THE USE OF YOGA AS A TREATMENT MODALITY BY SOUTH AFRICAN OCCUPATIONAL THERAPISTS

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DECLARATION

I declare that the thesis, which I hereby submit for the degree Master of Science in Occupational Therapy at the University of the Witwatersrand, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

D. Evangelidis 05 October 2025

Name Date

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ABSTRACT

Introduction: Yoga is increasingly recognized as a complementary treatment modality in healthcare, providing holistic benefits for physical, emotional, and sensory challenges. This study aimed to explore how South African occupational therapists use yoga as a treatment modality in practice to enhance therapeutic outcomes and support client-centered care.

Objectives: This study aimed to explore how occupational therapists in South Africa use yoga as a treatment modality, specifically the extent to which they use yoga, the demographics of clients that they use yoga with, and the treatment goals they aim to reach.

Method: An exploratory qualitative research design was used in this study with 6 South African occupational therapists taking part in semi-structured interviews. Qualitative content analysis was used to analyse the data. Manual coding was done in this study, making use of a coding manual. MAXQDA was also used to assist with the development of the codes.

Findings: Three key themes emerged from the data analysis: (1) 'Harnessing Yoga' which encompasses how SA OTs find yoga is a versatile and holistic therapeutic approach; (2) 'Mindful Movements' which highlights how yoga can play a role in enhancing sensory integration and emotional regulation; (3) 'Increasing the OT Toolbox' which shows how OTs adapt yoga to the SA context and gain professional growth through yoga training.

Conclusion: Yoga is a valuable treatment modality used by South African OTs. Addressing barriers through expanded training, greater inclusivity, and further research into long-term impacts can enhance its integration. This study contributes to growing evidence supporting yoga as a complementary approach in occupational therapy.

PUBLICATIONS ARISING FROM THIS STUDY

A journal article based on this research has been submitted to the *British Journal of Occupational Therapy* for publication. The article presents key findings from the study, exploring the use of yoga as a therapeutic modality by South African occupational therapists. This publication aims to contribute to the growing body of evidence on complementary and integrative therapies within occupational therapy, informing both clinical practice and future research in the field.

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NOMENCLATURE/LIST OF ABBREVIATIONS AND SYMBOLS

ADHD	Attention Deficit Hyperactivity Disorder
ADLs	Activities of Daily Living
AOTA	American Occupational Therapy Association
ASD	Autism Spectrum Disorder
BJOT	British Journal of Occupational Therapy
DMN	Default Mode Network
HPCSA	Health Professionals Council of South Africa
MBSR	Mindfulness-Based Stress Reduction
OT	Occupational Therapy
OTPF	Occupational Therapy Practice Framework
PEO	Person-Environment-Occupation Model
SA	South Africa

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CHAPTER 1.1: INTRODUCTION

1.1.1 INTRODUCTION TO THE PROBLEM

Yoga has been considered an upcoming and leading form of exercise globally, with approximately 300 million people practicing yoga on a regular basis (Clarke et al. 2015a; Gronski & Doherty 2020a; Mooventhan & Nivethitha 2020a). This has been multiplied by yoga's increased global prominence in advertising and general media over the past two decades (Park, Braun & Siegel 2015). So, this begs the question, why has there been such an immense increase in this form of exercise? Overall, the upsurge in popularity of yoga can be credited to a combination of elements, including the proven and perceived health benefits, cultural influence, social media, and ease of access to the practice (Park et al. 2015).

Yoga was created in ancient India approximately 5000 years ago and is considered to be a physical, mental, and spiritual practice (Broad 2012a; Mooventhan & Nivethitha 2020a; Stephens 2017a). The term 'yoga' originates from the Sanskrit word 'yuj', which is directly translated to 'unite or integrate' and it also refers to the amalgamation of the mind, body, and spirit (Broad 2012a; Mooventhan & Nivethitha 2020a; Stephens 2017a). At its core, there are two skills that are utilised in every yoga practice. Namely, asanas and pranayamas. Asanas are a series of physical postures that are meant to improve posture, balance, strength, and flexibility (Broad 2012a; Mooventhan & Nivethitha 2020a). Whereas pranayamas are various breathing techniques and meditation exercises which are intended to help calm the mind, as well as decrease stress and anxiety (Broad 2012a; Mooventhan & Nivethitha 2020a). The use of these two skills is what makes up the yoga practice and allows for the various health benefits to be achieved.

The increased interest surrounding yoga as a form of exercise has been attributed to the benefits of achieving mindfulness and movement through the abovementioned sequential physical postures and breathing techniques (Gronski & Doherty 2020a; Mooventhan & Nivethitha 2020a). A large body of research has been conducted, outlining the benefits of yoga, and the positive impact it has on being able to effectively engage in activities of daily living (Clark et al. 2011a; Grajo, Candler & Sarafian 2020a; Schmid et al. 2019a). Some

of these benefits include an increase in the decision making to engage in health-leading activities, a decrease in stress and anxiety, and an overall improvement in quality of life (Clark et al. 2011a; Mooventhan & Nivethitha 2020a). Cagas, Biddle and Vergeer (2022) explored why people practice yoga and the motives surrounding different types of yoga participants (Cagas, Biddle & Vergeer 2022). They stated that various studies have shown that yoga can either be seen as physical exercise or as a spiritual activity, or both (Cagas et al. 2022). These two motives have been identified as the reasons as to why a person has started practicing yoga and why they also continue to participate in a regular yoga practice (Cagas et al. 2022).

