DIALECTICAL BEHAVIOUR THERAPY AS IT INFORMS OCCUPATIONAL THERAPY IN MENTAL HEALTH IN SOUTH AFRICA: A DESCRIPTIVE STUDY

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TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

DECLARATION

I, *Kristy Ward*, declare that the Master's Degree research dissertation or interrelated, publishable manuscripts/articles, in the form of two interrelated publishable articles that I herewith submit for the Master's Degree qualification in Occupational Therapy, **'Dialectical Behaviour Therapy as it informs occupational therapy in mental health in South Africa: A descriptive study'** at the University of the Free State, is my independent work, and that I have not previously submitted it for a qualification at another institution of higher education.

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ASSIGNMENT COVER PAGE

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With the submission of this assignment, I hereby declare that:

· I am aware of the UFS policy on plagiarism and that I understand the content thereof (available at http://www.ufs.ac.za/dl/userfiles/Documents/00000/364_eng.pdf).

· I undertake to abide by all the requirements as set out in the UFS policy on plagiarism.

· This is my own, original work, unless I have properly referenced the work of others.

Student Name:

Kristy Ward

Signature:

Date:

14/11/2023

DEDICATION

This dissertation is dedicated to my partner, Ludwig Zietsmann, for supporting me emotionally and practically throughout this trying process.

ABSTRACT

South African occupational therapists show a growing interest in Dialectical Behaviour Therapy (DBT). However, there are currently minimal publications on the use of DBT internationally and no publications nationally. This gap supports the need to further investigate this incorporation of a traditional psychology theory with occupational therapy theory.

The main research question was how the DBT approach is used to inform occupational therapy in mental health in South Africa. Two different methodologies were incorporated to answer this question. The first was a scoping review, and the second was a qualitative, descriptive design. The objectives were twofold and formed two phases of the research. The first objective was to review the literature on the use of the DBT approach by occupational therapists working in the mental health field. The second objective was to describe the current knowledge, attitudes, and practices of South African occupational therapists working in mental health regarding the DBT approach as an intervention approach for MHCUs.

The results of this were captured in two academic articles. The first study followed a non-empirical approach for a theoretical article, with the scoping review as the chosen method. This review emphasized the need for more evidence and guidelines integrating DBT and occupational therapy. The second article used a qualitative descriptive design and the data from 17 online one-on-one interviews with South African occupational therapists to answer the research question. A non-probability snowball sampling technique was used. Ethical approval was obtained, and confidentiality was ensured. The knowledge, attitude, and practices of occupational therapists using DBT to inform their practice were presented. The following themes emerged from the study: (a) Potential challenges identified by occupational

therapists using DBT, (b) The benefits/motivators of DBT-informed occupational therapy for the therapist and user, and (c) Variation in how DBT is being used by occupational therapists in practice.

Recommendations for further research and implications of the study were described in both articles. Areas of future research are identified to advance the profession's body of knowledge and provide guidance with potential future research in the field of Dialectical Behaviour Therapy-informed occupational therapy.

Key terms: dialectical behaviour therapy; mental disorder; intervention; psychotherapy; occupational therapy; dialectical behaviour therapy-informed occupational therapy

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- Dr Tania Rauch van der Merwe for her guidance and supervision in the conceptualization phases of this research.

GLOSSARY

Term	Definition and supporting citation
Dialectical Behaviour Therapy (DBT)	DBT utilizes a dialectical (oppositional) philosophy to integrate cognitive-behavioural approaches, as well as Zen practice (Swales & Heard, 2017). This study will specifically investigate how this technique is applied in occupational therapy.
DBT-informed occupational therapy	The DBT themes of mindfulness, interpersonal effectiveness, distress tolerance, and emotional regulation are incorporated into occupational therapy treatment sessions (Linehan & Wilks, 2015).
Evidence-based practice	Evidence-based practice refers to decision-making guided by the best available scientific basis or clinical research, combined with practitioner expertise and considering client preferences (Li et al., 2019; Lindstrom & Bernhardsson, 2018). For this study, evidence-based practice refers primarily to the consideration of research to assist in choosing between the available treatment approaches.
Mental healthcare user (MHCU)	A mental healthcare user is defined as an individual who receives health services aimed at improving their mental health status at an establishment (Republic of South Africa, 2002). In this study, patients receiving both inpatient and outpatient care will be referred to as mental healthcare users (MHCUs). *MHCU's- shows ownership by MHCU *MHCUs- plural

Mental health field	Mental health can be defined as "the internal process of self-care, centered on the self-awareness and self-regulation of the human being, in which the person seeks to balance their feelings, thoughts, and behaviors, intrapersonal and interpersonal ones, to approach an optimal state of wellbeing and absence of mental disorders according to universal values and symptoms, and biological, social, psychological, and environmental factors" (Rodríguez-Macías & Coronel-Santos, 2022). Occupational therapists working towards this goal could be defined as occupational therapists working in the mental health field.
Occupational Therapy Practice Framework (OTPF)	This is a theoretical framework providing a description of occupational therapy constructs which was developed to guide occupational therapists and occupational therapy assistants in practice (American Occupational Therapy Association, 2020). It describes the domains to be considered in treatment, evaluation and outcomes in order to achieve the overall goal of health, wellbeing and participation in life through occupation (American Occupational Therapy Association, 2020). These domains include occupations, context, performance patterns, performance skills, and client factors.
Third wave therapies	Third wave psychotherapeutic techniques all have a common primary focus on a person's relationship to their thoughts and emotions (Hayes & Hofmann, 2017; Dimidjian et al., 2016). This term is linked to highly-researched therapies including but not limited to Acceptance and Commitment Therapy, Mindfulness-Based Cognitive Therapy, and Dialectical Behaviour Therapy (Dimidjian et al., 2016).

LIST OF ABBREVIATIONS

ADHD: Attention Deficit Hyperactivity Disorder

ADL: Activities of daily living

CBT: Cognitive Behaviour Therapy

DBT: Dialectical Behaviour Therapy

DBTMTBI: Dialectical Behaviour Therapy for Mild Traumatic Brain Injury

DSM-5: Diagnostic and Statistical Manual of Mental Disorders, 5th Edition

HPCSA: Health Professions Council of South Africa

HSREC: Health Sciences Research Ethics Committee

IADL: Instrumental activities of daily living

ICD-10: International Classification of Diseases, 10th Revision

JBI: Joanna Briggs Institute

MDT: Multi-Disciplinary Team

MHCU: Mental Healthcare User

MRC: Medical Research Council

NHS: National Health Service

OTPF: Occupational Therapy Practice Framework

TRIP: Transforming Relapse and Instilling Prosperity Programme

UFS: University of the Free State

CHAPTER 1: Background and motivation for the study

Introduction

Globally and locally, adverse circumstances continue to increase, increasing the incidence of mental disorders in South Africa (Craig et al., 2022). As a result, more people are struggling to perform their chosen occupations, and they are reaching out for assistance from mental healthcare providers (Backenstrass et al., 2006; Samuel, Thomas & K. S. Jacob, 2018). This would often include an occupational therapist as a member of the multi-disciplinary team. The occupational therapist seeks to provide evidence-based interventions for the mental healthcare user (MHCU) (Carroll, 2015). In recent years, some occupational therapists have been exploring new treatment interventions, outside the traditional approaches. One of these approaches is Dialectical Behaviour Therapy (DBT) (Linehan, 2015). Dialectical Behaviour Therapy has originally been developed by psychologists and is based on four constructs, namely mindfulness, distress tolerance, interpersonal effectiveness, and emotional regulation (Linehan, 2015).

Training and research are available on the DBT approach. However, the researcher found that DBT literature was focused on the psychology profession. Even though literature highlights the possible benefits of DBT as a treatment approach for individuals experiencing symptoms of mental disorders, limited information exists on how DBT is used by occupational therapists to inform their practice within the mental health context.

This problem is multi-faceted. It may be that there is limited research on this topic because the traditional DBT approach was not designed by or for occupational therapists (Linehan & Wilks, 2015). It may not be viewed by some as discipline-specific codified knowledge, or occupation-centred (Ashby et al., 2016; Fisher, 2013). This could lead to limited use of this approach within the occupational therapy profession, and therefore limited opportunity to

research the phenomenon. However, the fact remains that DBT is being incorporated by South African occupational therapists, without much guidance from contextualized research on this specific approach (Gelderblom, 2023; Grounded Well Wise, 2023).

Clinical observation in practice as well as informal research led to the development of the following research question: *How is the DBT approach being used to inform occupational therapy in mental health in South Africa?*

Answering this research question would be significant because it would add to the knowledge base of this novel field of research. It may also contribute towards the controversial discussion surrounding the integration of traditionally psychological approaches in occupational therapy.

Positionality statement

The researcher acknowledges that her positionality influenced this study to some extent. Her professional experience and interests shaped her research question and have placed her in a post-positivist stance (de Vos et al., 2021). This means that there will be other perspectives on this research topic.

Kristy grew up in a privileged position, which allowed her to study at university level. From there, she worked in a government psychiatric hospital during her community service year. At that time, the occupational therapy department made little to no use of purely psychological approaches that she was aware of. Her next paid vocations were both within the private, mental health occupational therapy sphere. The researcher never offered DBT, although this service was offered by one of the two practices where she worked. This approach was also offered by psychologists who practiced from the same institution. This brought to mind the question about the distinction between the two professions using the same approach, and what literature there would be to support and guide the use of this approach by the occupational therapist. Kristy then completed the level one DBT training

offered by the DBT Institute of South Africa out of interest. Options are available to further yourself in DBT with the DBT Institute of South Africa, and she by no means would call herself an expert in this approach.

Kristy's interest stems from a long-standing passion for mental health/psychiatry, in pursuit of which she continued to obtain an honours degree in Counselling Psychology via the University of South Africa. She has been residing in the Netherlands for almost two years, and is no longer a practising occupational therapist. The researcher has no friendship with any occupational therapists offering DBT, nor MHCUs who have or will take part in a DBT programme.

The methodology chosen for this study was previously changed from quantitative to qualitative. Approximately three years ago, the researcher started to collect data on the emotional regulation of MHCUs taking part in a DBT programme. However, when COVID 19 struck, the intake for this programme reduced drastically and the decision was made to start the research from scratch with a different protocol and different approach. Interviews and a scoping review were seen as the best way to gather more personalised and deeper qualitative information related to DBT-informed occupational therapy.

Theoretical framework

As a guiding framework for the mandate of occupational therapy's focus in health care, the Occupational Therapy Practice Framework (OTPF) is a description of occupational therapy constructs which was developed to guide occupational therapists and occupational therapy assistants in practice (American Occupational Therapy Association, 2020). The OTPF describes that an individual's wellbeing, health, occupational identity, and participation in life is interlinked with factors unique to each person (American Occupational Therapy Association, 2020). These factors include values, beliefs, body structures, and bodily functions unique to each person, and are termed client factors. Client factors are affected by an occupation, but also affect the individual's occupational performance (American Occupational Therapy

Association, 2020). The essence of this would mean that if a change occurs in one of the client factors, the unique smaller constructs of a person, a change can also be expected in that person's occupational engagement. Similarly, if a person changes how or with which occupations they engage, a change is likely to occur in either their beliefs, body structures, bodily functions, or values (American Occupational Therapy Association, 2020).

When an individual is diagnosed with a mental disorder, they are likely to experience disrupted bodily functions, such as disturbed physiological homeostasis, which will compromise their ability to display appropriate emotions and regulate unpleasant emotions during the acute phase of their illness (Naisberg, 1996; Berking & Wupperman, 2012). Although sub-optimal body functioning does not necessarily result in occupational dysfunction, therapeutic support when an individual is experiencing difficulties regulating emotions may enhance an individual's capacity to participate or perform chosen occupations (American Occupational Therapy Association, 2020). This premise highlights why an occupational therapist may address client factors in order to reach the final goal of improved occupational performance. This outcome is important because each individual has the right to meaning, participation, choice and balance in their occupations (Townsend & Polatakjo, 2013). This is termed occupational justice (Durocher et al., 2014; Townsend & Wilcock, 2004). Occupational justice is an occupational science construct (Wilcock, 2005).

Occupational science will be used as a supporting theoretical framework in this study because it is recognised that the OTPF is westernised and may not encompass all aspects related to occupation in South Africa (Wilcock, 2005). Occupational science is based on the premise that occupation is essential to health, and it is a source of healing for those who are not in their best health (Wilcock, 2005; Wilcock, 1999). Not just any occupation, but the right type of occupation considering the individual's unique set of circumstances, wants and needs (Wilcock, 2005; Wilcock, 1999; Durocher et al., 2014). When an occupation as a means or an end is meaningful to the individual, it is a client-centred therapy (Townsend & Wilcock, 2004). However, pressure from other healthcare providers, especially in the mental health space,

make it challenging to hold onto the occupational foundation of the occupational therapy profession (Wilcock, 2005; Ashby et al., 2016; Pettican & Bryant, 2007). The hope is that this study does not forcefully mould an approach to suit occupational therapy, but also embrace the differences that would separate DBT-informed occupational therapy from the traditional DBT approach. DBT presents a specific set of themes with specific techniques. There are also additional components of the traditional DBT skills training, such as individual psychotherapy (Linehan, 2015). The importance of occupational science here is the evaluation, adaptation, and clinical reasoning an occupational therapist will use to find aspects of the traditional DBT programme which can enhance an MHCUs occupational performance and allow for inclusion in society, and those aspects that are not meaningful for the MHCU within their unique context, abilities, and belief system.

Research question

How is the DBT approach being used to inform occupational therapy in mental health in South Africa?

Aim and objectives

Aim

The aim of this study was to describe the use of the DBT approach by South African occupational therapists to enable occupational performance of MHCUs.

Objective 1 (Phase one):

To review the literature on the use of the DBT approach by occupational therapists working in the mental health field.

Objective 2 (Phase two):

To describe the current knowledge, attitudes and practices of South African occupational therapists working in mental health regarding the DBT approach as an intervention approach for MHCUs.

Research design and methodology

Two different methodologies were incorporated in order to answer the research question.

For the first objective, a scoping review design was selected because of its broad reach in the relatively new field of DBT-informed occupational therapy. This may be the first step before a systematic review, which could then be a more specified search should this field of interest develop further (Aromataris, 2020). The Joanna Briggs Institute (JBI) search strategy was considered the most appropriate and structured scoping review method (Aromataris, 2020; Peters et al., 2020). This methodology is a revised and developed version of Arksey and O' Malley's scoping review framework (Arksey & O'Malley, 2005). The JBI scoping review methodology was used to search through databases accessible to the University of the Free State including multidisciplinary, health, psychology, education, and social sciences databases; specialist journals; and gray literature. Stage one was defining and aligning the research objectives and questions. Stage two was to develop and align the inclusion criteria with the objectives and questions. Stage three was to describe the planned approach to evidence searching, selection, data extraction and presentation of the evidence. Stage four is searching for the evidence, followed by selection of the evidence, extraction of the evidence, analysis of the evidence, and then presentation of the results. Lastly, evidence was summarised according to the purpose of the review, conclusions were made, and implications of the findings were noted. The information search was limited to the publication period of 2004 to August 2022 as this is when publications on DBT came about until the time of the search (Hayes, 2004). Sources were included should they mention the use of DBT by an occupational therapist directly or an intervention that is evaluated as similar enough to one of the DBT themes. The scoping review was not limited to South Africa alone, making the

research more internationally applicable. This broad focus was aimed at reporting on as much literature as possible given the paucity of publications with this specific topic. The analysis of the literature was primarily done by frequency counts of concepts and key findings because this is sufficient for a scoping review, especially this review with the quality of sources identified (Aromataris, 2020).

For the second objective a qualitative research design was selected (de Vos et al., 2021). Information regarding the use of DBT was gathered via online one-on-one semi-structured interviews with occupational therapists working in the South African mental health sphere. This methodology was selected with the idea that more detailed information on this approach may be more appreciated or useful for the therapist than providing quantitative data. Providing participants with the option to share as much or as little as they would like using a semi-structured setup was also viewed as an important concept in this research given intellectual property rights. Creswell's six-step thematic analysis was then completed in order to extract the main themes conveyed by the study participants (Creswell, 2009). The study aimed to describe the knowledge, attitude and practices related to the DBT approach across various national sectors and settings, thereby gaining a more comprehensive picture. No limits were placed on the context where the approach is being incorporated, and therapists working in private or public settings, in-patient or out-patient, non-traditional, as well as community settings were consulted.

The research proposal was submitted for approval to the Health Sciences Research Ethics Committee (HSREC) committee of the University of the Free State prior to commencement of the study (UFS-HSD2022/0937/2908) (Appendix A). Identifying information was excluded from the data analysis and participation was voluntary.

Chapter layout

The chapters in this dissertation are ordered as follows:

Chapter 1:

Background and motivation for this study provide a broad overview of the study and the problem statement that leads up to the study's aim and objectives. An outline of the two articles is provided, the methodological considerations of each, the ethical considerations and chapter layout.

Chapter 2:

Chapter two provides an overview of the literature that grounds and provides context for this research. This review begins with the concept of mental health and mental disorders, followed by how mental disorders relate to occupational performance.

This section is followed up by current evidence-based occupational therapy interventions, barriers faced in mental health practice, and finally what DBT-informed occupational therapy could look like.

Chapter 3:

Chapter three contains article one titled *Dialectical Behaviour Therapy-informed occupational therapy: A scoping review.* The chapter includes a publishable manuscript in accordance with the Occupational Therapy in Mental Health Journal guidelines, including the article's list of references.

Chapter 4:

Chapter four contains article two titled *An exploration of Dialectical Behaviour Therapy-informed occupational therapy in South Africa.* This chapter includes a publishable manuscript in accordance with the guidelines provided by the South African Journal of Occupational Therapy, including the article's list of references.

Chapter 5:

The fifth chapter of this dissertation includes the conclusion, recommendations, and closure. The objectives of this study and how they compare to the findings are reviewed. The main findings of the study are also presented here.

Chapter 6:

Chapter six contains the bibliography, a list of references, excluding those already included in chapter three and four.

Chapter 7:

Chapter seven contains all the appendices. This includes the ethical approval letter, the information letter distributed to the participants of the study, the interview schedule used for the second phase of the study, and a letter of assistance from a librarian.

CHAPTER 2: Literature overview

Chapter one consisted of an overview of the study and contextualised this research. The aim of the study was stated, namely: to describe the use of the DBT approach by South African occupational therapists to enable occupational performance of MHCUs. In chapter two, literature regarding the main concepts of the study will be reviewed to gain a better understanding of the topics covered. These concepts investigated include mental health and mental disorders; mental disorders as related to occupational performance; occupational therapy interventions; current evidence-base for occupational therapy in mental health; occupational therapy group interventions; potential barriers to occupational therapy groups; Dialectical Behaviour Therapy; DBT-informed occupational therapy; and condensed DBT programmes.

1. Mental health and mental disorders

Over time, the concept of positive mental health and wellbeing has been defined and described by researchers (Jahoda, 2006; Smith, 1959). The notion of mental health not only encompasses the absence of psychiatric symptoms, but also pertains to a subjective feeling of content, or feeling good (Mishra, 2017; American Occupational Therapy Association, 2014). With cognisance of this definition, the opposite end of mental health would be a mental disorder (Raskin, 2012). The treatment of mental disorders forms the foundation of this study. As such, the concept of mental disorders as described in literature will be further explored.

In history, there was at some point a global predominant understanding that mental disorders were rooted in supernatural forces (Austin et al., 2012). However, the scientific era towards the end of the nineteenth century marked the beginning of a more biological understanding of mental health (Austin et al., 2012). In more modern times, especially in westernised societies, mental disorders have now been classified into groups according to how they

recognizably affect thoughts, perceptions, emotions, behaviour, and relationships (World Health Organization, 2019).

Globally, given the high number of possible clinical presentations, classifications have been developed over time to provide clinicians with an organization of symptoms as specific diagnoses. This allows for a mutual understanding of various conditions within a country and internationally. There are currently two main and most widely established classifications of mental disorders. These are the International Classification of Diseases (ICD-10), and the Diagnostic and Statistical Manual of Mental Disorders (DSM) (Austin et al., 2012; Tyrer, 2014; American Psychiatric Association, 2013; World Health Organization, 1993). In South Africa, the DSM is primarily used to guide diagnosis, although this has been criticized and increased use of the ICD has been encouraged (Burns, 2013; World Health Organization, 1993; American Psychiatric Association, 2013). The DSM is also used to inform occupational therapy curriculum on mental health pathologies , in South Africa (Health Professions Council of South Africa, 2019).

The most updated version of the DSM is the DSM-5 (fifth edition), developed by the American Psychiatric Association. This manual classifies the following categories of mental disorders (American Psychiatric Association, 2013):

- Neurodevelopmental disorders
- Schizophrenia spectrum and other psychotic disorders
- Bipolar and related disorders
- Depressive disorders
- Anxiety disorders
- Obsessive-compulsive and related disorders
- Trauma and stress-related disorders
- Dissociative disorders
- Somatic symptom and related disorders

- Feeding and eating disorders
- Elimination disorders
- Sleep-wake disorders
- Sexual dysfunctions
- Gender dysphoria
- Disruptive, impulse control, and conduct disorders
- Substance-related and addictive disorders
- Neurocognitive disorders
- Personality disorders
- Paraphilic disorders

Of the many disorders mentioned above, anxiety and depressive disorders are more frequently diagnosed globally (Silva et al., 2020). This study does not limit its focus to specific disorders or symptoms, but rather the occupational therapy intervention within the broader sphere of mental health.

1.1 The unique indigenous perspective on mental health in South Africa

In South Africa, it is important to be aware of the continued influence of indigenous theories of mental illness, ranging from environmental to spiritual causes, as well as the stigma surrounding mental illness (Austin et al., 2012; Egbe et al., 2014). Context is important in the multi-cultural South Africa because there is a large range of cultures and subcultures, each with their own unique ideas and practices which should be considered from diagnosis to intervention. In South Africa, mentally ill persons have been described as non-functional beings, avoided in social situations (Rodríguez-Macías & Coronel-Santos, 2022). Due to these types of beliefs, a negative stigma can be found. Stigma surrounding treatment for mental illnesses can come from within the person or external sources (Egbe et al., 2014). Stigma in the workplace prevents depressed individuals from disclosing their diagnosis to management, which interferes with the road to recovery and their productivity (Stander et al., 2016).

Depression particularly also affects the economic growth of the country (Stander et al., 2016). In order to overcome these stigma barriers and improve the likelihood of an individual gaining from what mental health interventions have to offer, the intervention needs to be designed and not only selected (Pierce, 2003).

Treatment approaches developed in high-income countries in the Global North will possibly not be transferable to the general South African population (Semrau et al., 2015; Ahsan, 2020). For an occupational therapist working in a country like South Africa where stigma and spirituality plays a role in the understanding of mental disorders, all the more care should be taken to design interventions that are appealing, accurate, and intact (Pierce, 2003). Of particular importance is intactness, or the idea that the therapeutic occupation selected would be typical for the MHCU's socio-cultural, spatial, and temporal circumstances (Pierce, 2003). This construct links in well with client-centredness, the call that occupations are designed with all aspects of the MHCU at centre stage (Townsend & Wilcock, 2004). Considering spirituality, the past and future of a person, can support MHCUs to adapt and cope with their symptoms (Mthembu, 2017). Mthembu (2017) recommended an increased focus on spirituality as part of undergraduate occupational therapy training in South Africa. He also recommended that self-insight of the practitioner's spirituality is important, and that reflection could be used throughout intervention to enhance spirituality as part of client-centred practice (Mthembu, 2017).

An additional factor that needs to be considered in the South African mental health space is that interventions need to be accessible. There should be no "treatment gap" between the various socio-economic classes in South Africa (Egbe et al., 2014; Jack et al., 2014). A national survey published in 2019 found that only 0.89% of the uninsured population requiring mental health treatment received in-patient care at that time, and 7,35% received out-patient care (Docrat et al., 2019). Occupational therapists aim to reach marginalized and lower-income communities as well (Townsend & Polatakjo, 2013).

In 2019 it was estimated that 11.6% of people living in South Africa met the criteria for a mental health or development disability, excluding substance-use disorders (Institute for Health Metrics and Evaluation, 2019). In response to the high levels of mental health issues, the United Nations published a list of targets aimed at improving health and wellbeing in South Africa (United Nations, 2015). However, this publication is related to physical health and there is no direct reference to mental health (Votruba et al., 2016; United Nations, 2015). Therefore, although there is a highlighted need to better address mental health issues, there are no emphasized guidelines from the United Nations addressing how this should be done.

A South African occupational therapist may also turn to another governing document for guidance, the Mental Healthcare Act 17 of 2002. This Act partially described the processes related to mental health care, rehabilitation and treatment (Republic of South Africa, 2002). A positive aspect of this act is that it requires the humane treatment of all MHCUs. However, there are concerns from practitioners that the act assumes functional primary care facilities, and that the act has served to increase the administrative burden surrounding mental health (Szabo & Kaliski, 2017).

The premise of the South African Mental Healthcare act most relevant to this study is that occupational therapists are obliged to provide effective interventions in order to promote mental health (Republic of South Africa, 2002). They need to make the best possible use of resources (human and inanimate) and continue to seek and develop until the needs of MHCUs are addressed. A starting point of addressing this request would be to clarify the link between occupational performance and mental disorders and from this point provide more detailed guidelines for the use of specific approaches and techniques.

2. Mental disorders as related to occupational performance

Occupational performance is the “act of doing and accomplishing a selected action, activity or occupation and results from the dynamic transaction among the client, the context, and

the activity" (American Occupational Therapy Association, 2020). Persons diagnosed with a mental disorder experience difficulties in some or all of their occupations.

When looking more closely at what type of occupational performance challenges are to be expected by those who seek treatment for a mental disorder, literature will be provided with examples ranging from mood disorders to personality disorders, to challenges faced by caregivers. Literature will cover various occupations as put forward by the OTPF, including rest and sleep, education, work, play, leisure, social participation, activities of daily living (ADLs), as well as instrumental activities of daily living (IADLs). Instrumental activities of daily living are the more complex skills that support community and home life (American Occupational Therapy Association, 2020).

Depression is a common and debilitating mood disorder in South Africa, particularly of concern in the workforce aged 25-44 years old (Stander et al., 2016; Van Wijk et al., 2021). A 2016 publication described how depression affects cognition, and thereby work productivity (Stander et al., 2016). Difficulties coping with stress, decision making and responsibility may also contribute towards work challenges (Swart, 2014). Poor mental health in the workplace not only negatively affects the individual's perception of themselves, but can be a very real risk to further injuries or exacerbate already present mental challenges (Van Wijk et al., 2021). At the same time, supported employment as an occupational therapy intervention has been found to support the recovery of mental disorders (Rocamora-Montenegro et al., 2021). Similarly, personality disorders such as Borderline Personality Disorder result in disrupted occupational performance (Wasmuth et al., 2020; Javaras et al., 2017). An internal feeling of neglect and victimization can negatively influence the occupational output of those diagnosed with Borderline Personality Disorder (Wasmuth et al., 2020). This is particularly true in the field of work and in building relationships (Javaras et al., 2017). Their labile mood along with a low self-esteem and reduced social skills may prevent mature relationships and lead to a feeling of isolation and loneliness (Nott, 2014). Also, difficulties for MHCUs experiencing depressive mood symptoms can be found in the domains of home management, social

activities, and leisure activities (Fried & Nesse, 2014). In this quantitative study, the scale used to measure these areas asked few generalised questions about cleaning, tidying, shopping, socialising with friends, independent leisure activities such as sewing and maintaining close relationships (Fried & Nesse, 2014).

An individual with depression may be experiencing self-loathing, which may result in an unkempt home and work environment (Duncan, 2014). In a different case related to instrumental activities of daily living, young adults with mood disorders reported difficulties with chores around the house (home management), meal preparation, and financial management (Jonas & Loeb, 2010; Samuel, Thomas & K. S. Jacob, 2018; Kim et al., 2016). There is literature that describes the hoarding and abuse of pets (Remy & Desormiere, 2017). In support of community integration and independence, it has been found that completed education positively affects mental health (Halpern-Manners et al., 2016).

In the area of rest and sleep, sleep disturbances occur with most mental disorders, and sleep deprivation has been linked to impaired affective (emotional) functioning (Li et al., 2021; Tomaso et al., 2020; Baglioni et al., 2016).

Occupational performance problems faced by Mental Healthcare Users (MHCUs) may stretch outside of the individual themselves, and permeate their immediate family and caregivers (Halberstadt et al., 2020). In the context of this study, this would suggest that a psychosocial intervention should aim to collaborate with the MHCU's family where possible.

