

UNIVERSITY OF THE WESTERN CAPE

Faculty of Community and Health Sciences

RESEARCH

Title: Exploring mental healthcare provider attitudes towards evidence-based practice in the treatment of post-traumatic stress disorder (PTSD) in South Africa

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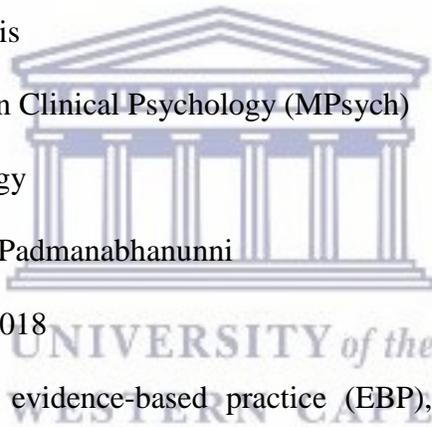
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DECLARATION

I declare that the mini-thesis entitled, “Exploring mental healthcare provider attitudes towards evidence-based practice in the treatment of post-traumatic stress disorder (PTSD) in South Africa”, is my own work. It has not been submitted for any degree or examination at any other university, and that all the sources I have used or quoted have been indicated and acknowledged by complete references.

Signature:



Date: 03/01/2018



ABSTRACT

Evidence-based practice (EBP) is the responsive process of making clinical decisions on behalf of the individual patient based on the best available research evidence, the clinician's expertise, as well as the context and characteristics of the patient. As stipulated in the 2011 scope of practice for the Psychology Profession (Government Gazette, 2011), offering evidence-based interventions to people with psychological and psychiatric conditions has become a legal requirement in South Africa. However, the adoption of EBP within the profession of Psychology has been slow, which has raised concerns. Related to this, numerous barriers have been identified as hindering the adoption of EBP in the field of Psychology, central among these being mental healthcare provider attitudes. The current study focused on investigating mental healthcare providers' attitudes to EBP in the treatment of Post-Traumatic Stress Disorder (PTSD) in South Africa and utilised a cross-sectional, descriptive, survey design using two self-reporting online questionnaires, namely the Evidence-Based Practice Attitude Scale (EBPAS) and a demographic questionnaire. Participants included registered clinical and counselling psychologists, social workers, and counsellors in South Africa and were recruited from various websites through purposive sampling. Findings indicated that participants generally held positive attitudes towards EBP in the treatment of PTSD and demographic characteristics, specifically age and race, had a significant impact on participants' attitudes toward EBP. Ethical approval was obtained by the Senate Higher Degrees Committee of the University of the Western Cape.

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CHAPTER ONE: INTRODUCTION

1.1. Background

This study investigated mental healthcare providers' attitudes toward evidence-based practice (EBP) in the treatment of Post-Traumatic Stress Disorder (PTSD) in South Africa. EBP refers to the process of integrating research evidence, clinical expertise, and patient preferences in order to make informed clinical decisions on behalf of the patient (Spring, 2007). Internationally, an evidence-based approach has boomed with general consensus that all therapeutic interventions, whether medical, psychological, or social, should be based on rigorous research (Craig & Sprang, 2010; Kagee & Lund, 2012). However, the publication of treatment models that have been proven to be effective in clinical trials does not automatically translate into clinical practice and a 'chasm' exists between research and practice (McHugh & Barlow, 2010). According to Kagee and Lund (2012), however, the motivation to adopt EBP is both an ethical and scientific imperative. In terms of ethics, the psychologist has a professional responsibility to make the best decisions on behalf of the patient based on sound research. In addition, Psychology claims to be a science and, therefore, should allow research and not tradition or intuition to inform practice. Thus, the urgency for adopting EBP is to improve both quality of service and accountability.

Internationally, there has been a growing concern that the adoption of EBP has been slow. This is true, even amongst PTSD practitioners, and the current study therefore aimed to understand the attitudinal barriers that prevent the adoption of EBP in the treatment of trauma. To remedy this situation, many international mental health service providers such as the World Health Organisation, the National Institutes of Clinical Excellence in the UK, and the National Institutes of Health in the USA, have engaged formally in pledging their support. In South Africa there seems to be even less of an urgency to adopt EBP amongst mental healthcare providers (Kagee &

Lund, 2012). Adopting EBP in South Africa is vital as it can assist in offering cost-effective services given that symptom reduction and normal functioning are achieved at a much faster rate. EBP is also helpful in best allocating scarce psychological resources, which yield the greatest benefit to patients, in an under-resourced developing country such as South Africa (Kagee & Lund, 2012). South Africa, with over 20 years of democracy, still has many social problems and Kagee (2014) challenges empirical Psychology with the responsibility of facilitating social development and the demand for increased access to psychological treatment and the desire of practitioners to offer best practice is the core of EBP (McHugh & Barlow, 2010).

Numerous research studies indicate a number of barriers preventing the adoption of EBP, including limited opportunities for training, resource constraints, misunderstandings about EBP, lack of communication between researchers and clinicians, and the lack of time and skill. Central amid these barriers, however, are negative attitudes towards EBP. Given this, the present study focused on attitudes towards EBP in the treatment of PTSD, since PTSD represents one of the priority mental health disorders in the country due to high incidences of trauma. The effects of untreated or ineffective treatment of PTSD are continued symptomology and an increase in comorbid mental and physical illness. In addition, it leads to a poor quality of life that negatively affects social and career function. In order to minimise these negative effects, it is imperative that EBP be used in treating PTSD.

1.2. Problem Statement

In South Africa, there is limited research on the attitudes of mental healthcare providers towards EBP in the treatment of PTSD. An understanding of these attitudes is necessary in order to address negative attitudes and design appropriate dissemination and implementation strategies.

Insight into trauma practitioners' attitudes will also give an indication of their readiness to implement new practices. The ultimate goal, however, is to increase the effectiveness of treatment and provide quality mental health services.

There are gaps in the current body of knowledge and more research is needed to identify barriers to adopting specific EBP and to compare self-reported practices to actual observed practices (McGovern, Fox, Xie & Drake, 2004). McHugh and Barlow (2010) suggest that a lack of data exists on the effective dissemination and implementation procedures for EBP. Therefore, further research on the process of dissemination needs to focus on contextual factors and how these affect the adoption of EBP in community programs (Garland, Kruse & Aarons, 2003). In addition, future studies need to explore specific programme types, organisational structures, and policies, and how these impact on attitudes in the adoption of EBP. Kagee and Lund (2012) were the first to conduct research amongst the directors of Psychology training programmes in South Africa in order to assess how EBP is taught in the programme. However, this study focusses on practicing psychologists, social workers, and counsellors, to determine their use of EBP, their understandings of EBP, and their attitudes towards EBP. The current study aimed to address the scarcity of South African literature on EBP and identifies barriers that prevent implementation and explores the willingness of clinicians to adopt EBP.

1.3. Aims and Objectives

The aims of this study were twofold; to investigate the attitudes of South African mental healthcare providers towards EBP in the treatment of PTSD and to determine if demographic factors are related to self-reported attitudes.

The objectives of this study were to investigate:

- clinicians' general attitudes to EBP in the treatment of PTSD;
- and, whether demographic factors are related to self-reported attitudes.



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CHAPTER TWO: LITERATURE REVIEW

2.1. Introduction

World-wide emphasis has been given to implementing EBP, regardless of the professional discipline. In this chapter, I explore relevant literature that explains and gives a broad understanding of what EBP is. I will outline why EBP has become a world-wide significant movement within the discipline of Psychology and what its significance is for Psychology in South Africa. The chapter also explores literature that explains what the research-practice gap is and identifies various barriers in the adoption and dissemination of EBP. Furthermore, it explores the relevance of applying EBP in the treatment of PTSD in the South African context.

2.2. Evidence-Based Practice in Psychology (EBPP)

Evidence-based practice in Psychology (EBPP) is defined as the “integration of the best available research with clinical expertise in the context of patient characteristics, culture and preferences and circumstances” (American Psychological Association, 2005, p. 5; Edwards, 2009, p. 191; Spring, 2007, p. 612). It involves the “conscientious, explicit and judicious use of current best evidence in making decision about the care of individual patient” (Law, 2000, p. 32). This should not be confused with empirically supported treatment (EST), which is the product of research, such as randomised clinical trials (Luebbe, Radcliffe, Callands, Green & Thorn, 2007; Wilson, Armoutliev, Yakunin & Werth, 2009). In short, EBP is the process of finding relevant research evidence and the skill to integrate it into clinical practice, while considering patient preferences.

EBP is visually conceptualised as a three-legged stool model (Spring, 2007; Lilienfeld, Ritschel, Lynn, Cautin & Latzman, 2013). The first leg represents best research that informs why a treatment works. The evidence is arranged hierarchically with meta-analyses and randomised

controlled trials on top, quasi-experimental studies in the middle, and correlational and uncontrolled case studies at the bottom. The second leg represents clinical expertise, which refers to the practitioner's intuition, attributes, and training. Wilson et al. (2009) describe clinical expertise as drawing on past experiences, developing a therapeutic alliance, and having a rationale for therapy choices. The skills include assessment, treatment planning, clinical decision-making, interpersonal expertise, continual self-reflection, and the ability to integrate research and patient preferences to find the best fit (Wilson et al., 2009). The third leg represents patient preferences and the patient's active participation in the management of their own wellness. Wilson et al. (2009) list patient factors to consider such as culture, geographic placement, occupation, individual differences, and the diagnosis. Norcross, Hogan, and Koocher (2008) expand on these differences to include, age, gender, sexual orientation, life stage, ethnicity, race, social class, religion, and worldview. EBP is the process of integrating all of these legs in order to inform clinical decision making (Edwards, 2009; Spring, 2007). This process needs not only specialised skills at the level of each leg, but also in the integration of all and is part of the challenge in the successful implementation of EBP. There is still much debate about whether each leg is of equal importance. It is argued though that, if clinical practice is informed by research, then the legs cannot be equal but must be in a hierarchical relationship, with research based evidence carrying more weight than the other legs (Lilienfeld et al., 2013). The challenge is how to ensure that one leg or function is not side-lined or neglected in the process.

2.3. Why is EBP important?

Healthcare has gone through major changes and this is largely due to access to research outcomes via the development in technology. Areas in which knowledge has improved is a general understanding of mental pathologies and effective interventions as well as an increased drive to

reduce error and increase positive outcomes in treatment (Huppert, Fabbro & Barlow, 2006; McHugh & Barlow, 2012). In addition, in recent years, the rising costs of healthcare has led to changes in policies that require greater levels of accountability by clinicians. Costs to patients and third-party payers, such as medical aid or insurance companies, now increasingly require proof of treatment efficacy, particularly in the international domain (Huppert et al., 2006; Luebbe et al., 2007). In sum, various reasons are cited for the necessity of using EBP, including reduced time in treatment, improved clinical outcomes, and ensuring a high standard of care and accountability (Lilienfeld et al., 2013; Spring, 2007). It is argued, therefore, that the need for EBP in Clinical Psychology is vital in advancing best practice (Huppert et al., 2006).