Yoga has been previously aimed at people without diagnoses or medical difficulties, as it was assumed that you need to be in good physical condition in order to complete the various physical postures (Cagas et al. 2022; Clark et al. 2011a; Park et al. 2015). However, through the immense growth in popularity over the recent decades, as well as through the latest research studies, there has been a large progression in yoga being aimed at people who struggle with diverse health conditions (Cagas et al. 2022; Clark et al. 2011a; Park et al. 2015). These can range from low back pain, cancer, heart disease, addiction, head injuries such as concussion, as well as various psychiatric disorders (Acabchuk et al. 2020; Cabral, Meyer & Ames 2011a; Clark et al. 2011a; Hill et al. 2020; Khanna & Greeson 2013a; Montgomery et al. 2015a; Schmid et al. 2019a; Stephens et al. 2020a). Research also started to prove that yoga may be beneficial to people with diverse diagnoses in improving their performance in their activities of daily living (ADLs) (Cabral et al. 2011a; Clark et al. 2011a; Hill et al. 2020; Khanna & Greeson 2013a; Montgomery et al. 2015a; Schmid et al. 2019a; Stephens et al. 2020a). Additionally, it is an easily accessible practice that requires little to no resources (Cabral et al. 2011a; Clark et al. 2011a; Hill et al. 2020; Khanna & Greeson 2013a; Montgomery et al. 2015a; Schmid et al. 2019a; Stephens et al. 2020a).

Subsequently, various health care practitioners, specifically allied health care workers, began adopting yoga as a medium of treatment with their clients, due to the previously mentioned health benefits and ease of access (Acabchuk et al. 2020). However, even though the aforesaid benefits do appear to have several positive outcomes, it is not clear whether these outcomes correlate to the occupational therapy (OT) treatment goals.

There seems to be no prescribed manner in how treatment should be administered and in what contexts. Thus, the question is posed as to why occupational therapists are using yoga in their OT treatment, as well as how this is being incorporated, specifically within a South African (SA) context.

1.1.2 BACKGROUND AND SETTING OF THE PROBLEM

Yoga, an ancient mind-body practice, has gained increasing recognition in modern healthcare for its therapeutic benefits in physical and mental well-being (Mooventhan & Nivethitha 2020a). Research has demonstrated that yoga enhances flexibility, posture, muscle strength, and motor coordination while also supporting emotional regulation, stress reduction, and mental health (Nguyen-Feng, Clark & Butler 2019; Rose et al. 2021). As a result, yoga has been integrated into various healthcare disciplines, including occupational therapy, where it is used as a holistic intervention to support client engagement in meaningful activities and improve overall function (Andrews et al. 2020).

Occupational therapy is a client-centered profession that focuses on enabling individuals to participate in daily activities despite physical, cognitive, or emotional challenges . Internationally, research supports the integration of yoga into OT practice, showing benefits for individuals with neurological disorders, musculoskeletal conditions, and mental health challenges (Andrews et al. 2020). However, despite its potential, the use of yoga within occupational therapy remains underexplored in certain contexts, particularly in resource-limited settings like South Africa.

South Africa's healthcare system faces significant challenges, including limited access to rehabilitation services, high mental health burdens, and socio-economic disparities (Gordon, Booysen & Mbonigaba 2020; Hill et al. 2020; Ned et al. 2020). Many individuals lack access to conventional therapy due to financial and geographical barriers, necessitating cost-effective and accessible interventions such as yoga. While community-based yoga programs have been implemented in other low-resource settings with promising outcomes, little is known about how South African occupational therapists incorporate yoga into their practice, the methods they use, or the challenges they encounter (Hill et al. 2020).

Although there is anecdotal evidence that occupational therapists in South Africa are utilizing yoga as a treatment modality, there is a lack of empirical research detailing how and why it is being implemented. It remains unclear what specific techniques OTs are incorporating, what populations they are targeting, and what factors influence their decision to use yoga within their therapeutic interventions. Additionally, the motivations behind using yoga, whether for physical rehabilitation, emotional regulation, or sensory integration, have not been thoroughly explored. This gap in knowledge limits the ability to develop guidelines, training resources, or policies that support the effective use of yoga in OT practice.

Given these factors, this study seeks to explore the use of yoga as a treatment modality by occupational therapists in South Africa. By examining the perspectives and experiences of occupational therapists, this research aims to contribute to a deeper understanding of yoga's role as a complementary therapy, its potential benefits, and the barriers to its implementation. In doing so, the study addresses a critical gap in the literature and provides insights that could inform OT practice, policy, and training in South Africa's diverse healthcare landscape.

1.1.3 PROBLEM STATEMENT

The use of yoga as a therapeutic modality within the scope of OT, has increased significantly both globally, and within the South African context (Clark et al. 2011a; Clarke et al. 2015a). Although the use of yoga has already been adopted by various professionals, it appears that there is limited research on its use in OT (Schmid et al. 2019a). The effects and outcomes that this treatment modality has on clients is unclear due to the lack of evidence based research (Cabral et al. 2011a; Clark et al. 2011a; Montgomery et al. 2015a). There are apparent gaps in existing international research studies regarding the use of yoga as a mode of treatment in OT. These gaps can be attributed to the limitations of the studies, which are namely: small sample sizes; lack of standardised assessment tools that indicate improvement; limited variation in terms of diversity in participants; and the exclusion of qualitative analysis included in the results of such studies (Cabral et al. 2011a; Milton et al. 2019a; Schmid et al. 2019a). It is thus essential that further research be done on the use of yoga within the scope of OT in South

Africa (Cabral et al. 2011a; Milton et al. 2019a; Schmid et al. 2019a). Additionally, previous studies have focused on client outcomes when completing yoga as part of their treatment regime. OTs views on the effectiveness of using yoga as a form of treatment with various diagnoses have yet to be considered (Cabral et al. 2011a; Milton et al. 2019a; Montgomery et al. 2015a; Schmid et al. 2019a). Moreover, although these studies have examined the use of yoga within the scope of OT on a quantitative level, the results have not portrayed the qualitative experiences of OTs using yoga as a treatment modality and whether they deem it to be a useful technique to use with clients (Cabral et al. 2011a; Milton et al. 2019a; Montgomery et al. 2015a; Schmid et al. 2019a). Without evidence-based practice, that outlines the experience as well as tried and tested techniques of how to incorporate yoga into OT sessions, there could be detrimental consequences (Stephens 2017a; Stephens et al. 2020a). These consequences may have a direct correlation to a client's physical and mental well-being (Stephens 2017a; Stephens et al. 2020a). Thus, it is imperative that research be conducted, entailing detailed accounts from South African OTs on how and why yoga strategies are utilized in treatment plans. This will inform OTs and future research in understanding whether yoga as a treatment approach has effective outcomes, and how these outcomes can be achieved within the South African context.