There are some occupations that have been found to improve mental health. Positive emotions have been measured as generally increased prior to and during leisure activities, suggestive that less positive emotions will be experienced when leisure activities are limited (Mitas et al., 2012).

The above-provided list of examples would not be considered entirely inclusive of all difficulties with occupational performance as a result of mental disorder. Occupational

therapy has a history of compartmentalizing occupations within categories as used in the examples above. However, working with the OTPF occupational categories as a lens through which to organise occupation can be strengthened by also including various occupations, that are not necessarily culture or category-bound (Hammell, 2018). In certain circumstances it may be more client-centred to refer to wellbeing needs instead of IADLs or ADLs as this allows for a more inclusive list of occupations, and occupations done with the assistance of others (Hammell, 2018).

This inclusive perception ties into occupational justice, which urges the consideration of a person's unique occupational wishes, habits and needs bound within their unique context or circumstance (Durocher et al., 2014). A broader view of occupations in addition to those bound to a model or textbook, is occasionally more suitable for certain MHCUs in South Africa. Culture can add a specific meaning to an occupation (American Occupational Therapy Association, 2014). More specifically, an individual's perceived purpose and their developmental structure will determine what meaning will be attached to a given occupation, as well as their performance of such (Nelson, 1988). Considering client-centred practice and occupational justice could result in the exclusion of interventions developed and researched in the Global North, such as DBT, because they may not be perceived as meaningful or suited for an MHCU (Haft et al., 2022; Mabunda et al., 2022; Townsend & Wilcock, 2004). On the other hand, given the numerous cultures, socio-economic circumstances, and potential combinations of client factors in South Africa, there may very well be a preference for treatment approaches developed and tested in the Global North. An occupational therapist may evaluate such evidence-based approaches as appealing, accurate, and intact as is or with adjustments (Pierce, 2003).

With a comprehensive concept of occupation in mind, a primary principle within occupational therapy is that meaningful occupations (everyday activities) are fundamental to wellbeing and when done together, add to a sense of belonging (Hammell, 2018). When a person is unable to participate in or perform their chosen meaningful activities due to mental disorders, it

becomes relevant for an occupational therapist to assist in overcoming barriers. For the purpose of this study, all wellbeing needs or intervention approaches will be considered.

3. Occupational therapy interventions

Given the numerous potential wellbeing needs of MHCUs, the potential ways that an occupational therapist can address the barriers to occupation is extensive. In addition, there is also no limitation as to where therapy can occur. This is especially important when considering marginalized groups (Hammell, 2018). Typically within South Africa, occupational therapy can take place in a community setting, in public practice, private practice, schools and correctional facilities (Hohl et al., 2017). There are also various models and theories that can be used to inform occupational therapy practice, alongside clinical reasoning. Some of the most common models used in occupational therapy practice include the Model of Human Occupation; the Cognitive Orientation to Daily Occupational Performance; the Occupational Therapy Intervention Process; Sensory Integration Theory; and Motor Learning and Motor Control Theory (American Occupational Therapy Association, 2020). The World Federation of Occupational Therapy is of the position that occupational therapists use a holistic, bio-psychosocial, person-centred approach to enhance occupational engagement (World Federation of Occupational Therapy, 2019).

According to Fisher's (2009) Occupational Therapy Intervention Process, occupations can be used within a compensatory model, an acquisition model, a restorative model, or an education/teaching model. A compensatory model would be the use of adaptive occupation when a capability is lost (Fisher, 2009). An acquisitional model of practice refers to the engagement in meaningful activities within the naturally occurring context "to directly facilitate the acquisition of skilled, goal-directed actions of occupational performance-occupational skills training" (Fisher, 2009). An occupational therapist can also, together with a client, choose the restorative model with a focus on enhancing already existing client factors and/or body function (Fisher, 2009). The last option would be the education or teaching

model, which facilitates the dissemination of (only occupation-focused) knowledge to relevant persons. This Occupational Therapy Intervention Process, with its various sub-categories, provides a framework or guideline for the occupational therapist setting up an intervention. Using such models allows for purposeful goal setting and may help with clarifying the clinical reasoning process.

Alongside models, interventions can also be informed by different theoretical frames of references. Frames of references are borrowed knowledge from other disciplines used within occupational therapy to integrate the wellbeing needs of a MHCU with their unique client factors and provide information or techniques that are then relevant. There are currently up to 25 frames of references used within occupational therapy which can be used to ground practice in theory (Chandler, 2022). The use of psychological frames of references are said to dominate occupational therapy in mental health (Ashby et al., 2016).

There are five broader perspectives that are considered when treating psycho-social dysfunction in the occupational therapy mental health space (Andonian et al., 2013). The first of these is the humanistic perspective, which can be seen as underlying the development of client-centredness in occupational therapy (Andonian et al., 2013; American Occupational Therapy Association, 2014). The biological perspective focuses on the physiological mechanisms behind mental disorders, which could help an occupational therapist appreciate the need for medical intervention outside of occupational therapy (Andonian et al., 2013). The psychodynamic theory focuses on unconscious processes, and can be seen in occupational therapy projective techniques (Andonian et al., 2013). The occupational therapy profession also makes use of behaviourism, under which DBT falls (Andonian et al., 2013). Behaviourism is based on the idea that a given stimulus results in a given behaviour, which on its own is not in-line with occupational therapy which considers a much broader array of factors influencing behaviour (Andonian et al., 2013). However, concrete behaviourism concepts such as reinforcing are sometimes used by occupational therapists (Andonian et al., 2013). Lastly there is the cognitive perspective, which focuses on the role of thoughts in

pathology development and course (Andonian et al., 2013). Cognitive principles are often used when teaching life skills in occupational therapy, as well as when grading an activity (Andonian et al., 2013). Commonly borrowed approaches in mental health occupational therapy include Acceptance and Commitment Therapy, and Cognitive Behavioural Therapy (Ashby et al., 2016). It has been said that the use of Cognitive Behaviour Therapy within an occupational therapy framework by occupational therapists is not only permitted, but encouraged (Duncan, 2011).

Within each frame of reference, there are specific techniques that are put forward and which may be used by the occupational therapist in practice. For example, rating activities of the degree of mastery or experience of pleasure would fall under a cognitive-behavioural technique (Fenn & Byrne, 2013). Although there are numerous frames of references within the occupational therapy profession, they are not all universally applicable. For more guidance in this regard, it is important for the occupational therapist to consider current evidence-based practice.

3.1 Current evidence-base for occupational therapy in mental health

There is a rich description of the positive effects of occupational therapy for the MHCU found in literature. A literature search across the 318 databases available to University of the Free State students identified some promising studies conducted in recent years. As an example, an Australian study conducted with a forensic mental health population found that an occupation-based and occupation-focused interventions supported self-identity, hope, and readiness for change (Whiteford et al., 2020). A sensory integration-based programme had a positive influence on the symptoms and creative ability of individuals diagnosed with schizophrenia (Zengın et al., 2022). Also for MHCUs with schizophrenia, Psychosocial Skills Training and case management in addition to routine occupational therapy had a positive effect on the clinical symptoms of MHCUs (Yilmaz Karaman et al., 2020). In South Africa, MHCUs coping with depressive symptoms appreciated occupational therapy activity-based

groups for contributing towards an improved mood, coping skills, and self-esteem (Ramano et al., 2021). These outcomes tie in with common themes addressed by the South African occupational therapist including improved role performance, social interaction, and life skills (Meyer, 2020).

In April 2019, Kirsh et al. published a synthesis of fifty peer-reviewed research studies focused on occupational therapy interventions in adult mental health (Kirsh, Martin, Hultqvist & Eklund, 2019). This publication reported on the following findings.

Psychoeducation programme:

Psychoeducation is a frequently researched intervention approach (Rocamora-Montenegro et al., 2021). Typically, psychoeducation focuses on disease management, social skills, and meaningful activity acquisition (Rocamora-Montenegro et al., 2021). A group programme consisting of three one-hour weekly sessions presented as lectures on predetermined illness-based topics was evaluated (Tanaka et al., 2015). Although MHCUs did experience an improved sense of psychological wellbeing, the rate of relapse between the control group and psychoeducation programme participants was not statistically significant. This research highlights the fact that didactic teaching alone is not sufficient in ensuring sustained wellbeing and that as previously described, activity is central to successful occupational therapy practice.

The Transforming Relapse and Instilling Prosperity (TRIP) programme, implemented in Hong Kong, was successful in improving the insight, improving illness awareness, and decreasing relapse rate of programme participants who presented with acute symptoms of schizophrenia (Chan et al., 2007). The TRIP utilizes didactic teaching of ten predetermined topics followed by open discussion. The TRIP can therefore also be viewed as a group psychoeducation programme. A similar psycho-educational and application-based approach was utilized in a three to six weeks occupational therapy programme designed for a low-income population (Helfrich & Fogg, 2007). This study provided individual and group treatment sessions. Findings

showed improved independence in basic activities of daily living. In conclusion, psycho-education programmes that incorporate discussion, group therapy, and application focus hold potential to improve MHCU outcomes. Therefore, a combination of these factors should be considered when applicable by South African occupational therapists who facilitate group therapy. Next, literature on creative occupation interventions will be discussed.

Creative occupation interventions:

Creative interventions include art and storytelling as a medium (Kirsh, Martin, Hultqvist & Eklund, 2019). Individuals diagnosed with chronic schizophrenia experienced a reduction in symptoms secondary to participation in an expressive and creative occupational therapy programme, which incorporated an individual and group approach (Foruzandeh & Parvin, 2013). Complementary to this finding, adults with severe and chronic mental disorders perceived an art psychotherapy group drawing from occupational therapy principles to be helpful in the recovery process (Coles & Elliott, 2020). In two research studies conducted in West Los Angeles and Sweden, it was found that participation in creative activities may have preceded MHCUs experience of improved quality of life (Eklund, 1999; Liberman et al., 1998). Clinicians presenting art therapy to MHCUs view art as a valuable tool promoting expression (Blomdahl et al., 2016). However, social skills training when compared to psycho-social creative occupation-based programmes assisted MHCUs in gaining and maintaining improved independence in independent living skills (Liberman et al., 1998).

In the geriatric field, although valued by participants, a year of occupational therapy intervention comprised of MHCU-centred group and individual therapy utilizing creative activities did not reduce participant's experience of depressive symptomology (Mozley et al., 2007). Similarly, in a Japan longitudinal study, repeated exposure to creative-activity based occupational therapy yielded no long-term improvements in psychological wellbeing (Yamashita et al., 2012). When comparing handicrafts and non-emotionally challenging activities to creative and expressive activities, neither of these two forms of intervention

outcomes surpassed the other (Sexton et al., 1990). Although arts-and-crafts activities assisted in improving some aspects of social functioning, occupational therapy integrating life skills, social skills training, and psychomotor skills training demonstrated more significant improvement in a MHCU's overall social functioning (Torres et al., 2002).

In the case of Kirsh's synthesis of fifty peer-reviewed research studies focused on occupational therapy interventions in adult mental health, the evidence supported the use of skills training over creative activities when considering more concrete MHCU outcomes (Mozley et al., 2007; Yamashita et al., 2012; Sexton et al., 1990; Torres et al., 2002; Kirsh, Martin, Hultqvist, Eklund, et al., 2019). Usually, more pressing symptoms or dysfunctions hold treatment priority. When a therapist does choose to utilize crafts as a means to promote constructive use of free time, it is paramount that the craft created is suited to the MHCU's socio-economic status and culture. For example, a male miner will not benefit from creating a birthday card. Craft activities also need to be completed, and of good quality to lift the MHCU's self-esteem (Nott, 2014). Time-use interventions are also used in occupational therapy with MHCUs.

Time-use interventions:

Time-use programmes are orientated around a balanced lifestyle and increased engagement in the various occupational domains. The 16-week 'Redesigning Daily Occupations Intervention' identified sustained improved mental wellbeing of programme participants when MHCUs experienced stress-related symptoms (Eklund & Erlandsson, 2011; Erlandsson, 2013). This programme focuses on occupational self-analysis, setting goals and strategies for change, and job placement. Another recovery and occupation-based intervention coined Balancing Everyday Life intervention administered at out-patient psychiatry centres in Sweden found that participants experienced an improved quality of life, as well as improved levels of activity engagement when compared to individuals who partook in standard occupational therapy (Eklund, Tjörnstrand, et al., 2017).

A similar time-use occupational therapy intervention that spanned 12 weeks, Action over Inertia, did assist MHCUs in identifying barriers to more active living, although significant clinical improvement was not established (Edgelow & Krupa, 2011). It is useful to keep in mind that patterns of daily occupations and occupational balance are proposed as interacting phenomena in literature, and should as such be used as a guide for occupational therapists seeking to address time-use (Eklund, Orban, et al., 2017). What should also be considered is that occupational balance may look different for people from a lower socio-economic living situation, as they may be directly or indirectly responsible for a broader range of activities (Apollis, 2019).

A comparison of the findings of these studies suggests that occupational therapy interventions aimed at time-use alone and spanning less than 16-weeks yield limited improvement in MHCU outcomes. However, when considering client-centredness, there is no restriction for the therapeutic aim that could be valued by an MHCU (Carroll, 2015).

Occupational therapy interventions in the area of skills development, lifestyle modifications, and occupational engagement:

Studies in the area of skills development, lifestyle improvements, and occupational engagement have been conducted on a diverse range of study populations (Kirsh, Martin, Hultqvist & Eklund, 2019). Thirteen studies in the field of anxiety and stress-related disorders collectively highlighted the potential value of life-skills, goal-setting, and lifestyle changes as a treatment approach preventing psychiatric compromise in this population (Fox et al., 2019). Life-skills development within an appropriate occupational therapy programme has similarly been identified as valuable to MHCUs within the South African private practice setting (Stone, 2018). It can subsequently be concluded that occupational therapists are equipped to address goal setting and attainment, life-skills, and lifestyle modification as potential client-centred outcomes.

For adults diagnosed with severe mental disorders (schizophrenia, schizotypal personality disorder, delusional disorder, schizoaffective disorder, psychotic disorder, bipolar disorder, major depressive disorder and obsessive– compulsive disorder), psychosocial interventions have received the largest focus of research in occupational therapy (Rocamora-Montenegro et al., 2021). Psychosocial interventions have no specific timeframe or universal programme. However, they can be described as aiming to improve occupational balance and facilitating socialising and work (Rocamora-Montenegro et al., 2021). Cognitive and exercise interventions are also researched as interventions used with this population by occupational therapists (Rocamora-Montenegro et al., 2021).

The studies discussed above highlight the positive and more critical literature advising against certain approaches available in the field of occupational therapy in mental health. What could not be found, was detailed studies on the effect of Dialectical Behaviour Therapy used to inform occupational therapy. This research aligns with the initial steps of considering whether current practices are evidence-based or not.

4. Occupational therapy group interventions

Treatment may be offered to MHCUs on an individual or group basis. However, group therapy holds several advantages in the South African setting and empirically, it is also preferred in occupational therapy mental health and will therefore be discussed further (Ramano et al., 2021).

Group therapy may be preferred by the out-of-pocket paying South African individual, given the financial restraints on treatment present in our socio-economic landscape (Meyer, 2020). When considering literature, a meta-analysis of randomized controlled trials aimed at improving psychological wellbeing suggests that group psychological wellbeing interventions are more effective than individual treatment sessions (Weiss et al., 2016).

Furthermore, in a study by Buchain, MHCUs that took part in interactive group activities facilitated by an occupational therapist displayed improved interpersonal relationships and occupational performance when compared to MHCUs that administered pharmacotherapy intervention alone (Buchain et al., 2003). Meyer concurs that occupational therapy groups play an appreciated role in the recovery of MHCUs diagnosed with Major Depressive Disorder when admitted to a mental health facility, although the specific correlation between perceived activity participation and depression needs to be further investigated (Meyer, 2020). Occupational therapy, when compared to discussion-based groups, has also been proven to be more effective in improving interpersonal skills and functional ability of group members (Schindler, 1999; Ramano et al., 2017). These findings suggest that group therapy should remain a key focus of MHCU treatment.

The potential therapeutic value of groups has long been established. Prior to the year 1955, at least 175 curative factors present in therapeutic groups were empirically identified (Sherry & Hurley, 1976). Yalom identified twelve popular curative factors unique to group therapy that are still fundamentally grounding to clinical practice today (Yalom, 1970). These factors were ranked according to perceived helpfulness in a psychotherapeutic and growth group study (Sherry & Hurley, 1976). Study participants ranked the following ten helpful and valued curative factors, which have been linked with Yalom's curative factors in brackets (Hauber et al., 2019; Sherry & Hurley, 1976; Nott, 2014):

i. Other members honestly telling me what they think of me. (Interpersonal input)

ii. Learning how to express my feelings. (Socialising techniques)

iii. Learning how I come across to others. (Interpersonal input)

iv. Expressing negative and/or positive feelings toward another member. (Interpersonal learning)

v. Being able to say what was bothering me instead of holding it in. (Socialising techniques)

vi. The groups teaching me about the type of impression that I made on others. (Interpersonal input)

vii. Discovering and accepting previously unknown or unacceptable parts of myself. (Self-understanding)

viii. Seeing that others could reveal embarrassing things and take other risks and benefit from it helped me to do the same. (Imitative behaviour)

ix. Feeling more trustful of the group and other people. (Interpersonal output).

x. Learning that I must take ultimate responsibility for the way I live my life no matter how much guidance and support I get from others. (Existential factors) (Sherry & Hurley, 1976).

The above-mentioned perspectives of individuals who have engaged in group therapy indicate that groups with relevant goals and effective techniques boast high therapeutic potential for their members and are valued by those involved. A therapist's ability to utilize group processes to the benefit of the MHCU has been described as an art in its own right (Dsouza et al., 2017).

Adding to this essential characteristic, occupational therapy groups are unique in that they are activity, or occupation-based (Finlay, 1997; Dsouza et al., 2017). Activity may be used by therapists as a therapeutic medium to offer a more tangible experience of the programme content for MHCUs. It may also be structured as a treatment goal of enhancing participation in everyday activities simultaneous to the minimization of MHCU's dysfunctional thoughts and behaviour (Ramano et al., 2017). This is supported by the Occupational Therapy Association of South Africa, with the position that group therapy must have a clear goal, an

activity, be occupation-focused, and with intentional and specific questions posed (Occupational Therapy Association of South Africa, 2014).

Activities are selected based on the MHCU's social, emotional, cognitive, perceptual, and physical capacities (Finlay, 1997). The degree of grading in these areas should not be anxiety-provoking for MHCUs, although they should also be structured to upskill the individual in necessary areas. This is termed the "just-right" challenge (Rebeiro & Polgar, 1999). Inevitably, a group constituted of various group members with a range of strengths and weaknesses will require that activities be individualized. Ideally, all participating group members should be met with the "just-right" challenge. When this does not happen, individuals are prone to disengage from therapy and the benefit thereof subsequently remains undiscovered.

In order to prevent this disengagement, the treating occupational therapist is required to be equipped with a range of approaches that he/she may select from and adjust according to the unique and evolving characteristics of a group. The occupational therapist is equipped to facilitate therapeutic occupation, defined by Nelson as "meaningful, purposeful occupational performance leading to assessment, adaption, and compensation" (Nelson, 1996)**.** Although the potential benefits of group therapy are highlighted here, it is also necessary to discuss the potential downfalls that can be faced by the occupational therapist working in the mental health sphere.

4.1 Potential therapeutic barriers in occupational therapy groups

On many occasions, the outcome of occupational therapy aids the process of recovery and improved psychological wellbeing as intended (Buchain et al., 2003; Schindler, 1999; Ramano et al., 2017). However, literature also notes that MHCUs attending occupational therapy groups are often not conscious of the therapeutic goals or intentions of treatment and sometimes attend treatment to avoid boredom (Lloyd & Maas, 1997; Stone, 2018). Another potential error in the planning of occupational therapy is the overemphasis and misuse of activity, which should be viewed as a means to foster discovery (Stone, 2018).

Despite time, efforts, and funds allocated to the recovery process, mental disorders may become chronic in nature, resulting in the "revolving door" effect where MHCUs continuously return for mental health interventions (Fonseca Barbosa & Gama Marques, 2023). Persisting symptoms negatively impact on an individual's capacity to fulfil their desired life roles, including their vocational pursuits. Therefore, all treating medical professionals working in the field of mental health must frequently appraise the efficacy of their treatment approaches to optimise MHCU outcomes.

For the occupational therapist, evidence-based therapy approaches may serve to improve occupational performance in activities of daily living and reduce the likelihood of relapse. To make this process of improving treatment approaches easier, guidelines for treatment based on sound evidence is necessary (Kirsh, Martin, Hultqvist & Eklund, 2019). Without strict or universally implemented guidelines for therapy, it is understandable that there would be differences between the varying occupational therapy treatment received by MHCUs. However, it is important to note that this does not reflect on poor treatment offered to MHCUs in all national settings. Differences in practice may also be rooted in the call for client-centred practice and occupational design which would lead to tailored intervention programmes, based on the unique needs of the MHCU (Law et al., 1995; Pettican & Bryant, 2007; Townsend & Wilcock, 2004; Pierce, 2003).

In summary, the researcher found numerous theories, frames of references, and treatment approaches available to guide the South African occupational therapist. There are also certain factors that make South African mental health needs unique. It has been recognised that a more critical approach to chosen treatment modalities is necessary (Kirsh, Martin, Hultqvist & Eklund, 2019; Austin et al., 2012; Health Professions Council of South Africa, 2006). For this reason, contextualised research is necessary to test the applicability of psychological approaches within the South African occupational therapy mental health space. In search of evidence, this study aims to explore therapeutic approaches on the periphery of occupational therapy, but that hold potential value for MHCUs within our context.

5. Dialectical Behaviour Therapy

Dialectical Behaviour Therapy is a third wave psychotherapeutic technique which integrates cognitive-behavioural approaches, as well as elements of Eastern (zen) practice, in order to reduce extreme behaviours (Swales & Heard, 2017). The "dialectic" in DBT refers to the two contradictory states of change and acceptance (Conlin & Lorinser, 2012). It was originally designed as an out-patient programme with a specific programme and a set of specific skills covering the themes of emotional regulation, distress tolerance, mindfulness and interpersonal skills (May et al., 2016; Linehan & Wilks, 2015).

The goal of the original DBT programme in the early 1990s was to reduce the main symptoms of Borderline Personality Disorder (Stepp et al., 2008). This is done through various components, including phone calls, weekly individual therapy, skills groups, and consultation with more than one therapist (Stepp et al., 2008; May et al., 2016). Although originally designed for the treatment of highly suicidal MHCUs, DBT has been successfully incorporated across a range of settings including schools, incarceration facilities and a computer-based system (May et al., 2016; Linehan, 2015; Linehan & Wilks, 2015). A qualitative analysis of a DBT skills training programme offered to teachers, suggested that DBT may be useful in equipping individuals with social-emotional competencies, even outside of clinical pathology (Justo et al., 2018). Although there is literature available on the adaptation and use of DBT concepts in varying contexts, this study aims to explore its potential use in the South African occupational therapy in mental health landscape (Bohus et al., 2013; Sahranavard & Miri, 2018; Evershed et al., 2003). It will be important to first grasp the four modules taught in DBT, namely mindfulness, interpersonal effectiveness, distress tolerance, and emotional regulation (Linehan & Wilks, 2015). A brief description of these concepts as presented in the original DBT programme will be discussed. It is important to recognize the copyright limitations of the DBT manual which prevents more in-depth description of the DBT techniques (Linehan, 2015). It is also important to recognise that the same themes may be

presented in other therapy approaches, but that the general concepts are not equal to how they are understood and used in DBT.

Mindfulness

Mindfulness teaches one to recognize, or become aware of, habitual negative thinking, and then disengage from these ruminations and redirect attention to experiences within the current moment (Piet & Hougaard, 2011). Improved awareness of one's environment will also influence the way that the environment shapes occupational engagement (Crouch & Alers, 2014). The use of mindfulness in DBT is somewhat different to how it would be utilized in other therapy approaches. Broadly, the skills can be separated into the "what" and "how" skills (Eeles & Walker, 2022). The "what" skills are designed to become more aware of your internal and external experiences (Eeles & Walker, 2022). The "how" skills may assist in adapting your response to your experiences (Eeles & Walker, 2022). Dialectical Behaviour Therapy mindfulness skills can be taught as part of a complete DBT programme, but also as a separate, standalone module (Eeles & Walker, 2022).

Interpersonal effectiveness

Interpersonal effectiveness is not the same as interpersonal skills. The aim of DBT interpersonal effectiveness skills is to reduce chaos in relationships The interpersonal effectiveness skills taught in DBT includes, amongst others, assertiveness and conflict management (Linehan, 2015). Mastery of these skills is sought through repetition and feedback so that they become versatile and practically useful (Linehan, 2015).

Distress tolerance

An important component of these skills is a non-judgemental lens when tackling difficult situations, as is emphasized with the application of mindfulness (Linehan, 2015). The tolerance aspect here refers to a learning to accept (not approval of) the inevitability of

distress and suffering in life as a means to cope better with it, much like Yalom's existential factor (May et al., 2016; Yalom, 1970). There are two components to the distress tolerance skills. The first looks at crisis survival by means of distraction, self-soothing and adjustment of thoughts (May et al., 2016). The second component aims to improve acceptance through changing how you experience pain (May et al., 2016). Further skills include short-term survival skills and techniques to prevent impulsivity (Linehan, 2015).

Emotional regulation

Emotional regulation is defined as an individual's ability to modify their emotions and adapt their behaviour accordingly (Beck et al., 2020). Experts in DBT speculate that improved emotional regulation is a most important contributor towards wellbeing within the DBT programme (Stepp et al., 2008). Emotional regulation affects the development or latency of emotions, the magnitude of emotions, and the duration of responses experienced. Difficulties in regulating unpleasant emotions may manifest as symptoms of mental disorders, such as suicidal behaviour or emotional suppression (Linehan, 2015). The inverse is also true, that the presence of mental disorders is associated with an impairment to regulate negative emotions such as anger and guilt (McLean & Foa, 2017; Berking & Wupperman, 2012).

The central theme that persists through literature is that emotional regulation is an important factor to be addressed in the treatment of mental disorders (Berking & Wupperman, 2012; McLean & Foa, 2017; Moore et al., 2008; Beck et al., 2020). It has also been found as a key factor that when optimised, emotional regulation may enhance personal resiliency (Sætren et al., 2019). An important factor that needs to be considered when teaching emotion regulation skills is the MHCU's emotional regulation self-efficacy, or their confidence in their ability to integrate certain emotion regulation strategies (Gross, 2014). Although further research into this theme of why people regulate in different ways is warranted, the fact that self-efficacy in emotional regulation can be modified is hopeful to the treating therapist (Gross, 2014).

When teaching this skill, it is important to remember that regulation is not only diminishing unpleasant emotions (Gratz & Roemer, 2008). Ideally, one should be able to experience a range of strong emotions, but still be able to respond appropriately (Gratz & Roemer, 2008). This is awareness promoting an understanding or mindfulness of emotions, rather than suppressing them. It is furthermore suggested by literature that when an emotion arises, an individual should aim to regulate this emotion by modulating the intensity or duration thereof, not the quality of the emotion itself (Gratz & Roemer, 2008).

When modulated, an individual has better control over their subsequent behaviour and is therefore in a better position to perform occupations that are meaningful to them (Gratz & Roemer, 2008; Gross, 2014; Mulki et al., 2015; American Occupational Therapy Association, 2014; Backenstrass et al., 2006; Kearns Murphy & Shiel, 2020). Occupational participation also affects emotions, as confirmed by a scoping review published in 2019 (Dallman & Triplett, 2020).

6. DBT-informed occupational therapy

When teaching DBT in a practical, skill-based manner, the occupational therapist is making use of psychoeducation, which falls within the occupational therapy scope of practice (Eaton, 2002; Professional Board of Occupational Therapy, 2020). It is recognised that psychoeducation does not amount to psychotherapy, and rather forms a component of treatment within the psychotherapy framework (Bäuml et al., 2006). The process of psychoeducation was identified as a vital tool in mental health treatment programmes (Padilla, 2001; Sarkhel et al., 2020). The impartment of information remains fundamental to occupational therapy. It may guide MHCUs towards better understanding their diagnosis, as well as then remain compliant to prescribed psychopharmacotherapy (Crouch, 2014).