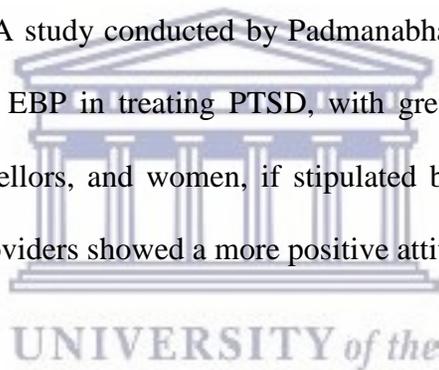
2.4. Why the Increase in Emphasis on EBPP?

Internationally, there has been a growing concern that the adoption of EBP has been slow (Aarons et al., 2010). Harvey and Gumport (2015) indicate that the prevalence of mental disorders is growing, yet access to adequate treatments is diminishing. The statistics of people with mental disorders receiving treatment was 25% for Great Britain, 34.9% for Australia, and in less developed countries it ranged from 14.6% to 23.7%. In terms of intervention, it was found that the pharmaceutical treatment of mental illness is increasing, while psychosocial treatment is declining. This is concerning, since this reduces symptomology but fails to address the core issues and, in the process, the individual is not taught skills that can act as a buffer for relapse prevention (Harvey & Gumport, 2015).

2.5. EBPP in South Africa

In South Africa, there is limited literature about EBPP and the literature that is available has produced mixed results. For example, Kagee and Lund (2012) found mixed attitudes toward EBP

that suggests a diverse set of training experiences exist in different institutions. Kagee and Lund (2012) suggest that this diversity in attitudes can, in part, be attributed to not being involved in international debates about EBP during the apartheid era or might indicate a lack of urgency to adopt EBP amongst psychologists. In another study among South African psychologists, the results showed that many psychologists accepted beliefs that had been disproved by research, opting rather to rely on intuition and experience (Kagee, 2009). This raises concern as patients have the right to treatment methods with proven effective interventions. Another concern is that, in not adopting EBP, the discipline of Psychology risks losing its credibility as a science-based discipline, which is not only a disservice to clinicians and their patients, but also to the profession of Psychology (Kagee, 2006). A study conducted by Padmanabhanunni and Sui (2016) found a global positive attitude toward EBP in treating PTSD, with greater willingness to adopt EBP amongst social workers, counsellors, and women, if stipulated by their regulatory body. They also found that older service providers showed a more positive attitude to implementing EBP.



As stipulated in the 2011 new Scope of Practice (SoP) for the Psychology Profession, adopting EBP in South Africa has become a legal requirement, and it is explicitly mentioned that clinical psychologists are required to offer evidence-based interventions to people with psychological and psychiatric conditions (Government Gazette, 2011). Another reason for adopting EBP is that it best allocates scarce financial and psychological resources that yield the greatest benefit to patients in an under-resourced developing country such as South Africa (Kagee, 2014; Kagee & Lund, 2012). Specifically, EBP assists in offering cost-effective services since symptom reduction and normal functioning are achieved at a much faster rate. Due to scarce resources, attention needs to be paid to the effectiveness of psychological services and evaluative strategies need to be in place. However, taking time from an already pressured demand for services will be

challenging and could act as a barrier to the implementation of EBP (Kagee, 2014). Nevertheless, the demand for increased access to psychological treatment and the desire of practitioners to offer best practice and avoid harm is core to EBP (Kagee & Lund, 2012; McHugh & Barlow, 2010).

The South African Stress and Health Study (SASH), a national survey, established that 30.3% of South Africans have a mental disorder at some point in their life. The study also established that 25.2% of those suffering with a mental disorder sought treatment, but only 5.7% received care from a mental healthcare professional (Herman et al., 2009). After 20-years of democracy, Kagee (2014) argues that Psychology in South Africa has failed in its responsibility to improve social development and meet the needs of its society. Given this, there has been an increased focus on determining the relevance of Psychology in South Africa. De la Rey and Ipser (2004) provide us with the historical context in understanding the relevance of Psychology debate in South Africa. Pre-democracy, relevance involved critiquing the violation of human rights and the oppression experienced during apartheid. Since 1994, psychological relevance entailed correcting inequalities such as changing the demographic profile of psychologists and responding to post-apartheid policies. Now, relevance calls for a further shift, which includes knowledge production that impacts social and economic development (De la Rey & Ipser, 2004).

The social problems facing post-apartheid South Africa have increased in terms of community violence, woman and child abuse, drug and alcohol abuse, high rates of communicable and non-communicable diseases, as well as high immigrant and refugee rates. Although there has been an increase of research in the past 20-years, this research has largely been conducted under the ambit of other disciplines and not Psychology (Kagee, 2014). Thus, Psychology in South Africa has missed an opportunity to make ample contributions and has not stayed true to being a science-

based discipline. Statistics from the 2001 World Health Organisation report states that mental disorders are one of the leading global burdens in the world at 12%. Herman et al.'s (2009) statistics from the SASH study records a lifetime prevalence of mental disorder in South Africa at 30.3%. In addition, Psychology has a role to play in improving health outcomes as aimed for in the 2011 National Planning Commission report; one of which is to address inefficient public health (Kagee, 2014). Without an evidence-based approach, Psychology will not make an impact on policy or acquire investment in mental health (Kagee & Lund, 2010). Therefore, it is imperative that Psychology taps in on its full potential, uses scientific means, and become more relevant in society as an agent of change.

2.6. Dissemination and Implementation of EBPP

2.6.1. Why the gap between science and practice?

The concept of the 'scientist-practitioner gap' refers to the division between psychologists who believe clinical practice should be based on empirical evidence and those that believe it is based on clinical experience and intuition. It speaks of a 'mismatch' between what scientific findings have proved are effective interventions versus continued ineffective treatments practiced in clinical settings (Cautin, 2011). According to Lilienfeld et al. (2013), it refers to the process whereby research findings inform clinical practice; where clinical decision-making is based on scientific evidence. Ideally, the reverse should also be true, where practice informs research (Tasca, Grenon, Fortin-Langelier & Chyurlia, 2014). However, what exists is that clinicians are not guided by research (Dozois, 2013) and research is not influenced by clinicians, which results in a divide or separateness between researchers and practitioners (Bloom & Tam, 2015).

Historically, this scientist-practitioner divide first became a concern when the American Psychological Association first set regulations that Psychology be a science (Cautin, 2011). Two polar opposite groups appeared and were perceived as having very different goals; researchers were seen to be interested in explaining and predicting human behaviour, whereas practitioners saw themselves as solving real human problems (Cautin, 2011). What informed their views of science was also different; namely, scientists were informed by objective experimental methods, whereas practitioners were informed by subjective interpretations of their practice and intuition (Cautin, 2011). This is cause for concern as there is no shortage of research findings, which lie at the core to utilising EBP. EBP is clinical decisions and practices that are based on the best available evidence with the overall goal of improved outcomes (Rousseau & Gunia, 2016).

2.6.2. Barriers to the dissemination and implementation of EBPP

To better understand and address the research-practice divide, one must identify the barriers that slow the adoption and implementation of EBP in clinical settings. Lilienfeld et al. (2013) encourage identifying the barriers as this is key to developing the ‘prescription’ to closing the gap, whereas ignoring them can lead to widening the gap. Greater success will be achieved when this understanding is gleaned from those who are partially in favour of and those who are completely opposed to EBP. This resistance is understandable as change is never easy and giving up longstanding practices for new ones is understandably difficult (Lilienfeld et al., 2013).

Various reasons are cited for this persistent gap. Green, Ottoson, Garcia, and Hiatt (2009) point the finger at tradition-bound practitioners who believe personal experience and knowledge of their patients is best. Law (2000) concurs, stating that practitioners feel their experience and expertise is not sufficiently acknowledged by researchers. Dozois (2013) refers to this as

clinicians placing more value on clinical rather than scientific evidence. Lilienfeld et al. (2013) terms this obstacle as 'naïve realism', referring to the belief that 'the external world is exactly as we see it'. This belief is based on a dependence on intuition rather than research outcomes in therapy decision-making. As a result, therapeutic success can be incorrectly assigned to all types of bias, including spontaneous remission, regression, effort justification, and multiple treatment interference.

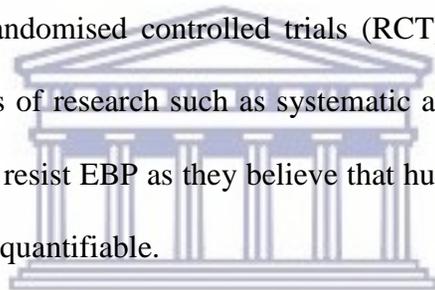
On the other hand, scientist feel a smugness about the value of their research and do not consider the needs, circumstances, and relevance to practitioners as well as the diverse populations they serve. Instead their target audience is, usually, other scientists, and articles are written using highly technical language, which creates social distance (Green et al., 2009; Lilienfeld et al., 2013). This 'social distance' of supply and demand, professional and personal identities, lies at the core of the gap, according to Green et al. (2009). Scientists have an unrealistic expectation that published research findings will automatically be used by clinicians and fail to translate research findings into real-world settings and this creates a divide of 'us and them' (Green et al., 2009; Lilienfeld et al., 2013). In addition, researchers do not include or value input from clinicians, maintaining this distance (Tasca et al., 2014). Tasca et al. (2014) state that it is a lack of communication between researcher and practitioner that causes a disconnect in the translation of research into clinical practice. Lilienfeld et al. (2013) views this differently, mentioning that critics of EBP ask for proof of therapies not yet ratified by research. As a result, they revert the 'onus of proof' where critics collect proof against and it is up to developers of new ideas to accrue evidence. In the process, critics fail to make the distinction between invalidated and unvalidated therapies. The difference being that invalidated therapies are those that, through

research, have been found not to work, while unvalidated therapies are those for which ample research has not yet been accrued to prove effectivity.

A barrier that clinicians struggle with is the belief that research findings are not always generalisable to real-world clinical settings, to the population, or to complex and unique cases (Dozois, 2013; Dozois et al., 2014; Gray, Elhai & Schmidt, 2007; Tasca et al., 2014). Lilienfeld et al. (2013) agree that this is a point of contention and explain that research follows a nomothetic approach that understands the world from group-probabilities, whereas clinicians work with individual uniqueness or from an idiographic approach. It requires special skill and is difficult for the therapist to translate group-findings to the individual. The clinicians, therefore, conclude that the two are incompatible and, as such, EBP is resisted. In addition, Tasca et al. (2014) acknowledge professional diversity of psychotherapy as a real challenge. This diversity includes an array of professionals (i.e. psychologists, psychiatrists, social workers, counsellors), a variety of clinical settings (i.e. private practice, community clinics, hospitals), and an assortment of diagnoses and variances in training.