1.1.4 RESEARCH QUESTION

How do occupational therapists in South Africa use yoga as a treatment modality?

1.1.5 RESEARCH AIMS AND OBJECTIVES

This study aimed to explore the use of yoga as a treatment modality by South African occupational therapists.

The objectives of this study are to:

1. Describe the demographics of clients that occupational therapists use yoga with as a treatment modality.

2. Describe the extent (frequency, duration, scope of application, yoga training level) to which South African occupational therapists use yoga as a treatment modality.

3. Determine what treatment goals occupational therapists aim to reach when using yoga as a treatment modality.

1.1.6 SIGNIFICANCE/JUSTIFICATION OF THE STUDY

OT is a health care service that is required amongst various populations, specifically in the SA context, given the quadruple burden of disease and the implications on quality of life (Joubert 2010a; Kielhofner & Forsyth 1997a). South Africa currently has an unemployment rate of 32,6% (Statistics South Africa 2020a). With the population of South Africa being approximately 60 million in 2024, and there only being approximately 5180 OTs as of 2018, it can be seen that access to OT services is highly limited for the South African population (Naidoo, Van Wyk & Joubert 2017a). Yoga is a practice that requires little to no resources to engage in, thus categorizing the incorporation of yoga practices into OT treatment plans makes it more affordable and accessible (Clark et al. 2011a; Grajo et al. 2020a). More specifically, minimal room space and equipment are required thus reducing treatment costs. In addition to affordability, carry over into the home environment would appear more structured and fluid. Continuation of home programs are generally more attainable with a significant amount of free online yoga resources, such as YouTube videos, for the client to access and perform in their own environment (Novak & Berry 2014a). Yoga therapy is a valuable tool that could be used to a greater extent by OTs in SA to yield improved outcomes for their clients, including carry over into the client's home environment. Yoga is already being used as a treatment technique by OTs (Clark et al. 2011a; Montgomery et al. 2015a; Schmid et al. 2019a), therefore this study would explore why South African OTs use yoga in their treatment, which clients South African OTs use yoga with, and what OT treatment goals are aligned with yoga. Thus, the current study will serve as a baseline for future research regarding evidence-based practice using yoga as a treatment modality in South Africa. The current research will assist in defining whether yoga is a viable and feasible treatment modality, using the accounts of experienced OTs.

1.1.7 ORGANISATION OF THE THESIS

The general outline of the thesis is summarized as follows:

CHAPTER 1.2: Literature review

1.2.1 INTRODUCTION TO LITERATURE REVIEW

Occupational therapy (OT) in South Africa has undergone significant evolution over the past few decades, adapting to the diverse needs of its population. The profession is dedicated to enabling individuals to engage in meaningful activities that enhance their quality of life, addressing various physical, emotional, and social factors that influence occupational engagement (Esterhuizen, Naidoo & Govender 2021). This holistic approach is particularly crucial in a country marked by socio-economic disparities, where access to traditional healthcare resources may be limited. As such, occupational therapists are increasingly exploring complementary therapies, such as yoga, to enhance their therapeutic practices (Andrews et al. 2020).

The growing interest in yoga within the field of OT is driven by the need for accessible, cost-effective interventions that can be integrated into existing therapeutic frameworks. Yoga offers a holistic approach that aligns well with the principles of OT, emphasizing the interconnectedness of mind, body, and spirit (Hill et al. 2020). This is particularly relevant in South Africa, where traditional healthcare resources may not be readily available, and where there is a pressing need for innovative solutions to address the health challenges faced by various populations (Candray et al., 2022). Research has shown that yoga can significantly improve various health outcomes, including physical functioning, emotional well-being, and overall quality of life (Hill et al. 2020). For instance, a study by Hill et al. (2020) demonstrated that integrating yoga into OT interventions for individuals with Parkinson's disease led to improvements in fatigue management and participation in daily activities (Hill et al. 2020).

Similarly, Andrews et al. (2020) found that merging yoga with occupational therapy for stroke survivors resulted in increased engagement in everyday activities, a primary goal of OT practice (Andrews et al. 2020). These findings underscore the potential of yoga as a therapeutic tool that can complement traditional OT methods. Moreover, the philosophical underpinnings of yoga resonate with the core values of occupational therapy. Both disciplines prioritize client-centered care and emphasize the importance of self-regulation, mindfulness, and balance in daily life (Candray et al. 2022). The

incorporation of yoga into OT practice not only enriches therapeutic interventions but also empowers clients to take an active role in their recovery. As Candray et al. (2022) noted, the philosophies of yoga and OT share common goals of promoting self-esteem, self-expression, and minimizing occupational imbalance and injustice (Candray et al. 2022). By fostering accessibility and adaptability, yoga provides individuals with strategies to regulate their physiological and emotional states, thereby enabling more equitable participation in meaningful occupations. In this way, yoga supports occupational therapists in promoting inclusivity and reducing barriers to engagement, aligning with the profession's commitment to enhancing well-being and occupational balance (Candray et al. 2022).

In the South African context, the integration of yoga into OT practice presents a promising avenue for enhancing therapeutic outcomes. The accessibility of yoga, which requires minimal equipment and can be practiced in various settings, makes it an attractive option for occupational therapists working in resource-limited environments (Hill et al. 2020). Furthermore, community-based yoga interventions can be developed to reach underserved populations, promoting health and wellness in a culturally sensitive manner (Andrews et al. 2020). However, the successful integration of yoga into OT practice is not without challenges.

Cultural perceptions of yoga may influence its acceptance among clients and practitioners alike. Therefore, it is essential for occupational therapists to adapt yoga practices to align with the diverse cultural contexts within South Africa (Candray et al. 2022). By doing so, therapists can ensure that yoga interventions are relevant and effective for their clients, thus making the exploration of yoga as a treatment modality within occupational therapy in South Africa is both timely and necessary.