Within occupational therapy, MHCU-centred care prioritizes the MHCU's autonomy, partnership between the MHCU and therapist, and responsibility, enablement, contextual appropriateness, accessibility, and respect for differences (Law et al., 1995). Research shows

that when MHCUs were responsible for their choice of occupational therapy intervention, their symptoms and psycho-social functioning quantifiably improved in comparison to a therapist-chosen intervention (Hoshii et al., 2013). Client-centred practise in psychoeducation facilitates motivation, participation, and improved outcomes for MHCUs (Fenstermacher et al., 2009; Padilla, 2001; Law et al., 1995). Another guideline in the use of psychoeducation was offered by Rosemary Crouch, who suggested that hand-outs and notes are not useful tools to be utilized in psychoeducation and emphasis should rather be placed on face-to-face interaction (Crouch, 2014). These suggestions may be considered in order to enhance and align any psychoeducation interventions, including DBT-informed occupational therapy, with literature surrounding the topic.

When the therapist is successfully able to do so, optimal DBT-informed occupational therapy may aid the reduction of mental disorder symptoms and thereby set the emotional grounds for desired occupational performance (American Occupational Therapy Association, 2014; Backenstrass et al., 2006; Kearns Murphy & Shiel, 2020; Christie et al., 2021).

6.1 Condensed DBT programmes

DBT was originally designed as a one-year programme, with set activities and themes (Linehan, 2015). In some instances, such as with a three-week hospital admission, it would not be viable to follow the original one-year programme. As limited protocols and evidence exist for short-term DBT programmes, clinical teams continue to adjust how DBT functions according to their specific clinical settings and needs (Fox, 2018). Whenever a DBT programme is customized, an assessment of an MHCU's ability to engage with module content/materials will be all the more relevant (Fox, 2018).

The most condensed version of DBT-informed therapy takes place in acute in-patient settings. When considering a review of current in-patient DBT programmes as described in the literature, it is stated that these programmes are usually structured to prevent the reoccurrence of unplanned emotional crises by providing basic skills training and

psychoeducation by a trained DBT therapist (Fox, 2018). It is reasonable to assume that a similar approach would be taken on a short-term outpatient setup, which is closer in length to a short-term admission than a full one-year programme. However, when DBT is condensed in this way, it is important to remember that treatment is not complete and that clinical outcomes achieved are likely no more than skill-enhancement (Fox, 2018). Nonetheless, DBT remains the treatment of choice in many international inpatient facilities and is offered to outpatients primarily by trained psychologists and less commonly by occupational therapists as discussed during the upcoming articles (Fox, 2018).

DBT phases in short-term programmes

Swenson et. al (2007) describes three phases of in-patient, or short-term, DBT treatment for practitioners in mental health. This programme has been selected and compared to occupational therapy constructs in order to compile a guideline for DBT-informed occupational therapy interventions, as no such guideline currently exists.

Swenson's phases of DBT treatment may be easily described to MHCUs and clinicians as a swimming metaphor. The first phase of swimming is committing to getting into a swimming pool. This is when an MHCU is orientated to a specific DBT programme, their life-goals are discussed, their occupations as outpatients are established, and a commitment to work towards improving dysfunctional behaviours in treatment is vouched (Swenson et al., 2007; Fox, 2018). It is important to note that not every problem needs to be addressed during the current programme (Fox, 2018). Phase two of treatment is gaining control (Swenson et al., 2007). This is when an MHCU chooses to engage in therapy and "swim". The final phase of DBT in a short-term programme would be getting out of the swimming pool (Fox, 2018; Swenson et al., 2007). Here, a discharge plan is discussed to reduce the risk of relapse. This discharge plan is specific to the MHCU's context and may include further follow-up treatment on an out-patient basis (Fox, 2018). The following table is a suggestion of how DBT could be condensed into a short-term occupational therapy process.

Table 1: The phases of DBT for occupational therapy

Stages (Swenson)	**As applied in an OT treatment programme**	**Functional outcome (example)**	**Objectives of sessions**	**Occupational therapy principles**
Orientation	Establishing rapport and collaboration between practitioner and MHCU (American Occupational Therapy Association, 2014). Occupational therapists analyse occupational performance by evaluating the interaction between MHCU factors, performance patterns, performance skills, contexts and environments, and occupational demands (American Occupational Therapy Association, 2014).	A person with a Borderline Personality Disorder demonstrates emotional regulation by constructively and positively contributing during a stressful work meeting.	Improving MHCU's insight towards the DBT process and desired outcomes. Selection of appropriate treatment goals and tailoring a programme specific to the collective occupational performance abilities of group members.	Client-centred care (Carroll, 2015).

Active therapy	The occupational therapy process is fluid and dynamic. Whilst treatment outcomes are always kept in mind, the overall treatment programme may be adjusted according to new developments (American Occupational Therapy Association, 2014). As an example, although three mindfulness sessions were initially scheduled, should a group grasp the skill rapidly, the number of mindfulness sessions may be reduced through the use of clinical reasoning.		Facilitate improved insight into the practice of mindfulness. Facilitate improved insight towards effective interpersonal skills. Facilitate improved knowledge and practice of distress tolerance skills. Facilitate improved knowledge and practice of emotional regulation skills.	Clinical reasoning (American Occupational Therapy Association, 2014). Activity-based interventions. "Just-right" challenges considering a MHCU's level of creative ability (de Witt, 2014; Rebeiro & Polgar, 1999). Interventions structured around client-centred care (Law et al., 1995).

				All interventions aligned with certain objectives or outcomes (Finlay, 1997).
Pre-discharge	Time and programme structure should allow MHCUs to exercise new information and master skills offered in order to establish these new skills in the MHCU's repertoire and allow them to draw from these new skills more comfortably when discharged (Stone, 2018). Towards the end of the intervention programme, a therapist will determine if further occupational therapy services are necessary and review the intervention (American		Improve MHCU's insight and self-efficacy towards adaptation and implementation of learnt skills in their home environment. Addressing any concerns or questions related to discharge.	Client-centredness can also play a central role here, looking at what that individual would require to properly equip and prepare them before returning to their home context (Carroll, 2015).

	Occupational Therapy Association, 2014).			

It is important to note that the phases of DBT as described by Swenson is similar to the structure of the general occupational therapy process in the acute psychiatric setting, being "individual and group assessment and intervention, discharge planning, and community reintegration" (Syed, 2020: 9).

7. Conclusion

A review of the available literature highlights the link between mental disorders and occupational performance, substantiating the role of occupational therapy in the treatment of mental disorders. The literature also brings to the fore the valuable role of group work in the mental health space, and the potential for the use of DBT by occupational therapists. However, there is limited research in the field of occupational therapy and DBT, more specifically, within the context of South Africa. This is a compound and multi-dimensional problem, with many aspects that need to be addressed. An investigation is required as to the relationship between a DBT-informed programme as presented in a manner true to occupational therapy constructs, as well as the relationship of such a programme to occupational performance.

In order to start the process of alleviating the gap in knowledge specified, an initial database describing the use of DBT to inform occupational therapy by South African occupational therapists will be created. Another scoping review of literature on this topic will also be done in order to seek out further empirical guidance. These two tasks will provide information that can be disseminated and integrated into clinical reasoning and programme development in private mental health practices.

In the following chapter, the first article *Dialectical Behaviour Therapy-informed occupational therapy: A scoping review,* will be presented.

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CHAPTER 3 ARTICLE 1: Dialectical Behaviour Therapy-informed occupational therapy: A scoping review.

Note to the reader

It is the author's intention to submit this article to the *Occupational Therapy in Mental Health Journal* for the following reasons: this article covers an approach that is used uniquely within the occupational therapy mental health sphere; the journal addresses interdisciplinary practices and new programmes; and the article aligns with the journal's goal of advancing theories, innovation and best practices in mental health. The research reported on in this article is not bound to a country or type of publication because in the occupational therapy profession, research on this topic is still in its infancy.

The *Occupational Therapy in Mental Health Journal* provides guidelines for publication., a word count should be included, and the article cannot be more than 40 pages. At present, the article comprises of 4 633 words (excluding figures and tables) and 22 pages. The abstract for a research article may not be longer than 100 words. Currently, the abstract is 97 words. A further requirement was that American spelling be used, hence "behavior" and not the South African "behaviour", as well as "organize" and not "organise".

Abstract

This scoping review examined the available evidence for the use of Dialectical Behavior Therapy (DBT) or DBT constructs within occupational therapy. Using the JBI guidelines, the search for evidence was structured, but very broad. Ultimately, seven literature sources were included. It was found that the evidence for the integration of this traditionally psychology-based approach within the occupational therapy profession is limited. A significant gap in knowledge is identified, and Dialectical Behavior Therapy-informed occupational therapy cannot be considered to be evidence-based at this time. Additional research is needed to add towards the body of knowledge in this field.

Keywords: Dialectical Behavior Therapy; occupational therapy; mental health; scoping review; DBT-informed occupational therapy

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Introduction

South Africans may be at a higher risk of developing a mental disorder due to a higher incidence of adverse childhood experiences than other countries (Craig et al., 2022). The 5th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM 5) defines a mental disorder as a "behavioral or psychological syndrome or pattern that occurs in an individual" (American Psychiatric Association, 2013). Individuals diagnosed with mental disorders experience psychological and functional symptoms for which they may choose to seek treatment at a facility or as an outpatient. They could also be admitted involuntarily. This individual can then be identified as a Mental Healthcare User, or MHCU. Here, as part of a holistic multi-disciplinary team, the MHCU may come in contact with an occupational therapist who can assist with improving their capacity to fulfil desired life roles and chosen occupations (Backenstrass et al., 2006; Samuel, Thomas & K. S. Jacob, 2018). To this end, occupational therapists are involved in the treatment of people with mental disorders.

There are three important occupational science factors that should play a role when considering a specific intervention. These are occupational justice, client-centredness, and occupational-centredness (Townsend & Wilcock, 2004; Wilcock, 2005; Wilcock, 1999; Fisher, 2013). Occupational justice is the right of every person to engage in occupation, because occupation is health giving (Durocher et al., 2014; Townsend & Wilcock, 2004). In the case of mental disorders, there may be particular barriers preventing meaningful occupation (Nott, 2014; Wasmuth et al., 2020; Samuel, Thomas & K. . Jacob, 2018; Tomaso et al., 2020; Baglioni et al., 2016; Kim et al., 2016). The occupational therapist may reason the treatment of client factors, such as emotional regulation, should this be the best way to assist in achieving meaningful occupation (American Occupational Therapy Association, 2020).

When selecting what the therapeutic goal will be, this needs to be done with the MHCU and for the MHCU. Considering all the factors within and outside of an individual when planning an intervention leads towards client-centred practice (Law et al., 1995; Townsend & Wilcock, 2004; Carroll, 2015). With this in mind, it would be important to consider the culture of the MHCU as well (Haft et al., 2022; Mabunda et al., 2022).

Finally, there is also a call for occupational therapists to maintain occupation-centredness, even when it seems easier to simply adopt approaches rooted in other professions (Fisher, 2013). This concept refers to a professional perspective, or a lens through which an occupational therapist will link what they are doing to occupation (Fisher, 2013). Should the therapist and an MHCU see an occupational challenge, and an evidence-based approach that may seem relevant or matched to overcome that challenge, this approach may be considered.

There are various therapeutic approaches that can be incorporated into practice (Chandler, 2022). Some approaches are rooted purely in occupational therapy theory. However, there is a growing trend among occupational therapists in South Africa to look beyond traditional occupational therapy interventions. Psychological frames of references are also reported to shape the occupational therapy mental health space in countries such as Australia, despite resistance (Ashby et al., 2016). In this case, it was due to pressures to adopt these frameworks and tensions between the psychology and occupational therapy professions (Ashby et al., 2016). The exact reasons for this integration in South Africa still needs to be explored.

One of the approaches currently incorporated into treatment interventions is Dialectical Behavior Therapy (DBT). Dialectical Behavior Therapy was originally developed based on the clinical experiences of psychologists as a year-long outpatient programme presented in four modules, namely mindfulness, interpersonal effectiveness, distress tolerance, and emotional regulation (Linehan & Wilks, 2015). The first randomized controlled trial on this topic was reported on in 1991 (Linehan & Wilks, 2015). All constructs of a DBT programme aim to reduce rigid, polarized and extreme behaviors, and encourage flexible, adaptive behaviors (Fox, 2018). Flexible and adaptive behaviors have the potential to improve occupational performance, despite illness (American Occupational Therapy Association, 2014). A review of available literature indicates DBT to be a psychotherapeutic approach with a growing empirical base (Apsche et al., 2005).

Although originally designed for the treatment of highly suicidal MHCUs, DBT has been successfully incorporated across a range of mental health settings (May et al., 2016; Linehan, 2015; Linehan & Wilks, 2015). In a quasi-experimental study with a pre-test post-test design, group-based DBT showed a significant reduction of depressive symptoms in a female

substance use population (Sahranavard & Miri, 2018). An 18-month DBT programme was effective in reducing anger and violence in a forensic population (Evershed et al., 2003). DBT combined with trauma-focused interventions showed a reduction in Post-traumatic Stress Disorder symptoms (Bohus et al., 2013). A qualitative analysis of a DBT skills training programme offered to teachers, suggested that DBT may be useful in equipping individuals with social-emotional competencies, even outside of the sphere of clinical pathology (Justo et al., 2018). The developer of the DBT approach, Marsha Linehan, has identified the potential usefulness of DBT in ever evolving and adapted clinical settings. However, Linehan also states that further research is required to explain how DBT works in these evolving clinical setups (Linehan & Wilks, 2015).

There are a number of factors that could support the incorporation of DBT in occupational therapy. Dialectical Behavior Therapy modules are selected because the occupational therapist recognizes that by optimizing the client factors of distress tolerance, mindfulness, emotional regulation, and interpersonal effectiveness, the occupational performance of the MHCU can be enhanced. These skills can increase an individual's capacity to engage with chosen activities and occupations. In conjunction with the treatment outcome, the process of presenting DBT modules incorporates practical activities that remain true to the occupational therapy theory of activity-based intervention. Furthermore, according to the occupational therapy scope of practice, the occupational therapist may present interventions that identify, remediate, develop or compensate for emotional regulation and behavioural skills (American Occupational Therapy Association, 2021).

However, there are also some questions surrounding the integration of traditionally psychological approaches into the profession of occupational therapy. Has this been done in the past? If so, how and what was the efficacy of this? When deciding on a treatment approach, the need for evidence-based and client-centred practice is imperative at all times in order to ensure effective and durable occupational therapy interventions (Carroll, 2015; Lloyd et al., 2004). However, although adjusted versions of the DBT approach are utilized by occupational therapists in South Africa, at the time of this study there was no comprehensive review of literature related to the use of Dialectical Behavior Therapy (DBT) as a treatment approach in the field of occupational therapy (Grounded Well Wise, 2023; Gelderblom, 2023).

The need arose for an understanding of how DBT is applied by occupational therapists globally in order to better contextualize and guide South African occupational therapists. A mapping of literature which refers to the use of DBT in the field of occupational therapy could contribute to answering important questions, guided by research, to clarify this current gray position.

The aim of this article is to report on a scoping review that aimed to answer the question "What is known from the literature regarding the use of DBT in occupational therapy?". The more specific objective of this study was to review the literature on the use of the DBT approach by occupational therapists working in the mental health field.

It is important to initiate and continue research in the field of DBT-informed occupational therapy in order to provide a united front and understanding of how occupational therapy integrates this approach in practice and how this approach may be experienced by the MHCU. Evidence-based practice will also ultimately optimize clinical outcomes for future MHCUs.

Methodology

Moving from the philosophical standpoint of enhancing participation in occupations with the use of evidence-informed therapeutic intervention, in this case DBT-informed occupational therapy, it is necessary to know what research has been done. To address this objective, a scoping review of the available evidence-based knowledge regarding the use of DBT by occupational therapists was completed. This methodology was selected as it allowed for the inclusion of a greater number of study designs and study characteristics regarding this under-researched topic (Arksey & O'Malley, 2005; Creswell, 2009). The end goal of this methodology was to qualitatively "map" relevant literature and identify knowledge gaps in this field (Munn et al., 2018; Arksey & O'Malley, 2005). The stages of conducting a scoping review as described in the Joanna Briggs Institute (JBI) manual were followed (Aromataris, 2020). The reason for selecting this methodology was because it is underpinned by the well-researched Arksey and O'Malley framework, and has since been further researched and developed to stay relevant and up-to-date (Aromataris, 2020; Arksey & Lisa, 2005). The JBI stages of conducting a scoping

review have been further enhanced by Peters et al., (2020). The JBI scoping review stages include: defining and aligning the objective/s and question/s; developing and aligning the inclusion criteria with the objective/s and question/s; describing the planned approach to evidence searching, selection, data extraction, and presentation of the evidence; searching for the evidence; selection of the evidence; extracting the evidence; analysis of the evidence; presentation of the results; summarizing the evidence in relation to the purpose of the review, drawing conclusions, and noting any implications of the findings (Arksey & O'Malley, 2005; Aromataris, 2020; Peters et al., 2020). The Health Sciences Ethics Committee (HSREC) of the University of the Free State (UFS) approved the study protocol (UFS-HSD2022/0937/2908).

The search strategy

The review question that guided this search was: "what is the use of the DBT approach by occupational therapists working in the mental health field internationally?"

The information search was limited to the publication period of 2004 to August 2022. This date specification would include possible publications from the period that the term "third wave therapies" was first published up to the time of the data collection phase (Hayes, 2004).

Within the “searching for the evidence” stage, there is a three-phase search strategy which was utilized for this study (Aromataris, 2020). Firstly, at least two appropriate databases were searched using the search string specified in table 2. The titles and abstracts were analysed for related keywords and index terms which could be relevant, and then added to the list of search terms. Thereafter, a second search was done using identified keywords and index terms related to the topic of interest, in applicable databases. Thirdly, the reference lists of identified sources to be included in the review were scanned for additional relevant sources. The main search was conducted with the assistance of a librarian as recommended by McGowan (Aromataris, 2020). There were no additions made by the second or third search.

1. ("Dialectic* Behav*" or Mindfulness or "being present" or meditat* or "Interpersonal effectiveness" or "interpersonal skill*" or "social skill*" or "Distress tolerance" or coping or "stress manag*" or "Emotion* regulation" or "emotion* modulation" or "being present" or "coping strateg*")
2. ("mental* disorder*" or “mental* health*” or “mental* disease*” or “mental* ill*” or depres* or psychiatr* or anxiety or bipolar* or schizophren* or psychosis or psychotic or "Neurodevelopmental disorder*" or neurocognit* or "substance-related disorder*" or "addictive disorder*" or obsessive-compulsive or "trauma-related disorder*" or "stress*-related disorder*" or "somatic symptom*" or "dissociative disorder*" or "sexual dysfunction*" or "gender dysphoria*" or paraphil* or "eating disorder*" or "sleep-wake disorder*" or "personality disorder*") n4 (outpatient* or inpatient* or patient* or diagnos* or user* or client*)
3. (occupation* or "performance skill*" or "performance pattern*" or work or leisure or sleep or productivity or play or "interpersonal relationship*")
4. "occupation* therap*"
5. (outpatient* or inpatient* or patient* or diagnos* or user* or client*)

Table 2. Search string

Search terms

The search terms used in this study were iterative and could change as the study progressed in order to include as many relevant publications as possible (Arksey & O’Malley, 2005).

Through the collaboration between the author and a university librarian, a final search string was developed and is presented in table 2.

Information sources

Databases accessible to the University of the Free State were searched, including multidisciplinary, health, psychology, education, and social sciences databases. Specialist journals were included in the search, as well as at a later stage unpublished literature (including dissertations and theses).

The following electronic bibliographic databases were searched: Academic Search Ultimate, Africa-Wide Information, APA PsycArticles, APA PsycInfo, CINAHL with Full Text, Communication & Mass Media Complete, ERIC, Health Source - Consumer Edition, Health Source: Nursing/Academic Edition, Humanities Source Ultimate, MEDLINE (all of the preceding on the EBSCOHost platform), Scopus, and ProQuest.

Inclusion criteria

Concept

This review sought to include literature regarding the use of DBT within occupational therapy. This would be the core concept of the review (Aromataris, 2020). Less attention is paid to details of the included literature such as population or validity and reliability. There were numerous articles identified reporting on DBT, but with no link to the occupational therapy profession. If the literature focused on a profession other than occupational therapy or a treatment modality that was not DBT, the source was excluded from the review. If the standalone occupational therapy intervention discussed in the literature was similar enough to one of the four DBT themes (emotional regulation, mindfulness, distress tolerance and interpersonal effectiveness), and not part of a mixed or different recognized approach, it was included in the study.

Context

There was no limitation placed on the context of studies, such as the culture of participants (Aromataris, 2020). This was an open review. The only indirect restriction related to context was the language of the written article, which was required to be English. The translation of literature in other languages would be time-consuming and expensive if done professionally (feasibility).

Types of evidence sources

This review initially searched for published research articles as evidence sources. All study designs were considered in the review, including, but not limited to, randomized controlled trials, quasi-experimental studies, case-control studies, cohort studies, observational studies, case series, and expert opinions. As discussed further in the selection of source evidence below, the author realised that there was very limited return on articles covering this topic of DBT use within occupational therapy. The search was then expanded to include other types of evidence sources that could be extracted using the university database. The newly identified literature could be considered "gray literature" and came in the form of university theses and dissertations. There was no further search for other gray literature such as websites or blogs as these were not considered empirical enough to support this study.

The broad inclusion criteria described above were allowed in anticipation of minimal to no literature based on DBT use in occupational therapy, and hence to maximize the sample size.

Selection of source evidence

The initial search produced 893 results, which was reduced to 594 after automatic system deduplication. The author independently screened the evidence by title and then by abstract, and 46 articles were selected. The full text articles (except for one) were provided by the library. None of the articles referred to DBT specifically, although two interventions were presented similar to the DBT themes of interpersonal effectiveness and mindfulness. After adding Scopus as a database, an additional 124 articles were screened by title and then abstract. Nineteen full-text articles were requested from the library, of which only 16 could

be provided. One of the resultant articles referred to DBT use in occupational therapy. Another database was then searched, namely ProQuest, producing 157 results, of which 13 full text documents were examined. Of these, five mentioned the use of DBT by an occupational therapist. In total, 74 full text documents were reviewed (including articles and gray literature sources).

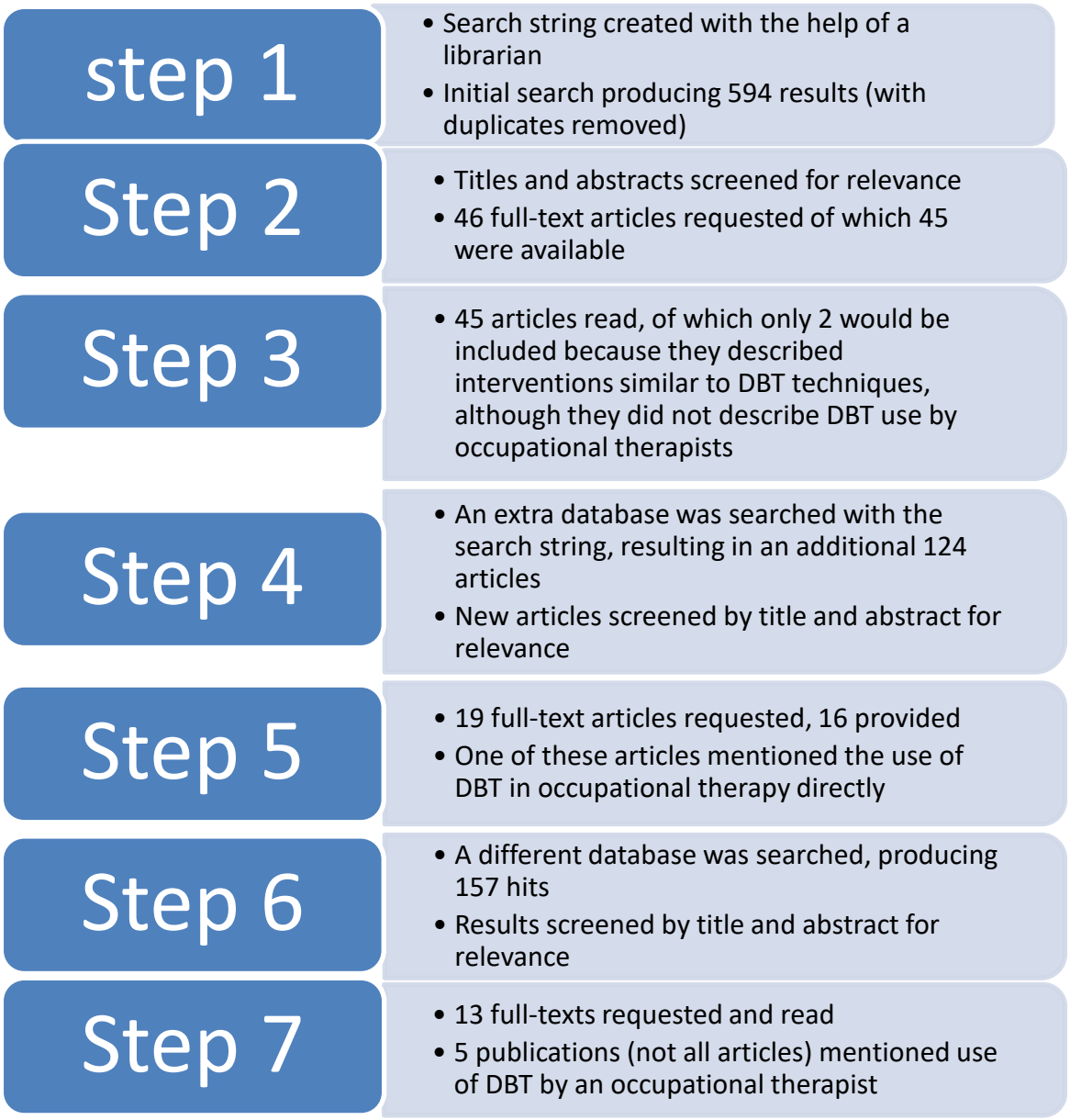

Figure 1. Selection of source evidence

Extraction of the data

The data extraction strategy as put forth in the JBI manual was used, based on the review question and the scoping review conducted on the published literature on the topic. Data extraction has the goal of presenting a summary of the information (Aromataris, 2020). Recommended data points were used to build a self-developed data charting form, designed according to the guidelines offered in the JBI manual (Aromataris, 2020). The table was completed as far as possible including the following information: author; year of publication; origin/country of origin; aims/purpose; population and sample size in the source of evidence; study design; intervention type and duration; key findings that related to the scoping review question; DBT theme(s). If necessary, these extraction points could be adjusted. Adjustment of extraction points may be due to a lack of relevance of a specific extraction point, or the particular relevance of a point which is not suggested in the JBI manual (Aromataris, 2020). One of the 9 optional extraction points put forward in the JBI manual was not used, namely "outcomes and key details of these (e.g. How measured)" (Aromataris, 2020). This point was excluded because few of the literature sources identified measured an intervention, and none measured the efficacy of a purely occupational therapy DBT-informed intervention. One unique extraction point was added, namely "DBT themes". This was necessary in order to identify if the source under examination mentioned DBT in general or any specific theme.

The author charted this data on a Microsoft Excel spreadsheet, while the study supervisor reviewed this data for accuracy and completeness.

Data analysis

The analysis of the literature was primarily done by frequency counts of concepts and key findings (Aromataris, 2020). A scoping review differs from a systematic review here in that there is no synthesis of individual study findings or presentation of summary findings (Aromataris, 2020). A deeper thematic analysis of the data was also not viewed as viable in the case of this study given the limited amount of quality information found in the selected literature related to the specific research topic, being the use of DBT in the occupational therapy profession.

Results

The results of this review are presented through a discussion of the characteristics of the included studies, and the findings of these studies as related to the scoping review question. This discussion is aimed at comparing the extracted information to what could be found in literature on that specific topic.

Characteristics of the included studies

Through the process of elimination, a total of seven sources were ultimately included in the review. The publication date of these sources ranged from 2005 to 2022, and sources were from India (*n*=1) (Aruldass et al., 2022), the United States of America (*n*=4) (Miller, 2005; Moro, 2008; Gutman et al., 2020; Conlin & Lorinser, 2012), Ireland (*n*=1) (Lyng, 2017), and England (*n*=1) (Syrett, 2015). The mental disorders addressed in these studies included Borderline Personality Disorder (Lyng, 2017), schizophrenia (Aruldass et al., 2022), self-diagnosed adult attention deficit hyperactivity disorder (Gutman et al., 2020), and mild traumatic brain injury (Miller, 2005). The two sources which were published did not relate to DBT specifically but rather occupational therapy approaches that looked similar to what may be found in the interpersonal effectiveness or mindfulness theme of a DBT skills training programme (Aruldass et al., 2022; Gutman et al., 2020; Linehan, 2015). For three of the unpublished sources and one published literature review, there was a trend in that no specific DBT theme was mentioned, but rather DBT was referred to as a whole (Moro, 2008; Syrett, 2015; Lyng, 2017; Conlin & Lorinser, 2012). Of the studies that were related to interventions, they were all different related to the type of intervention and duration (Aruldass et al., 2022; Gutman et al., 2020; Moro, 2008; Lyng, 2017).

Table 3. Results of the Scoping Review on DBT

Author and year	**Origin**	**Aim/Purpose**	**Population and sample size**	**Study design**	**Type & duration of intervention**	**Findings that relate to the scoping review question**	**DBT theme**
P Aruldass; T S Sekar; S Saravanan; R Samuel; K S Jacob (2022)	India	Evaluating the effectiveness of a DBT social skills training programme.	Schizophrenia diagnosis; n=101	postinterventional experimental design	Group intervention Social skills training, including verbal and non-verbal communication skills of social competence, social perception, social cognition	Social skills similar to mindfulness of others and making friends (DBT skills) were used to improve social functioning.	Interpersonal effectiveness

					and emotional perception.		
S A Gutman; S Balasubramanian; M Herzog; E Kim; H Swirnow; Y Retig; S Wolff (2020)	USA	To determine whether a 7-week tailored occupation-based intervention can reduce perceived stress and ADHD symptoms and enhance perceived performance of and satisfaction with daily roles	Women with self-reported ADHD; n=23	Randomized control study	Individual intervention 7 week 1-hour sessions addressed routine establishment, organization, time management, stress management (mindful walks), and sensory regulation in the	Mindfulness (observing) was used to enhance occupation	Mindfulness

		and activities among women with ADHD.			home and community.		
C D Moro (2008)	USA	A literature review defining self-mutilation and occupational therapy intervention approaches.	N/A	Literature review	Group intervention 2.5 hours skills training with occupational therapy and once weekly psychotherapy sessions	Advised that focus should be on problem-solving (real life situations), skills-training, relationship strategies and contingency management.	Emotional regulation; distress tolerance; interpersonal effectiveness; mindfulness
J L Lyng (2017) *Unpublished	Ireland	PhD in Philosophy: Exploring ways that DBT can be delivered in the community	Individuals meeting criteria for Borderline	Quasi-experimental design (quantitative)	Individual and group intervention	Two occupational therapists formed part of a team of 23 therapists who presented	Emotional regulation; distress tolerance; interpersonal

		and who is likely to respond to DBT.	Personality Disorder (BPD)		Standard DBT programme: 24 weeks	comprehensive DBT, skills trainer role was rotated.	effectiveness; mindfulness
K Syrett (2015) *Unpublished	England	PhD in psychology: Exploring the emotional experiences of therapists whilst implementing a DBT approach.	N=9, of which occupational therapist=2, DBT consultation team in NHS Foundation Trust, received intensive DBT training and worked with clients for a minimum of one year after	Semi-structured interviews	DBT framework. Some other intervention approaches were used in combination.	Occupational therapists made use of DBT in practice and offered advice.	Emotional regulation; distress tolerance; interpersonal effectiveness; mindfulness

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			completion of training.				
M Conlin; A Lorinser (2012) *Unpublished	USA	M. Occupational therapy: Identifying the most effective and current evidence-based occupational therapy interventions available for adolescents with bipolar disorder.	N/A	Systematic literature review	N/A	An occupational therapist certified in DBT can utilize two main intervention approaches when working with a bipolar disorder population: psychotherapy and skills training. DBT falls within the scope of occupational therapy according to the Occupational	Emotional regulation; distress tolerance; interpersonal effectiveness; mindfulness

						therapy Practice Framework: Domain and Process, 2nd ed.	
A Miller (2005) *Unpublished	USA	PhD in psychology: A programme design, including DBT, for Mild Traumatic Brain Injury (DBTMTBI)	Mild Traumatic Brain Injury	Literature review	N/A	Occupational therapist formed part of a multidisciplinary team providing DBTMTBI. Occupational therapist provided functional living skills and self-care skills as well as addressing problems affecting	Occupational therapy goals addressed, not DBT-specific skills

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						extremities and visual perception. Not DBT skills training.	

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Discussion

This scoping review was undertaken to identify literature regarding the use of DBT in the occupational therapy profession. Evidence shows that DBT is used by occupational therapists in England and Ireland (Syrett, 2015; Lyng, 2017). Occupational therapists may present DBT as part of a multi-disciplinary team, although specific differences between how an occupational therapist would present DBT compared to another profession was not clear from the identified sources (Lyng, 2017). Establishing where DBT presented by occupational therapists and other professions differs and aligns is an important aspect of developing a body of knowledge.

As a starting point, this scoping review found that occupational therapists remained within the functional living skills scope, or within skills training (Miller, 2005; Conlin & Lorinser, 2012). In the DBT programme design adjusted for mild traumatic brain injury, offered by Miller (2005), occupational therapists were not involved in teaching DBT skills. Occupational therapy was an additional component to the DBT programme, adding relevant functional skills that may be required from someone who has suffered a brain injury (Miller, 2005). In the systematic literature review by Conlin and Lorinser (2012), it was suggested that problem solving skills training; behavior adaptations and compensatory techniques training; and symptom regulation training would be of particular benefit for MHCUs diagnosed with bipolar mood disorder (Conlin & Lorinser, 2012). More research is needed in this area, but the preliminary evaluation suggests that DBT-use by occupational therapists should remain in the sphere of skills training. The sources cited do not mention the occupational therapist delving deeper into emotional processing, or other areas of practice unique to the psychology profession. According to the World Health Organization (WHO), life skills are defined as the "abilities for adaptive and positive behavior that enable individuals to effectively deal with the demands and challenges of everyday life" (Abaoğlu et al., 2017). DBT skills could be viewed as enabling participation in life roles, a concept at the core of occupational therapy (Abaoğlu et al., 2017).

It was found was that some occupational therapy interventions overlapped with certain main concepts or techniques conveyed in the DBT module of interpersonal effectiveness and

mindfulness (Gutman et al., 2020; Aruldass et al., 2022). For example, the "DEAR MAN" DBT skill helps one to develop effective communication, much like interactive social skills training groups (Aruldass et al., 2022; Linehan, 2015). The main goals of such interventions may be similar to those of DBT, but they are not termed DBT. The DBT skill of interpersonal effectiveness may be comparable to the occupational therapy interpersonal and social life skills, which includes assertiveness, conflict resolution, social awareness, and communication (Wegner, 2014; Abaoğlu et al., 2017). These skills are presented in an experiential manner, with the aim of improving an individual's confidence in social situations (Wegner, 2014).

Further to this point, the DBT mindfulness skill or distress tolerance skill may be comparable to relaxation training offered by an occupational therapist, such as mentalization (Nott, 2014). The DBT skill of emotional regulation may also be comparable to the coping skills taught in occupational therapy (Abaoğlu et al., 2017). However, the exact techniques taught in DBT, and the method of teaching, are specific to DBT theory, demarcating generalized skills training and DBT skills training.

There are some potential benefits of integrating DBT theory in the profession of occupational therapy. The MHCU will likely benefit from life skills presented by an occupational therapist. This is especially true because of the unique component of activity participation in occupational therapy, which overcomes performance problems and enhances self-confidence (Crouch, 2014). A focus on practical problem-solving is also recommended in one of the sources identified in this scoping review (Moro, 2008). The theme of problem-solving is also found in literature describing the focus of occupational therapy (Trupin et al., 2002; Smith, 2018; Hegel et al., 2011; Nielsen et al., 2022). However, it is important to recognize that an occupational therapist who is presenting their unique interpretation of the four DBT themes does not amount to a DBT intervention. Dialectical Behavior Therapy is unique in its content and assumptions, hence training of the service provider is required (Linehan, 2015).

In support of training, one of the sources included in the scoping review also mention that the occupational therapists who participated in the research were DBT certified (Conlin & Lorinser, 2012). This suggests that when looking outside of South Africa, there is a prerequisite or preference for training. More research into the different types of training offered and the

value of such should be done. Due to copyright limitations of DBT techniques, as well as the wide variation amongst occupational therapists in how they present skills (to be client-centred), it would not be possible to compare the details of the four DBT themes and how these topics would be covered in occupational therapy (Linehan, 2015; Townsend & Wilcock, 2004). However, because there is increasing empirical support for the benefits of DBT, even when adapted to only a skills training programme, it may be worthwhile to further investigate if the traditional DBT can be adjusted so as to become occupation-centred and client-centred (Flynn et al., 2019; McMain et al., 2017).

In occupational therapy, the specific life skills presented are selected based on the needs of the individual MHCU, in support of client-centered outcomes (Abaoğlu et al., 2017). This suggests that it should be clear why the unique package of DBT skills would be appropriate for a MHCU within their unique context. The question remains then, at which degree of integration does an occupational therapy intervention qualify as "DBT-informed"? This question is especially relevant when other occupational therapy techniques or approaches are also incorporated. A clear conceptualization should be further established and/or investigated in future research. As a first step, a clear definition of DBT-informed occupational therapy is necessary.

When considering the number of sources included in this review, as well as the fact that most of the sources were unpublished material, it remains evident that there is a paucity of research regarding this concept. The limited literature could be viewed as a study limitation, but it also provides a clear answer to the purpose of this scoping review. There are no clear guidelines found in literature for the occupational therapist wishing to present DBT-informed occupational therapy at this point. As each source included in this review differ in terms of the type of intervention and their duration, there is no consistency found in literature that would allow the building of a standardized DBT-informed occupational therapy programme at this time. A large portion of writings on this topic form part of postgraduate studies, but not in the field of occupational therapy (Miller, 2005; Syrett, 2015; Lyng, 2017). In the selected sources there is also no clarity on how the occupational therapist made use of or adapted the original DBT approach, or how this differs from the role of other multidisciplinary members. Much of what was found was advice from occupational therapists who use DBT, but no clear

guidelines or findings rooted in published literature (Moro, 2008). The DBT concepts presented were also usually one of a few themes addressed by a broader intervention (Gutman et al., 2020; Syrett, 2015; Aruldass et al., 2022). In such a situation it becomes difficult to clearly establish a cause and effect between one approach and a positive outcome when more than one approach is used in an intervention.

Conclusion and recommendations

This scoping review identified seven sources which mention the profession of occupational therapy within a DBT programme as well as some generalized advice aimed at occupational therapists presenting DBT. Four of the seven sources were unpublished. These sources support the link between occupational therapy and DBT by providing evidence that the two are integrated in some countries. However, the details of this integration are not clear in literature. No guidelines are provided and there is no clear link between occupational therapy alone and improved client outcomes.

After a body of knowledge has been established and DBT-informed occupational therapy has been clearly defined, the efficacy of the resultant DBT-informed occupational therapy procedures for the mental health population should be evaluated. This could be in the form of pre-and post-intervention studies, or another experimental approach. This would be a last step in the search for evidence-based interventions.

This study established the need for a clear definition of DBT-informed occupational therapy, followed by an appreciation of how this aligns or differs from other forms of DBT, and then lastly an evaluation of the efficacy of a set approach. Currently, DBT-informed occupational therapy could not be considered evidence-based.

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References

Abaoğlu, H., Cesim, Ö.B., Kars, S. & Çelik, Z. 2017. Life Skills in Occupational Therapy. Occupational Therapy - Occupation Focused Holistic Practice in Rehabilitation: 50. https://doi.org/10.5772/intechopen.68462 19 December 2022.

American Occupational Therapy Association. 2014. Occupational therapy practice framework: domain and process. The American journal of occupational therapy : official publication of the American Occupational Therapy Association, 68. https://doi.org/10.5014/ajot.2014.682006.

American Occupational Therapy Association. 2020. Occupational therapy practice framework: Domain and process. American Journal of Occupational Therapy, 74: 1–87. https://doi.org/10.5014/ajot.2020.74s2001 17 May 2023.

American Occupational Therapy Association. 2021. Occupational therapy scope of practice. American Journal of Occupational Therapy, 75. https://doi.org/10.5014/ajot.2021.75s3005 28 April 2023.

American Psychiatric Association. 2013. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. Washington; London: American Psychiatric Publishing. https://doi.org/10.1176/appi.books.9780890425596.

Apsche, J.A., Bass, C.K., Jennings, J.L., Murphy, C.J., Hunter, L.A. & Siv, A.M. 2005. Empirical comparison of three treatments for adolescent males with physical and sexual aggression: Mode deactivation therapy, cognitive behavior therapy and social skills training. International Journal of Behavioral Consultation and Therapy, 1(2): 101–113. https://doi.org/10.1037/h0100738 6 November 2019.

Arksey, H. & Lisa, O. 2005. Scoping studies: towards a methodological framework. International Journal of Social Research Methodology, 8(1): 19–23. https://doi.org/10.1080/1364557032000119616.

Arksey, H. & O'Malley, L. 2005. Scoping studies: towards a methodological framework. International Journal Social Research Methodology, 8(1): 20;22. https://doi.org/10.1080/1364557032000119616.

Aromataris, M. (editor). 2020. JBI Manual for Evidence Synthesis. M. Aromataris E, ed. https://doi.org/10.46658/jbirm-20-02.

Aruldass, P., Sekar, T.S., Saravanan, S., Samuel, R. & Jacob, K.S. 2022. Effectiveness of social skills training groups in persons with severe mental illness: A pre–post intervention study. Indian Journal of Psychological Medicine, 44(2): 114–119. https://doi.org/10.1177/02537176211024146 19 December 2022.

Ashby, S., Gray, M. & Carole, J. 2016. An exploratory study into the application of psychological theories and therapies in Australian mental health occupational therapy practice: Challenges to occupation-based practice. Australian Occupational Therapy Journal, 64(1): 24–32. https://doi.org/10.1111/1440-1630.12302.

Backenstrass, M., Frank, A., Joest, K., Hingmann, S., Mundt, C. & Kronmqller, K.-T. 2006. A comparative study of nonspecific depressive symptoms and minor depression regarding functional impairment and associated characteristics in primary care B. Comprehensive Psychiatry, 47: 35. https://doi.org/10.1186/s41155-018-0094-z 4 May 2020.

Baglioni, C., Nanovska, S., Regen, W., Spiegelhalder, K., Feige, B., Nissen, C., Reynolds, C.F. & Riemann, D. 2016. Sleep and mental disorders: A meta-analysis of polysomnographic research. Psychological Bulletin, 142(9): 969–990. https://doi.org/10.1037/bul0000053 27 May 2023.

Bohus, M., Dyer, A.S., Priebe, K., Krüger, A., Kleindienst, N., Schmahl, C., Niedtfeld, I. & Steil, R. 2013. Dialectical Behaviour Therapy for Post-traumatic Stress Disorder after childhood sexual abuse in patients with and without Borderline Personality Disorder: A randomised

controlled trial. Psychotherapy and Psychosomatics, 82(4): 221–233. https://doi.org/10.1159/000348451 28 March 2020.

Carroll, E. 2015. Towards client-centred practice within an occupational therapy group life skill program: An action research journey. https://ezproxy.ufs.ac.za:8381/ehost/detail/detail?vid=12&sid=8c349ad9-a910-4a54-ae54-1c44e50fedeb%40pdc-v-sessmgr05&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=ufs.11660.2300&db=ir00890a 14 February 2020.

Chandler, M. 2022. 25 OT Frames of Reference: A Quick Overview for Students and Practitioners - myotspot.com. my OT Spot. https://www.myotspot.com/ot-frames-of-reference/ 17 March 2023.

Conlin, M. & Lorinser, A. 2012. The most effective evidence-based occupational therapy intervention for adolescents with bipolar disorder: a systematic literature review. The College of St. Scholastica. https://ezproxy.ufs.ac.za/dissertations-theses/most-effective-evidence-based-occupational/docview/1251631173/se-2?accountid=17207.

Craig, A., Rochat, T., Naicker, S.N., Mapanga, W., Mtintsilana, A., Dlamini, S.N., Ware, L.J., Du Toit, J., Draper, C.E., Richter, L. & Norris, S.A. 2022. The prevalence of probable depression and probable anxiety, and associations with adverse childhood experiences and socio-demographics: A national survey in South Africa. Frontiers in Public Health, 10: 4076. https://doi.org/10.3389/fpubh.2022.986531 19 December 2022.

Creswell, J.W. 2009. Research design: qualitative, quantitative, and mixed methods. third. SAGE Publications Inc. https://doi.org/10.1002/nha3.20258.

Crouch, R. 2014. Activation and psycho-education: major principles in the occupational therapist's approach to schizophrenia. In R. Crouch & V. Alers, eds. Occupational therapy in psychiatry and mental health. Wiley Blackwell: 507–518. https://doi.org/10.1002/9781118913536.

Durocher, E., Gibson, B.E. & Rappolt, S. 2014. Occupational justice: A conceptual review. Journal of Occupational Science, 21(4): 418–430. http://www.tandfonline.com/doi/abs/10.1080/14427591.2013.775692 6 March 2020.

Evershed, S., Tennant, A., Boomer, D., Rees, A., Barkham, M. & Watson, A. 2003. Practice-based outcomes of dialectical behaviour therapy (DBT) targeting anger and violence, with male forensic patients: a pragmatic and non-contemporaneous comparison. Criminal Behaviour and Mental Health, 13(3): 198–213. http://doi.wiley.com/10.1002/cbm.542 28 March 2020.

Fisher, A.G. 2013. Occupation-centred, occupation-based, occupation-focused: Same, same or different? Scandinavian Journal of Occupational Therapy, 20: 162–173. 10.3109/11038128.2012.754492.

Flynn, D., Joyce, M., Spillane, A., Wrigley, C., Corcoran, P., Hayes, A., Flynn, M., Wyse, D., Corkery, B. & Mooney, B. 2019. Does an adapted Dialectical Behaviour Therapy skills training programme result in positive outcomes for participants with a dual diagnosis? A mixed methods study. Addiction science & clinical practice, 14(1): 28. https://doi.org/10.1186/s13722-019-0156-2 4 February 2023.

Fox, E. 2018. Delivering DBT in an inpatient setting. In The Oxford Handbook of Dialectical Behaviour Therapy. 1–30. https://doi.org/10.1093/oxfordhb/9780198758723.013.20.

Gelderblom, A. 2023. How I work. https://gelderlove.com/how-i-work/ 23 October 2023.

Grounded Well Wise. 2023. Haneke Jonas. https://www.groundedwellwise.co.za/Haneke Jonas 23 October 2023.

Gutman, S.A., Balasubramanian, S., Herzog, M., Kim, E., Swirnow, H., Retig, Y. & Wolff, S. 2020. Effectiveness of a tailored intervention for women with Attention Deficit Hyperactivity Disorder (ADHD) and ADHD symptoms: A randomized controlled study. The American Journal of occupational therapy : official publication of the American Occupational Therapy Association, 74(1). https://doi.org/10.5014/ajot.2020.033316 19 December 2022.

Haft, S.L., O'Grady, S.M., Shaller, E.A.L. & Liu, N.H. 2022. Cultural adaptations of Dialectical Behavior Therapy: A systematic review. Journal of Consulting and Clinical Psychology, 90(10): 787. https://doi.org/10.1037/ccp0000730 16 December 2022.

Hegel, M.T., Lyons, K.D., Hull, J.G., Kaufman, P., Urquhart, L., Li, Z. & Ahles, T.A. 2011. Feasibility study of a randomized controlled trial of a telephone-delivered problem-solving-occupational therapy intervention to reduce participation restrictions in rural breast cancer survivors undergoing chemotherapy. Psycho-Oncology, 20(10). https://doi.org/10.1002/pon.1830 19 December 2022.

Justo, A.R., Andretta, I. & Abs, D. 2018. Dialectical behavioral therapy skills training as a social-emotional development program for teachers. Practice Innovations, 3(3): 168–181. https://doi.org/10.1037/pri0000071 28 March 2020.

Kim, J.G., Moon, K.H., Lim, E.S. & Yoo, J.H. 2016. A Study on IADL, Stress and Motivation on Healthy Lifestyle among Elderly People with Arthritis. Journal of the Korea Academia-Industrial cooperation Society, 17(3): 209–217. https://doi.org/10.5762/kais.2016.17.3.209 25 June 2020.

Law, M., Baptiste, S. & Mills, J. 1995. Client-centred practice: what does it mean and does it make a difference? Canadian journal of occupational therapy. Revue canadienne d'ergotherapie, 62(5): 250–7. https://doi.org/10.1177/000841749506200504 21 February 2020.

Linehan, M. 2015. DBT skills training manual. Second. Guilford Press. https://doi.org/10.1097/nmd.0000000000000387.

Linehan, M.M. & Wilks, C.R. 2015. The course and evolution of dialectical behavior therapy. American Journal of Psychotherapy, 69(2): 97–110. https://doi.org/10.1176/appi.psychotherapy.2015.69.2.97 28 March 2020.

Lloyd, C., Bassett, H. & King, R. 2004. Occupational therapy and evidence-based practice in mental health. British Journal of Occupational Therapy, 67(2): 83–88. https://doi.org/10.1177/030802260406700205 4 April 2020.

Lyng, J.L. 2017. Dialectical Behaviour Therapy for Borderline Personallity Disorder in the community. Bangor University.

Mabunda, D., Oliveira, D., Sidat, M., Cavalcanti, M.T., Cumbe, V., Mandlate, F., Wainberg, M., Cournos, F. & de Jesus Mari, J. 2022. Cultural adaptation of psychological interventions for people with mental disorders delivered by lay health workers in Africa: scoping review and expert consultation. International Journal of Mental Health Systems, 16(1): 1–16. https://doi.org/10.1186/s13033-022-00526-x 15 October 2023.

May, J.M., Richardi, T.M. & Barth, K.S. 2016. Dialectical behavior therapy as treatment for borderline personality disorder. Mental Health Clinician, 6(2): 62–69. https://doi.org/10.9740/mhc.2016.03.62 11 March 2020.

McMain, S.F., Guimond, T., Barnhart, R., Habinski, L. & Streiner, D.L. 2017. A randomized trial of brief dialectical behaviour therapy skills training in suicidal patients suffering from borderline disorder. Acta Psychiatrica Scandinavica, 135(2): 138–148. http://doi.wiley.com/10.1111/acps.12664 28 March 2020.

Miller, A. 2005. Dialectical behavior therapy for mild traumatic brain injury: A program design. Carlos Albizu University. https://ezproxy.ufs.ac.za/dissertations-theses/dialectical-behavior-therapy-mild-traumatic-brain/docview/305362418/se-2?accountid=17207.

Moro, C.D. 2008. A comprehensive literature defining self-mutilation and occupational therapy intervention approaches. Occupational Therapy in Mental Health, (231): 55–67. https://doi.org/10.1300/j004v23n01_04.

Munn, Z., Peters, M.D.J., Stern, C., Tufanaru, C., McArthur, A. & Aromataris, E. 2018. Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. BMC Medical Research Methodology, 18(143): 1. https://doi.org/10.1186/s12874-018-0611-x.

Nielsen, T.L., Holst-Stensborg, H.W. & Nielsen, L.M. 2022. Strengthening problem-solving skills through occupational therapy to improve older adults' occupational performance - A

systematic review. Scandinavian journal of occupational therapy. https://doi.org/10.1080/11038128.2022.2112281 19 December 2022.

Nott, A. 2014. Understanding and treating people with personality disorders in occupational therapy. In V. Alers & R. Crouch, eds. Occupational therapy in psychiatry and mental health. Wiley Blackwell: 480–506. https://doi.org/10.1002/9781118913536.

Peters, M.D.J., Marnie, C., Tricco, A.C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C.M. & Khalil, H. 2020. Updated methodological guidance for the conduct of scoping reviews. JBI evidence synthesis, 18(10): 2119–2126. https://doi.org/10.11124/jbies-20-00167 22 June 2023.

Sahranavard, S. & Miri, M.R. 2018. A comparative study of the effectiveness of group-based cognitive behavioral therapy and dialectical behavioral therapy in reducing depressive symptoms in Iranian women substance abusers. Psicologia: Reflexão e Crítica, 31(1): 15. https://doi.org/10.1186/s41155-018-0094-z 20 February 2020.

Samuel, R., Thomas, E. & Jacob, K.. 2018. Instrumental activities of daily living dysfunction among people with schizophrenia. Indian Journal of Psychological Medicine, 40: 134. https://doi.org/10.4103/ijpsym.ijpsym_308_17 25 June 2020.

Samuel, R., Thomas, E. & Jacob, K.S. 2018. Instrumental activities of daily living dysfunction among people with schizophrenia. Indian Journal of Psychological Medicine, 40(2). https://doi.org/10.4103/ijpsym.ijpsym_308_17 15 April 2020.

Smith, J. 2018. An occupational therapy emotion regulation and problem solving program for incarcerated women. Boston University. https://web-p-ebscohost-com.ufs.idm.oclc.org/ehost/detail/detail?vid=18&sid=2c2c16aa-0e7a-45be-b9ad-d4c541779da7%40redis&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=2018-00726-158&db=psyh 19 December 2022.

Syrett, K. 2015. An exploration of the emotional experiences of therapists when working with individuals with Borderline Personality Disorder. The University of Liverpool.

Tomaso, C.C., Johnson, A.B. & Nelson, T.D. 2020. The effect of sleep deprivation and restriction on mood, emotion, and emotion regulation: Three meta-analyses in one. Sleep. https://doi.org/10.1093/sleep/zsaa289 8 April 2021.

Townsend, E. & Wilcock, A. 2004. Occupational justice and client-centred practice: a dialogue in practice. Canadian Journal of Occupational Therapy, 71(2): 78. https://doi.org/10.1177/000841740407100203.

Trupin, E.W., Stewart, D.G., Beach, B. & Boesky, L. 2002. Effectiveness of a Dialectical Behaviour Therapy program for incarcerated female juvenile offenders. Child and Adolescent Mental Health, 7(3): 121–127. http://doi.wiley.com/10.1111/1475-3588.00022 28 March 2020.

Wasmuth, S., Mokol, E., Szymaszek, K., Gaerke, K.J., Manspeaker, T. & Lysaker, P. 2020. Intersections of occupational participation and borderline personality disorder: A grounded theory approach. Cogent Psychology, 7(1): 2. https://doi.org/10.1080/23311908.2020.1803580 11 March 2021.

Wegner, L. 2014. Occupational therapy intervention for drug-related disorders. In R. Crouch & V. Alers, eds. Occupational therapy in psychiatry and mental health. Wiley Blackwell: 537–550. https://doi.org/10.1002/9781118913536.

Wilcock, A.A. 2005. Occupational science: bridging occupation and health. Canadian Journal of Occupational Therapy, 72(1): 5–12. https://doi.org/10.1177/000841740507200105.

Wilcock, A.A. 1999. Reflections on doing, being and becoming. Australian Occupational Therapy Journal, 46: 1–11. https://doi.org/10.1046/j.1440-1630.1999.00174.x.

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CHAPTER 4 ARTICLE 2: An exploration of DBT-informed occupational therapy in South Africa

Note to the reader

It is the author's intention to submit this article to the *South African Journal of Occupational Therapy* for the following reasons: this research was conducted in South Africa and is therefore contextually bound to South African contexts; it meets the aims of the journal by containing new information and starting the steps towards resolving the controversy of the use of a psychological approach within the occupational therapy profession.

Guidelines provided by the journal include 16-19 page articles; a limit of 7000 words (without tables and references) and an abstract not exceeding 200 words. The recommended structure for an article submitted to this journal includes an introduction; a literature review; methods; results/findings; discussion; conclusion; acknowledgments and conflict of interests. At present, the article is 6360 words and just over 16 pages (in the journal required Arial font size 11). A maximum of 35 references for the literature review is allowed. Currently there are 30 references in the literature review. The total maximum number of references permitted by the journal is 60, whereas the article currently has 59. The referencing style of this article is in-line with the journal requirements (Vancouver referencing style as provided by Mendeley), while the rest of the dissertation was in-line with the postgraduate school requirements (the Cape Peninsula University of Technology referencing style). South African spelling rules were followed.

Abstract

Background: There is currently very limited literature to be found surrounding the use of Dialectical Behaviour Therapy (DBT) within the occupational therapy profession. Purpose: This study aimed to investigate whether occupational therapists in South Africa make use of the DBT approach in practice, and if so, provide a clearer description of their perspectives and these practices. Method: Using a qualitative design, 17 semi-structured interviews were conducted with South African occupational therapists using the DBT approach in clinical

practice. This was followed by thematic analysis of the qualitative information obtained. Findings: Three themes emerged from the data analysis: (a) Potential challenges identified by occupational therapists using Dialectical Behaviour Therapy, (b) The numerous benefits/motivators of Dialectical Behaviour Therapy-informed occupational therapy for the therapist and user, and (c) Variation in how Dialectical Behaviour Therapy is being used in practice. These themes highlight the need for more research in this integration of fields and a guideline for occupational therapists who choose to make use of Dialectical Behaviour Therapy in practice.

Keywords: Dialectical Behaviour Therapy; Dialectical Behaviour Therapy-informed occupational therapy; mental disorders; evidence-based practice

Introduction

According to the World Health Organization, mental illness is one of the leading causes of disability [1]. When psychologically compromised, as is the case with mental disorders, intrinsic emotional factors such as emotional regulation may prevent an individual from effectively engaging in meaningful occupations, or doing[2–5]. Therefore, in order to optimise the occupational wellbeing of mental healthcare users (MHCUs) affected by mental disorders, it becomes important for an occupational therapist to focus on the client factors and capacities that are inhibited by illness, such as emotional regulation. In the case of mental health disorders, this will be treatment targeting affective capacity as part of a holistic programme.

Various psychotherapy treatment modalities for mental disorders have been researched and developed over time, ranging from psychoanalysis to behaviourism[6]. Dialectical Behaviour Therapy (DBT) forms part of relatively new psychological treatment approaches termed third wave psychotherapeutic techniques, which all have a common primary focus on a person's relationship to their thoughts and emotions[7].

It has been the experience of the author that occupational therapists in South Africa are adapting and making use of the original DBT programme in practice. Even though it is being used, the details of this integration are unknown. More specifically, there is also no published research on DBT-informed occupational therapy within the South African context. It is not

understood how and why DBT is being used in South Africa by occupational therapists. This means that any version of DBT-informed occupational therapy is not evidence-based at this time, but possibly practice-based and evidence-informed. It also means that there is little uniformity among an intervention presented, which may lead to confusion of the MHCUs and medical aid funders.

In order to start clarifying the integration of this approach within occupational therapy, this article aims to describe the current use of DBT-informed occupational therapy by South African occupational therapists in order to enable occupational engagement in clients with mental disorders. This is achieved by describing the knowledge, attitudes and practices of occupational therapists practicing in the South African mental health field.

Literature review

Over time, the concept of positive mental health and wellbeing has been defined and described by several researchers[8,9]. Consensus is available that the notion of mental health does not only encompass the absence of psychiatric symptoms, but also pertains to a subjective feeling of content, or feeling good[2,10]. With cognisance of this definition, the opposite end of mental health would be a mental disorder, which forms the focus of this study[11]. The symptoms of mental disorders are experienced by individuals as primarily negative and distressing, described in more severe cases as having a "tyrannical power over life"[12].

Severe and persistent sub-optimal responses to negative emotions at an inappropriate time, as is the case with mental disorders, would be a driving force behind performance difficulties with activities of daily living (ADL), instrumental activities of daily living (IADL), health management, rest and sleep, education, work, play, leisure, and social participation. Conversely, occupational engagement supports health and wellness[2,13]. Both of these notions substantiate the link between emotional factors and performance patterns, performance skills, and ultimately functional domains[14].

In order to address the occupational performance challenges faced by those diagnosed with mental disorders, occupational therapy can be offered individually, in a group setting, or

targeting an entire population. Occupational therapy groups with relevant goals and effective techniques boast high therapeutic potential for their members and are valued by those involved[15]. A therapist's ability to utilise group processes to the benefit of the MHCU has been described as an art in its own right[16]. In South Africa, common themes addressed by the occupational therapist include improved role performance, social interaction, and life skills[17]. In Cape Town, South Africa, therapeutic groups in an occupational therapy programme assisted with positive workplace integration of forensic MHCUs[18].

However, despite the value of occupational therapy in reported cases in South Africa, there are MHCUs who chronically experience the negative impact of mental disorder symptoms on their occupational performance[19,20]. This group is not able to perform occupations meaningful to them, or not able to perform in the manner which they wish to do. Their right to do (actively engage), to be (discover), to become (all that they want to be) and to belong (connect to others) is disrupted[21].

This occupational injustice substantiates the need for continual exploration and research of evidence-based, client-centred, and occupation-centred mental health approaches[22–24]. This study aims to explore therapeutic approaches on the periphery of occupational therapy, but that hold potential value for MHCUs within the South African context. Dialectical Behaviour Therapy is a third wave psychotherapeutic technique which teaches specific zen-related techniques for better regulating emotions and behaviour[25].

Although originally designed for the treatment of MHCUs with suicidal thoughts or ideation, DBT has been successfully incorporated across a range of mental health settings[26–28]. In a quasi-experimental study with a pre-test post-test design, group-based DBT showed a significant reduction of depressive symptoms in a female substance use population[29]. An 18-month DBT programme was effective in reducing anger and violence in a forensic population[30]. Dialectical Behaviour Therapy combined with trauma-focused interventions showed a reduction in Post-traumatic Stress Disorder symptoms[31]. A qualitative analysis of a DBT skills training programme offered to teachers, suggested that DBT may be useful in equipping individuals with social-emotional competencies, even outside of clinical pathology[32]. Dialectical Behaviour Therapy skills also instilled confidence in teachers fighting

racism[33]. A 2021 study found that a shortened version of DBT successfully improved the emotional regulation of adults with Autism Spectrum Disorder, with no intellectual disability [34]. Although some adaptations were recommended, DBT was viewed as a feasible approach when working to improve the mental health of transgender youth[35]. Best practice guidelines are also available to practitioners wishing to adapt DBT for various cultures and ethnicities[36]. These are only a few examples of numerous studies in the field of DBT which highlight the approaches value in differing contexts and with different populations.

Although there is literature available on the adaptation and use of DBT concepts in varying contexts, this study aimed to explore the knowledge, attitudes, and practices of South African occupational therapists possibly making use of DBT in the mental health landscape.

Method

A qualitative research design with a postpositivist stance was used in order to gain insights into the phenomenon of DBT used within occupational therapy in mental health in South Africa[37]. This design was suited to the need for an initial description of the landscape, asking "how?" before exploring specific hypotheses[37]. One-on-one online semi-structured interviews were used to gather individual perspectives and practices which were then organised according to themes and used to inductively build an understanding of what DBT-informed occupational therapy currently looks like in South Africa[37,38]. There were no initial restrictions placed on the types of mental disorders and types of clinical settings included in this study. A strength of this method is that it allowed for revision and redirection as the themes in this study emerged, as well as providing a more in-depth understanding of the phenomenon under investigation[39].

Sampled population

The A total of 17 interviews were conducted (n=17). Seven of these therapists interviewed have been working in the mental health field for 5 years or less (n=5); four for a period between 5 to 10 years (n=4); five for 10 to 15 years (n=5); and one for longer than 15 years (n=1). Fifteen of the participants were working in private practice (n=15); one in the public sector (n=1), and one at a non-government organization (n=1). Ten of the participants worked

with in-patients (n=10), six with out-patients (n=6) and one with both (n=1). A broad range of mental disorders were treated by the study participants. Participants were relatively evenly spread out across three provinces in South Africa, namely the Eastern Cape, Gauteng, and the Western Cape.

A large portion of the participants had completed formal DBT training in the form of courses of a few weeks or days (n=11). Six participants completed basic training through the DBT Institute of South Africa (n=6). All of the participants interviewed were registered with the Health Professions Council of South Africa and reported to have some knowledge of the DBT approach.

Sampling method

Initial participants known by the research team (principal investigator and supervisors,) to be working in the mental health public and private sector were invited via email to participate in the study via purposive sampling (a non-probability sampling technique)[37]. The non-probability snowball sampling or chain referral method was used by emailing initial participants, who were then encouraged to refer further colleagues for an interview by resending the invitation email, without sharing the contact details of potential participants with the research team[37,40].

Inclusion criteria:

- Health Professions Council of South Africa (HPCSA) registered occupational therapist working in the mental health sector in South Africa, preferably with knowledge of the DBT approach
- Occupational therapists working in the public and private mental health sector
- All ages, gender, culture, fields of expertise, any number of years' experience
- Therapists that have access to the internet and are able to receive emails and do online interviews

Exclusion criteria:

- Community service occupational therapists

Data generation methods

An interview schedule was developed by the principal investigator. Open-ended and detail-oriented probes were used to guide the interview, instead of strictly dictating it as true to the chosen research design[37,41]. An interview script was prepared, and questions were arranged from simple to complex in a logical order[37]. A guideline for knowledge, attitude, and practice surveys was also consulted in the preparation of the interview schedule as these three themes are relevant to answering the research question[42]. The primary questions were direct questions regarding knowledge of, attitude towards, and practice using DBT. The probing questions were designed based on themes that are relevant to this study such as training and occupational participation. Open-ended interview questions are recommended as multiple-choice answers may potentially lead to correct guessing by participants[42]. If not addressed in the open-ended answers, more direct questions were asked. The primary open-ended questions provided in table 4 were asked, with each primary question also having several optional probing questions.

Keeping the primary questions open-ended allowed for depth, and also allowed the participant the freedom to disclose as much or as little information regarding their methods as they desired. This is important when considering the participants right to intellectual property in programme design. The sessions were concluded with an ethically obliged debriefing question in order to clarify any concerns or unpleasant experiences during the research participation process[37]. No concerns were brought forward by research participants. The interviews were conducted in English, using Microsoft Teams software. This software also allowed for automatic transcribing and manual storing of the recorded interviews. Recordings were stored on the principal investigator's password protected OneDrive account for a period of 12 months. The average time of completion was 30 minutes per interview.

Table 4: Interview schedule

1. Can you describe to me what you know and understand about the Dialectical Behaviour Therapy (DBT) approach?
2. Could you kindly share your attitude towards the use of DBT by occupational therapists to enable occupational performance in patients with mental health disorders.
3. Please explain how you make use of the DBT approach or selected DBT themes in practice?
4. Please explain why you have chosen to use DBT in the manner

Data analysis

Creswell's six step theory for the analysis of qualitative data was used as a guideline to analyse the information gathered via interviews[37,38]. These steps with minor adaptations included the following:

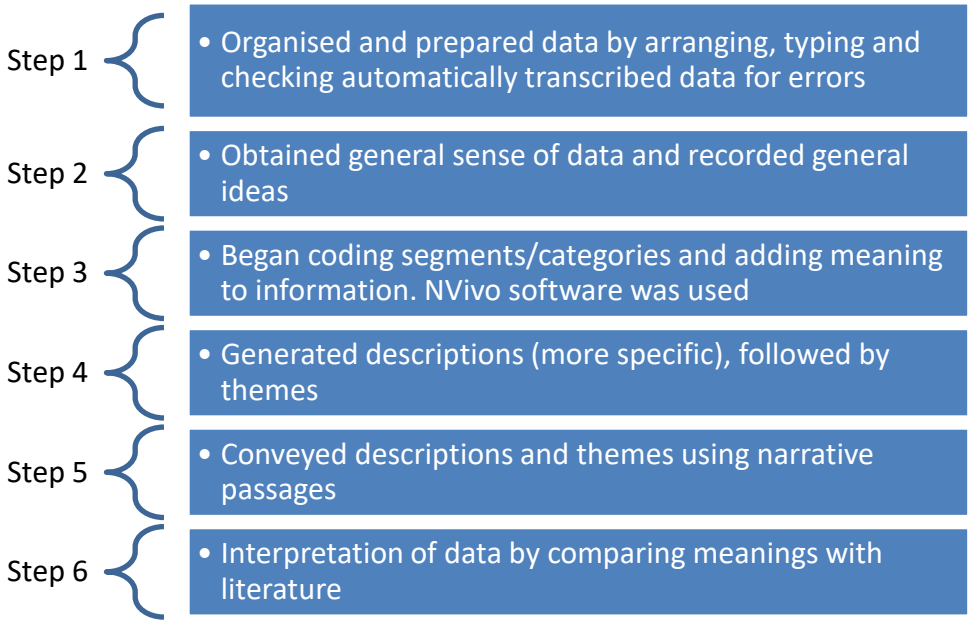

Figure 2. Data analysis process

This method of data analysis is true to the inductive design of the study, working from the ground up in this previously unexplored field. Data analysis was completed by the principal investigator using NVivo software and reviewed by the study supervisors.

Quality criteria (trustworthiness)

This research was designed to meet the four pillars of trustworthiness, being credibility, transferability, dependability and confirmability[43]. Credibility was achieved via investigator triangulation. In this case, using at least two co-coders to make decisions regarding coding and data analysis. Transferability was enhanced by describing the context (such as sample size and inclusion criteria) in which the research took place, adding to a thicker description of behaviour and experiences[43]. By maintaining the research path throughout the study and basing the analysis process on a common and tested theory described in literature, dependability and confirmability were possible[38,43]. The interpretation of data was free from researcher subjectivity and bias, evident via a trail of notes kept throughout the analysis process[43]. The researcher tried not to digress too much from the original message conveyed in the interviews by using quotations as far as possible. The review of analysis by more than one investigator also added to confirmability.

Ethical clearance

This research included human participants, which therefore required that it be approached with ethical sensitivity. This study was approved by the Health Sciences Research Ethics Committee at the University of the Free State (HSREC no: UFS-HSD2022/0937/2908) and was conducted according to the ethical guidelines and principals of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research. Prior to the interview, an informed consent form was distributed to potential participants as part of the invitation email. It was indicated on the form, as well as at the beginning of the interview, that participation in the interview is viewed as understanding and providing informed consent. Identifying information was excluded from the data analysis and participation was voluntary.

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Findings

Three themes emerged from the study: (a) Potential challenges identified by occupational therapists using DBT, (b) The benefits/motivators of DBT-informed occupational therapy for the therapist and user, and (c) Variation in how DBT is being used by occupational therapists in practice.

Table 5: Themes and categories

THEME	CATEGORY
(a) Potential challenges identified by occupational therapists using DBT	1. The role of occupational therapists in applying DBT
	2. The duration allocated to applying DBT in practice
	3. Limited extent of knowledge surrounding DBT theory
(b) The benefits/motivators of DBT-informed occupational therapy for the therapist and user	1. DBT-informed occupational therapy enhances occupational performance
	2. DBT-informed occupational therapy is empowering
	3. DBT is suited to various populations
	4. DBT is well-packaged
	5. DBT can fall within the occupational therapy scope of practice
	6. DBT use is encouraged by management
(c) Variation in how DBT is being used by occupational therapists in practice	1. Training is helpful
	2. DBT is being adapted

Theme A: Potential challenges identified by occupational therapists using DBT.

This theme discusses the challenging aspects of incorporating the DBT approach into practice as experienced by the study participants. Three categories are discussed. The first relates to

the use of DBT by multiple disciplines. The second category is related to the large amount of content in the traditional DBT programme. The third potential challenge is the limited in-depth knowledge of the traditional DBT programme.

Category 1: The role of occupational therapists in applying DBT.

A key concern of participants was the differing role of occupational therapists versus other multi-disciplinary team members (MDT) and how each makes use of DBT to inform their practice. One participant expressed that psychologists do not understand this differentiation clearly, stating: "*that's them not understanding the professional scope of practice*" (P10). This was seconded by another participant who stated: "*they will not understand our role that we will play using it*" (P5). It was recommended by one participant to: "*find the line where is OT and where is psych because I often want to dive into psych*" (P2); as well as by another: "*don't try to take over the role of the psychologist…. focus on occupational performance areas*" (P13).

This blurred line between professions was seconded by a participant who stated: "*I found that I was very often grappling outside my zone of expertise*" (P17). These sentiments all surround the importance of communicating differences among the MDT, but also with MHCUs, "*we just need to be careful about really being intentional about remaining in our scope and yeah, and setting those boundaries with our clients as well*" (P15). Six participants reported that or encouraged their MHCU to see another member of the MDT at the same time as they are attending occupational therapy. There was consensus among some participants that the same type of lingo or consistency with wording and practice should be used by the MDT incorporating DBT into their practice. One participant shared: "efficacy of DBT in someone's therapeutic process can be enhanced when the whole team is speaking the same language" (P9).

Category 2: The duration allocated to applying DBT in practice.

A second primary potential risk/challenge identified by study participants was doubt conveyed surrounding the applicability of the DBT approach in short-term or acute settings. This doubt is two-fold. Firstly, there is a lot of content in the original DBT handbook. Possibly too much to be utilized in a brief period. Participants stated: "it's too much information"

(P17); "*I question how realistic it is to expect patients to remember*" (P14); "*it's more practical over three four months, if not longer*" (P10) and that time limits lead to "*possibly not spending enough time practicing it*" (P16). The second cause of doubt was the participants reported concern over the mental status of MHCUs admitted in an acute setting and how this matches the demands of DBT. For example: "*patients were actually still a little bit psychotic and then nothing works DBT wise*" (P11).

Category 3: Limited extent of knowledge surrounding DBT theory.

Majority of the participants interviewed were able to name the four main DBT themes. Just under half of the participants spontaneously mentioned the original target population that DBT was designed for, namely Borderline Personality Disorder. Seven participants spontaneously mentioned the creator of DBT, Marsha Linehan. All of these facts are in-line with DBT-literature.

However, there was also some uncertainty among the population surrounding DBT background and research. This was suggested by some participants with phrases such as: "*I'm not 100% sure*" (P14); "*DBT stands for dialectical behavioural, neh?*" (P5) and "*there's a bit of a lack of knowledge with regards to DBT*" (P7). There was also a belief among five participants that DBT was intertwined with Cognitive Behavioural Therapy, as some participants stated: "*it's a derivative of Cognitive Behaviour Therapy*" (P15) and "*it's based on Cognitive Behaviour Therapy*" (P11). Outside of knowledge on the basic premises of DBT, limited in-depth knowledge or expertise on the approach came to the fore for most participants.

Theme B: The benefits/motivators of DBT-informed occupational therapy for the therapist and user.

All of the study participants displayed a positive attitude towards the use of DBT to inform occupational therapy practice. There were multiple reasons for this enthusiasm.

Category 1: DBT-informed occupational therapy enhances occupational performance.

The belief that DBT-informed occupational therapy enhances occupational performance was strongly conveyed by most study participants. DBT-informed occupational therapy was seen

as allowing MHCUs to cope or function better when the DBT skills are applied. One participant stated that DBT helps to "*improve being able to make decisions, being able to do higher order executive skills, being able to problem solve within a work environment, things like that*" (P10), and another "*their ability to perform their occupations is enhanced*" (P9). Distress tolerance and emotional regulation skills were identified as two skills well-matched to the "*preparing for the doing*" (P15).

Category 2: DBT-informed occupational therapy is empowering.

A second motivator for five participants to use DBT to inform their practice was that the DBT process was viewed as empowering for the MHCU. As stated by participants: "*give patients some confidence and make them feel that they are able to tackle distressing situations*" (P14); also, that DBT is "*bringing people back to their…inner strength*" (P17); and "*it really empowers patients to kind of take their own responsibility*" (P2). Furthermore, the efficacy of this approach for the MHCU, namely the positive effect for the user, was experienced by some participants. One participant stated: "*I've seen the effectiveness of it*" (P3).

Category 3: DBT is suited to various populations.

Thirteen of the 17 therapists interviewed reported that the DBT approach can be adapted and successfully incorporated for a wide range of MHCU populations. This was noted in comments such as: "*I think it can be used with all mental health diagnoses*" (P14); "*they (the DBT skills) really are made for everyone*" (P12). One participant stated that DBT is "*really something that you can adapt to a population easily*" (P4). This was viewed as true even for more challenging groups: "*a lot of my patients aren't really receptive to other kind of skills*" (P7). A range of populations with which this approach was successfully being incorporated included: "*substance dependency, depression, personality disorders, schizophrenia and anxiety*" (P3).

Category 4: DBT is well-packaged.

Another encourager or motivator for participants using DBT was that the handbook, including handouts and activities, was seen as an "*amazing tool*" (P4). Participants described the approach as: "*practical, it's tangible*" (P15), structured and well-packaged.

Category 5: DBT can fall within the occupational therapy scope of practice.

Dialectical Behaviour Therapy was seen by participants as aligned to the premises of occupational therapy and falling within the occupational therapy scope of practice. One participant stated: "*I feel it's very much in our scope of practice*" (P15). This was seconded by six other participants with statements such as "*it suites us OTs very nicely*" (P12); and "*it's very OT based*" (P10).

Category 6: DBT use is encouraged by management.

A few participants also used DBT to inform their practice because this approach specifically was encouraged by the institution where they work, or their management. For example: "I just kind of like follow along with the programme" (P14) and "*they've done it this way for a very long time in the clinic where I am working*" (P4).

Theme C: Variation in how DBT is being used by occupational therapists in practice.

The general idea conveyed with theme C is that each study participant was using the traditional DBT approach differently in order to inform their practice.

Category 1: Training is helpful.

Your training as a therapist will influence how you make use of a specific approach because of your level of expertise therein. Twelve of the participants in the study believe that additional DBT training is necessary before an occupational therapist can incorporate the DBT approach effectively. One participant stated: "*some sort of training is, is very helpful.... to understand the whole picture and to really give an effective service*" (P13). Another participant stated: "*so there is a risk, because it is not going to be not effective, but it is not going to be as effective as it can be if someone just uses the skills in a by the way kind of manner*" (P1). On the other hand, some participants did not believe that training is vital and that learning about an approach through reading and observing is possible given an occupational therapy background.

Category 2: DBT is being adapted.

The original DBT programme is not being used as-is by study participants, but rather adapted according to the needs and wants of the MHCUs that they work with. This was derived from statements such as: "*it's very much based on their needs*" (P15) and we "*need to look at what's important meaningful to the client*" (P1). Adaptation is done according to grading as well, as one participant mentioned: "*we must always do our grading when it comes to our activity choices and our presentation choices and our structuring*" (P13).

The original programme is also being adapted based on time available. For majority of the participants interviewed, this was a short period falling between a few days to 12 weeks. Therefore, condensation of the approach becomes a must. Frequently, sessions are also presented by the participants in groups.

Majority of the participants reported only using components of the theory by bringing in aspects of it or teaching certain skills as they become necessary. This was corroborated by statements such as: "*I love that I can use aspects of it...as you go along, the opportunity will arise*" (P8); and "*I always use it in conjunction with other OT stuff*" (P6). This is different to four of the participants interviewed who use DBT as the primary or most influential approach informing their practice, stating: "we work through the different components" (P7); "*the bulk of what I use currently is DBT skills*" (P1) and "*DBT is one of the bigger, bigger components*" - (P16).

Five of the 17 study participants report using the DBT themes in a practical manner, teaching practical skills. As stated by one participant: "*we will look at more of the functional practical implications of it in your context*" (P6) and another "*we don't like to just talk about it. We actually do the things*" (P15). The same number of participants report using handouts and/or worksheets when presenting DBT themes. When DBT is used by occupational therapists, it is viewed by many as skills training, with little emphasis on the processing of emotions. As stated by one occupational therapist: "*occupational therapists' role is very much in the skills training*" (P17).

There were a number of reports of primarily discussion-based groups surrounding the DBT themes. As explained further by one participant: "*sometimes the skills coaching, and the teaching might be the activity*" (P1).

Discussion

The current study sought to investigate the knowledge, attitudes and practices of occupational therapists using DBT to inform their practice within South Africa. These three themes are integrated under a discussion around themes that emerged during the study. The information gathered during the interviews provided above provides insight into the current DBT landscape within South Africa.

Knowledge

Regarding the knowledge of the participants surrounding DBT, there was an understanding of the very basic constructs of the original DBT programme, but also some uncertainty. In particular, there was uncertainty regarding whether DBT is part of or separate from Cognitive Behaviour Therapy (CBT). In literature, DBT is described as a theoretical construct in its own right, with a unique set of skills taught that differ from CBT[44]. However, in numerous other published sources, DBT is viewed as a form of CBT[45]. These two contradictions found in literature may be a source of confusion among DBT users. Uncertainty surrounding DBT theory and research could be one of the reasons why practices differ. Cognitive Behaviour Therapy elements found in DBT is the rapport forming techniques, and the training in skills[46]. Still, DBT is different to CBT in that its core focus is stress coping skills and there is radical acceptance of the MHCU[46].

Clear communication within multi-disciplinary team

On the subject of the attitudes of study participants, some potential challenges were identified. One of the main concerns was related to the use of DBT by various MDT members. When an occupational therapist works as part of a MDT, there is potential for conflict and miscommunications among professionals. Therefore, there needs to be clear communication by the occupational therapist regarding how DBT would be used to inform occupational

therapy, and the differences between this adapted version and the traditional DBT. As recommended by one participant, such a discussion should be sought with the MHCU as well. A discussion of the relevance of occupational therapy interventions with the MHCU is supported by literature[47]. This may entail, for example, explaining to the MHCU what DBT is, how it is used within the occupational therapy profession, and why it has been selected as the treatment approach for the client. One such motivator could be that enhancing interpersonal and psycho-social factors with the use of meaningful activity falls within the scope of occupational therapy[48].

MHCUs should also see a psychologist

Ideally, because DBT was designed for psychologists, in order to reap the full benefit of this approach, a MHCU should also be seeing a psychologist who processes emotions more than would be done in skills training by an occupational therapist[45]. This was the practice of majority of the participants as well. Having the support of a psychologist and clear communication between two treating professionals could prevent the need to grapple outside of the scope of occupational therapy while moving through the DBT process. As stated by one participant: "*there might be smaller nuances that we might miss that we might not understand as well*" (P6) as a psychologist, for example. Although this risk is important to recognise, there might also be opportunity when DBT is used by an occupational therapist. Staying within the scope of occupational therapy, focusing on activity, occupational and performance rooted in occupational science, may bring to the fore aspects of DBT not explored by other professions[48].

The length of intervention should be appropriate

A second branch of the potential challenges expressed by participants was related to the length and content of the original DBT approach. According to the experience of two participants the mental status of MHCUs experiencing acute symptoms seems to not lean itself towards the learning of acronyms and other more cognitively demanding or abstract DBT concepts. This finding is substantiated in literature stating that engaging an acutely ill MHCU in occupational therapy is not easy, particularly when it comes to appreciating the full

professional potential of an intervention[47]. Furthermore, it has been described that establishing a life worth living (a crucial aim of DBT) would require more intensive work on behalf of the service provider in an in-patient setting[49].

Given the doubt raised surrounding the amount of content forming part of the original DBT design, research investigating the efficacy of condensed versions of DBT-informed occupational therapy would help to better understand the mechanics of more brief interpretations.

Broad applicability

Despite the potential challenges expressed by the participants, the overarching attitude of participants surrounding DBT-informed occupational therapy was positive. The substantiation of the alignment of DBT with occupational therapy theory argument is built up and supported in the introduction of this article. Using the OTPF as a frame of reference, the occupational therapist is able to address emotional factors within an MHCU that may interfere with functionality[14]. The focus of DBT-informed occupational therapy is not psychotherapy or psychoeducation, but rather equipping a MHCU with the necessary skills needed to return to their daily life[50].

A motivator/benefit for using DBT in practice was the flexibility of the approach and its broad applicability. The promising notion that DBT can have a beneficial outcome for varying populations is supported by literature[30,31,51]. There is positive research in the fields of DBT for depressive symptoms, Post-Traumatic Stress Disorder, people with no diagnosed mental disorder, and the forensic population, among others[30,31,35,44]. The developer of the DBT approach, Marsha Linehan, has also identified the potential usefulness of DBT in ever evolving and adapted clinical settings. However, Linehan also states that further research is required to explain how DBT works in these evolving clinical setups[28]. It is also important to recognise that the research with successful DBT outcomes was within the psychology profession, and not in occupational therapy.

Skills training

With regards to the practices surrounding DBT-informed occupational therapy, every participant interviewed during this study was interpreting and using DBT differently. Some variations were small and some large. These differences in practice make it complicated to clearly define what DBT-informed occupational therapy entails.

It could also unfortunately make it difficult to determine what level of expertise in the field of DBT and what quality of practice would qualify as DBT-informed occupational therapy. This would be a valuable question to ground further research and discussions.

The participants reported to mostly translate the original DBT approach into skills training in a group setting. This differs to the traditional DBT programme which has additional components such as telephone contact and one-on-one therapy with a psychologist. In a study by Flynn et al (2019), it was found that DBT skills training alone seemed to be effective in reducing binge drinking, and drug use, as well as improving emotional regulation and mindfulness practice. Therefore, there is a degree of support for presenting an adapted DBT programme for MHCU with dual diagnosis. However, it is important to recognise that the skills training in this reported study was offered for 24 weeks, and multiple disciplines were included in the study[51].

Grading and clinical reasoning

The selection and presentation of skills was not uniform among participants. Grading of the intervention was recommended. Grading by an occupational therapist is a fundamental occupational therapy technique or art that should not be lost regardless of the structure of an approach chosen[52,53]. It is also important to recognise that all approaches that are incorporated by the occupational therapist are underpinned with occupational therapy or occupational science principles. One of which, recognised by participants in the study, is the occupational therapy art of grading and making theory practical and applicable for the MHCU's unique context. In all instances, the occupational therapist aims to build their intervention with and for a specific MHCU[54]. Considering the culture of the MHCU is crucial in the multi-cultural South Africa, before applying an approach designed in the global-north [36,55].

If you stay true to the notion of adapting an approach according to the needs of the people who you work with, then there should be no "one-size-fits-all" programme, such as the traditional DBT group training component. A key requirement when selecting the best practice for a MHCU is clinical reasoning, based on critical thinking (56). If DBT is selected by occupational therapists as the treatment approach of choice simply because it is popular or advised by an institution, this way of working could pose a risk to clinical reasoning and best outcomes for the MHCU.

Looking Through the occupation-centred lens, it is possible that all four DBT themes hold relevance for the MHCU and their occupational needs and wants[23]. However, in situations where the DBT content as is seems to not match the client factors, it becomes all the more important for the occupational therapist to use techniques such as grading, therapeutic use of self, and clinical reasoning in order to make the intervention client-centred again[24]. This may mean choosing not to use DBT or choosing to use only certain techniques.

As DBT is a specific approach with specific skills taught, the degree of adaptation may be limited before one is no longer offering the traditional DBT. Should it be selected as the primary approach, the therapist should be skilled therein and not only have a working knowledge of the basic components. Furthermore, it would be important to recognise that by using small components of an approach, a therapist cannot substantiate his or her practice with the positive research findings supporting the use of DBT referenced in earlier sections. They could, however, use the OTPF and occupational science to empirically support their use of occupational therapy void of DBT[14,57].

Groups

Most of the participants reported the use of DBT in groups. The potential therapeutic value of groups has long been established. At least 175 curative factors present in therapeutic groups were empirically identified prior to the year 1955[15], Yalom identified twelve popular curative factors unique to group therapy that are still fundamental to clinical practice[58]. The traditional DBT skills training also takes place in groups (in conjunction with individual

therapy), also recognizing the potential value of the group dynamics[27]. However, there is no literature supporting DBT-informed occupational therapy groups at this time.

On this topic, it would be important for the occupational therapist to consider published research suggesting that didactic teaching alone (as reported by some participants) is not effective in ensuring mental wellness long-term[59]. The fundamental occupational therapy therapeutic medium and outcome of meaningful activity should always be a central construct in practice. Furthermore, as with the other themes that have emerged from this study, it will be important to further investigate how DBT relates to occupational therapy principles and then what a DBT-informed occupational therapy group could look like in comparison to the standard DBT skills training group before the efficacy of such can be determined.

Limitations

This study emphasises the need for more research in this field and the development of a guideline for occupational therapists wishing to offer DBT-informed occupational therapy. However, this guideline should also be flexible to an extent, allowing for clinical reasoning and alignment with occupational science.

A limitation of this study findings is that there were no exact detailed explanations provided on how DBT is specifically being used in practice. This is understandable, given intellectual property rights, but it also means that it is challenging to describe specific techniques or particularly helpful portions of the entire traditional approach. Future research in this field may wish to seek the connection between occupational performance and DBT-informed occupational therapy practice more. A limitation to the sampling method was that not all provinces in South Africa were represented. This was mediated by gaining more qualitative information. A third limitation to the research process was having to do the interviews online. This was managed by giving enough time for additional discussion to add to a more comfortable and personal atmosphere.

Conclusion

Overall, the study participants using DBT to inform their practice have some knowledge on the basic DBT concepts. However, there are varying levels of expertise in the field of DBT among study participants. The recommendation for additional DBT training was made by study participants.

The dominating attitude of participants in this study was positive surrounding the notion of DBT-informed occupational therapy in South Africa. However, some concerns were raised by participants on the topic of multi-disciplinary collaboration.

Mostly, DBT-informed occupational therapy differs from traditional DBT in that it is a practical, skills training approach. Participants who draw from this approach shared reports of positive outcomes when working with a large variety of MHCUs and in differing setups. However, each occupational therapist is using DBT differently to inform their practice. There are differences in terms of the intervention time frame, and the degree of discussion versus practice. These differences in practice may mean that an occupational therapist is staying true to the notion of client-centred practice, but drastic differences in practice could also roll over into important challenges that would need to be negotiated for the occupational therapist wishing to make use of this approach.

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Conflict of interest

No conflict of interest was reported by the author.

References

1. World Health Organization. Mental health overview [Internet]. 2023 [cited 2023 May 17]. Available from: https://www.who.int/health-topics/mental-health#tab=tab_1

2. American Occupational Therapy Association. Occupational therapy practice framework: domain and process. American Journal of Occupational Therapy [Internet]. 2014;68. Available from: https://doi.org/10.5014/ajot.2014.682006

3. Backenstrass M, Frank A, Joest K, Hingmann S, Mundt C, Kronmqller K-T. A comparative study of nonspecific depressive symptoms and minor depression regarding functional impairment and associated characteristics in primary care B. Compr Psychiatry [Internet]. 2006 [cited 2020 May 4];47:35. Available from: https://doi.org/10.1186/s41155-018-0094-z

4. Kearns Murphy C, Shiel A. Evaluation of an intensive occupational therapy intervention to facilitate independent living and improve occupational performance and participation. Results of a longitudinal case study design. Occup Ther Ment Heal [Internet]. 2020 [cited 2021 Mar 11];15. Available from: https://doi.org/10.1080/0164212x.2020.1852149

5. Christie L, Inman J, Davys D, Cook PA. A systematic review into the effectiveness of occupational therapy for improving function and participation in activities of everyday life in adults with a diagnosis of depression. J Affect Disord [Internet]. 2021 Mar 1 [cited 2021 Apr 14];282:962–73. Available from: https://doi.org/10.1016/j.jad.2020.12.080

6. Austin T, Bezuidenhout C, Botha K, Du Plessis E, Du Plessis L, Jordaan E, et al. Abnormal psychology a south african perspective. Second. Burk A, editor. Oxford University Press; 2012. 5–36 p.

7. Hayes SC, Hofmann SG. The third wave of cognitive behavioral therapy and the rise of process-based care [Internet]. Vol. 16, World Psychiatry. Blackwell Publishing Ltd; 2017 [cited 2021 Mar 10]. p. 245–6. Available from: https://doi.org/10.1002/wps.20442

8. Jahoda M. Current concepts of positive mental health. [Internet]. Current concepts of positive mental health. Basic Books; 2006 [cited 2021 Apr 15]. Available from: https://doi.org/10.1037/11258-000

9. Smith MB. Research strategies toward a conception of positive mental health. Am Psychol [Internet]. 1959 [cited 2021 Apr 15];14(11):673–81. Available from: https://doi.org/10.1037/h0040030

10. Mishra M. Understanding well-being: A practical approach.: EBSCOhost. Indian J Heal Wellbeing [Internet]. 2017 [cited 2020 Feb 14];8(10):1133–5. Available from: https://ezproxy.ufs.ac.za:8381/ehost/pdfviewer/pdfviewer?vid=11&sid=acc0b87a-4d56-4c03-8c22-83dc8c964f26%40sessionmgr103

11. Raskin J. What is the DSM-5 definition of a mental disorder? Saybrook Forum [Internet]. 2012 [cited 2020 Jun 5];1. Available from: https://www.saybrook.edu/unbound/defining-mental-disorders-dsm-5-style/

12. Connell J, Brazier J, O'Cathain A, Lloyd-Jones M, Paisley S. Quality of life of people with mental health problems: a synthesis of qualitative researc. Health Qual Life Outcomes [Internet]. 2012;(10):7. Available from: https://doi.org/10.1186/1477-7525-10-138

13. Wasmuth S, Mokol E, Szymaszek K, Gaerke KJ, Manspeaker T, Lysaker P. Intersections of occupational participation and borderline personality disorder: A grounded theory approach. Cogent Psychol [Internet]. 2020 Jan 1 [cited 2021 Mar 11];7(1):2. Available from: https://doi.org/10.1080/23311908.2020.1803580

14. American Occupational Therapy Association. Occupational therapy practice framework: Domain and process. Am J Occup Ther [Internet]. 2020 Aug 1 [cited 2023 May 17];74:1–87. Available from: https://doi.org/10.5014/ajot.2020.74s2001

15. Sherry P, Hurley J. Curative factors in psychotherapeutic and growth groups. J Clin Psychol [Internet]. 1976;34(2):835–7. Available from: https://doi.org/10.1002/1097-4679(197610)32:4%3C835::aid-jclp2270320423%3E3.0.co;2-#

16. Dsouza SA, Galvaan R, Ramungondo E. Concepts in occupational therapy-Understanding southern perspectives. 2017. 270; 275; 277 p.

17. Meyer A. Trends in activity participation of mental health care users with major depressive disorder attending occupational therapy groups. University of the Witwatersrand; 2020.

18. Soeker MS, Hare S, Mall S, Van Der Berg J. The value of occupational therapy intervention for the worker roles of forensic mental healthcare users in Cape Town, South Africa. Work [Internet]. 2021 [cited 2023 Jun 22];68(2):399–414. Available from: https://doi.org/10.3233/wor-203381

19. Alnæs R, Torgersen S. Personality and personality disorders predict development and relapses of major depression. Acta Psychiatr Scand [Internet]. 1997 [cited 2019 Nov 6];95(4):336–42. Available from: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1600-0447.1997.tb09641.x

20. Fonseca Barbosa J, Gama Marques J. The revolving door phenomenon in severe psychiatric disorders: A systematic review. Int J Soc Psychiatry [Internet]. 2023 Aug 1 [cited 2023 Oct 19];69(5):1075–89. Available from: https://journals.sagepub.com/doi/full/10.1177/00207640221143282

21. Wilcock AA. Reflections on doing, being and becoming. Aust Occup Ther J [Internet]. 1999;46:1–11. Available from: https://doi.org/10.1046/j.1440-1630.1999.00174.x

22. Lau AS, Lind T, Crawley M, Rodriguez A, Smith A, Brookman-Frazee L. When do therapists stop using evidence-based practices? Findings from a mixed method study on system-driven implementation of multiple EBPs for children. Adm Policy Ment Heal Ment Heal Serv Res [Internet]. 2020 Mar 1 [cited 2020 Apr 25];47(2):329. Available from: https://doi.org/10.1007/s10488-019-00987-2

23. Fisher AG. Occupation-centred, occupation-based, occupation-focused: Same, same or different? Scand J Occup Ther [Internet]. 2013;20:162–73. Available from: 10.3109/11038128.2012.754492

24. Carroll E. Towards client-centred practice within an occupational therapy group life skill prgram: An action research journey [Internet]. 2015 [cited 2020 Feb 14]. Available from:

https://ezproxy.ufs.ac.za:8381/ehost/detail/detail?vid=12&sid=8c349ad9-a910-4a54-ae54-1c44e50fedeb%40pdc-v-sessmgr05&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=ufs.11660.2300&db=ir00890a

25. Swales M, Heard H. Dialectical behaviour therapy: distinctive features [Internet]. Second. Routledge; 2017. 6;7. Available from: https://doi.org/10.4324/9781315544540

26. May JM, Richardi TM, Barth KS. Dialectical behavior therapy as treatment for borderline personality disorder. Ment Heal Clin [Internet]. 2016 Mar [cited 2020 Mar 11];6(2):62–9. Available from: https://doi.org/10.9740/mhc.2016.03.62

27. Linehan M. DBT skills training manual [Internet]. Second. Guilford Press; 2015. 129;419. Available from: https://doi.org/10.1097/nmd.0000000000000387

28. Linehan MM, Wilks CR. The course and evolution of dialectical behavior therapy. Am J Psychother [Internet]. 2015 [cited 2020 Mar 28];69(2):97–110. Available from: https://doi.org/10.1176/appi.psychotherapy.2015.69.2.97

29. Sahranavard S, Miri MR. A comparative study of the effectiveness of group-based cognitive behavioral therapy and dialectical behavioral therapy in reducing depressive symptoms in Iranian women substance abusers. Psicol Reflexão e Crítica [Internet]. 2018 Dec 25 [cited 2020 Feb 20];31(1):15. Available from: https://doi.org/10.1186/s41155-018-0094-z

30. Evershed S, Tennant A, Boomer D, Rees A, Barkham M, Watson A. Practice-based outcomes of dialectical behaviour therapy (DBT) targeting anger and violence, with male forensic patients: a pragmatic and non-contemporaneous comparison. Crim Behav Ment Heal [Internet]. 2003 Sep 1 [cited 2020 Mar 28];13(3):198–213. Available from: http://doi.wiley.com/10.1002/cbm.542

31. Bohus M, Dyer AS, Priebe K, Krüger A, Kleindienst N, Schmahl C, et al. Dialectical Behaviour Therapy for Post-traumatic Stress Disorder after childhood sexual abuse in patients with and without Borderline Personality Disorder: A randomised controlled trial. Psychother

Psychosom [Internet]. 2013 [cited 2020 Mar 28];82(4):221–33. Available from: https://doi.org/10.1159/000348451

32. Justo AR, Andretta I, Abs D. Dialectical behavioral therapy skills training as a social-emotional development program for teachers. Pract Innov [Internet]. 2018 Sep [cited 2020 Mar 28];3(3):168–81. Available from: https://doi.org/10.1037/pri0000071

33. Yang P, Crous Y, Balli-Borrero NA, Scott BL, Trujillo AM, Choi BY, et al. Antiracism work in schools: Using Dialectical Behavior Therapy skills to empower south Texas educators. J Am Acad Child Adolesc Psychiatry [Internet]. 2022 [cited 2022 Dec 16];61(10):1296. Available from: https://doi.org/10.1016/j.jaac.2022.03.031

34. Bemmouna D, Coutelle R, Weibel S, Weiner L. Feasibility, Acceptability and Preliminary Efficacy of Dialectical Behavior Therapy for Autistic Adults without Intellectual Disability: A Mixed Methods Study. J Autism Dev Disord [Internet]. 2022 [cited 2022 Dec 16];52. Available from: https://doi.org/10.1007/s10803-021-05317-w

35. Tilley JL, Molina L, Luo X, Natarajan A, Casolaro L, Gonzalez A, et al. Dialectical behaviour therapy (DBT) for high-risk transgender and gender diverse (TGD) youth: A qualitative study of youth and mental health providers' perspectives on intervention relevance. Psychol Psychother [Internet]. 2022 Dec 1 [cited 2022 Dec 16];95(4):1056–70. Available from: https://doi.org/10.1111/papt.12418

36. Haft SL, O'Grady SM, Shaller EAL, Liu NH. Cultural adaptations of Dialectical Behavior Therapy: A systematic review. J Consult Clin Psychol [Internet]. 2022 Oct [cited 2022 Dec 16];90(10):787. Available from: https://doi.org/10.1037/ccp0000730

37. de Vos A, Strydom H, Fouche C, Delport C. Research at grass roots for the social sciences and human service professions. 5th ed. Van Schaik Publishers; 2021.

38. Creswell JW. Research design: qualitative, quantitative, and mixed methods [Internet]. third. SAGE Publications Inc.; 2009. Available from: https://doi.org/10.1002/nha3.20258

39. Anderson C. Presenting and evaluating qualitative research. 2010 [cited 2023 Mar 27];74(8). Available from: https://doi.org/10.5688/aj7408141

40. Naderifar M, Goli H, Ghaljaie F. Snowball sampling: A purposeful method of sampling in qualitative research. Strides Dev Med Educ [Internet]. 2017 Sep 30 [cited 2021 Dec 16];14(3):1–6. Available from: https://doi.org/10.5812/sdme.67670

41. Adams WC. Conducting semi-structured interviews. Handb Pract Progr Eval Fourth Ed [Internet]. 2015 Oct 14 [cited 2022 Mar 28];492–505. Available from: https://doi.org/10.1002/9781119171386.ch19

42. Andrade C, Menon V, Ameen S, Praharaj SK. Designing and conducting knowledge, attitude, and practice surveys in psychiatry: practical guidance. Indian J Psychol Med [Internet]. 2020;42(5):478–81. Available from: https://doi.org/10.1177/0253717620946111

43. Korstjens I, Moser A. Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. Eur J Gen Pract [Internet]. 2018 [cited 2022 Apr 15];24(1):120–4. Available from: https://doi.org/10.1080/13814788.2017.1375092

44. Webb CA, Beard C, Kertz SJ, Hsu KJ, Björgvinsson T. Differential role of CBT skills, DBT skills and psychological flexibility in predicting depressive versus anxiety symptom improvement. Behav Res Ther [Internet]. 2016 Jun 1 [cited 2023 Feb 3];81:12–20. Available from: https://doi.org/10.1016/j.brat.2016.03.006

45. Rizvi SL, Steffel LM, Carson-Wong A. An overview of dialectical behavior therapy for professional psychologists. Prof Psychol Res Pract [Internet]. 2013 [cited 2023 Feb 3];44(2):73–80. Available from: https://doi.org/10.1037/a0029808

46. Bass C, van Nevel J, Swart J. A comparison between dialectical behavior therapy, mode deactivation therapy, cognitive behavioral therapy, and acceptance and commitment therapy in the treatment of adolescents. Int J Behav Consult Ther [Internet]. 2014 [cited 2023 May 27];9(2):4. Available from: https://doi.org/10.1037/h0100991

47. Crouch R, Alers V. Occupational therapy in psychiatry and mental health [Internet]. 5th ed. Wiley Blackwell; 2014. 17;34;37;39;40;69;115;116;118;120. Available from: https://doi.org/10.1002/9781118913536

48. Department of Health. Regulations defining the scope of the profession of occupational therapy [Internet]. Government Gazette. 2023. p. 39–41. Available from: https://www.gov.za/sites/default/files/gcis_document/202303/48158rg11551gon3101pdf.pdf

49. Fox E. Delivering DBT in an inpatient setting. In: The Oxford Handbook of Dialectical Behaviour Therapy [Internet]. 2018. p. 1–30. Available from: https://doi.org/10.1093/oxfordhb/9780198758723.013.20

50. Nott A. Understanding and treating people with personality disorders in occupational therapy. In: Alers V, Crouch R, editors. Occupational therapy in psychiatry and mental health [Internet]. Fourth. Wiley Blackwell; 2014. p. 480–506. Available from: https://doi.org/10.1002/9781118913536

51. Flynn D, Joyce M, Spillane A, Wrigley C, Corcoran P, Hayes A, et al. Does an adapted Dialectical Behaviour Therapy skills training programme result in positive outcomes for participants with a dual diagnosis? A mixed methods study. Addict Sci Clin Pract [Internet]. 2019 Aug 15 [cited 2023 Feb 4];14(1):28. Available from: https://doi.org/10.1186/s13722-019-0156-2

52. Rebeiro KL, Polgar JM. Enabling occupational performance: Optimal experiences in therapy. Can J Occup Ther [Internet]. 1999 Feb [cited 2020 Mar 9];66(1). Available from: https://doi.org/10.1177/000841749906600102

53. Andonian L, Cara E, Macrae A. Psychological theories and their treatment methods in mental health practice. In: Cara E, Macrae A, editors. Psychosocial occupational therapy: An evolving practice [Internet]. Third. Cengage Learning; 2013. p. 128–64. Available from: https://doi.org/10.1080/0164212x.2020.1752881

54. Townsend E, Wilcock A. Occupational justice and client-centred practice: a dialogue in practice. Can J Occup Ther [Internet]. 2004;71(2):78. Available from: https://doi.org/10.1177/000841740407100203

55. Daniels AL, Isaacs D. Cultural constructions of the mentally ill in South Africa: A discourse analysis, part 1. Cult Psychol [Internet]. 2023;29(1):45–66. Available from: https://doi.org/10.1177/1354067X221131998

56. Alers V. Clinical reasoning in psychiatric occupational therapy. In: Alers V, Crouch R, editors. Occupational therapy in psychiatry and mental health [Internet]. Fourth. Wiley Blackwell; 2014. p. 74–91. Available from: https://doi.org/10.1002/9781118913536

57. Wilcock AA. Occupational science: bridging occupation and health. Can J Occup Ther [Internet]. 2005;72(1):5–12. Available from: https://doi.org/10.1177/000841740507200105

58. Yalom ID. The theory and practice of group psychotherapy [Internet]. New York: Basic Books; 1970. Available from: https://doi.org/10.1177/105960117600100117

59. Tanaka S, Ishikawa E, Mochida A, Kawano K, Kobayashi M. Effects of early-stage group psychoeducation programme for patients with depression. Occup Ther Int [Internet]. 2015 Dec 1 [cited 2020 Feb 17];22(4):195–205. Available from: http://doi.wiley.com/10.1002/oti.1397

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CHAPTER 5: CONCLUSION, RECOMMENDATIONS AND CLOSURE

Within the South African mental health context, it has been observed that occupational therapists are increasingly making use of DBT. Traditionally, this intervention approach was designed as a year-long out-patient programme implemented by psychologists. There has been much promising research published on this approach, including adapted versions thereof. However, this research remains in the field of psychology and a scoping review conducted by the author found minimal mention of use within the occupational therapy profession.

The main aim of this dissertation was to describe the use of the DBT approach by South African occupational therapists to enable occupational performance of MHCUs. This aim was broken up into two objectives or phases. The first was to review literature on the use of the DBT approach by occupational therapists working in the mental health field. This was reached in the first theoretical article that followed a non-empirical approach, namely a scoping review. By following the *JBI scoping review methodology*, the study provided a broad overview and a structured summary of the seven literature sources which mentioned DBT or DBT-like themes within the occupational therapy profession. It was found that social skills similar to the mindfulness of others and "making friends" DBT skills have been used by occupational therapists to improve social functioning. Mindfulness (observing) was used by occupational therapists to enhance occupation. Advice was provided as to the focus of DBT for the occupational therapist by two sources. One source mentioned that occupational therapists formed part of a multi-disciplinary team presenting two versions of DBT. Lastly, DBT was mentioned as a treatment approach that could be used by the occupational therapist working with bipolar mood disorder. A critical evaluation of these sources found no structured or detailed description of how DBT was being used to inform practice. The study succeeded to map the literary landscape that is valuable to identify the significant gap in knowledge. Recommendations for further research were based on this gap identified in the evidence. Currently, DBT-informed occupational therapy could not be considered evidence-based.

The second objective was to describe the current knowledge, attitudes and practices of South African occupational therapists working in mental health regarding the DBT approach as intervention approach for MHCUs. This objective was accomplished in a second scientific article. This article followed a qualitative approach, using the data from 17 semi-structured interviews with occupational therapists who made use of DBT in practice. Participants were recruited initially using purposeful sampling, followed by snowball or chain referral sampling. The data collected was analysed using Creswell's six-step theory for the analysis of qualitative data and three themes emerged. These were (a) Potential challenges identified by occupational therapists using DBT, (b) The benefits/motivators of DBT-informed occupational therapy for the therapist and user, and (c) Variation in how DBT is being used by occupational therapists in practice. These themes are significant as they highlight the need for guidance and training among occupational therapists, but also the enthusiasm surrounding DBT informed occupational therapy which also supports further research in this field. The data from the interviews helped to shed light on the general setup, MHCU diagnoses worked with, the range of intervention duration, degree of DBT integration, and manner in which DBT-informed occupational therapy was used by the study participants, hereby achieving the main aim of the study.

Recommendations

The researcher would like to present the following recommendations for future consideration by occupational therapy practitioners and researchers.

Recommendations for clinicians:

Firstly, occupational therapy clinicians who would like to use DBT to inform their practice are recommended to obtain a post-graduate DBT qualification. This could be achieved by contacting South African or international institutions that offer training in this area. This would be important in order to gain the specialised knowledge of techniques and theory related to DBT which may not otherwise be presented in an undergraduate curriculum. It is also recommended that DBT is covered in-depth during training, to allow for a true understanding and ability to apply all of the principles and assumptions. This knowledge will translate to more specialised and quality DBT treatment offered to MHCUs. To remain within

the scope of occupational therapy, the clinician should focus their treatment plan on specific skills that the MHCUs need to participate in occupations that are meaningful to them. It is also very important that the occupational therapist communicate their treatment focus to other team members, to avoid confusion or overlap.

The DBT approach emphasises the importance of treatment design which is in-line with the MHCU's needs and outcomes. Therefore, the clinician who implements the DBT approach should clinically reason from an occupational science approach. This would mean designing a client-centred treatment plan in a manner which is accessible to the MHCU, enabling specific skills that will meet the MHCU's occupational needs. This may mean that a standardized programme is not likely, and that a proper assessment should guide the chosen intervention. Any intervention should also be viewed and focused on using occupation, and enabling occupation, as true to the occupational therapy perspective.

Recommendations for the researcher:

This study emphasises the need for more research in this field. This study has initiated a body of knowledge and a next researcher could use this in collaboration with experts to clearly define DBT-informed occupational therapy. With this definition, the efficacy of the resultant DBT-informed occupational therapy procedures for the mental health population should be evaluated. This could be in the form of pre-and post-intervention studies, or another experimental approach. This would be the last step in the search for evidence-based interventions.

This study established the need for a clear definition of DBT-informed occupational therapy, followed by an appreciation of how this aligns or differs from other forms of DBT, and then lastly an evaluation of the efficacy of a set approach.

Limitations of this study

Study participants were mostly from the private practice sector in South Africa, and spread across three provinces. This could be a result of the sampling method and a limitation of the study. It limits the understanding of this approach for MHCUs who do not have private

medical funding. This could be overcome by having arranging interviews with clinicians in the public sphere or arranging experimental studies with this MHCU population.

Further related to the study participants, 17 is a limited number in proportion to all the occupational therapists practicing in the mental health field in South Africa. Therefore, what these participants believe and practice is not representative. However, as they were distributed across many different practices, their knowledge, attitudes, and practices may reflect what is occurring in their practices or clinics in general where more therapists work. Therefore, possibly a larger number of therapists may be represented indirectly.

A further limitation with the scoping review would be the low number of literature sources obtained with the scoping review, as well as the quality and quantity of information provided in those identified. However, this limited literature could also be viewed as a clear answer to the question "what is known on this topic" and supports the need for further investigation. This further investigation was started as part of this research, in the form of interviews with occupational therapists.

As the researcher relocated to a different country after study conceptualization, the options for interviewing became limited to online. This format could take away from other non-verbal information that could be observed during an interview, as well as seem more impersonal to participants. This was mediated by allowing time for conversation outside of the interview schedule. An online interview could also be viewed as an opportunity because it requires no travel time for participants or the researcher and allows for a broader reach across South Africa. The impersonal nature of the online interview may also allow for a sense of freedom when talking for some participants because there is less human connection or feedback, as well as the comfort of a familiar environment when speaking.

The information provided by participants, specifically regarding practices, did not include the content of their sessions in detail. This is a limitation to the understanding of what aspects of DBT are being used, the specific techniques. However, it is also understandable when considering intellectual property of the participants as well as copyright restrictions on the

DBT handbook. Even if specific details of the DBT techniques were provided, this should ethically not be reprinted and published in an article.

Conclusion

The aim of this study was to describe the use of the DBT approach by South African occupational therapists to enable occupational performance of MHCUs. To answer this aim, two objectives were proposed: to review literature on the use of the DBT approach by occupational therapists working in the mental health field; and to describe the current knowledge, attitudes and practices of South African occupational therapists working in mental health regarding the DBT approach as intervention approach for MHCUs. This study answered to the objectives in the following manner:

Although there were limitations in this study, value has been added to the profession because this research is novel in its theme and highlighted the need for future research into the application of DBT in occupational therapy for MHCUs. It also provided the first base and some direction from where further research can add to an understanding of occupational therapy services provided to MHCUs, as well as provide more potential approach options for the user and the therapist working towards improved occupational performance. Occupational therapists are sensitised towards the use of traditionally psychology approaches to inform their practice and provided with some guidelines from fellow occupational therapists.

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CHAPTER 6: Bibliography

Abaoğlu, H., Cesim, Ö.B., Kars, S. & Çelik, Z. 2017. Life Skills in Occupational Therapy. *Occupational Therapy - Occupation Focused Holistic Practice in Rehabilitation*: 50. https://doi.org/10.5772/intechopen.68462 19 December 2022.

Ahsan, S. 2020. Holding up the mirror: deconstructing whiteness in clinical psychology. *Journal of Critical Psychology, Counselling and Psychotherapy*, 20(3): 45–55.

American Occupational Therapy Association. 2014. Occupational therapy practice framework: domain and process. *The American journal of occupational therapy : official publication of the American Occupational Therapy Association*, 68. https://doi.org/10.5014/ajot.2014.682006.

American Occupational Therapy Association. 2020. Occupational therapy practice framework: Domain and process. *American Journal of Occupational Therapy*, 74: 1–87. https://doi.org/10.5014/ajot.2020.74s2001 17 May 2023.

American Occupational Therapy Association. 2021. Occupational therapy scope of practice. *American Journal of Occupational Therapy*, 75. https://doi.org/10.5014/ajot.2021.75s3005 28 April 2023.

American Psychiatric Association. 2013. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington; London: American Psychiatric Publishing. https://doi.org/10.1176/appi.books.9780890425596.

Andonian, L., Cara, E. & Macrae, A. 2013. Psychological theories and their treatment methods in mental health practice. In E. Cara & A. Macrae, eds. *Psychosocial occupational therapy: An evolving practice*. Cengage Learning: 128–164. https://doi.org/10.1080/0164212x.2020.1752881.

Apollis, J.L. 2019. *An exploration of undergraduate occupational therapy students' perspectives on occupational balance*. University of the Western Cape.

Apsche, J.A., Bass, C.K., Jennings, J.L., Murphy, C.J., Hunter, L.A. & Siv, A.M. 2005. Empirical comparison of three treatments for adolescent males with physical and sexual aggression: Mode deactivation therapy, cognitive behavior therapy and social skills training. *International Journal of Behavioral Consultation and Therapy*, 1(2): 101–113. https://doi.org/10.1037/h0100738 6 November 2019.

Arksey, H. & Lisa, O. 2005. Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, 8(1): 19–23. https://doi.org/10.1080/1364557032000119616.

Arksey, H. & O'Malley, L. 2005. Scoping studies: towards a methodological framework. *International Journal Social Research Methodology*, 8(1): 20;22. https://doi.org/10.1080/1364557032000119616.

Aromataris, M. (editor). 2020. *JBI Manual for Evidence Synthesis*. M. Aromataris E, ed. https://doi.org/10.46658/jbirm-20-02.

Aruldass, P., Sekar, T.S., Saravanan, S., Samuel, R. & Jacob, K.S. 2022. Effectiveness of social skills training groups in persons with severe mental illness: A pre–post intervention study. *Indian Journal of Psychological Medicine*, 44(2): 114–119. https://doi.org/10.1177/02537176211024146 19 December 2022.

Ashby, S., Gray, M. & Carole, J. 2016. An exploratory study into the application of psychological theories and therapies in Australian mental health occupational therapy practice: Challenges to occupation-based practice. *Australian Occupational Therapy Journal*, 64(1): 24–32. https://doi.org/10.1111/1440-1630.12302.

Austin, T., Bezuidenhout, C., Botha, K., Du Plessis, E., Du Plessis, L., Jordaan, E., Lake, M., Moletsane, M., Nel, J., Pillay, B., Ure, G., Visser, C., Von Krosigk, B. & Vorster, A. 2012. *Abnormal psychology a south african perspective*. Second. A. Burk, ed. Oxford University Press.

Backenstrass, M., Frank, A., Joest, K., Hingmann, S., Mundt, C. & Kronmqller, K.-T. 2006. A comparative study of nonspecific depressive symptoms and minor depression

regarding functional impairment and associated characteristics in primary care B. *Comprehensive Psychiatry*, 47: 35. https://doi.org/10.1186/s41155-018-0094-z 4 May 2020.

Baglioni, C., Nanovska, S., Regen, W., Spiegelhalder, K., Feige, B., Nissen, C., Reynolds, C.F. & Riemann, D. 2016. Sleep and mental disorders: A meta-analysis of polysomnographic research. *Psychological Bulletin*, 142(9): 969–990. https://doi.org/10.1037/bul0000053 27 May 2023.

Bäuml, J., Froböse, T., Kraemer, S., Rentrop, M. & Pitschel-Walz, G. 2006. Psychoeducation: A basic psychotherapeutic intervention for patients with schizophrenia and their families. In *Schizophrenia Bulletin*. Oxford University Press: S1. https://doi.org/10.1093/schbul/sbl017 23 March 2021.

Beck, K.B., Conner, C.M., Breitenfeldt, K.E., Northrup, J.B., White, S.W. & Mazefsky, C.A. 2020. Assessment and treatment of emotion regulation impairment in autism spectrum disorder across the life span: Current state of the science and future directions. *Child and Adolescent Psychiatric Clinics of North America*, 29(3): 527–542. https://doi.org/10.1016/j.chc.2020.02.003 5 June 2020.

Berking, M. & Wupperman, P. 2012. Emotion regulation and mental health: Recent findings, current challenges, and future directions. *Current Opinion in Psychiatry*, 25(2): 128–134. https://doi.org/10.1097/yco.0b013e3283503669 3 May 2020.

Blomdahl, C., Gunnarsson, B.A., Guregård, S., Rusner, M., Wijk, H. & Björklund, A. 2016. Art therapy for patients with depression: expert opinions on its main aspects for clinical practice. *Journal of Mental Health*, 25(6). https://doi.org/10.1080/09638237.2016.1207226 11 March 2021.

Bohus, M., Dyer, A.S., Priebe, K., Krüger, A., Kleindienst, N., Schmahl, C., Niedtfeld, I. & Steil, R. 2013. Dialectical Behaviour Therapy for Post-traumatic Stress Disorder after childhood sexual abuse in patients with and without Borderline Personality Disorder: A randomised controlled trial. *Psychotherapy and Psychosomatics*, 82(4): 221–233. https://doi.org/10.1159/000348451 28 March 2020.

Buchain, P.C., Vizzotto, A.D.B., Neto, J.H. & Elkis, H. 2003. Randomized controlled trial of occupational therapy in patients with treatment-resistant schizophrenia. *Revista Brasileira de Psiquiatria*, 25(1): 26–30. https://doi.org/10.1590/s1516-44462003000100006 18 February 2020.

Burns, J.K. 2013. Are we slaves to DSM? A South African perspective. *African Journal of Psychiatry*, 16(3): 151–154. https://doi.org/10.4314/ajpsy.v16i3. 27 May 2023.

Carroll, E. 2015. *Towards client-centred practice within an occupational therapy group life skill prgram: An action research journey*. https://ezproxy.ufs.ac.za:8381/ehost/detail/detail?vid=12&sid=8c349ad9-a910-4a54-ae54-1c44e50fedeb%40pdc-v-sessmgr05&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=ufs.11660.2300&db=ir00890a 14 February 2020.

Chan, S.H.W., Lee, S.W.K. & Chan, I.W.M. 2007. TRIP: A psycho-educational programme in Hong Kong for people with schizophrenia. *Occupational Therapy International*, 14(2): 86–98. https://doi.org/10.1002/oti.226 17 February 2020.

Chandler, M. 2022. 25 OT Frames of Reference: A Quick Overview for Students and Practitioners - myotspot.com. *my OT Spot*. https://www.myotspot.com/ot-frames-of-reference/ 17 March 2023.

Christie, L., Inman, J., Davys, D. & Cook, P.A. 2021. A systematic review into the effectiveness of occupational therapy for improving function and participation in activities of everyday life in adults with a diagnosis of depression. *Journal of Affective Disorders*, 282: 962–973. https://doi.org/10.1016/j.jad.2020.12.080 14 April 2021.

Coles, A. & Elliott, T. 2020. From reflection to action: a case study of an art psychotherapy group which drew on occupational therapy perspectives. *Mental Health Review Journal*, 25(3). https://doi.org/10.1108/mhrj-02-2020-0012 11 March 2021.

Conlin, M. & Lorinser, A. 2012. *The most effective evidence-based occupational therapy intervention for adolescents with bipolar disorder: a systematic literature review*. The

College of St. Scholastica. https://ezproxy.ufs.ac.za/dissertations-theses/most-effective-evidence-based-occupational/docview/1251631173/se-2?accountid=17207.

Craig, A., Rochat, T., Naicker, S.N., Mapanga, W., Mtintsilana, A., Dlamini, S.N., Ware, L.J., Du Toit, J., Draper, C.E., Richter, L. & Norris, S.A. 2022. The prevalence of probable depression and probable anxiety, and associations with adverse childhood experiences and socio-demographics: A national survey in South Africa. *Frontiers in Public Health*, 10: 4076. https://doi.org/10.3389/fpubh.2022.986531 19 December 2022.

Creswell, J.W. 2009. *Research design: qualitative, quantitative, and mixed methods*. third. SAGE Publications Inc. https://doi.org/10.1002/nha3.20258.

Crouch, R. 2014. Activation and psycho-education: major principles in the occupational therapist's approach to schizophrenia. In R. Crouch & V. Alers, eds. *Occupational therapy in psychiatry and mental health*. Wiley Blackwell: 507–518. https://doi.org/10.1002/9781118913536.

Crouch, R. & Alers, V. 2014. *Occupational therapy in psychiatry and mental health*. 5th ed. Wiley Blackwell. https://doi.org/10.1002/9781118913536.

Dallman, A.R. & Triplett, B. 2020. Emotion, affectus, and occupation: A scoping review. *Journal of Occupational Science*, 27(2). https://www.tandfonline.com/doi/abs/10.1080/14427591.2019.1668831 15 March 2021.

Dimidjian, S., Arch, J.J., Schneider, R.L., Desormeau, P., Felder, J.N. & Segal, Z. V. 2016. Considering meta-analysis, meaning, and metaphor: A systematic review and critical examination of "third wave" cognitive and behavioral therapies. *Behavior Therapy*, 47(6): 886–905. https://doi.org/10.1016/j.beth.2016.07.002 22 February 2020.

Docrat, S., Besada, D., Cleary, S., Daviaud, E. & Lund, C. 2019. Mental health system costs, resources and constraints in South Africa: a national survey. *Health Policy and Planning*, 34: 706–719. https://doi.org/10.1093/heapol/czz085 15 October 2023.

Dsouza, S.A., Galvaan, R. & Ramungondo, E. 2017. *Concepts in occupational therapy-*

Understanding southern perspectives.

Duncan, E. 2011. The cognitive behavioural frame of reference. In E. Duncan, ed. *Foundations for Practice in Occupational Therapy*. Churchill Livingstone: 434–470.

Duncan, M. 2014. Three approaches and processed in occupational therapy with mood disorders. In R. Crouch & V. Alers, eds. *Occupational therapy in Psychiatry and mental health*. Wiley Blackwell: 459–479. https://doi.org/10.1002/9781118913536.

Durocher, E., Gibson, B.E. & Rappolt, S. 2014. Occupational justice: A conceptual review. *Journal of Occupational Science*, 21(4): 418–430. http://www.tandfonline.com/doi/abs/10.1080/14427591.2013.775692 6 March 2020.

Eaton, P. 2002. Psychoeducation in acute mental health settings: Is there a role for occupational therapists? *British Journal of Occupational Therapy*, 65(7). http://journals.sagepub.com/doi/10.1177/030802260206500704 23 March 2021.

Edgelow, M. & Krupa, T. 2011. Randomized controlled pilot study of an occupational time-use intervention for people with serious mental illness. *American Journal of Occupational Therapy*, 65(3): 267–276. https://doi.org/10.5014/ajot.2011.001313 18 February 2020.

Eeles, J. & Walker, D.M. 2022. Mindfulness as taught in Dialectical Behaviour Therapy: A scoping review. *Clinical Psychology and Psychotherapy*, 29(6): 1843–1853. https://doi.org/10.1002/cpp.2764 18 March 2023.

Egbe, C.O., Brooke-Sumner, C., Kathree, T., Selohilwe, O., Thornicroft, G. & Petersen, I. 2014. Psychiatric stigma and discrimination in South Africa: Perspectives from key stakeholders. *BMC Psychiatry*, 14(1): 1–14. https://doi.org/10.1186/1471-244x-14-191 15 April 2021.

Eklund, M. 1999. Outcome of occupational therapy in a psychiatric day care 2unit for long-term mentally III patients. *Occupational Therapy in Mental Health*, 14(4). https://www.tandfonline.com/doi/abs/10.1300/J004v14n04_02 15 March 2021.

Eklund, M. & Erlandsson, L.K. 2011. Return to Work Outcomes of the Redesigning Daily Occupations (ReDO) Program for women with stress-related disorders-A comparative study. *Women and Health*, 51(7): 676. tandfonline.com/doi/abs/10.1080/03630242.2011.618215 18 February 2020.

Eklund, M., Orban, K., Argentzell, E., Bejerholm, U., Tjörnstrand, C., Erlandsson, L.-K. & Håkansson, C. 2017. The linkage between patterns of daily occupations and occupational balance: Applications within occupational science and occupational therapy practice. *Scandinavian Journal of Occupational Therapy*, 24(1): 41–56. https://www.tandfonline.com/doi/full/10.1080/11038128.2016.1224271 15 April 2021.

Eklund, M., Tjörnstrand, C., Sandlund, M. & Argentzell, E. 2017. Effectiveness of Balancing Everyday Life (BEL) versus standard occupational therapy for activity engagement and functioning among people with mental illness – a cluster RCT study. *BMC Psychiatry*, 17(1): 363. https://doi.org/10.1186/s12888-017-1524-7 18 February 2020.

Erlandsson, L. 2013. The Redesigning Daily Occupations (ReDO)-Program: Supporting women with stress-related disorders to return to work-Knowledge base, structure, and content. *Occupational Therapy in Mental Health*, 29(1). https://doi.org/10.1080/0164212x.2013.761451 11 March 2021.

Evershed, S., Tennant, A., Boomer, D., Rees, A., Barkham, M. & Watson, A. 2003. Practice-based outcomes of dialectical behaviour therapy (DBT) targeting anger and violence, with male forensic patients: a pragmatic and non-contemporaneous comparison. *Criminal Behaviour and Mental Health*, 13(3): 198–213. http://doi.wiley.com/10.1002/cbm.542 28 March 2020.

Fenn, K. & Byrne, M. 2013. The key principles of cognitive behavioural therapy. *InnovAiT: Education and inspiration for general practice*, 6(9): 579–585. http://journals.sagepub.com/doi/10.1177/1755738012471029 22 February 2020.

Fenstermacher, G., Soltis, J. & Sanger, M. 2009. *Approaches to Teaching*. 5th ed. Amsterdam: Teachers College Press. https://doi.org/10.1177/019263658707149535 18

February 2020.

Finlay, L. 1997. *The Practice of Psychosocial Occupational Therapy*. second. Stanley Thornes Publishers Ltd.

Fisher, A.G. 2013. Occupation-centred, occupation-based, occupation-focused: Same, same or different? *Scandinavian Journal of Occupational Therapy*, 20: 162–173. 10.3109/11038128.2012.754492.

Fisher, A.G. 2009. *Occupational Therapy Intervention Process Model*. Three Star Press.

Flynn, D., Joyce, M., Spillane, A., Wrigley, C., Corcoran, P., Hayes, A., Flynn, M., Wyse, D., Corkery, B. & Mooney, B. 2019. Does an adapted Dialectical Behaviour Therapy skills training programme result in positive outcomes for participants with a dual diagnosis? A mixed methods study. *Addiction science & clinical practice*, 14(1): 28. https://doi.org/10.1186/s13722-019-0156-2 4 February 2023.

Fonseca Barbosa, J. & Gama Marques, J. 2023. The revolving door phenomenon in severe psychiatric disorders: A systematic review. *International Journal of Social Psychiatry*, 69(5): 1075–1089. https://journals.sagepub.com/doi/full/10.1177/00207640221143282 19 October 2023.

Foruzandeh, N. & Parvin, N. 2013. Occupational therapy for inpatients with chronic schizophrenia: A pilot randomized controlled trial. *Japan Journal of Nursing Science*, 10(1): 136–141. http://doi.wiley.com/10.1111/j.1742-7924.2012.00211.x 18 February 2020.

Fox, E. 2018. Delivering DBT in an inpatient setting. In *The Oxford Handbook of Dialectical Behaviour Therapy*. 1–30. https://doi.org/10.1093/oxfordhb/9780198758723.013.20.

Fox, J., Erlandsson, L.K. & Shiel, A. 2019. A systematic review and narrative synthesis of occupational therapy-led interventions for individuals with anxiety and stress-related disorders. *Occupational Therapy in Mental Health*, 35(2): 179–204. ezproxy.ufs.ac.za:8379/ehost/detail/detail?vid=3&sid=4f783ed8-c3b4-4c82-8c65-d3170aa8a111%40sessionmgr4007&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaX

Rl#AN=136414703&db=c8h 20 February 2020.

Fried, E. & Nesse, R. 2014. The impact of individual depressive symptoms on impairment of psychosocial functioning. *PLoS One*, (9). https://doi.org/10.1371/journal.pone.0090311.

Gelderblom, A. 2023. How I work. https://gelderlove.com/how-i-work/ 23 October 2023.

Gratz, K.L. & Roemer, L. 2008. Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, 30(4): 315. https://doi.org/10.1007/s10862-008-9102-4 5 June 2020.

Gross, J.J. 2014. *Handbook of emotion regulation*. second. J. J. Gross, ed. New York: The Guilford Press.

Grounded Well Wise. 2023. Haneke Jonas. https://www.groundedwellwise.co.za/Haneke Jonas 23 October 2023.

Gutman, S.A., Balasubramanian, S., Herzog, M., Kim, E., Swirnow, H., Retig, Y. & Wolff, S. 2020. Effectiveness of a tailored intervention for women with Attention Deficit Hyperactivity Disorder (ADHD) and ADHD symptoms: A randomized controlled study. *The American Journal of occupational therapy : official publication of the American Occupational Therapy Association*, 74(1). https://doi.org/10.5014/ajot.2020.033316 19 December 2022.

Haft, S.L., O'Grady, S.M., Shaller, E.A.L. & Liu, N.H. 2022. Cultural adaptations of Dialectical Behavior Therapy: A systematic review. *Journal of Consulting and Clinical Psychology*, 90(10): 787. https://doi.org/10.1037/ccp0000730 16 December 2022.

Halberstadt, B.F., Moraes, A.B. de & Souza, A.P.R. de. 2020. Down syndrome: functionality and therapeutic history of the child, adaptation and occupational performance of parents. *Saúde e Pesquisa*, 13(4): 809–819. https://doi.org/10.17765/2176-9206.2020v13n4p809-819 11 March 2021.

Halpern-Manners, A., Schnabel, L., Hernandez, E.M., Silberg, J.L. & Eaves, L.J. 2016. The Relationship between education and mental health: New evidence from a discordant twin study. *Social Forces*, 95(1): 107–131. https://doi.org/10.1093/sf/sow035 27 May 2023.

Hammell, K.W. 2018. Opportunities for well-being: The right to occupational engagement. *Canadian Journal of Occupational Therapy*: 210–211. https://doi.org/10.1177/0008417417734831 15 March 2023.

Hauber, K., Boon, A.E. & Vermeiren, R. 2019. Therapeutic factors that promote recovery in high-risk adolescents intensive group psychotherapeutic MBT programme. *Child and Adolescent Psychiatry and Mental Health*, 13(2): 1–10. https://doi.org/10.1186/s13034-019-0263-6 19 October 2023.

Hayes, S.C. 2004. Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behavior Therapy*, 35: 639–665. https://doi.org/10.1016/s0005-7894(04)80013-3.

Hayes, S.C. & Hofmann, S.G. 2017. The third wave of cognitive behavioral therapy and the rise of process-based care. *World Psychiatry*, 16(3): 245–246. https://doi.org/10.1002/wps.20442 10 March 2021.

Health Professions Council of South Africa. 2006. *Standards of practice for occupational therapists*.

Health Professions Council of South Africa. 2019. The minimum standards for the education of occupational therapists 2019. : 6.

Hegel, M.T., Lyons, K.D., Hull, J.G., Kaufman, P., Urquhart, L., Li, Z. & Ahles, T.A. 2011. Feasibility study of a randomized controlled trial of a telephone-delivered problem-solving-occupational therapy intervention to reduce participation restrictions in rural breast cancer survivors undergoing chemotherapy. *Psycho-Oncology*, 20(10). https://doi.org/10.1002/pon.1830 19 December 2022.

Helfrich, C.A. & Fogg, L.F. 2007. Outcomes of a life skills intervention for homeless adults

with mental illness. *Journal of Primary Prevention*, 28(3–4): 313–326. https://doi.org/10.1007/s10935-007-0103-y 18 February 2020.

Hohl, W., Moll, S. & Pfeiffer, A. 2017. Occupational therapy interventions in the treatment of people with severe mental illness. *Current Opinion in Psychiatry*, 30(4): 300–305. https://doi.org/10.1097/yco.0000000000000339.

Hoshii, J., Yotsumoto, K., Tatsumi, E., Tanaka, C., Mori, T. & Hashimoto, T. 2013. Subject-chosen activities in occupational therapy for the improvement of psychiatric symptoms of inpatients with chronic schizophrenia: a controlled trial. *Clinical rehabilitation*, 27(7): 638–45. https://doi.org/10.1177/0269215512473136 18 February 2020.

Institute for Health Metrics and Evaluation. 2019. Global Burden of Disease.

Jack, H., Wagner, R.G., Petersen, I., Thom, R., Newton, C.R., Stein, A., Kahn, K., Tollman, S. & Hofman, K.J. 2014. Closing the mental health treatment gap in South Africa: a review of costs and cost-effectiveness. *Global Health Action*, 7(1): 23431. http://dx.doi.org/10.3402/gha.v7.23431 5 June 2020.

Jahoda, M. 2006. *Current concepts of positive mental health.* Basic Books. https://doi.org/10.1037/11258-000 15 April 2021.

Javaras, K.N., Zanarini, M.C., Hudson, J.I., Greenfield, S.F. & Gunderson, J.G. 2017. Functional outcomes in community-based adults with borderline personality disorder. *Journal of Psychiatric Research*, 89. https://doi.org/10.1016/j.jpsychires.2017.01.010 23 March 2021.

Jonas, B. & Loeb, M. 2010. Mood disorders and physical functioning difficulties as predictors of complex activity limitations in young U.S. adults. *Disability and Health Journal*, 3(3): 171–178. https://doi.org/10.1016/j.dhjo.2009.11.001 25 June 2020.

Justo, A.R., Andretta, I. & Abs, D. 2018. Dialectical behavioral therapy skills training as a social-emotional development program for teachers. *Practice Innovations*, 3(3): 168–181. https://doi.org/10.1037/pri0000071 28 March 2020.

Kearns Murphy, C. & Shiel, A. 2020. Evaluation of an intensive occupational therapy intervention to facilitate independent living and improve occupational performance and participation. Results of a longitudinal case study design. *Occupational Therapy in Mental Health*: 15. https://doi.org/10.1080/0164212x.2020.1852149 11 March 2021.

Kim, J.G., Moon, K.H., Lim, E.S. & Yoo, J.H. 2016. A Study on IADL, Stress and Motivation on Healthy Lifestyle among Elderly People with Arthritis. *Journal of the Korea Academia-Industrial cooperation Society*, 17(3): 209–217. https://doi.org/10.5762/kais.2016.17.3.209 25 June 2020.

Kirsh, B., Martin, L., Hultqvist, J. & Eklund, M. 2019. Occupational Therapy interventions in mental health: A literature review in search of evidence. *Occupational Therapy in Mental Health*, 35(2): 109–156. https://doi.org/10.1080/0164212x.2019.1588832 6 February 2020.

Kirsh, B., Martin, L., Hultqvist, J., Eklund, M., Kirsh, B., Martin, L., Hultqvist, J. & Eklund, M. 2019. Occupational therapy in mental health occupational therapy interventions in mental health : A literature review in search of evidence occupational therapy Interventions in Mental Health : A literature review in search of evidence. *Occupational Therapy in Mental Health*, 0(0): 1–48. https://doi.org/10.1080/0164212X.2019.1588832.

Law, M., Baptiste, S. & Mills, J. 1995. Client-centred practice: what does it mean and does it make a difference? *Canadian journal of occupational therapy. Revue canadienne d'ergotherapie*, 62(5): 250–7. https://doi.org/10.1177/000841749506200504 21 February 2020.

Li, B.Z., Cao, Y., Zhang, Y., Chen, Y., Gao, Y.H., Peng, J.X., Shao, Y.C. & Zhang, X. 2021. Relation ofdecreased functional connectivity between left thalamus and left inferior frontal gyrus to emotion changes following acute sleep deprivation. *Frontiers in Neurology*, 12: 1. https://doi.org/10.3389/fneur.2021.642411 8 April 2021.

Li, S., Cao, M. & Zhu, X. 2019. Evidence-based practice Knowledge, attitudes, implementation, facilitators, and barriers among community nurses-systematic review.

Medicine (Baltimore), 98(39): 1–9. http://dx.doi.org/10.1097/MD.0000000000017209 17 October 2023.

Liberman, R.P., Wallace, C.J., Blackwell, G., Kopelowicz, A., Vaccaro, J. V. & Mintz, J. 1998. Skills training versus psychosocial occupational therapy for persons with persistent schizophrenia. *American Journal of Psychiatry*, 155(8): 1087. https://doi.org/10.1176/ajp.155.8.1087 18 February 2020.

Lindstrom, A.-C. & Bernhardsson, S. 2018. Evidence-based practice in primary care occupational therapy: a cross-sectional survey in sweden. *Occupational Therapy International*: 1. https://doi.org/10.1155/2018/5376764 25 April 2020.

Linehan, M. 2015. *DBT skills training manual*. Second. Guilford Press. https://doi.org/10.1097/nmd.0000000000000387.

Linehan, M.M. & Wilks, C.R. 2015. The course and evolution of dialectical behavior therapy. *American Journal of Psychotherapy*, 69(2): 97–110. https://doi.org/10.1176/appi.psychotherapy.2015.69.2.97 28 March 2020.

Lloyd, C., Bassett, H. & King, R. 2004. Occupational therapy and evidence-based practice in mental health. *British Journal of Occupational Therapy*, 67(2): 83–88. https://doi.org/10.1177/030802260406700205 4 April 2020.

Lloyd, C. & Maas, F. 1997. Occupational Therapy Group Work in Psychiatric Settings. *British Journal of Occupational Therapy*, 60(5): 226–230. http://journals.sagepub.com/doi/10.1177/030802269706000512 28 February 2020.

Lyng, J.L. 2017. *Dialectical Behaviour Therapy for Borderline Personallity Disorder in the community*. Bangor University.

Mabunda, D., Oliveira, D., Sidat, M., Cavalcanti, M.T., Cumbe, V., Mandlate, F., Wainberg, M., Cournos, F. & de Jesus Mari, J. 2022. Cultural adaptation of psychological interventions for people with mental disorders delivered by lay health workers in Africa: scoping review and expert consultation. *International Journal of Mental Health Systems*, 16(1): 1–16. https://doi.org/10.1186/s13033-022-00526-x 15 October 2023.

May, J.M., Richardi, T.M. & Barth, K.S. 2016. Dialectical behavior therapy as treatment for borderline personality disorder. *Mental Health Clinician*, 6(2): 62–69. https://doi.org/10.9740/mhc.2016.03.62 11 March 2020.

McLean, C. & Foa, E. 2017. Emotions and emotion regulation difficulties in posttraumatic stress disorder. *Current Opinion in Psychology*, (14): 72. https://doi.org/10.1016/j.copsyc.2016.10.006.

McMain, S.F., Guimond, T., Barnhart, R., Habinski, L. & Streiner, D.L. 2017. A randomized trial of brief dialectical behaviour therapy skills training in suicidal patients suffering from borderline disorder. *Acta Psychiatrica Scandinavica*, 135(2): 138–148. http://doi.wiley.com/10.1111/acps.12664 28 March 2020.

Meyer, A. 2020. *Trends in activity participation of mental health care users with major depressive disorder attending occupational therapy groups*. University of the Witwatersrand.

Miller, A. 2005. *Dialectical behavior therapy for mild traumatic brain injury: A program design*. Carlos Albizu University. https://ezproxy.ufs.ac.za/dissertations-theses/dialectical-behavior-therapy-mild-traumatic-brain/docview/305362418/se-2?accountid=17207.

Mishra, M. 2017. Understanding well-being: A practical approach.: EBSCOhost. *Indian Journal of Health and Wellbeing*, 8(10): 1133–1135. https://ezproxy.ufs.ac.za:8381/ehost/pdfviewer/pdfviewer?vid=11&sid=acc0b87a-4d56-4c03-8c22-83dc8c964f26%40sessionmgr103 14 February 2020.

Mitas, O., Yarnal, C., Adams, R. & Ram, N. 2012. Taking a 'Peak' at Leisure Travelers' Positive Emotions. *Leisure Sciences*, 34(2): 115–135. https://doi.org/10.1080/01490400.2012.652503 8 April 2021.

Moore, S.A., Zoellner, L.A. & Mollenholt, N. 2008. Are expressive suppression and cognitive reappraisal associated with stress-related symptoms? *Behaviour Research and Therapy*, 46(9): 993–1000. https://doi.org/10.1016/j.brat.2008.05.001 18 December 2020.

Moro, C.D. 2008. A comprehensive literature defining self-mutilation and occupational therapy intervention approaches. *Occupational Therapy in Mental Health*, (231): 55–67. https://doi.org/10.1300/j004v23n01_04.

Mozley, C.G., Schneider, J., Cordingley, L., Molineux, M., Duggan, S., Hart, C., Stoker, B., Williamson, R., Lovegrove, R. & Cruickshank, A. 2007. The care home activity project: does introducing an occupational therapy programme reduce depression in care homes? *Aging & mental health*, 11(1): 99–107. https://doi.org/10.1080/13607860600637810 18 February 2020.

Mthembu, T.G. 2017. *The design and development of guidelines to integrate spirituality and spiritual care into occupational therapy education using design-based research*. University of the Western Cape. http://hdl.handle.net/11394/6093.

Mulki, J.P., Jaramillo, F., Goad, E.A. & Pesquera, M.R. 2015. Regulation of emotions, interpersonal conflict, and job performance for sales people. *Journal of Business Research*, 68(3). https://doi.org/10.1016/j.jbusres.2014.08.009 15 March 2021.

Munn, Z., Peters, M.D.J., Stern, C., Tufanaru, C., McArthur, A. & Aromataris, E. 2018. Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology*, 18(143): 1. https://doi.org/10.1186/s12874-018-0611-x.

Naisberg, Y. 1996. Homeostatic disruption and depression. *Medical Hypotheses*, 47(6). https://doi.org/10.1016/s0306-9877(96)90152-8 12 May 2020.

Nelson, D.L. 1988. Occupation: Form and performance. *The American Journal of Occupational Therapy*, 42(10): 633–641. /ajot/article/42/10/633/1986/Occupation-Form-and-Performance 14 November 2023.

Nelson, D.L. 1996. Therapeutic occupation: A definition. *American Journal of Occupational Therapy*, 50(10): 775–782. https://doi.org/10.5014/ajot.50.10.775 15 April 2021.

Nielsen, T.L., Holst-Stensborg, H.W. & Nielsen, L.M. 2022. Strengthening problem-solving skills through occupational therapy to improve older adults' occupational performance

- A systematic review. *Scandinavian journal of occupational therapy*. https://doi.org/10.1080/11038128.2022.2112281 19 December 2022.

Nott, A. 2014. Understanding and treating people with personality disorders in occupational therapy. In V. Alers & R. Crouch, eds. *Occupational therapy in psychiatry and mental health*. Wiley Blackwell: 480–506. https://doi.org/10.1002/9781118913536.

Occupational Therapy Association of South Africa. 2014. Position statement on therapeutic group-work in occupational therapy. *South African Journal of Occupational Therapy*, 44(3): 43–44. https://www.otasa.org.za/wp-content/uploads/2021/12/318-1970-1-PB.pdf 27 May 2023.

Padilla, R. 2001. Teaching approaches and occupational therapy psychoeducation. *Occupational Therapy in Mental Health*, 17(3–4): 81–95. https://doi.org/10.1300/j004v17n03_06 18 February 2020.

Peters, M.D.J., Marnie, C., Tricco, A.C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C.M. & Khalil, H. 2020. Updated methodological guidance for the conduct of scoping reviews. *JBI evidence synthesis*, 18(10): 2119–2126. https://doi.org/10.11124/jbies-20-00167 22 June 2023.

Pettican, A. & Bryant, W. 2007. Sustaining a focus on occupation in community mental health practice. *British Journal of Occupational Therapy*, 70(4): 140–146. https://doi.org/10.1177/030802260707000402 2 December 2019.

Pierce, D. 2003. *Occupation by design: Building therapeutic power*. First. F.A. Davis Company.

Piet, J. & Hougaard, E. 2011. The effect of mindfulness-based cognitive therapy for prevention of relapse in recurrent major depressive disorder: A systematic review and meta-analysis. *Clinical Psychology Review*, 31(6): 1032–1040. https://doi.org/10.1016/j.cpr.2011.05.002 21 February 2020.

Professional Board of Occupational Therapy. 2020. *Scope of occupational therapy*. https://doi.org/10.5014/ajot.2021.75s3005.

Ramano, E., de Beer, M., Louw Roos, J. & Becker, P.J. 2017. *A comparison of two occupational therapy group programmes on the functioning of patients with major depressive disorders*. University of Pretoria. https://doi.org/10.23736/s0391-1772.17.01935-5.

Ramano, E., de Beer, M. & Roos, J.L. 2021. The perceptions of adult psychiatric inpatients with major depressive disorder towards occupational therapy activity-based groups. *South African Journal of Psychiatry*: 1–8. https://doi.org/10.4102/sajpsychiatry.v27i0.1612.

Raskin, J. 2012. What is the DSM-5 definition of a mental disorder? *Saybrook Forum*: 1. https://www.saybrook.edu/unbound/defining-mental-disorders-dsm-5-style/ 5 June 2020.

Rebeiro, K.L. & Polgar, J.M. 1999. Enabling occupational performance: Optimal experiences in therapy. *Canadian Journal of Occupational Therapy*, 66(1). https://doi.org/10.1177/000841749906600102 9 March 2020.

Remy, D. & Desormiere, P. 2017. Psychiatry and Animal Abuse: Animal hoarding or accumulation of animals: aetiopathogenesis. *Point Veterinaire*: 6–7. https://ezproxy.ufs.ac.za:8379/ehost/detail/detail?vid=19&sid=9c80c899-fac2-4bd7-8172-c8c5d36ee262%40sdc-v-sessmgr01&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=20173126790&db=lah 25 June 2020.

Republic of South Africa. 2002. *Mental Health Care Act*. https://www.gov.za/sites/default/files/gcis_document/201409/a17-02.pdf 5 June 2020.

Rocamora-Montenegro, M., Compañ-Gabucio, L.-M. & Garcia De La Hera, M. 2021. Occupational therapy interventions for adults with severe mental illness: a scoping review. *BMJ Open*, 11: 47467. http://dx.doi.org/10.1136/bmjopen-2020-047467 8 November 2023.

Rodríguez-Macías, J.C. & Coronel-Santos, M.A. 2022. Integral definition and conceptual model of mental health: Proposal from a systematic review of different paradigms. *Frontiers in Sociology*, 7: 1–15. https://doi.org/10.3389/fsoc.2022.978804.

Sætren, S.S., Sütterlin, S., Lugo, R.G., Prince-Embury, S. & Makransky, G. 2019. A multilevel investigation of resiliency scales for children and adolescents: The relationships between self-perceived emotion regulation, vagally mediated heart rate variability, and personal factors associated with resilience. *Frontiers in Psychology*, 10(MAR): 1. https://doi.org/10.3389/fpsyg.2019.00438 12 March 2021.

Sahranavard, S. & Miri, M.R. 2018. A comparative study of the effectiveness of group-based cognitive behavioral therapy and dialectical behavioral therapy in reducing depressive symptoms in Iranian women substance abusers. *Psicologia: Reflexão e Crítica*, 31(1): 15. https://doi.org/10.1186/s41155-018-0094-z 20 February 2020.

Samuel, R., Thomas, E. & Jacob, K.. 2018. Instrumental activities of daily living dysfunction among people with schizophrenia. *Indian Journal of Psychological Medicine*, 40: 134. https://doi.org/10.4103/ijpsym.ijpsym_308_17 25 June 2020.

Samuel, R., Thomas, E. & Jacob, K.S. 2018. Instrumental activities of daily living dysfunction among people with schizophrenia. *Indian Journal of Psychological Medicine*, 40(2). https://doi.org/10.4103/ijpsym.ijpsym_308_17 15 April 2020.

Sarkhel, S., Singh, O.P. & Arora, M. 2020. Clinical practice guidelines for psychoeducation in psychiatric disorders general principles of psychoeducation. *Indian Journal of Psychiatry*, 62(8): 319. https://doi.org/10.4103/psychiatry.indianjpsychiatry_780_19 12 March 2021.

Schindler, V.P. 1999. Group effectiveness in improving social interaction skills. *Psychiatric Rehabilitation Journal*, 22(4): 349–354. http://doi.apa.org/getdoi.cfm?doi=10.1037/h0095216 18 February 2020.

Semrau, M., Evans-Lacko, S., Koschorke, M., Ashenafi, L. & Thornicroft, G. 2015. Stigma and discrimination related to mental illness in low- and middle-income countries.

Epidemiology and Psychiatric Sciences, 24(5): 382–394. https://doi.org/10.1017/s2045796015000359 15 October 2023.

Sexton, H., Fornes, G., Kruger, M.B., Grendahl, G. & Kolset, M. 1990. Handicraft or interactional groups: a comparative outcome study of neurotic inpatients. *Acta Psychiatrica Scandinavica*, 82(5): 339–343. https://doi.org/10.1111/j.1600-0447.1990.tb01398.x 18 February 2020.

Sherry, P. & Hurley, J. 1976. Curative factors in psychotherapeutic and growth groups. *Journal of Clinical Psychology*, 34(2): 835–837. https://doi.org/10.1002/1097-4679(197610)32:4%3C835::aid-jclp2270320423%3E3.0.co;2-#.

Silva, S.A., Silva, S.U., Ronca, D.B., Gonçalves, V.S.S., Dutra, E.S. & Carvalho, K.M.B. 2020. Common mental disorders prevalence in adolescents: A systematic review and metaanalyses. *PLoS ONE*, 15(4): 1. https://doi.org/10.1371/journal.pone.0232007 10 March 2021.

Smith, J. 2018. *An occupational therapy emotion regulation and problem solving program for incarcerated women*. Boston University. https://web-p-ebscohost-com.ufs.idm.oclc.org/ehost/detail/detail?vid=18&sid=2c2c16aa-0e7a-45be-b9ad-d4c541779da7%40redis&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=2018-00726-158&db=psyh 19 December 2022.

Smith, M.B. 1959. Research strategies toward a conception of positive mental health. *American Psychologist*, 14(11): 673–681. https://doi.org/10.1037/h0040030 15 April 2021.

Stander, M.P., Bergh, M., Miller-Janson, H.E., De Beer, J. & Korb, F. 2016. Depression in the South African workplace. *South African Journal of Pyschiatry*, 22(1). https://doi.org/10.4102/sajpsychiatry.v22i1.814.

Stepp, S.D., Epler, A.J., Jahng, S. & Trull, T.J. 2008. The effect of dialectical behavior therapy skills use on borderline personality disorder features. *Journal of personality disorders*, 22(6): 549. https://doi.org/10.1521/pedi.2008.22.6.549 18 March 2023.

Stone, A. 2018. *Healing elements of an eclectic life skills programme conducted within a private psychiatric clinic: Client's perspectives (unpublished)*. Stellenbosch University.

Swales, M. & Heard, H. 2017. *Dialectical behaviour therapy: distinctive features*. Second. Routledge. https://doi.org/10.4324/9781315544540.

Swart, L. 2014. Vocational rehabilitation in psychiatry and mental health. In R. Crouch & V. Alers, eds. *Occupational therapy in Psychiatry and mental health*. Wiley Blackwell: 208–212. https://doi.org/10.1002/9781118913536.

Swenson, C., Witterholt, S. & Bohus, M. 2007. Dialectical behaviour therapy on inpatient units. In *Dialectical behaviour therapy in clinical practice*. 69–111.

Syed, Z. 2020. Occupational therapy: The process in acute psychiatry. *African Journal of Health Professions Education*, 12(1): 9. https://doi.org/10.7196/AJHPE.2020.v12i1.1185 15 March 2021.

Syrett, K. 2015. *An exploration of the emotional experiences of therapists when working with individuals with Borderline Personality Disorder*. The University of Liverpool.

Szabo, C.P. & Kaliski, S.Z. 2017. Mental health and the law: a South African perspective. *BJPsych International*, 14(3): 69. https://doi.org/10.1192/s2056474000001951 15 March 2023.

Tanaka, S., Ishikawa, E., Mochida, A., Kawano, K. & Kobayashi, M. 2015. Effects of early-stage group psychoeducation programme for patients with depression. *Occupational Therapy International*, 22(4): 195–205. http://doi.wiley.com/10.1002/oti.1397 17 February 2020.

Tomaso, C.C., Johnson, A.B. & Nelson, T.D. 2020. The effect of sleep deprivation and restriction on mood, emotion, and emotion regulation: Three meta-analyses in one. *Sleep*. https://doi.org/10.1093/sleep/zsaa289 8 April 2021.

Torres, A., Mendez, L.P., Merino, H. & Moran, E.A. 2002. Improving social functioning in schizophrenia by playing the train game. *Psychiatric services (Washington, D.C.)*, 53(7):

799–801. https://doi.org/10.1176/appi.ps.53.7.799 18 February 2020.

Townsend, E. & Polatakjo, H. 2013. A framework of occupational justice: Ocupational determinants, instruments, contexts, and outcomes. In *Enabling occupation II: Advancing an occupational therapy vision for health, wellbeing and justice through occupation*. CAOT Publications ACE: 81.

Townsend, E. & Wilcock, A. 2004. Occupational justice and client-centred practice: a dialogue in practice. *Canadian Journal of Occupational Therapy*, 71(2): 78. https://doi.org/10.1177/000841740407100203.

Trupin, E.W., Stewart, D.G., Beach, B. & Boesky, L. 2002. Effectiveness of a Dialectical Behaviour Therapy program for incarcerated female juvenile offenders. *Child and Adolescent Mental Health*, 7(3): 121–127. http://doi.wiley.com/10.1111/1475-3588.00022 28 March 2020.

Tyrer, P. 2014. A comparison of DSM and ICD classifications of mental disorder. *Advances in Psychiatric Treatment*, 20(4): 285. https://doi.org/10.1192/apt.bp.113.011296 23 March 2021.

United Nations. 2015. Sustainable Development Goal 3: Good Health and Well-being | United Nations in South Africa. *The Sustainable Development Goals in South Africa*. https://doi.org/10.18356/8f3d4aea-en 15 March 2023.

de Vos, A., Strydom, H., Fouche, C. & Delport, C. 2021. *Research at grass roots for the social sciences and human service professions*. 5th ed. Van Schaik Publishers.

Votruba, N., Thornicroft, G. & Group, the F.S. 2016. Sustainable development goals and mental health: learnings from the contribution of the FundaMentalSDG global initiative. *Global Mental Health*, 3: e26. https://doi.org/10.1017/gmh.2016.20 15 March 2023.

Wasmuth, S., Mokol, E., Szymaszek, K., Gaerke, K.J., Manspeaker, T. & Lysaker, P. 2020. Intersections of occupational participation and borderline personality disorder: A grounded theory approach. *Cogent Psychology*, 7(1): 2.

https://doi.org/10.1080/23311908.2020.1803580 11 March 2021.

Wegner, L. 2014. Occupational therapy intervention for drug-related disorders. In R. Crouch & V. Alers, eds. *Occupational therapy in psychiatry and mental health*. Wiley Blackwell: 537–550. https://doi.org/10.1002/9781118913536.

Weiss, L.A., Westerhof, G.J. & Bohlmeijer, E.T. 2016. Can we increase psychological well-being? The effects of interventions on psychological well-being: A meta-analysis of randomized controlled trials. *PLoS ONE*, 11(6): 1. https://doi.org/10.1371/journal.pone.0158092 4 April 2020.

Whiteford, G., Jones, K., Weekes, G., Ndlovu, N., Long, C., Perkes, D. & Brindle, S. 2020. Combatting occupational deprivation and advancing occupational justice in institutional settings: Using a practice-based enquiry approach for service transformation. *British Journal of Occupational Therapy*, 83(1): 52–61. 10.1177/0308022619865223.

Van Wijk, C., Martin, J. & Meintjies, W. 2021. Burden of common mental disorders in South African workplace settings. *Occupational Health Southern Africa*, 27(5): 164–171.

Wilcock, A.A. 2005. Occupational science: bridging occupation and health. *Canadian Journal of Occupational Therapy*, 72(1): 5–12. https://doi.org/10.1177/000841740507200105.

Wilcock, A.A. 1999. Reflections on doing, being and becoming. *Australian Occupational Therapy Journal*, 46: 1–11. https://doi.org/10.1046/j.1440-1630.1999.00174.x.

de Witt, P. 2014. Creative ability: a model for psychosocial occupational therapy. In V. Alers & R. Crouch, eds. *Occupational therapy in psychiatry and mental health*. Wiley Blackwell: 3–61. https://doi.org/10.1002/9781118913536.

World Federation of Occupational Therapy. 2019. *Position statement: Occupational therapy and mental health*. https://doi.org/10.1179/otb.2012.66.1.004.

World Health Organization. 2019. Mental disorders. https://www.who.int/news-room/fact-sheets/detail/mental-disorders 5 June 2020.

World Health Organization. 1993. *The ICD-10 classification of mental and behavioural disorders: Diagnostic criteria for research*. Geneva.

Yalom, I.D. 1970. *The theory and practice of group psychotherapy*. New York: Basic Books. https://doi.org/10.1177/105960117600100117.

Yamashita, H., Terao, T. & Mizokami, Y. 2012. The effects of single and repeated psychiatric occupational therapy on psychiatric symptoms: Assessment using a visual analogue scale. *Stress and Health*, 28(2): 98. http://doi.wiley.com/10.1002/smi.1408 18 February 2020.

Yilmaz Karaman, İ.G., İzci Kasal, M., İngeç, C., Yastibaş, C., Gülyüksel, F. & Güleç, M. 2020. Effect of adjunct psychosocial skills training on social functioning of schizophrenia patients who get occupational therapy in a community mental health center: A comparative study. *Noropsikiyatri Arsivi*, 57(3): 248–253. https://doi.org/10.29399/npa.24885 8 November 2023.

Zengın, G., Yazici, M.R. & Hurı, M. 2022. Sensory integration based program developed according to the model of creative ability in an individual with schizophrenia: An occupational therapy case report. *International Journal of Disabilities Sports and Health Sciences*, 5(1): 66–74. https://doi.org/10.33438/ijdshs.1099222 8 November 2023.

CHAPTER 7: Appendices

APPENDIX A

Health Sciences Research Ethics Committee

01-Aug-2022

Dear **Miss Kristy Ward**

Ethics Clearance: **Dialectical Behaviour Therapy as it informs occupational therapy in mental health in South Africa: a descriptive study**

Principal Investigator: **Miss Kristy Ward**

Department: **Occupational Therapy Department (Bloemfontein Campus)**

Submission Page

APPLICATION APPROVED

Please ensure that you read the whole document

With reference to your application for ethical clearance with the Faculty of Health Sciences, I am pleased to inform you on behalf of the Health Sciences Research Ethics Committee that you have been granted ethical clearance for your project.

Your ethical clearance number, to be used in all correspondence is:**UFS-HSD2022/0937/2908**

The ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension.

We request that any changes that may take place during the course of your research project be submitted to the HSREC for approval to ensure we are kept up to date with your progress and any ethical implications that may arise. This includes any serious adverse events and/or termination of the study.

A progress report should be submitted within one year of approval, and annually for long term studies. A final report should be submitted at the completion of the study.

Research conducted in any Department of Health facility: Researchers are required to sign and return the HSREC approval letters to the provincial Department of Health where they applied. It is also a requirement for researchers to submit electronic copies of their final research findings, and/or make a presentation of their findings and recommendations at departmental research days when and where indicated.

The HSREC functions in compliance with, but not limited to, the following documents and guidelines: The SA National Health Act. No. 61 of 2003; Ethics in Health Research: Principles, Structures and Processes (2015); SA GCP(2020); Declaration of Helsinki; The Belmont Report; The US Office of Human Research Protections 45 CFR 461 (for non-exempt research with human participants conducted or supported by the US Department of Health and Human Services- (HHS), 21 CFR 50, 21 CFR 56; CIOMS; ICH-GCP-E6 Sections 1-4; International Council for Harmonisation (ICH) Harmonised Guideline, Integrated Addendum to ICH E6(R1), Guideline for Good Clinical Practice (GCP) E6(R2), 2016, SAHPRA Guidelines as well as Laws and Regulations with regard to the Control of Medicines, Constitution of the HSREC of the Faculty of Health Sciences.

For any questions or concerns, please feel free to contact HSREC Administration: 051-4017794/5 or email EthicsFHS@ufs.ac.za.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours Sincerely

Prof. A. Sherriff
Chairperson: Health Sciences Research Ethics Committee

Health Sciences Research Ethics Committee
Office of the Dean: Health Sciences
T: +27 (0)51 401 7795/7794 | E: ethicsfhs@ufs.ac.za
IRB 00011992; REC 230408-011; IORG 0010096; FWA 00027947
Block D, Dean's Division, Room D104 | P.O. Box/Posbus 339 (Internal Post Box G40) | Bloemfontein 9300 | South Africa
www.ufs.ac.za

APPENDIX B

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF THE RESEARCH PROJECT: Dialectical Behaviour Therapy as it informs occupational therapy in mental health in South Africa: a descriptive study

REFERENCE NUMBER: UFS-HSD2022/0937/2908

PRINCIPAL INVESTIGATOR: Kristy Ward

B. Occupational Therapy (Hons.)

HPCSA number- OT 0095966

Kristyward94@gmail.com

ADDRESS: Department of Occupational Therapy, University of the Free State, Bloemfontein Campus

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please do not hesitate to contact me regarding any part of this project that you do not fully understand. To explain any uncertainties, I will gladly phone you or schedule a Microsoft Teams meeting at a time suitable to you. It is very important that you clearly understand what this research entails and how you could be involved. Also, your participation is entirely voluntary, and you are free to decline participation. If you do decline participation, this will not affect you negatively in any manner whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part initially.

This study has been approved by the Health Sciences Research Ethics Committee at the University of the Free State (HSREC no: UFS-HSD2022/0937/2908) and will be conducted

according to the ethical guidelines and principals of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

What is this research study all about?

- This project aims to expand the understanding of a psychotherapeutic approach called Dialectical Behaviour Therapy and its use in occupational therapy.
- You as a participant will be requested to participate in an online, one-on-one interview which is structured to capture your knowledge, attitude, and practices pertaining to the Dialectical Behaviour Therapy approach. This is all that will be required of you.

Why have you been invited to participate?

- You have been identified among fellow occupational therapists as a possible expert in the field of Dialectical Behaviour Therapy and/or make use of this approach in practice. Although this is a well-researched therapeutic approach, there is limited literature specifically related to Dialectical Behaviour Therapy presented by an occupational therapist in South Africa. Therefore, should you choose to participate in this research, you may help to guide clinicians towards better understanding this technique, the first step towards evidence-based practise in this field.

What will your responsibilities be?

- You will be responsible for honestly answering questions. Please ask the principal investigator (Kristy Ward) for guidance if there are any uncertainties at any point. The interview will consist of open-ended questions.

Are there risks involved in your taking part in this research?

- There are no risks posed to you if you choose to partake in this research. The identity of study participants will remain confidential by limiting any identifying information to

email addresses only, already known by a colleague who referred you, and using a secured online platform (Microsoft Teams). No individual responses nor information shared by a participant will be identified or highlighted by the researcher which will enable the identification of participants. Confidentiality will be further ensured by the researcher through storing documents related to the study at the access-controlled department of Occupational Therapy of the University of the Free State for a period of ten years post completion of the study. Thereafter it will be disposed of. Until you make contact with the principal researcher, your contact details are not known by the research team.

- In light of the Covid 19 pandemic, online interviews will be conducted. This interview should take no longer than one hour, and it is recorded. Recordings are stored on OneDrive for a period of 12 months post-interview and transcripts for a period of ten years post-study completion.

- The findings of this study will be prepared for publication in two research articles and potentially (although unlikely) be presented at a conference or meeting.

Will you be paid to take part in this study and are there any costs involved?

- You will not be paid to take part in the study. Participating in the Microsoft Teams meeting will incur some data costs for your account.

Is there anything else that you should know or do?

- You can contact the Health Sciences Research Ethics Committee at 051-401 7794/5 if you have any concerns or complaints that have not been adequately addressed by the researcher.

Should you be interested in participating in this study, kindly contact the principal investigator at kristyward94@gmail.com. Once an interview has been scheduled at a time suited to you, consent will be confirmed verbally before starting the interview.

Declaration by participant

By continuing with the interview, I agree to take part in a research study entitled "Dialectical Behaviour Therapy as it informs occupational therapy in mental health in South Africa: a descriptive study". i.e., participation equals informed consent and therefore no signature is required on this document.

I declare that:

- I have read or had read to me this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is voluntary and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Declaration by investigator

I, Kristy Ward declare that:

- This document adequately explains all aspects of the research relevant to a participant and the participant has been provided with my contact details should any further clarification or discussion be necessary.

Signed at Eindhoven on 26/05/2022.

Signature of investigator

Signature of witness

APPENDIX C

Interview schedule

Orientation: welcome; thank you for willingness; purpose of research briefly explained; consent; guidelines to answer questions (as much or as little information as interviewee feels comfortable with disclosing); questions before we start

Introduction

5. Can you describe to me what you know and understand about the Dialectical Behaviour Therapy (DBT) approach?

   Probing:

   - Share your knowledge on how OTs use DBT to specifically enable occupational participation in patients with mental health disorders.
   - Can you please share with me any DBT training you have received?

6. Could you kindly share your attitude towards the use of DBT by occupational therapists to enable occupational performance in patients with mental health disorders.

   Probing:

   - Reflect on potential downfalls / pitfalls? / challenges? of DBT use within the occupational therapy profession / relating to MHCU's?
   - What is your opinion on the necessity of training before DBT constructs can be presented by an occupational therapist?
   - What do you think are the potential benefits for MHCU's engaging in DBT-informed occupational therapy?

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7. Please explain how you make use of the DBT approach or selected DBT themes in practice?

8. Why have you chosen to use DBT in this manner?

   Probing:

   - What field do you work in and does your practice fall within the public or private sector?

Is there anything else you would like to share on the use of DBT as an intervention approach in occupational therapy in order to enable occupational participation in MHCU's?

Debriefing: Any questions regarding research; how your experience with this interview was; thanks

APPENDIX D

Frik Scott Health Sciences Library
University of the Free State
PO Box 12327
Bloemfontein
9300
051 401 7786

22/01/2024

To whom it may concern

INFORMATION LIBRARIAN INVOLVEMENT: SCOPING REVIEW

Scoping reviews describe existing literature and other sources of information commonly include findings from a range of different study designs and methods. As such, the information search is a critical step in the review process.

In order to effectively conduct a scoping review, the skills of an experienced information librarian are required.

With regards to the following study:

DIALECTICAL BEHAVIOUR THERAPY AS IT INFORMS OCCUPATIONAL THERAPY IN MENTAL HEALTH IN SOUTH AFRICA: A DESCRIPTIVE STUDY by Kristy Ward (student number 2012043333) in Occupational Therapy, supervisor Monique Strauss and co-supervisor Itumeleng Tsatsi-Mosala.

The information librarian, in conjunction with the investigator, has developed the following search string:

("Dialectic* Behav*" or Mindfulness or "being present" or meditat* or "Interpersonal effectiveness" or "interpersonal skill*" or "social skill*" or "Distress tolerance" or coping or "stress manag*" or "Emotion* regulation" or "emotion* modulation" or "being present" or "coping strateg*")

and

(("mental* disorder*" or “mental* health*” or “mental* disease*” or “mental* ill*” or depres* or psychiatr* or anxiety or bipolar* or schizophren* or psychosis or psychotic or "Neurodevelopmental disorder*" or neurocognit* or "substance-related disorder*" or "addictive disorder*" or obsessive-compulsive or "trauma-related disorder*" or "stress*-related disorder*" or "somatic symptom*" or "dissociative disorder*" or "sexual dysfunction*" or "gender dysphoria*" or paraphil* or "eating disorder*" or "sleep-wake disorder*" or "personality disorder*") n4 (outpatient* or inpatient* or patient* or diagnos* or user* or client*))

and

(occupation* or "performance skill*" or "performance pattern*" or work or leisure or sleep or productivity or play or "interpersonal relationship*")

and

"occupation* therap*"

and

(outpatient* or inpatient* or patient* or diagnos* or user* or client*)

Only articles published since 2004 will be taken into consideration.

If the string does not yield the desired results, the search string may be reformulated.

The following databases have been identified as suitable for this search:

- Academic Search Ultimate
- Africa-Wide Information
- APA PsycArticles
- APA PsycInfo
- CINAHL with Full Text
- Communication & Mass Media Complete
- ERIC
- Health Source - Consumer Edition
- Health Source: Nursing/Academic Edition
- Humanities Source Ultimate
- MEDLINE
- ProQuest Dissertations and Theses
- Scopus

The information librarian will assist in obtaining the full text of included articles, if necessary, and will assist in writing the “sources and search methodology” section, if required.

The investigator(s) will complete the screening and inclusion/exclusion analysis of articles with the assistance of the supervisor, and conduct the analysis.

I hope you find this in order.

Yours sincerely,

Annamarie du Preez
Head: Frik Scott Health Sciences Library