Lilienfeld et al. (2013) highlight another barrier as the wide spread acceptance of myths and misconceptions of human behaviour. These false beliefs are spread via the media and even via the presenters of the training and supervision of clinicians. Lilienfeld et al. (2013) state that these myths can include misunderstandings about EBP itself, including that it is seen to be more compatible with Cognitive Behavioural Therapy (CBT) modalities and incompatible with others (Dozois et al., 2014). EBP stifles innovation, not allowing the clinician to try new therapies but, of course, research is always evolving and developing new innovations. Another misconception is that EBP follows a rigid manual script that applies the ‘one size fits all’ principle. However,

EBP manuals are to be regarded more as guidelines to be used at the discretion of the therapist and could facilitate a therapeutic alliance (Bearman, Wadkins, Bailin & Doctoroff, 2015; Lilienfeld et al., 2013). Bortrager, Chorpit, Higa-McMillan, and Weisz (2009) and Addis et al. (1999) mention that there is resistance to adopting treatment manuals as these are perceived as being rigid, uncreative, constraining, boring, and unfulfilling. Therapists are concerned that manuals focus on technique, minimize the importance of clinical judgement and rapport, will have a negative effect on the therapeutic relationship, and prevent genuine connection (Aarons & Palinkas, 2007; Addis & Krasnow, 2000; Bearman et al., 2015; Harvey & Gumport, 2015). Lilienfeld et al. (2013) and Dozois et al. (2014) list the belief that EBP does not include other types of research other than randomised controlled trials (RCT) as a barrier. While RCT are valued more highly, other types of research such as systematic and quasi-experimental research are also acceptable. Critics also resist EBP as they believe that human behaviour is unpredictable and therapeutic changes are not quantifiable.



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There is also the complaint that following EBP processes in clinical settings takes too much time (Garland et al., 2003; Law, 2000; Lilienfeld et al., 2013). Gray et al. (2007) found in their study amongst trauma clinicians that clinicians struggled to find sufficient time to learn and attend training and the high cost or geographic distance of training proved difficult to practicing EBP. In addition, Harvey and Gumport, (2015) mention that it takes time for clinicians to review new literature and when this is not granted or doable within a clinical setting, it becomes an obstacle to following the process of EBP.

Another obstacle is that clinicians need to develop skills such as searching, reading, and interpreting appropriate research literature and integrate this knowledge into practice (Law,

2000). Wilson et al. (2009) argue that following an EBPP approach is difficult and Lilienfeld et al. (2013) state that these skills extend to what and how to use training manuals. In addition, according to these authors, the sheer newness and volume of learning might just be too overwhelming for some clinicians. Finally, the know-how of setting up such a practice is lacking (Law, 2000). As Harvey and Gumport (2015) concur, there is a lack of training not only in terms of knowing how to provide the training, but also how much training is essential.

Aarons (2004) states that there is very little known about the attitude of clinicians towards adopting EBP into their everyday practice and Dozois (2013) considers clinicians' attitudes to EBP to be a primary barrier. An example provided by Dozois (2013) is that there is a fear that science will take away the 'human' aspect of Psychology. Frueh, Grubaugh, Cusack, and Elhai (2009) mention that negative attitudes, such as a lack of motivation and resistance to change, as barriers. According to Rogers (2003), attitude is a determinant to deciding to change one's practice and, therefore, vital for dissemination to happen. Research reveals that negative attitudes towards EBP is often not against the entire concept, but rather aspects of it. For example, therapists are supportive of the science, but have concerns that standardised manuals will negatively affect the process of building rapport, will devalue clinical judgement, and will not be sufficiently flexible to adapt to the individual case (Borntreger et al., 2009). Borntreger et al.'s (2009) study examined how different types of training in evidence-based treatments, namely manualised versus modularised, affects the attitudes of clinicians towards EBP. The results of the study revealed that modular training resulted in more positive attitudes to EBP.

Harvey and Gumport (2015) list barriers at the level of the patient and these include: transportation problems, coping with stigma, and inconveniences to patients, such as having to

arrange childcare or time off from work. The patient also needs specific skills to identify a treatment provider and meet obligations of making and keeping appointments. Another patient factor is having sufficient levels of motivation to adhere to the treatment plan. Ollendick (2014) adds to this list a patient's resistance and the expectation that the therapist must do all the work, resulting in the patient not completing homework. Other barriers include the presence of comorbid disorders and the patient's belief that symptom relief is very difficult or impossible to change.

McHugh and Barlow (2010) indicate that insufficient research has yet been conducted around the dissemination of EBP and there is no clear direction of what the best strategies are for successful adoption into a clinical setting. Frueh et al. (2009) adds that the lack of involvement at the systems and organisational level can act as barriers to the successful adoption of EBP. There is the requirement of supervision and feedback, a monitoring system that measures clinical outcomes and whether EBP's are used effectively, as well as accountability and incentives, which are often not provided.

2.6.3. Barriers in the South African context

The study conducted by Kagee and Lund (2012) amongst directors of South African Psychology training programmes highlighted a few barriers that prevent the adoption of EBP in the South African context. Some directors took on a critical approach towards science and felt restricted by the application of the medical model into Psychology (Edwards, 2009; Kagee & Lund, 2012). Those opposed to EBP were also critical of the methodological debate of qualitative versus quantitative research and viewed EBP as gaining evidence through quantitative means and their practice as qualitative and, therefore, EBP was seen to be in conflict (Kagee & Lund, 2012).

Other directors valued experience-based learning more than evidence-based outcomes. Directors also indicated an incongruence between EBP and certain theoretical orientations; for example, CBT was perceived as aligned with EBP, whereas a psychodynamic orientation was excluded (Kagee & Lund, 2012). They perceived EBP purely as treatment manuals that must be used indiscriminately (Edwards, 2009; Edwards, 2013). Another barrier found was the mismatch of ontology; in other words, between research conducted mostly in Western settings, which was seen as incompatible or not generalisable within the South African cultural context and history of apartheid (Kagee & Lund, 2012).

Further critiques of EBP were raised, such as that research studies are very diagnostic specific with strict exclusion criteria and, therefore, fails to address comorbidity and social problems which are often the reality in clinical settings (Kagee & Lund, 2012). Some directors saw EBP and what they perceive as its CBT approach as effective when treating Axis I disorders, but not effective in treating Axis II disorders (Kagee & Lund, 2012). Another issue raised was that gaps in research findings still exist, including for all interventions, for community-based interventions, and for diverse populations (Kagee & Lund, 2012).

The study also revealed that tensions exist in Psychology departments, such as different belief systems as well as differences on what constitutes evidence and what research methodology should be used (Kagee & Lund, 2012). As a result, training differs across institutions based on their particular beliefs. Generally, it seems that South Africa lags in discussions around the evidence-based movement and one possible reason for this could be the exclusion of South Africa during the apartheid era from world discussions on evidence for psychological

interventions (Kagee & Lund, 2012). However, it is essential that South Africa gets on board and offers cost-effective services in an already under-resourced setting.

In light of insufficient evidence, Kagee (2006) speculates that South African clinicians may be relying largely on clinical intuition and experience. This would be problematic as it means that there is a move away from being a scientific discipline, which would be unfair to the patients it serves. Kagee (2006) further explains that relying on intuition and experience is concerning as people suffering from mental distress and left untreated will in time recover, called spontaneous remission. As result, at first distress will be recorded as high on a continuum and later closer to the norm; this is called the regression effect (Kagee, 2006). Due to this, evaluating one's clinical effectiveness is not a reliable measure as improvements in symptomology is in part due to spontaneous remission and regression. Kagee (2006) also highlights the dangers of depending on experience which includes only paying attention to those factors that confirm your initial hypothesis and ignoring those that contradict it. This leads to overconfidence, which in turn traps one into greater reliance on confirmation bias. On the other hand, offering explanations in hindsight is not useful, particularly if unable to predict behaviour beforehand. Another bias in relying on experience is that clinicians cannot remember all aspects of every case, which can lead to judgmental eras. Kagee (2006) continues his concern of clinician reliance on intuition and experience by differentiating between actuarial and clinical judgements, where clinical judgements are decisions made on patient outcomes based on patient information and clinical experience or expertise, while actuarial judgements are decisions made on patient outcomes supported by research findings. Clinical judgements are, therefore, deemed inferior as they are susceptible to human error and fatigue (Kagee, 2006). This creates a case for South African clinicians to place greater reliance on using EBP to ensure therapeutic success.

Padmanabhanunni and Sui (2016) raise additional barriers, such as the lack of training opportunities in an understanding of EBP. This is coupled with unsupportive institutional support and limited financial resources, which hinder the implementation of EBP. The authors agree with other researchers that attitudes towards EBP remain a top indicator of the successful adoption of EBP (Padmanabhanunni & Sui, 2016).

2.7. EPB in the Treatment of PTSD in South Africa

In post-apartheid South Africa, PTSD remains one of the priority mental health conditions (Atwoli et al., 2013). The SASH study referred to earlier was conducted from 2002 to 2004 and is a national study of mental health in South Africa and reports high rates of PTSD in the country with a lifetime prevalence of 2.3% and a 12-month prevalence of 0.7% (Atwoli et al., 2013; Stein et al., 2008; Williams et al., 2007). It is estimated that 75% of the South African population has experienced at least one traumatic event in their life (Benson-Martin, 2013; Edwards, 2005; Suliman & Stein, 2012; Williams et al., 2007) and that 55.6% of South Africans have experienced more than one traumatic event, which increases the risk of developing PTSD (Williams et al., 2007). As Atwoli et al. (2013) state, the average number of traumatic events victims are exposed to is 4.3 occurrences and the SASH study reports that 3.5% of people exposed to a trauma will develop PTSD resulting in psychological interventions becoming necessary (Atwoli et al., 2013).

These high rates of PTSD are attributed to the prevalence of traumatic events in the country which includes violence, community unrest, criminal victimization, motor vehicle accidents, natural disasters, workplace accidents, or working in emergency service careers (Benson-Martin,

2013; Edwards, 2005; Suliman & Stein, 2012). Results from the SASH study revealed that the most common traumatic events were the unexpected death of a loved one (39.2%) followed by physical violence (37.6%), accidents (31.9%), and witnessing trauma (29.5%) (Atwoli et al., 2013). South Africa is renowned for the highest rates of violent crime such as murder, armed robbery, rape, and intimate partner violence in the world (Kaminer, Grimsrud, Myer, Stein & Williams, 2008). Violence is the second leading cause of premature deaths in South Africa, with a rate of 73/100 000 and interpersonal violence is the leading cause of injury (Doolan, Ehrlich & Myer, 2007). South Africa has a five times greater rate of homicide than the global average and it accounts for 56% of fatal injuries for young people between the ages of 15-34 years (Doolan et al., 2007; Kaminer, Du Plessis, & Benjamin, 2013). In Slopen et al.'s (2010) study of childhood adversities based on the SASH study's results, it was found that 41% of participants had experienced at least one childhood adversity and experiencing one adversity placed them at greater risk of experiencing more. As a result, over a third of the South African population is exposed to some form of violence during their lifetime (Kaminer et al., 2008). This is reflected in the study conducted by Padmanabhanunni and Sui (2016) as they found that the rates of trauma presented in clinical settings were as follows: the highest was sexual assault (40%), hijacking and robbery (23.3%), neglect and physical abuse during childhood (10%), domestic violence (5%), community violence (5%), and work-related trauma (1.7%). In short, it must be noted that a greater risk for developing PTSD is determined by trauma induced by violence such as rape and physical abuse, the witnessing of atrocities, and one or multiple childhood adversities (Atwoli et al., 2013; Kaminer et al., 2008; Slopen et al., 2010).