As the profession continues to evolve, the integration of yoga offers a holistic approach that aligns with the core principles of OT, enhancing therapeutic outcomes and improving the overall well-being of clients. Future research should focus on evaluating the effectiveness of yoga in various OT contexts and developing training programs for occupational therapists to equip them with the skills needed to integrate yoga into their practice effectively.

This literature review aims to examine the evidence supporting yoga as a therapeutic tool in occupational therapy, with a specific focus on its relevance to South Africa. By integrating recent research findings, this review will highlight the potential benefits of integrating yoga into OT practice and identify areas for future exploration.

1.2.2 BACKGROUND OF YOGA AND OCCUPATIONAL THERAPY

Historical and Philosophical Underpinnings of Yoga

Yoga has its roots in ancient India, where it was developed as a comprehensive system aimed at achieving physical, mental, and spiritual well-being (Jelly, Sharma & Verma 2022). The philosophical foundations of yoga emphasize the interconnectedness of mind, body, and spirit, promoting a balanced and harmonious existence (Arasappa et al. 2021). This holistic perspective aligns closely with contemporary health paradigms that recognize the importance of treating the whole person rather than merely addressing isolated symptoms (Nair et al. 2023). Key components of yoga include asanas (postures), pranayama (breathing techniques), meditation, and mindfulness, all of which contribute to physical health, mental clarity, and emotional balance (Jelly et al. 2022; O'Shea et al. 2022). Research has demonstrated that the practice of yoga can lead to numerous health benefits, including improved flexibility, strength, and stress reduction (Nair et al. 2023). These attributes make yoga a valuable complementary therapy for individuals facing various health challenges, such as chronic pain, anxiety, and depression (Andrews et al. 2020; O'Shea et al. 2022).

The historical evolution of yoga has seen it transition from a spiritual practice to a widely recognized therapeutic modality (Jelly et al. 2022). In Western contexts, yoga is often perceived primarily as a physical exercise, yet it retains a rich philosophical and spiritual background that is frequently overlooked (Arasappa et al. 2021). The integration of these philosophical principles into therapeutic practices can enhance the effectiveness of interventions, particularly in occupational therapy, where holistic approaches are paramount (Nair et al. 2023). For instance, the ethical principles of yoga, such as ahimsa (non-violence) and satya (truthfulness), can inform therapeutic relationships and promote a compassionate approach to care (O'Shea et al. 2022).

Foundations of Occupational Therapy

Occupational therapy emerged as a distinct healthcare profession in the early 20th century, primarily in response to the need for rehabilitative services for individuals affected by war injuries, mental health issues, and the growing recognition of the importance of meaningful engagement in daily activities (Jansen van Vuuren, Okyere & Aldersey 2020). The profession focuses on enabling individuals to participate in meaningful activities that enhance their quality of life, thereby fostering a sense of purpose and fulfilment (Vuuren et al., 2021). OT practitioners adopt a holistic approach, addressing a wide range of factors that influence occupational engagement, including physical, emotional, cognitive, and environmental aspects (Jansen van Vuuren et al. 2020). This multifaceted perspective is essential in understanding how various elements interact to affect an individual's ability to participate in daily life (Jansen van Vuuren et al. 2020)

Core principles of OT include client-centered care, which emphasizes the importance of tailoring interventions to meet the unique needs and preferences of each individual. This approach not only promotes independence but also enhances overall well-being by encouraging clients to take an active role in their recovery process (Jansen van Vuuren et al. 2020). By fostering a collaborative relationship between the therapist and the client, occupational therapy empowers individuals to set and achieve personal goals, thereby improving their quality of life.

The Occupational Therapy Practice Framework (OTPF) serves as a foundational document that outlines the domain and process of occupational therapy. It provides a comprehensive overview of the various aspects of occupational therapy practice, including the importance of understanding the client's context, the significance of meaningful occupations, and the need for evidence-based interventions (AOTA 2020). The OTPF emphasizes the importance of engagement in occupation as a means of promoting health and well-being, highlighting the role of therapists in facilitating participation in daily activities that are meaningful to clients (AOTA 2020). The OTPF categorizes the domain of occupational therapy into several key areas, including occupations, client factors, performance skills, performance patterns, and context (AOTA 2020). This framework underscores the complexity of human occupation and the various factors that influence an individual's ability to engage in meaningful

activities (AOTA 2020). By utilizing the OTPF, occupational therapists can develop a comprehensive understanding of their clients' needs and tailor interventions accordingly.

In addition to the OTPF, the profession of occupational therapy is guided by various models and theories that inform practice. For instance, the Person-Environment-Occupation (PEO) model emphasizes the dynamic interaction between the person, their environments, and the occupations they engage in, highlighting the importance of considering all three components when planning interventions (Law et al. 1996). This model aligns with the holistic philosophy of occupational therapy, which seeks to address the multifaceted nature of health and well-being.

As the field of occupational therapy continues to evolve, there is an increasing emphasis on the need for practitioners to critically appraise their practice and adapt to the diverse populations they serve. Prominent occupational therapists have called for a reconceptualization of occupational therapy that aims to benefit all, asserting that the profession must develop models that reflect the diverse challenges faced by individuals in various contexts (Hayward & Taylor 2011). This call for inclusivity and adaptability is particularly relevant in the South African context, where healthcare disparities exist, and access to traditional therapeutic resources may be limited.

1.2.3 CONTEXT OF SOUTH AFRICA:

The socio-economic status of the South African population significantly influences access to medical care, including occupational therapy services. South Africa is characterized by stark inequalities rooted in its historical context, particularly the legacy of apartheid, which has resulted in persistent disparities in wealth, education, and health outcomes across different racial and socio-economic groups (Gordon et al. 2020). According to the World Bank, approximately 55% of South Africans live below the upper poverty line, with a significant portion of the population lacking access to basic healthcare services (Madela et al. 2023). This socio-economic divide is reflected in healthcare utilization patterns, where access to medical services is often dependent upon an individual's ability to pay, which is frequently determined by household income and access to private medical insurance (Gordon et al. 2020). South Africa also has one of the highest Gini coefficients in the world. As of 2025, South Africa's Gini

coefficient is forecast to be or 63%, indicating extreme income inequality that further exacerbates disparities in health and access to occupational therapy services (Statista 2024).

In terms of occupational therapy, the distribution of practitioners between the public and private sectors further shows these disparities. As of 2018, South Africa had approximately 89.7 occupational therapists per one million population, which is significantly lower than what the World Federation of Occupational Therapists' states is the recommended ratio, which is currently recommended to be a minimum of 1 occupational therapist per 10 000 people (Ned et al. 2020). The majority of occupational therapists are employed in the private sector, where they can charge fees that are often unaffordable for individuals from lower income groups (Ned et al. 2020). In contrast, the public sector, which serves a larger proportion of the population, is under-resourced and struggles to meet the demand for occupational therapy services. Reports indicate that there are about 5,000 registered occupational therapists in South Africa, with a significant number working in private practice, leaving public health facilities severely understaffed (Ned et al. 2020).

Access to occupational therapy is further complicated by geographical disparities, particularly in rural areas where healthcare facilities are limited. Many rural communities lack adequate healthcare infrastructure, making it challenging for residents to access occupational therapy services (Vergunst et al. 2017). The South African Constitution guarantees the right to healthcare, yet systemic inequities persist, leading to significant barriers for those in lower socio-economic brackets (Vergunst et al. 2017). For instance, individuals from disadvantaged backgrounds often face challenges such as transportation costs, long waiting times, and a lack of awareness regarding available services, which further exacerbate their inability to access necessary care (Stokes et al. 2017). Moreover, the COVID-19 pandemic has intensified existing inequalities, with many individuals experiencing increased financial strain and reduced access to healthcare services. The pandemic has highlighted the vulnerabilities of the healthcare system, particularly for those reliant on public services, which were already under pressure before the crisis (Rena & Mbukanma 2023). The impact of socio-economic status on health-seeking behaviour is evident, as individuals with lower socio-economic status are less likely to seek timely medical care, including

occupational therapy, due to financial constraints and a lack of information about available services (Stokes et al. 2017).

These socio-economic challenges not only hinder access to timely and appropriate occupational therapy services but also exacerbate health inequities across the population. As a result, individuals from lower-income backgrounds often experience poorer health outcomes and reduced quality of life due to delayed or insufficient care. Addressing these disparities requires systemic reforms to improve the accessibility and distribution of occupational therapy services, particularly in the public sector and rural areas.

1.2.4 THE EMERGENCE OF YOGA IN OCCUPATIONAL THERAPY

The emergence of yoga in occupational therapy can be traced back to the growing recognition of the mind-body connection and the holistic approach to health that both disciplines share. Initially, yoga was primarily practiced as a spiritual and physical discipline, but over the past few decades, it has gained traction as a therapeutic tool within various healthcare settings, including physiotherapy, psychology, and rehabilitation (Andrews et al. 2020). The integration of yoga into OT practice began as therapists sought innovative ways to enhance their interventions and address the diverse needs of their clients. This shift was driven by a growing body of evidence supporting the benefits of yoga for physical and mental health, particularly in managing conditions such as chronic pain, stress, and anxiety (Andrews et al. 2020; Candray et al. 2022). The versatility of yoga has led to its adoption across multiple therapeutic fields, with practitioners recognizing its potential to improve overall health outcomes. For instance, yoga has been integrated into physical therapy to enhance recovery from injuries and surgeries, while psychologists have utilized yoga techniques to help clients manage stress and improve emotional regulation (Hill et al. 2020).

There is congruence between yoga and OT principles, which emphasize the importance of engaging individuals in meaningful activities to improve their overall well-being. Both disciplines prioritize a holistic approach, focusing on the interconnectedness of physical, emotional, and social factors that influence health and occupational engagement. For instance, yoga's emphasis on mindfulness and self-awareness aligns with OT's client-centered philosophy, which encourages individuals

to take an active role in their recovery (Candray et al. 2022). The practice of yoga incorporates various techniques, such as breath control, meditation, and physical postures, which can enhance clients' self-regulation and emotional resilience - key components of successful occupational therapy interventions (Andrews et al. 2020; Rose et al. 2021).

As occupational therapists continue to explore innovative approaches to improve client outcomes, the incorporation of yoga offers a promising avenue for enriching therapeutic practices and promoting holistic health. The growing acceptance of yoga in various therapeutic fields underscores its potential to bridge the gap between physical and mental health, ultimately leading to improved quality of life for individuals facing diverse challenges (Andrews et al. 2020; Candray et al. 2022). In conclusion, the emergence of yoga in occupational therapy reflects a broader trend towards holistic and integrative approaches to health and wellness. By leveraging the principles of yoga, occupational therapists can enhance their interventions, promote client engagement, and ultimately improve health outcomes for individuals across various contexts. As research continues to support the efficacy of yoga in therapeutic settings, its role in occupational therapy is likely to expand, offering new opportunities for practitioners and clients alike.

1.2.5 EVIDENCE SUPPORTING YOGA IN OCCUPATIONAL THERAPY

The integration of yoga into occupational therapy has gained significant traction globally, supported by a growing body of research that highlights its effectiveness as a treatment modality. Numerous studies have demonstrated the positive impact of yoga on various health outcomes, making it a valuable adjunct to traditional therapeutic practices. For instance, a systematic review by Nguyen-Feng et al. (2019) examined the effects of yoga on psychological symptoms following trauma and found that yoga interventions significantly reduced symptoms of anxiety and depression (Nguyen-Feng et al. 2019). This aligns with the biopsychosocial model of health, which emphasizes the interconnectedness of physical, emotional, and social factors in promoting overall well-being (Hayward & Taylor 2011; Law et al. 1996). The findings suggest that yoga can serve as a holistic intervention that addresses multiple

dimensions of health, making it particularly relevant in the context of occupational therapy (Nguyen-Feng et al. 2019).

Research has demonstrated that yoga can enhance clients' self-regulation and emotional resilience, which are critical components of successful occupational therapy interventions (Andrews et al. 2020; Patil et al. 2018; Rose et al. 2021). The application of yoga in OT has been particularly beneficial for populations with specific health challenges. For example, studies have shown that incorporating yoga into rehabilitation programs for stroke survivors can help reestablish the mind-body connection, promoting acceptance of self and enhancing engagement in daily activities (Andrews et al. 2020; Rose et al. 2021). The implications of these findings extend to occupational therapy practice, where stress management is often a key component of client interventions.

Furthermore, the effectiveness of yoga in enhancing functional outcomes for individuals with specific health conditions has been well-documented. For example, Atler et al. (2017) explored the outcomes of merging yoga with occupational therapy for stroke survivors. Their findings indicated that participants experienced improved self-management skills, increased engagement in daily activities, and enhanced problem-solving abilities (Atler et al. 2017). These outcomes underscore the potential of yoga to facilitate meaningful engagement in occupations, which is a primary goal of occupational therapy (Atler et al. 2017). In addition to stroke rehabilitation, yoga has been shown to benefit individuals with mental health conditions. Behere et al. (2010) found that yoga therapy, when used as an adjunct to antipsychotic treatment for patients with schizophrenia, improved positive and negative symptoms as well as socio-occupational functioning (Behere et al. 2011). This highlights yoga's versatility as a therapeutic intervention that can be adapted to meet the needs of diverse populations, including those with complex mental health challenges (Behere et al. 2011).

The integration of yoga into occupational therapy is further supported by the American Occupational Therapy Association (AOTA), which recognizes yoga as a complementary integrative therapy (CIT). AOTA emphasizes the importance of incorporating evidence-based practices into OT interventions, and the growing research on yoga aligns with this directive (Rose et al. 2021). As occupational

therapists continue to explore innovative approaches to enhance client outcomes, the incorporation of yoga offers a promising avenue for improving health and well-being.

In conclusion, the evidence supporting the use of yoga as a treatment modality in occupational therapy is robust and multifaceted. Global research demonstrates its effectiveness in managing occupational stress, enhancing functional outcomes, and addressing mental health challenges. As the field of occupational therapy evolves, the integration of yoga presents an opportunity to enrich therapeutic practices and promote holistic health for clients across various contexts.

1.2.6 YOGA IN SOUTH AFRICA: POTENTIAL AND CHALLENGES

The integration of yoga into occupational therapy practice in South Africa presents a unique opportunity to address the healthcare needs of diverse populations within a challenging socio-economic context. The socio-economic landscape in South Africa is characterized by high levels of inequality, with significant disparities in access to healthcare resources (Gordon et al. 2020; Ned et al. 2020; Vergunst et al. 2017; Walls et al. 2016). Many individuals, particularly those in underserved communities, face barriers to accessing traditional therapeutic services due to financial constraints and limited availability of healthcare professionals (Walls et al. 2016). In this context, yoga emerges as a viable, low-cost intervention that can be easily adapted to various settings, making it accessible to those who may not have the means to engage in therapy (Hill et al. 2020). Yoga's minimal equipment requirements and adaptability allow occupational therapists to implement it in community-based programs, schools, and even homes, thereby reaching marginalized populations who may otherwise lack access to essential health services.

The accessibility of yoga is further enhanced by its potential for integration into public health initiatives and community health programs. By offering yoga classes as part of OT services, therapists can promote health and wellness among individuals facing socio-economic challenges. This approach not only addresses physical health concerns but also fosters mental and emotional well-being, which are critical components of holistic health (Andrews et al. 2020). The incorporation of yoga into OT practice can empower clients to take an active role in their recovery, enhancing their self-efficacy and promoting engagement in meaningful activities. This empowerment

is particularly important in South Africa, where many individuals may feel disempowered by their socio-economic circumstances. However, despite the potential benefits of integrating yoga into OT practice, several challenges must be addressed.

Cultural perceptions of yoga may influence its acceptance and implementation in South Africa. In a country with diverse cultural backgrounds and beliefs, it is essential to adapt yoga practices to align with the various cultural contexts, ensuring that interventions are culturally sensitive and relevant (Hill et al. 2020). This may involve collaborating with community leaders and stakeholders to develop yoga programs that resonate with local traditions and values, thereby enhancing participation and engagement. Additionally, occupational therapists may require training in yoga practices to effectively incorporate them into their therapeutic repertoire, which could pose a barrier to implementation if resources and training opportunities are limited (Candray et al. 2022).

Nonetheless, there are significant opportunities for occupational therapists to leverage yoga as a complementary treatment modality. By training therapists in yoga techniques, the profession can expand its therapeutic tools and enhance client outcomes. This training can empower therapists to incorporate yoga into their interventions, providing clients with additional strategies for managing stress, improving physical function, and enhancing overall well-being (Andrews et al. 2020). Furthermore, the growing popularity of yoga in South Africa presents an opportunity for occupational therapists to collaborate with yoga instructors and practitioners, fostering a multidisciplinary approach to health and wellness.

The integration of yoga into occupational therapy practice in South Africa offers a promising avenue for addressing the healthcare needs of diverse populations within a challenging socio-economic context. By leveraging the accessibility and adaptability of yoga, occupational therapists can promote health and wellness among underserved communities, enhance client engagement, and ultimately improve health outcomes. As the profession continues to evolve, embracing yoga as a complementary therapy can lead to innovative approaches that empower individuals to take an active role in their health and well-being.

1.2.7 CONCLUSION

In conclusion, the integration of yoga into occupational therapy practice in South Africa represents a significant advancement in addressing the diverse healthcare needs of the population, particularly within the context of the country's socio-economic challenges. The high levels of inequality and limited access to traditional healthcare resources necessitate the exploration of innovative, low-cost interventions like yoga. As highlighted throughout this literature review, yoga's minimal equipment requirements and adaptability to various settings make it a viable option for occupational therapists seeking to enhance their therapeutic interventions and reach underserved communities (Andrews et al. 2020).

The evidence supporting the effectiveness of yoga in occupational therapy is compelling, with numerous studies indicating its benefits for physical health, mental well-being, and overall quality of life. Local examples, such as the use of yoga for stroke survivors, illustrate the complementary nature of yoga and occupational therapy in promoting holistic health and well-being (Andrews et al. 2020; Atler et al. 2017). These findings underscore the potential of yoga to empower clients, enhance their self-efficacy, and facilitate engagement in meaningful activities, which are core objectives of occupational therapy practice.

However, the integration of yoga into occupational therapy practice is not without its challenges. Cultural perceptions of yoga may influence its acceptance and implementation in South Africa, where diverse cultural backgrounds and beliefs exist. It is essential for occupational therapists to adapt yoga practices to align with the cultural contexts of their clients, ensuring that interventions are relevant and sensitive to local traditions (Andrews et al. 2020). Additionally, there is a need for training and resources to equip occupational therapists with the skills necessary to effectively incorporate yoga into their practice. By addressing these challenges, occupational therapists can maximize the benefits of yoga as a complementary therapy and enhance client outcomes.

The opportunities for integrating yoga into existing healthcare programs, particularly in community health initiatives, are significant. By training occupational therapists in yoga practices, the profession can expand its therapeutic tools and enhance client outcomes. This training can empower therapists to incorporate yoga into their

interventions, providing clients with additional strategies for managing stress, improving physical function, and enhancing overall well-being (Atler et al., 2017a).Furthermore, the growing popularity of yoga in South Africa presents an opportunity for occupational therapists to collaborate with yoga instructors and practitioners, fostering a multidisciplinary approach to health and wellness.

In summary, this study is important as it highlights the potential of yoga as a complementary treatment modality within occupational therapy practice in South Africa. By leveraging the accessibility and adaptability of yoga, occupational therapists can promote health and wellness among underserved communities, enhance client engagement, and ultimately improve health outcomes. As the profession continues to evolve, embracing yoga as a complementary therapy can lead to innovative approaches that empower individuals to take an active role in their health and well-being. The integration of yoga into occupational therapy not only enriches therapeutic practices but also addresses the pressing healthcare needs of a diverse population, making it a vital area for further research and exploration.

CHAPTER 2: METHODOLOGY

2.1 INTRODUCTION

This chapter outlines the research design, data collection, and analysis methods used to explore how occupational therapists in South Africa use yoga as a therapeutic modality. Given the study's focus on understanding participants' perspectives and experiences, a qualitative research approach was deemed most appropriate. Qualitative research allows for an in-depth exploration of subjective experiences, making it well-suited for capturing the nuances of how and why yoga is incorporated into the practice of South African occupational therapists (Creswell 2014a; Creswell & Poth 2018a; Fossey et al. 2002a).

A semi-structured interview design was selected to provide flexibility while ensuring that key topics related to the research objectives were addressed (Gill et al. 2008a). This approach enabled participants to share detailed insights while allowing the researcher to probe deeper into emerging themes. Six occupational therapists, who incorporate yoga into their practice, participated in the study.

To analyse the data, qualitative content analysis was conducted following the framework by Erlingsson and Brysiewicz (2017). This method provides a structured yet flexible approach to systematically coding, categorizing, and interpreting qualitative data (Erlingsson & Brysiewicz 2017). Content analysis allowed for the identification of meaningful units within the interview transcripts, which were then condensed, coded, and grouped into categories and themes (Erlingsson & Brysiewicz 2017). This process ensured that findings remained deeply rooted in participants' lived experiences while allowing for an organized and comprehensive analysis of the data.

To enhance the trustworthiness of the study, Lincoln and Guba's (1985) evaluative criteria were applied (Lincoln & Guba 1986a). Strategies such as credibility, dependability, confirmability, and transferability were incorporated to ensure methodological rigor (Korstjens & Moser 2018). Reflexivity was also practiced throughout the research process, with the researcher acknowledging potential biases and taking steps to minimize their influence on data collection and interpretation (Korstjens & Moser 2018).

Ethical approval was obtained from the University of the Witwatersrand Human Research Ethics Committee (Medical) (Certificate no.: M210953) prior to data collection. Participants were provided with an information sheet outlining the study's purpose and were required to give informed consent before taking part. Confidentiality and anonymity were maintained by assigning participant codes and securely storing all data in password-protected files (Korstjens & Moser 2018). Additionally, cultural sensitivity was prioritized to ensure respect for participants' diverse professional and personal contexts (Korstjens & Moser 2018).

This chapter provides a detailed account of the research methodology, including the research design, participant recruitment, data collection procedures, and data analysis approach. The steps taken to uphold ethical standards and research trustworthiness are also discussed to ensure the credibility and rigor of the study.

2.2 STUDY DESIGN

This study was a qualitative descriptive, explorative research design. Qualitative research allowed the researcher to gain the most in-depth look and take an interpretive approach to understand how South African OTs use yoga as a treatment modality (Creswell 2014a; Fossey et al. 2002a). This design aimed to delve into questions regarding the development of an understanding of the meaning of humans' worlds and their experiences within specific contexts (Fossey et al. 2002a; Taylor, Bogdan & DeVault 2016a). Additionally, descriptive, explorative research design allowed the researcher to interpret the personal experiences and opinions of OTs in the field of OT and yoga (Creswell 2014a; Creswell & Poth 2018a; Taylor et al. 2016a). This was achieved by using semi-structured interviews to gain a better understanding of the experiences of OTs using yoga and to explore whether yoga can be used as an effective OT treatment modality in the South African context.

2.3 STUDY SETTING

All participants were South African occupational therapists working in the country. The OTs that participated in the study all worked in the private sector, although therapists in the public health sector were not excluded from the study. The researcher accessed participants from all scopes of OT i.e., psychiatry, paediatrics, and

neuromusculoskeletal. Participants were excluded if they were only practicing yoga now and not occupational therapy with clients.

2.4 PARTICIPANTS

2.4.1 Population

The population for this study consisted of occupational therapists practicing in South Africa, specifically those who use yoga as a treatment modality in their OT practice. This group was chosen because yoga is a growing therapeutic approach in the field of occupational therapy, particularly for individuals with diverse physical, mental, and emotional needs. Occupational therapists in South Africa are increasingly incorporating yoga techniques as part of their holistic and client-centered care, particularly for individuals with physical and sensory challenges. The broader population includes therapists working in various settings, including schools, clinics, and private practice, with varying levels of experience in using yoga as a therapeutic modality.

This population is relevant to the study as it offers insights into the emerging role of yoga within occupational therapy, reflecting the diverse applications and experiences of therapists working in a South African context. By focusing on this population, the study aims to capture the perspectives of occupational therapists who are actively using yoga as a treatment modality, thereby contributing to the understanding of its effectiveness and challenges within the South African context.

2.4.2 Sample

2.4.2.1 Sample selection

The sample for this study was selected based on specific inclusion and exclusion criteria to ensure that participants had relevant experience and qualifications related to the use of yoga as a treatment modality by South African occupational therapists. To be eligible for participation, the participants had to meet the following criteria:

Table 1. Inclusion Criteria

Inclusion Criteria	Description
Have obtained a degree in OT	Would need to have at least complete their undergraduate degree of OT at a university.
Be registered with the Health Professionals Council of South Africa (HPCSA)	The participant would need to be registered with the HPCSA at the time of the study to be able to be practicing legally within South Africa.
Currently practicing in South Africa	This could either be within the private or government sector and could be practicing in any scope of OT.
Currently practice OT and yoga with their clients	The OT would need to be practicing yoga with their clients on a regular basis
Have yoga training	This could include both/either formal or informal courses. The following was accepted: completing a yoga teacher training course, being registered with an affiliate yoga body, or practicing yoga consistently. Practicing yoga once a week was considered a sufficient level of consistent practice to meet this criterion.

Participants were excluded if they did not meet one or more of the inclusion criteria listed above. Specifically, individuals who were not registered with the HPCSA, who were not currently practicing occupational therapy in South Africa, or who did not regularly integrate yoga into their practice were not eligible to participate in the study. Additionally, participants without any form of yoga training, whether formal or informal, were excluded from the sample.

2.4.2.2 Sampling method

Purposive Sampling was used to find participants who used yoga as a treatment modality within their OT practice (Creswell & Poth 2018a). The participants were recruited through Facebook and WhatsApp groups by sending out the requirements to be a part of the study and a summary of the study. The researcher then sent the information sheet (Appendix B) and appropriate consent forms (Appendix C) to the participants. Snowball sampling was then utilised to find more participants that use yoga as a treatment technique (Palinkas et al. 2015a; Creswell & Poth 2018a). These sampling methods were used to ensure that these inclusion criteria are met and that

there was maximum variation in the experience of South African OTs using yoga in their treatment (Creswell & Poth 2018a; Lincoln & Guba 1986a).

2.4.2.3 Sample size

The study included six occupational therapists in South Africa who use yoga as a treatment modality in South Africa. All participants met the inclusion criteria and were recruited from the private sector, working across various settings such as private practices, schools, and psychiatric hospitals. The researcher aimed to achieve meaning saturation; however, this was not reached due to time constraints and recruitment challenges, as no further eligible participants responded to invitations within the available data collection period (Creswell & Poth 2018a; Hennink et al. 2017a). The limited recruitment may reflect the relatively small population of occupational therapists in South Africa who integrate yoga into practice, as well as potential barriers such as workload and availability. The fact that meaning saturation was not fully attained may impact the transferability of the findings, as additional perspectives from other occupational therapists could have enriched the data and provided a broader understanding of yoga use in occupational therapy practice within the country.

2.5 PROCEDURE OF DATA COLLECTION

2.5.1 Instrumentation

For this qualitative study, the primary method of data collection was semi-structured interviews, designed to explore the experiences and perspectives of South African occupational therapists who use yoga as a treatment modality in their practice. The interviews were guided by an interview schedule developed specifically for this study, which ensured consistency across all participant interviews while allowing for flexibility in response to individual experiences. The semi-structured format allowed participants to share detailed, personal accounts of their practice, the benefits and challenges of using yoga in their therapeutic work, and their training in yoga (Gill et al. 2008a).

The interview schedule was developed based on a review of the literature on yoga in occupational therapy and a preliminary exploration of key themes that emerged from the research questions. It included open-ended questions focused on the participants'

experiences with yoga, the frequency and context of its use with clients, and their perceptions of its effectiveness. The interview schedule was pre-tested with one occupational therapist in the pilot study to ensure clarity and relevance. No modifications were completed afterwards.

Data from the interviews were transcribed verbatim and then analysed using MAXQDA24, a qualitative data analysis software. MAXQDA24 allowed for systematic coding and categorization of the interview data, facilitating the identification of common themes and patterns across the participant responses. The use of software ensured a rigorous and transparent approach to data analysis, supporting the reliability and validity of the study's findings.

2.5.2 Data collection process

Data collection began once ethical clearance was obtained from the Human Research Ethics Committee (Medical) of the University of the Witwatersrand (Certificate no.: M210953) (Appendix D). Once this was obtained, all participants received an information sheet (Appendix B) and a consent form (Appendix C) that they were required to sign to participate in the study. Once this was completed, a time and date were agreed upon to complete the semi-structured interviews, which was used as the mode for data collection in this study (Gill et al. 2008a). Interviews took place on the online video-conferencing site, Microsoft Teams, as this allowed for more flexibility in responding and allowed for automatic transcription of the interviews.

Each recorded interview was approximately 30-45 minutes long. This allowed enough time for the participants to give an extensive narrative on why and how they use yoga (Gill et al. 2008a; McIntosh & