to administer*
- *Applicable / appropriate* → *objectively implemented* → "get the job done"
- *Accurate* → *measures what it intends or purports to measure!!!* → *Validity!!!* – *Content* – *Construct* – ???
- *Questionnaire* → together with the *Manual* → work through *Manual* → beforehand → *Questionnaire*, easier?
- *Discussion group?* → Different people's ideas ... makes you think about different things ... which might not have thought.

Appendix P



for tomorrow

SOUTH CAMPUS

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PTSD RISK SCHEDULE

Improved Version

Study explained		Questions answered		Consent signed		Referral information given	
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Date: YYYY / MM / DD

Interviewer:

Start time: 24:00 format

Item 1:**Contact information**

Name:

Date of birth: YYYY / MM / DD

Postal address:

.....

.....

.....

*Contact number(s):

Inpatient: Yes

Outpatient: Yes

*Significant other contact number:

.....

*Best time to contact telephonically:

**Item 2:****Demographic and socioeconomic information****Current age:**

Years	Months
-------	--------

Gender:

M	F
---	---

Ethnicity:

Black	Coloured	Indian	White	Other	(specify)
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Home language(s):

Xhosa	English	Afrikaans	Other	(specify)
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Education: Highest grade passed

1 – 12	Tertiary	Yes	No
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Employment:

Unemployed	Employed	(specify type of employment)
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Item 3:**Psychiatric and emotional history****3.1.**

Has the participant ever been treated for or diagnosed with any mental health disorder? <i>Q: Have you ever been to a nurse, doctor, counsellor, psychologist, or psychiatrist?</i>	Y	N
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<i>Diagnosis / Problem:</i>	<i>Clinician / Type of Treatment:</i>	<i>Date / When:</i>
E.g. anxiety, depression,	E.g. nurse, doctor, counsellor,	E.g. year
low mood, substance abuse	psychologist, psychiatrist, etc.	
suicide attempts, etc.		

3.2.

Has anyone in the participant's immediate family (siblings and parents) ever been treated for or diagnosed with any mental health disorder? <i>Q: Has anyone in your family (brothers, sisters, or parents) ever been to a nurse, counsellor, psychologist, or psychiatrist?</i>	Y	N
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<i>Relationship</i>	<i>Diagnosis / Problem:</i>	<i>Clinician / Type of Treatment:</i>	<i>Date / When:</i>
E.g. father, mother,	E.g. anxiety, depression,	E.g. nurse, doctor, counsellor,	E.g. year
sister, brother, etc.	low mood, substance abuse	psychologist, psychiatrist, etc.	
	suicide attempts, etc.		

3.3.

Has the participant experienced any other significant stressor(s) as a child?				
<i>Q: You do not need to tell me what happened. You can simply answer "Yes or No". Is that OK? Do you remember any negative event or experience when you were a child?</i>	Y	N	<i>Please give me an example.</i>	(e.g. negative parenting experiences or any other experience they see as negative during childhood)

3.4.

Has the participant experienced any other significant stressor(s) as an adult?				
<i>Q: Again, you do not need to tell me what happened. You can simply answer "Yes or No". Is that OK? Do you remember any negative event or experience as an adult?</i>	Y	N	<i>Please give me an example.</i>	(e.g. divorce, retrenchment or any other experience they see as negative during adulthood)

3.5.

Is the participant experiencing any significant stressor(s) currently?				
<i>Q: Again, you do not need to tell me what happened. You can simply answer "Yes or No". Is that OK? Are you experiencing any difficulties at the moment?</i>	Y	N	<i>Please give me an example.</i>	(e.g. divorce, retrenchment or any other experience they see as negative that is current)

Item 4:

4.1.

Trauma history

Has the participant experienced any traumatic stressor(s) as a child?				
<i>Q: You do not need to tell me what happened, as I know this must be very difficult for you. You can simply answer "Yes or No". Is that OK?</i> <i>Do you remember any traumatic event or experience when you were a child where you were hurt in any way or felt you were in danger?</i>	Y	N	<i>Please give me an example.</i>	(e.g. physical / sexual abuse or any other traumatic experience before the age of 18)

4.2.

Has the participant experienced any traumatic stressor(s) as an adult?				
<i>Q: You do not need to tell me what happened, as I know this must be very difficult for you. You can simply answer "Yes or No". Is that OK?</i> <i>Do you remember any traumatic event or experience as an adult where you were hurt in any way or felt you were in danger?</i>	Y	N	<i>Please give me an example.</i>	(e.g. assault, rape, armed robbery, hijacking)

Item 5:

Description of the event

<i>Trauma type</i>	Hijacking	<input type="checkbox"/>	Home invasion	<input type="checkbox"/>	Armed robbery	<input type="checkbox"/>	Rape (attempted)	<input type="checkbox"/>
	MVA	<input type="checkbox"/>	Industrial accident	<input type="checkbox"/>	Assault	<input type="checkbox"/>	Rape (completed)	<input type="checkbox"/>
							Other (please specify)	<input type="checkbox"/>

Weapon used

Number of attackers

Physical injuries

Extent of injuries

N/A	<input type="checkbox"/>	None	<input type="checkbox"/>	Knife	<input type="checkbox"/>	Firearm	<input type="checkbox"/>
1	<input type="checkbox"/>	2	<input type="checkbox"/>	3	<input type="checkbox"/>	4+	<input type="checkbox"/>
Yes	<input type="checkbox"/>	No	<input type="checkbox"/>				
Minor	<input type="checkbox"/>	Moderate	<input type="checkbox"/>	Severe	<input type="checkbox"/>		
None / superficial wounds / bruises – None / little medical attention		Open wounds / lacerations – Medical attention is needed		Open / penetrating wounds (stab / bullet) – Overnight in hospital needed			

Item 6:

6.1. Perceived life threat

Subjective experience during the event

Perceived life threat	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
<i>Q: How great did you think the danger was that you would die?</i> <i>E.g. Did you feel that you were in no / slight / reasonable / significant / unbearable danger?</i>					

6.2. Degree of control

Degree of control	None 4	Mild 3	Moderate 2	Severe 1	Extreme 0
<i>Q: To what extent did you feel in control during the event?</i> <i>E.g. Did you feel like you had no / slight / reasonable / significant / extreme control?</i>					

6.3. Dissociation

Dissociation	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
Q: To what degree did you feel detached / removed / or not part of the event? <i>E.g. Did it feel as if you were in a dream or in slow motion?</i>					

6.4. Numbing

Numbing	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
Q: How much trouble did you have experiencing or expressing emotions? <i>E.g. Were you stunned or in shock that you did not feel anything at all? Or to what degree did you feel emotionally numb or have trouble experiencing any kind of feeling / emotion?</i>					

6.5. Most salient emotion

The most salient emotion that the participant experienced during the event	None Nothing	Anxious Worried	Frightened Scared	Horried Shocked	Helpless Vulnerable
Q: What feeling stood out the most / was more prominent / noticeable / significant for you during the traumatic event? <i>E.g. Of all the examples listed to the right, which <u>one</u> emotion or feeling would you choose to best describe how you felt during the event?</i>	Fear Terror	Guilty Embarrassed	Ashamed Humiliated	Angry Aggressive	Stunned Surprised
	Lost Dazed	Numb Emotionless	Irritable Ill-tempered	Agitated Restless	Shocked Shaken

6.6. Strength of emotion

Strength of emotion	None 0	Mild 1	Moderate 2	Severe 3	Extreme 4
Q: You just answered (e.g. anxious / frightened / horrified / helpless, etc.). To what degree did you feel (e.g. anxious / frightened / horrified / helpless, etc.) this emotion? <i>E.g. How strong was this feeling of (e.g. anxiety / fear / horror / helplessness)? On a scale from 0 – 10, where 0 is the absence of the emotion and 10 is the most you have ever felt this way.</i>	0	1 – 3	4 – 6	7 – 9	10

Item 7:

Social support		
Q: Do you feel comfortable to talk about what happened to you with your family and / or friends? <i>E.g. If you wanted to speak to someone, do you feel that you have someone you could talk to about what happened?</i>	Y	N
Q: Do you think your family and / or friends will be supportive? <i>E.g. Do you think your family and / or friends will be understanding?</i>	Y	N

Yours sincerely

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