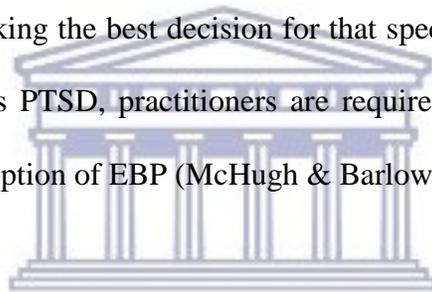
From these statistical figures we can see why South Africa is considered one of the most violent countries in the world. It is suggested by Williams et al. (2007) that the historical context of

apartheid and political violence is a major contributor to this situation. Other determinants are unemployment, high HIV/Aids rates, poverty, and continued social and economic inequalities. The General Household survey conducted in South Africa in 2007 indicated the 68% of children live in households below the poverty line and 38% of them live in homes without a working parent (Slopen et al., 2010). In addition, Atwoli et al. (2013) state that, despite a non-racial democracy implemented in 1994, criminal interpersonal violence has continued and is fuelled by rapid urbanisation and socioeconomic inequalities.

PTSD is characterised by, firstly, witnessing or experiencing a trauma. Secondly, re-experiencing the trauma through nightmares, flashbacks, or memories. Thirdly, persistent avoidance of feelings, people, or places linked to the traumatic event. Fourthly, negative alterations in cognition and mood. Fifthly, intense experiences of hyper arousal such as an exaggerated startle response or constant hyper vigilance. According to the DSM-5 Diagnostic and Statistical Manual of Mental Disorders, these symptoms must be present for at least one month but can last for many years (American Psychiatric Association, 2013). Atwoli et al. (2013) say that, if untreated, the symptoms last an average of 42 months. These symptoms can lead to significant impairment in social and occupational areas of function and secondary effects can include unemployment or being medically boarded. PTSD is often comorbid with other mental disorders such as substance abuse and mood and anxiety disorders (Benson-Martin, 2013) and relationships are often placed under great strain, particularly in the family and can result in divorce, separation, and poor parenting (Edwards, 2005).

Edwards (2013) lists a number of trauma-focused CBT treatments that have been proven through RCT to be effective treatments for PTSD. These include, to name a few, Fao's Prolonged

Imaginal Exposure, Cognitive processing therapy, Ehlers and Clarks Cognitive Therapy. Selecting the appropriate treatment based on RCT is that it gives a scientific base for the decision, however, choosing from this diversity of available treatments could be overwhelming and might require specific training, which makes successful implementation a challenge. The case study conducted by Edwards (2009), using Ehlers and Clark Model that was developed in the UK to treat PTSD in Africa, shows that Westernised models of therapy can be successfully used in an African setting. Intervention decisions, though, is just one aspect of the broader clinical decision making that EBP entails. Clinical decision making involves integrating the research evidence, considering the clinician's expertise, the specific context and characteristics specific to the individual patient, and then making the best decision for that specific patient. In the treatment of psychological disorders such as PTSD, practitioners are required to employ empirical rigor in clinical practice through the adoption of EBP (McHugh & Barlow, 2010).



PTSD has devastating effects both in the short-term and the long-term and may lead to a poor quality of life. Due to the severity of PTSD symptoms, it may lead to a greater need for mental and medical healthcare, social services, and financial costs. The persistent duration of PTSD symptoms is likely to severely impact the person's function in social and occupational tasks and negatively affect their contribution to society. The debilitating effects of PTSD require psychological interventions and places demand on an already under-resourced mental health system in South Africa (Kaminer et al., 2008). PTSD poses a great burden both on the individual and South African society and, therefore, it is expedient that clinicians use evidence-based interventions to ensure efficacy. This study focused on attitudes towards EBP in the treatment of PTSD, specifically, because it is a priority mental health disorder. The high rates of trauma and

PTSD make it a national burden and a knowledge of clinician attitudes will help to develop prevention and intervention strategies to address this challenge.

2.8. Conclusion

EBP has been supported by international mental health service providers such as the World Health Organisation, the National Institute of Clinical Excellence in the UK and the National Institutes of Health in the USA. There is no lack of current research to inform clinical Psychology in practice. Yet South African mental health professionals are not in-step with the rest of the world in incorporating empirical evidence in their clinical work (Kagee, 2006).

The high exposure to multiple trauma and violent trauma increases the risk of PTSD in the population. PTSD, if left untreated or treated ineffectively, cripples the individual with persistent symptomology as well as poor social and work functioning. It also affects society as the individual is unable to contribute to society and instead becomes a burden as they need special care. South Africa has scarce resources available for psychological therapies and this makes it important that those resources are used in a way that has the highest chance of succeeding and benefitting the patients. This is a matter of concern as a disservice is being done to the clinician, the patient, and the mental health profession. The advantages of EBP include more efficient outcomes than present treatment approaches, saving time, increasing relapse prevention, as well as a cost-benefit advantage (Stirman, Chrits-Christoph & DeRubeis, 2004). Green et al. (2009) argue that closing the gap between research and practice is possible if there is a change of thinking from 'how can we make practice more science-based' to 'how can we make science more practice-based'.



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CHAPTER THREE: THEORETICAL FRAMEWORK

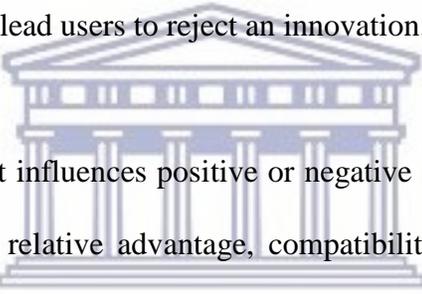
The current study's theoretical framework was Roger's (2003) Diffusion of Innovation Theory (DIT) and aimed to understand the attitudes and characteristics that predict the attitudes of trauma practitioners towards EBP in treating PTSD. This theory was well suited as it stipulates that attitude precedes decisions to try new practices and plays a major role in the implementation and use of an innovation (Aarons et al., 2010; Rogers, 2003).

3.1. Diffusion of Innovation Theory (DIT)

Rogers' (2003) DIT model has been widely used to understand the processes of how ideas, new knowledge, and practices are spread within a social system. The theory also assists in identifying barriers that influence the slow adoption of innovation. "Diffusion is the process by which the information about the innovation flows from one person to another over time within the social system" (Zhang, Yu, Yan, & Spil, 2015, p. 3).

The first three adoption stages of Rogers' (2003) DIT, known as knowledge-attitudes-practice process or innovation diffusion chain, fit well with the current study's aims to explore the attitudes of trauma practitioners. The Knowledge stage refers to the introduction and understanding of an innovation; the Persuasion stage is the process that determines either a positive or negative attitude toward the innovation; and the Decision stage includes activities that determine one's decision to either adopt or reject an innovation. Rogers' (2003) DIT has been used successfully in framing studies exploring EBP using the Evidence-based Practice Attitude Scale (EBPAS) (Aarons et al., 2010; Melas, Zampetakis, Dimopoulou & Moustakis, 2012; Nakamura, Higa-McMillan, Okamura & Shimabukuro, 2011). For example, Nakamura et al.

(2011) explored relationships between EBP knowledge, EBP attitudes, and demographic variables amongst therapists providing youth mental health services. They found that the first three adoption stages of Rogers' (2003) DIT, known as knowledge-attitudes-practice process or innovation diffusion chain, were particularly useful for their research. According to the theory, these processes predict that sufficient knowledge and favourable attitudes positively influences successful adoption (Nakamura et al., 2011; Rogers, 2003). Their findings partially supported Rogers' theory as they found a lack of knowledge of EBP led to negative attitudes toward EBP. There are two final stages to Rogers' (2003) DIT, which include the Implementation and Confirmation stages, where the innovation is being used. It has been found that, even at this stage, negative attitudes can still lead users to reject an innovation.

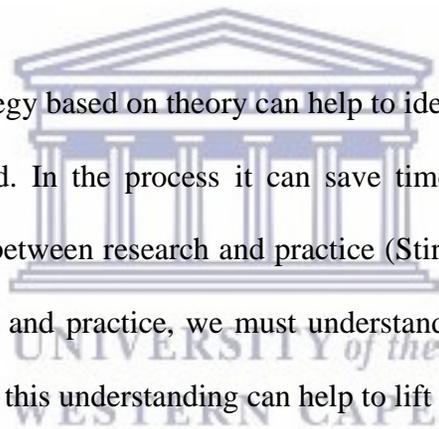


Another aspect of the theory that influences positive or negative attitudes towards an innovation are five characteristics; namely relative advantage, compatibility, complexity, trialability, and observability (Rogers, 2003). Relative advantage refers to how profitable or beneficial the innovation is regarded in comparison to what is presently used. Compatibility refers to how closely the innovation matches the adopters' own values, experiences, or needs, and also entails how it matches the social environment or context; the more closely it aligns, the more successful the adoption. Another factor is complexity; the easier and more user-friendly the innovation, the greater the level of adoption. Trialability refers to the possibility of personally experimenting with an innovation within the user's context. Finally, observability refers to how easily the outcomes of an innovation, or the benefits, can be seen by potential adopters (Rogers, 2003).

According to Rogers (2003), innovation diffusion in any social system is a process that takes time and is influenced by the integration of two means of communication; namely mass media and

interpersonal channels. The role of mass media is to create an awareness of the innovation and its potential and is particularly useful in the early stages of the innovation. On the other hand, interpersonal feedback from early adopters of the innovation greatly influences the social system to adopt or reject the innovation in the latter stages of the process. According to Green et al. (2009), this is difficult as the social system is constantly bombarded with new forms of mass communication and adopters' responses to interpersonal feedback varies from person to person. Zhang, Yu, Yan, and Spil's (2015) study explored factors that influence patients use of an e-health innovation and one finding was that mass communication was less effective than personalised communication in encouraging patients to use this new system.

Following a dissemination strategy based on theory can help to identify the most effective way an innovation can be implemented. In the process it can save time, be more cost-effective, and simultaneously bridge the gap between research and practice (Stirman et al., 2004). If we are to close the gap between research and practice, we must understand what prevents successful and speedy implementation. In turn, this understanding can help to lift some of the burden of disease.



CHAPTER FOUR: METHODOLOGY

4.1. Introduction

This study aimed to investigate the attitudes of practitioners toward EBP in the treatment of PTSD in South Africa. This chapter outlines the methodology of the study and information is provided regarding the research design, participants, procedure, method of data analysis, and ethical considerations.

4.2. Research Design

This research utilised a cross-sectional, descriptive, survey design, using two self-report online questionnaires to collect data. A distinct characteristic of this design is that they are carried out at one point in time in a defined population giving an overall picture as it stands at the time of the study (Bless, Higson-Smith & Kagee, 2006). Analysis, therefore, does not allow for strong findings to be made concerning a cause and effect relationship between variables. The advantages of a cross-sectional study are that it is inexpensive and takes little time to conduct (Levin, 2006).

Descriptive research sketches detail about individuals, groups, or situations, and describes what exists in the frequency of its existence and then aims to arrange the information categorically for understanding (Walker, 2005). A descriptive design in this study involves counting responses and then describing the results. The purpose of this design is to describe the attitudes of mental healthcare workers in South Africa towards the adoption of EBP in their treatment of PTSD.

According to Babbie (2013), surveys are best suited to collect information about attitudes and are easy to administer. The surveys used were self-administered which is suitable for professionals and it has the added advantage of giving access to respondents covering a wide geographic area (Nulty, 2008). The questionnaire used in social research is generally preferred because it is so adaptable. For one, objectivity is maintained by the distance between observer and the observed and, two, it can be replicated in the same way in another context (Bryan, 1984).

4.3. Participants

Participants who completed an online survey were comprised of 126 mental healthcare providers (i.e., clinical and counselling psychologists, social workers, and registered counsellors) who work with trauma and PTSD. All service providers were selected as they provide mental health services to trauma survivors. Inclusion criteria for participation in the study were: a) they must offer treatment to trauma survivors; b) have a minimum of three years' professional experience working with trauma survivors; and c) registration with their regulatory body. Participants were recruited through purposive sampling, a type of non-probability sampling, that involves participants being selected based on the researcher's knowledge of the population and the purpose of the study (Babbie & Mouton, 2011). This type of sampling was used as every suitable practitioner contacted had an equal opportunity to participate and were selected as they were more likely to provide the data required for this study (Babbie, 2013; Bryman, 2012).

Participants were recruited through the following open-access websites: www.psychotherapy.co.za; www.therapist-directory.co.za/listings/; and www.findhelp.co.za. These sites were used as members indicate their profession (i.e., clinical and counselling psychologists, social workers, and registered counsellors), membership with their regulatory

body's (e.g. HPCSA), and the specific psychological conditions they treat (e.g. PTSD). Through searching the above websites, a list of 680 practitioners who work with trauma survivors was generated.

An email was generated from the online survey software, Survey Monkey, and sent to the list of prospective participants. Included in the email was information about the research and an invitation to participate. The response rate was 20% and the final sample consisted of 126 participants, the majority of which were female (78.6%). Participants indicated their racial groups as White (78.6%), Black (9.5%), and Coloured (7.9%). A total of 91.3% were registered with a regulatory body and the highest level of education consisted of Doctoral degrees (9.5%), Master's degrees (63.5%) and other degrees (27%). Participants indicated that they used the following types of interventions in the treatment of PTSD: CBT (31.7%), Eclectic (24.6%), Other (14.3%), Psychotherapy (7.9%), EMDR (4.8%), Supportive (4.8%), Debriefing (3.2%), none (2.4%), Traumatic incident reduction (2.4%), Person-centered (1.6%), BWRT (1.6%) and TFT (0.8%).

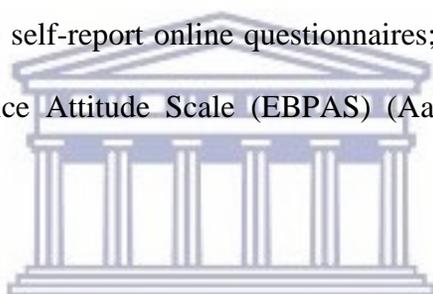
4.4. Procedure

The electronic survey was distributed via email to all participants who met the inclusion criteria and data was collected between August-October 2017. As previously mentioned, all prospective participants were invited to participate in the study via an email generated by the online program Survey Monkey, which included a brief description of the study and its purpose as well as the participation criteria and requirements. Participants were informed that participation involved completing two electronic questionnaires that would take approximately 10-15 minutes. In addition, the potential risks and benefits of participation were also outlined and participants were

given the opportunity to accept or decline participation on the consent form. Participants were informed that participation was voluntary and they had the right to withdraw from the process at any time without any negative consequences. Furthermore, participants were assured of anonymity and confidentiality of all information. The initial invitation was sent via Survey Monkey on 3 August 2017. This was followed by two reminders to those who had not yet participated on 18 August and 21 September 2017. Finally, a thank you note was generated on 20 October 2017 when the survey period closed.

4.5. Instruments

Data was collected through two self-report online questionnaires; namely a demographic survey and the Evidence-Based Practice Attitude Scale (EBPAS) (Aarons, 2004). Below is a brief outline of each instrument.



4.5.1. Demographic questionnaire (Appendix A)

The first instrument consists of ten demographic items (e.g. gender, age, race, relationship status, country of origin), professional items (e.g. registration with regulatory board, academic qualifications, number of years in clinical practice; average number of trauma patients per month), and items concerning the psychological interventions (e.g. CBT, psychodynamic psychotherapy, etc.) practitioners use in working with trauma survivors.

4.5.2. Evidence-Based Practice Attitude Scale (EBPAS) (Appendix B)

The EBPAS is a 15-item self-report measure that consists of four subscales: Appeal, Requirements, Openness, and Divergence. The Appeal subscale assesses the willingness of clinicians to adopt an EBP if it were intuitively appealing, could be used correctly, or was being

used by colleagues who were happy using it (Aarons, et al., 2010) (e.g. “If you received training in a therapy or intervention that was new to you, how likely would you be to adopt it if it ‘made sense’ to you?”). The Requirements subscale measures how willing clinicians are to adopt an EBP if it were a requirement by an agency, supervisor, or country (Aarons, et al., 2010) (e.g. “If you received training in a therapy or intervention that was new to you, how likely would you be to adopt it if it were required by your organization?”). The Openness subscale measures the extent to which the practitioner is willing to try new interventions and using more structured or manualised interventions (Aarons, et al., 2010) (e.g. “I am willing to try new types of therapy/interventions even if I have to follow a treatment manual”). The Divergence subscale measures the extent that practitioners believe that EBPs are not clinically useful and less important than clinical experience (Aarons, et al., 2010) (e.g. “Clinical experience is more important than using manualized therapy/interventions”). Finally, the measure also has a total scale which is an aggregate of all the scores and gives an indication of the global attitudes of clinicians towards the adoption of EBPs. Respondents indicated their level of agreement with each item on a five-point Likert Scale ranging from 0 (*Not at all*), 1 (*To a slight extent*), 2 (*To a moderate extent*), 3 (*To a great extent*), to 4 (*To a very great extent*). The researcher obtained permission from the original author (Aarons, 2004) to use the EBPAS instrument.

The EBPAS instrument, as developed by Aarons (2004), showed good internal consistency reliability scores. The total scale alpha score was .77 and the four subscales alpha scores were: Appeal .80, Requirements .90, Openness .78 and Divergence .59. The total and three of the subscales alpha scores showed good internal reliability, except for the Divergence subscale being <.60, but the items were still retained as they were regarded as important constructs. The EBPAS has been found to have sound content validity and internal consistency in additional studies. The

Cronbach's alphas for subscales have ranged from .66-.94 and total scale alpha scores ranged from .72-.82 (Aarons et al., 2007, 2010; Nakamura et al., 2011; Padmanabhanunni & Sui, 2016; van Sonsbeeck et al., 2015).

4.6. Data Analysis

Aarons (2004) provides instructions for computing the scores for each of the subscales and total scale of EBPAS. The EBPAS scores give an indication of the attitudes of practitioners to EBP and how receptive they are to adopt EBP, with higher scores indicating more favourable attitudes. The score for each of the subscales is calculated by obtaining a mean score for items loaded on the given subscale. The EBPAS total score is calculated by first reverse scoring the Divergence scale score and getting the overall mean (Aarons et al., 2007).

Data was copied from Survey Monkey to the Statistical Package for Social Science (IBM SPSS, version 24) to analyse data. The internal consistency of the measure, Cronbach's alpha, was calculated for the total scale score and four subscales scores. The descriptive statistics (means and standard deviations) for the EBPAS subscales and the EBPAS total score were calculated. Multiple regression analysis with EBPAS subscales and total scale as dependent variables and the demographic variables as predictors were conducted.

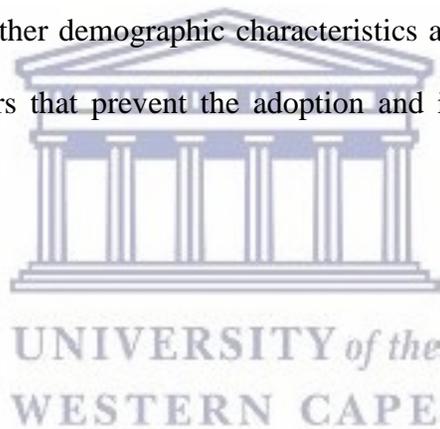
4.7. Ethics

This study received approval by the Senate Higher Degrees Committee of the University of the Western Cape. Participants were given an information sheet (Appendix C) specifying the value of the study and benefits to the general population. The research pledged anonymity and confidentiality and this was managed through the online program, by awarding response numbers

instead of names or email addresses attached to completed surveys. Participants were informed that participation was voluntary and that they were free to withdraw from the process at any stage of the study without any negative consequences. All participants had to indicate their consent for participating in the research by clicking ‘yes’ on the electronic correspondence generated by Survey Monkey (Appendix D).

4.8. Significance of the Study

This study addresses the scarcity of South African literature on EBP and it focused on practicing mental healthcare providers that treat PTSD and aimed to determine their attitudes towards EBP. It also aimed to determine whether demographic characteristics are associated with attitudes. In the process it identified barriers that prevent the adoption and implementation of EBP in the South African context.



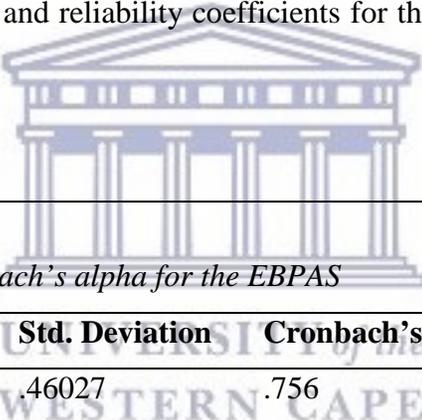
CHAPTER FIVE: RESULTS

5.1. Introduction

This study aimed to investigate mental healthcare providers' self-reported attitudes to EBP with a view towards identifying potential barriers to the adoption of EBP in the treatment of PTSD. In this section, the results of the study are presented. This includes descriptive statistics for the EBPAS as well as the results of the multiple regression analyses.

5.2. Descriptive Statistics

The means, standard deviations, and reliability coefficients for the EBPAS are reported in Table 1 below:



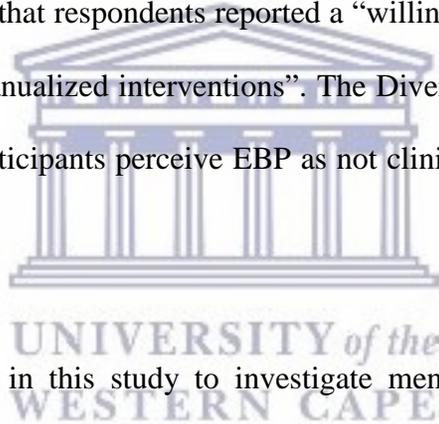
	Mean	Std. Deviation	Cronbach's Alpha
EBPAS = Total	3.3929	.46027	.756
Requirements	2.7814	.95805	.853
Appeal	3.8627	.54175	.561
Openness	3.3049	.77522	.839
Divergence	2.5467	.69420	.596

Note. Cronbach's Alpha acceptable range $0.7 \leq \alpha < 0.8$
EBPAS: Attitude to evidence based practice scale

The reliabilities of the scales in Table 1 are within an acceptable range. The EBPAS subscale alphas ranged from .56 to .85 with an overall scale alpha of .75 indicating high internal consistency and scale reliability. These results are similar to those achieved by Aarons (2004) and

Aarons et al. (2007). The Divergence subscale had the lowest reliability and similar results have been reported by Aarons (2004) and Melas et al. (2012), with alpha scores of between .56 and .59 achieved for this subscale.

The mean score on the EBPAS (3.39) indicates that respondents reported more global positive attitude towards adopting EBP in the treatment of PTSD. The Appeal subscale had the highest mean (3.86), indicating that respondents reported that they would be more likely to adopt EBP in relation to PTSD if it “made sense” to them”, “if they knew how to use it correctly”, and “if it was being used by a colleague who was happy with it”. The Openness subscale had the second highest mean (3.30), indicating that respondents reported a “willingness to try new interventions” and “use more structured or manualized interventions”. The Divergence subscale had the lowest mean (2.54), indicating that participants perceive EBP as not clinically useful and less important than clinical experience.



The EBPAS survey was used in this study to investigate mental healthcare providers’ self-reported attitudes to EBP in the treatment of PTSD. The results of the multiple regression analyses, with demographic factors as predictors of self-reported attitudes, are presented below.

Table 2.1			
<i>Total EBPAS</i>			
Model	Beta	t	Sig.
Age	-.195	-1.539	.127
Years	-.014	-.113	.910
Clients	.026	.277	.782
Gender = Female	-.060	-.647	.519

Race = Black	.011	.119	.905
Qualification	.075	.785	.434
Intervention=Eclectic	.043	.391	.697
Intervention=Other	.061	.558	.578
<i>Note. EBPAS: Attitude to evidence based practice scale</i>			

For the EBPAS Total scale, there was no significant relationship with any of the demographic characteristics.

Table 2.2			
<i>Subscale: Requirements</i>			
Model	Beta	t	Sig
Age	-.025	-.203	.839
Years	-.203	-1.658	.100
Clients	-.038	-.413	.680
Gender = Female	-.092	-1.005	.317
Race = Black	.160	1.689	.094
Qualification recorded	-.031	-.326	.745
Intervention = Eclectic	-.022	-.204	.839
Intervention = Other	.003	.027	.979

For the Requirements subscale, there were no significant relationships with any of the demographic characteristics.

Table 2.3			
<i>Subscale: Appeal</i>			
Model	Beta	t	Sig.
Age	-.258	-2.034	.044

Years	.117	.936	.351
Clients	-.047	-.493	.623
Gender = Female	-.051	-.543	.588
Race = Black	.002	.016	.987
Qualification recorded	.010	.104	.918
Intervention = Eclectic	.122	1.102	.273
Intervention = Other	-.002	-.021	.983

The Appeal subscale revealed age is significant and that EBP was more appealing for younger people compared to older.

Table 2.4			
<i>Subscale: Openness</i>			
Model	Beta	t	Sig.
Age	-.088	-.718	.474
Years	.141	1.156	.250
Clients	.066	.714	.477
Gender = Female	.015	.161	.872
Race = Black	.056	.588	.557
Qualification recorded	.176	1.871	.064
Intervention = Eclectic	.164	1.528	.129
Intervention = Other	.183	1.708	.090

The Openness subscale showed no significant association with any demographic characteristics.

Table 2.5			
<i>Subscale: Divergence</i>			
Model	Beta	t	Sig.

Age	.224	1.817	.072
Years	.029	.239	.812
Clients	-.047	-.504	.615
Gender = Female	.044	.485	.628
Race = Black	.190	2.005	.047
Qualification recorded	.020	.211	.833
Intervention = Eclectic	.102	.946	.346
Intervention = Other	.005	.043	.966

There was a significant relationship with 'Race' for the Divergence subscale, with Black practitioners reporting greater divergence between evidence-based interventions and current practice compared to White practitioners.



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CHAPTER SIX: DISCUSSION

6.1. Introduction

The aims of this study were twofold: namely to investigate the attitudes of South African mental healthcare providers towards EBP in the treatment of PTSD and to determine if demographic factors are related to self-reported attitudes. The findings of the study in relation to these two aims are discussed below.

6.2. Mental HealthCare Provider Attitudes Towards EBP in the Treatment of PTSD

With regard to the first aim, the study found that South African mental healthcare practitioners reported favourable attitudes towards EBP in the treatment of PTSD. This finding is consistent with prior research using the EBPAS (Aarons, 2004; Aarons & Palinkas 2007; Borntrager et al., 2009; Brown, Wickline, Ecoff & Glaser, 2009; Egeland, Ruud, Ogden, Lindstrøm & Heiervan, 2016; Padmanabhanunni & Sui, 2016; Salbagh, Jaglal, Korner-Bitensky, Rappolt & Davis, 2007; van Sonsbeeck et al., 2015). For example, a local study (i.e. Padmanabhanunni & Sui, 2016) investigating attitudes towards EBP in the treatment of PTSD among mental healthcare providers (i.e. clinical and counselling psychologists, social workers, and registered counsellors) working with trauma patients in local settings found global positive views towards EBP in the treatment of PTSD. The findings indicated that occupation, age, and gender were associated with attitudes. Social workers and counsellors, older, and female participants reported more positive attitudes towards EBP in the treatment of PTSD (Padmanabhanunni & Sui, 2016).

Another local study (i.e. Kagee & Lund, 2012) investigated the extent to which EBP is incorporated in South African Psychology training programs among 13 directors of these programmes and found mixed attitudes towards EBP. Reasons cited by participants for their

ambivalence was that they perceived EBP to be equivalent to a quantitative approach and aligned to CBT and, therefore, incompatible with their preferences for psychodynamic practices. Another barrier was what was perceived as an ontological mismatch; namely that research evidence is amassed in Western settings and this is seen as incompatible to a marginalised South African population.

Internationally, an online survey evaluated the attitudes of trauma professionals towards EBP using the EBPAS (Gray et al., 2007). The study found that more than 80% of trauma professionals indicated favourable attitudes towards EBP in treating PTSD. The main findings of this study was that age, those who were younger and those following a cognitive-behavioural orientation, held more positive attitudes. In a national survey conducted amongst social workers and psychologists, Craig and Sprang (2010) explored the use of EBP in the treatment of PTSD. They found that scientific evidence alone did not determine the interventions used in treating PTSD as there was a high usage of non-EBP methods of treatment, such as psychodynamic therapy, solution-focused therapy, and eclectic therapy. They also found that age, special trauma training, and a higher PTSD caseload were positive predictors of EBP. They concluded that it takes 'sets' of variables that predetermine the use of EBP.

Aarons (2004) investigated attitudes toward the adoption of EBP among health service providers (n=322) working with children, youth, and their families. Aarons (2004) reported overall more positive global attitudes among the sample. Individual characteristics, being an intern and having a higher level of education, were found to be a determinant of positive attitudes. Melas et al. (2012) investigated the attitudes of 534 medical doctors towards EBP and how adaptable the EBPAS are among different healthcare populations. They found the EBPAS to be an adaptable

instrument and medical doctors scored lower positive attitudes towards EBP than mental health service providers. They found that medical specialities were a determinant for attitude, with laboratory specialists showing lower attitudes than surgeons, pathologists, and general practitioners.

Borntrager et al. (2009) examined the attitudes of 55 mental health therapists' toward EBP before and after two types of EBP training, using two types of attitude instruments. They found that attitudes varied depending on how the questions were phrased; either framed in the context of treatment manuals or stated more generally. The result was that therapists did not hold negative ideas towards EBP, but rather with the use of treatment manuals. Furthermore, they found that training in the modular approach reported more positive attitudes after training and participants who received the standard treatment manuals training resulted in no significant change post-training. This highlights that certain aspects of an innovation may influence adoption. Nelson and Steele (2007) examined predictors of self-reported EBP use among 214 mental health practitioners in a United States national online survey. They found training in EBP, an enabling and supportive clinical setting, and practitioner's attitudes toward treatment research to be significant predictors of EBP use.

Nakamura et al. (2011) were the first to examine the relationships between EBP knowledge, attitudes, and therapist demographic variables among 240 public sector youth mental health service providers. They found no significant relationship between EBP knowledge and EBP attitudes. However, they did find that a lack of EBP knowledge related to more negative attitudes. They also found more favourable attitudes to EBP amongst those with higher levels of education and licenced practitioners. In addition, they found that those with higher levels of

education and those working in outpatient clinical settings showed greater evidence of knowledge of EBP.

Beidas and Kendall (2010) reviewed literature on training in EBP from a model of dissemination implementation; namely a systems-contextual (SC) perspective. The SC perspective states that dissemination implementation is a complex bidirectional process between therapist attributes and attitudes, patient variables, organizational support, and quality of training. They found that training influences therapist knowledge, attitudes, and perceived behaviour. However, in order to influence a change in behaviour, all aspects of the SC model need to be addressed. Furthermore, despite being trained in the ‘gold standard’ (i.e. workshops, manuals, clinical supervision), therapists still lacked in proficiency, treatment adherence, competence, and skill. However, when there was intervention at all the levels of the SC model (i.e. training, organization, and patient and therapist variables), proficiency was the result.

Another significant finding of the current study is that participants are more likely to have a positive view of EBP if it ‘made sense’ to them, “if they knew how to use it correctly”, and “if it was being used by a colleague who was happy with it”. Similarly, findings in other studies showed that having less clinical experience, (e.g. Aarons et al., 2010; Aarons et al., 2012; Melas et al., 2012), having higher education levels and being female (e.g. Aarons et al., 2010; Aarons, 2006; Egeland et al., 2016; Nakamura et al., 2011; van Sonsbeeck et al., 2015), as well as being an intern was positively related to intuitive appeal.

Aarons (2004) argues that the source of information about EBP is important as adopters are more easily persuaded by colleagues of its effectiveness, more so than by research. This indicates the

value of collaborative meetings with peers in order to aid changes in attitudes and beliefs about EBP (Aarons et al., 2012). Who these leaders, supervisors, and peers are as well as how possible adopters identify with them are important factors in terms of their influence with regards to EBP (Rogers, 2003).

Aarons and Palinkas (2007) through semi-structured interviews with child welfare service providers found a more positive attitude when there was a 'fit' with patient needs, personal experiences as a parent or practitioner, values and methods of the adopter, usual work-related tasks, and mission of the organisation. Rogers (2003) innovation theory stipulates that, where benefit to self is clear, this leads to a more favourable attitude towards an innovation. In this case, EBP was perceived as a benefit in that the person was learning a new intervention, was increasing their personal competence, was able to see positive outcomes, was able to provide skills in better organisations, and it provided a common language amongst practitioners (Aarons & Palinkas, 2007). The implications for having favourable attitudes is that these lead to an increased use of EBP in clinical settings or changed practice behaviour (Bearman et al., 2015; Nelson & Steele, 2007).

Worldwide emphasis is that mental treatment should be proven to be effective, efficient, and cost-effective and there is a common consensus that EBP is the means to achieve this. In the studies discussed above, there seems to be some common windows of opportunity to increase positive attitudes towards EBP. One such opportunity is offering training in EBP to students, interns, or professionals. Training will increase skills and produce positive attitudes. Many of the studies show that individual characteristics determine attitudes, such as being younger, female, having less clinical experience, higher education levels, as well as specific occupations.

Therefore, adoption and implementation strategies can target specific groups that remain ambivalent or opposed to EBP. Intuition, finding a ‘fit’ with patient needs, personal experiences, values, and treatment methods also produced more positive attitudes. As such, purposefully making these connections as part of dissemination strategies will facilitate more positive attitudes. The findings of this study of global positive views towards EBP are a first step towards change. As Stirman et al. (2004) stipulate, building positive attitudes is one of the ways to prepare for innovation and, therefore, these results are encouraging.

6.2. Demographic Factors and Attitudes Towards EBP in the Treatment of PTSD

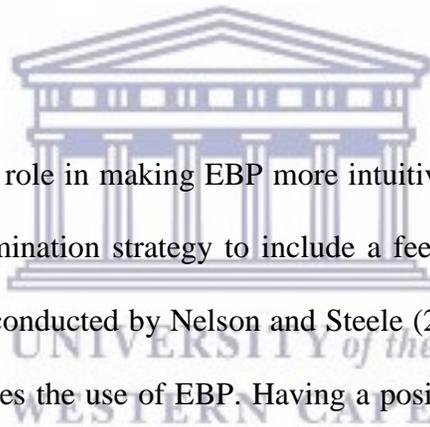
In relation to the role of demographic factors, this study found that age and race were related to attitudes towards EBP in the treatment of PTSD. In terms of age, it was found that a younger age was related to more positive attitudes towards EBP in the treatment of PTSD. This finding is consistent with international literature (Aarons & Sawitsky, 2006; Aarons, Sommerfeld, & Walrath-Greene, 2009; Egeland et al., 2016; Gray et al., 2007; Jette et al., 2003; Van Sonsbeek et al., 2015). Egeland et al. (2016), for example, investigated the psychometric properties of a Norwegian version of the EBPAS and examined differences in attitudes towards EBP among mental health practitioners. They found various individual factors to be predictors of attitudes towards EBP, including that younger practitioners showed more global positive attitudes. They suggest that the more experienced the practitioner, the less interest there is in trying new methods and a greater confidence in their own skills. Similarly, Van Sonsbeek et al. (2015) investigated the association of demographic variables and attitudes to EBP among 271 youth care professionals and found that younger participants showed less divergence between evidence-based initiatives and current practice. They suggest that younger professionals have been more exposed to EBP in their more recent academic studies and this accounts for more positive

attitudes. On the other hand, older participants might place more value on personal clinical experience and less on research outcomes. Gray et al. (2007) also found that younger respondents held more favourable attitudes towards EBP and suggest that it may be that older, more experienced practitioners are more self-confident in clinical decision-making and, therefore, less reliant on other opinions or research. It might also indicate that the older practitioners were trained pre-EBP era and have a different understanding of what evidence is or are unfamiliar with the process.

The present findings contrast with the results of the local study conducted by Padmanabhanunni and Sui (2016), where older age was associated with more favourable attitudes. The authors cite various possibilities for this result, including concerns of poor treatment outcomes, certain professional advantages for implementing EBP, or responding in a socially desirable manner. Another possibility to account for this difference is that the present study was conducted nationally, but more research is required to explore the differences in these results.

The implications for having favourable attitudes among younger people is to focus on graduate and internship training as knowledge and skill will not only increase positive attitudes, but also increase the adoption of new practices. This does not mean that older practitioners are ignored, instead professional training should target younger practitioners and improve attitudes. This compares with studies that compare attitudes before an EBP course and again after, where findings demonstrated an increase in positive views (Bearman et al, 2015; Borntrager et al., 2009; Nakamura et al., 2011). Bearman et al. (2015) found an even higher positive result with young students after training, compared to Borntrager et al. (2009) whose sample included clinicians who were older. However, training in EBP, that is both at graduate and professional levels, has

been proven by various studies to increase a positive attitude to EBP (Garland et al., 2003; Nelson & Steele, 2007). Although taking EBP classes does not instantly create positive attitudes, it can certainly act as a deterrent to negative attitudes. In addition, it also helps in exposing practitioners to EBP, increases knowledge of EBP, and increases confidence in its use (Nelson & Steele, 2007). One of the elements that makes EBP intuitively appealing, is knowing what to do, which produces positive attitudes to EBP. This is in keeping with Rogers (2003) DIT, which specifies knowledge as one of the stages necessary for adopters to develop positive attitudes and for the diffusion of an innovation (Rogers, 2003). A lack of knowledge is regarded as one of the greatest barriers against adopting EBP and, therefore, training addresses this barrier (Nakumara et al., 2011).



The social process plays a vital role in making EBP more intuitively appealing and, therefore, it would be expedient as a dissemination strategy to include a feedback loop in clinical settings. This is supported by the study conducted by Nelson and Steele (2007), which found that clinical setting factors strongly influences the use of EBP. Having a positive EBP culture in the clinical setting created by the influences of colleagues and supervisor's aids in the adoption and more positive attitudes towards EBP. This is consistent with studies on innovation diffusion and dissemination that specifies that adoption is a social process (Greenhalgh, Robert, Macfarlane, Bate & Kyriakidou, 2004; Stirman et al., 2004). Rogers' (2003) DIT mentions that there are five characteristics that lead to the adoption of an innovation, one being observability and it is through the observation of the successful use of a new innovation that makes it appealing. This is communicated by interpersonal feedback from early adopters of the innovation, which influences the individual to adopt or reject the innovation (Rogers, 2003).

Another significant finding of the present study is that race was related to attitudes towards EBP in the treatment of PTSD, with black practitioners perceiving EBP as less clinically useful and placing more value on clinical experience compared to white practitioners. Similar findings have been encountered in several international studies. For example, Aarons et al.'s (2010) study, which focused on provider demographic characteristics association with EBP attitudes as well as the psychometric properties of the EBPAS among mental health providers. The sample consisted of 70.5% Caucasian, who held more global positive attitudes, more intuitive appeal, and less divergence than African-American, Latino, or 'other' ethnicities (Aarons et al., 2010). A possible explanation provided by Aarons et al. is that EBP materials have not been adapted to particular cultures and evidence is lacking from their specific communities, resulting in African-American, Latino, or 'other' ethnicities being cautious about EBP and their perception that it is a misfit.

In a similar local study, no significant association was found between race and attitudes (Padmanabhanunni & Sui, 2016) and a possible explanation for this might be that the present study was a national study, across a more diverse population. This can lend itself to greater diversity in training and views of EBP that is dependent on the institution of training. It might also imply cultural or political differences with black practitioners being more sceptical or suspicious of change. In other words, in light of the apartheid history, it is possible that black practitioners are reluctant to follow what they might perceive as research outcomes from Western settings that is not generalisable in their communities. The present finding is congruent within the South African context and history of inequality. Even though there have been efforts to address the inequalities of race within the profession, most service providers are still White and more research needs to be conducted with a larger sample size of this subgroup to further explore this finding. The process of redressing inequalities in the discipline that has already begun in South

Africa needs to continue and it is also important that researchers focus on disadvantaged communities in order to increase confidence in research outcomes.

6.3. Importance of Mental Healthcare Providers' Attitudes in the Adoption of EBP in the Treatment of PTSD

Dissemination is defined as the “conscious efforts to spread new knowledge, ideas, policies, and practices to specific target audiences” (Green et al., 2009, p. 152). The advantages of the dissemination of EBP is better clinical outcomes, time saving, relapse prevention, and a cost-benefit advantage (Stirman et al., 2004). This process has been slow, even amongst PTSD practitioners, and the current study sought to understand the attitudinal barriers that prevent the implementation of research into practice in the treatment of trauma.

Understanding attitudes can help predict the readiness of providers in the use of an innovation in treating PTSD. Rogers (2003) says that attitudes precede the decision to try a new practice and, therefore, attitudes are the cog that link practice and beliefs. However, belief systems vary across cultures, language, race, and individuals. Positive attitudes increase the possibility of buy-in to the implementation of an innovation and measuring attitudes can help one target specific groups with an implementation plan designed to address possible barriers. Measuring attitudes can also be used to test for any changes in attitude after an implementation strategy so that they can be redefined.

There is limited South African literature that addresses EBP among PTSD service providers and this study contributes to the topical discussion. It keeps the topic relevant as it addresses one of

the priority areas of mental health needs in South Africa and addresses the need for effective and efficient treatment against the backdrop of a lack of resources.

The current study's findings that mental health providers hold mostly positive attitudes towards EBP in the treatment of PTSD is encouraging and, therefore, implementation strategies can use this as a platform for dissemination efforts. The study found that younger practitioners reported more positive attitudes when intuitively appealing and, as such, a good dissemination strategy would be to ensure that all graduate programs include EBP modules and that one of the requirements for the internship program be displaying skill in EBP. This does not preclude older practitioners, as specific EBP trauma training can be offered at a professional level. The training can be followed up with coaching or mentoring to deal with any difficulties in implementation. If there is to be an emphasis in training at all levels, there is also a need for a 'train the trainers' programme. A further suggestion is that a social process be deliberately implemented at all institutions, given that the feedback of colleagues and their effective use of EBP will further increase positive attitudes and adoption of EBP.

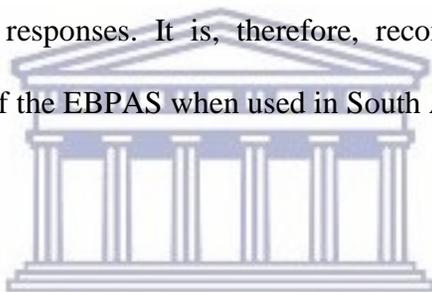
The current finding that black practitioners perceive EBP as less clinically useful and place more value on clinical experience is one that needs to be addressed. Firstly, more research needs to be conducted to explore this more. Black practitioners and the communities they serve may be incorporated in research studies in order to close the gap between research and practice.

6.4. Limitations of this study

A number of limitations of this study should be noted. Firstly, the response to the voluntary online survey received a low response rate of 20%. A possible reason for this could be that

invitees were ineligible as they did not meet one or more of the necessary criteria to participate. It is also possible that invitees were uninterested in responding and it is easier to ignore an electronic request as opposed to face-to-face or telephonic interaction. As a result, the sample might not be representative of the larger population in South Africa and, therefore, is not generalisable to the larger population of practitioners.

In this study attitudes towards EBP were assessed using only the EBPAS self-report measure and it is, therefore, possible that social desirability bias may have influenced the results. The understanding of EBP could also differ for individuals and different interpretations of the items could have resulted in varied responses. It is, therefore, recommended that future research investigate the factor structure of the EBPAS when used in South Africa.



6.5. Recommendations

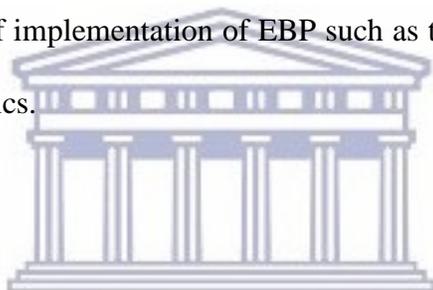
In terms of the finding that younger practitioners find EBP appealing when they know what to do, it is recommended that there be a strong focus on training at both the graduate and the internship level to increase knowledge and skill. Specific focus can be directed towards older practitioners through providing specific EBP training at the professional level to dispel myths about EBP and increase the adoption of new practices. In addition, systems need to be put in place to provide opportunities in institutions for a feedback loop for practitioners that in turn increases positive attitudes and use of EBP.

The finding that Black practitioners hold more negative attitudes to EBP means we need to continue redressing the inequalities that still exist within the discipline of Psychology. We need to find a 'fit' with patient needs, personal experiences, values, and treatment methods. In other

words, we need to ensure that EBP training materials are more culturally appropriate and in multiple languages. Therefore, researchers need to focus on disadvantaged communities as research sites in order to increase confidence in research outcomes.

6.6. Future Research

More research is needed to explore the relationship between attitude and behaviour. For example, the following questions need to be addressed: Does attitude predict the use, adoption, implementation, and sustainment of EBP? How do attitudes to EBP relate to clinical practice? Also, research needs directly enquire about the perceived barriers to EBP. Future research can also focus on other predictors of implementation of EBP such as training, organizational context, policy, and systems characteristics.



6.7. Conclusion

Aarons, Cafri, Lugo, and Sawitzky (2012) state that the implementation of EBP is critical to bringing about change, especially in order to improve the quality and outcomes of mental health services. EBP is, therefore, a worthwhile goal to strive to. This study, firstly, contributes to the available research literature about EBP in the SA context and, secondly, provides a sense of the attitudes of practitioners towards EBP in the treatment of PTSD. PTSD and trauma are major concerns in South Africa as there is a high rate of trauma exposure and, as a result, an increased risk of PTSD. This, together with a lack of resources, makes the practice of EBP in treating PTSD an imperative.

This study found that South African practitioners treating PTSD hold largely favourable attitudes towards EBP, which suggests that practitioners are ready for implementation programmes and the

use of new practices. This study also supports other research findings that young practitioners holding more positive attitudes and highlights the importance and need of quality and continuous training to effect change. In addition, this study highlights the effectiveness of the social process in influencing the adoption of innovation and, therefore, it should be a deliberate part of strategy plans. The finding that Black practitioners hold more negative views towards EBP highlights that the process of redressing inequalities in the discipline needs to continue and any resources, either training materials or research outcomes, need to be culturally appropriate.



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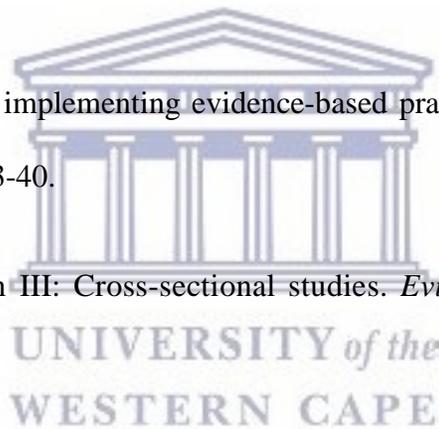
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APPENDICES

Appendix A: Demographic Questionnaire

Please complete the following demographic information, the survey will be anonymous and used for research purposes only.

No	Demographics				
1	Age				
2	Gender		Male		Female
3	Race		White	Coloured	Black
			Indian	Other	
4	Country of origin				
5	Registration with HPCSA		Yes		No
6	Relationship status		Married	Divorced	Committed relationship
					Single
7	Number of years in Clinical practice				
8	Academic Qualifications				
9	Average number of trauma clients treated per month				
10	Psychological Interventions used to treat PTSD				

Appendix B: Evidence-Based Practice Attitude Scale (EBPAS)

=====

The following questions ask about your feelings about using new types of therapy, interventions, or treatments. Manualized therapy refers to any intervention that has specific guidelines and/or components that are outlined in a manual and/or that are to be followed in a structured/predetermined way. Evidence based practice refers to any intervention that is supported by empirical research.

For questions 1-8: Circle the number indicating the extent to which you agree with each item using the following scale:

0	1	2	3	4
Not at all	Slight extent	Moderate extent	Great extent	Very great extent

1. I like to use new types of therapy/interventions to help my clients

0 1 2 3 4

2. I am willing to try new types of therapy/interventions even if I have to follow a treatment manual

.....

0 1 2 3 4

3. I know better than academic researchers how to care for my clients

0 1 2 3 4

4. I am willing to use new and different types of therapy/interventions developed by researchers

.....
0 1 2 3 4

5. Research based treatments/interventions are not clinically useful

0 1 2 3 4

6. Clinical experience is more important than using manualized therapy/treatment

0 1 2 3 4

7. I would not use manualized therapy/interventions

0 1 2 3 4

8. I would try a new therapy/intervention even if it were very different from what I am used to doing

.....
0 1 2 3 4

For questions 9-15: If you received training in a therapy or intervention that was new to you, how likely would you be to adopt it if:

9. it was intuitively appealing?

0 1 2 3 4

10. it “made sense” to you?

0 1 2 3 4

11. it was required by your supervisor?

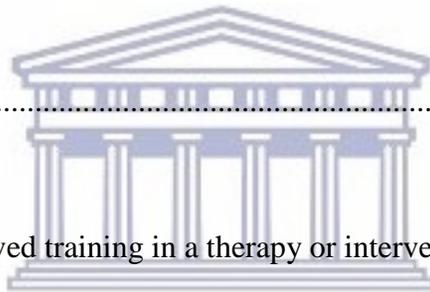
0 1 2 3 4

12. it was required by your agency?

0 1 2 3 4

13. it was required by your state?

0 1 2 3 4



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14. it was being used by colleagues who were happy with it?

0 1 2 3 4

15. you felt you had enough training to use it correctly?

0 1 2 3 4



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Appendix C: Information Sheet



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Department of Psychology
Private Bag X 17, Bellville 7535, South Africa
Tel: +27 21-959 2283, Fax: 27 21-959 3515

E-mail: apadmana@uwc.ac.za

INFORMATION SHEET

Project Title: Exploring challenges in the dissemination of research around evidence-based practice (EBP) in the treatment of post-traumatic stress disorder (PTSD) in South Africa.

What is this study about?

This is a research project being conducted by *Gail September* at the University of the Western Cape. We are inviting you to participate in this research project because you are currently a registered mental healthcare provider registered. The aim of this study is to explore attitudinal barriers in the adoption of EBP in the treatment of PTSD in South Africa.

What will I be asked to do if I agree to participate?

You are hereby invited to participate in the above study. To participate you must meet the following criteria; offer treatment to trauma survivors; be registered (e.g. with the Health Professions Council of South Africa) and have a minimum of three years professional experience working with trauma survivors. If you meet the criteria and wish to participate, please indicate this on the consent form and return by email. The two electronic questionnaires will be forwarded to you next. The first is a biographical questionnaire and the second is the Evidence-Based Practice Attitude Scale (EBPAS). The EBPAS is comprised of 15-items with 5 options to indicate your level of agreement. The surveys should take you approximately 20 minutes to complete.

Would my participation in this study be kept confidential?

The researcher undertakes to protect your identity and the nature of your contribution. To ensure your anonymity, the surveys will not contain any identifying information. If we write a report or article about this research project, your identity will be protected.

What are the risks of this research?

There may be some risks from participating in this research study. All human interactions and talking about self or others carry some amount of risks. We will nevertheless minimise such risks and act promptly to assist you if you experience any discomfort, psychological or otherwise during the process of your participation in this study. Where necessary, an appropriate referral will be made to a suitable professional for further assistance or intervention.

What are the benefits of this research?

This research is not designed to help you personally, but the results will inform what the current attitudes amongst South African Psychologists are in the adoption of EBP in real life settings. We hope that, in the future, it will assist in bridging the gap between research and practice.

Do I have to be in this research and may I stop participating at any time?

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

What if I have questions?

This research is being conducted by *Gail September*, Psychology Department at the University of the Western Cape. If you have any questions about the research study itself, please contact:

Principal Researcher: Mrs Gail September

Dept. of Psychology, UWC

021-9592283/ 072-1410383

gailseptember58@gmail.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

Supervisor: Dr. Anita Padmanabhanunni

Dept. of Psychology, UWC

021-9592283/ 0823309284

apadmana@uwc.ac.za

Head of Department: Dr. M. Andipatin

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Dean of the Faculty of Community and Health Sciences:

Prof José Frantz

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This research has been approved by the University of the Western Cape's Senate Research Committee and Ethics Committee.

Appendix D: Consent Form



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CONSENT FORM

Title of Research Project: Exploring challenges in the dissemination of research around evidence-based practice in the treatment of post-traumatic stress disorder (PTSD) in South Africa.

The study has been described to me in language that I understand. My questions about the study have been answered. I understand what my participation will involve, and I agree to participate of my own choice and free will. I understand that my identity will not be disclosed to anyone. I understand that I may withdraw from the study at any time without giving a reason and without fear of negative consequences or loss of benefits.

Participant's name.....
Participant's signature.....
Date.....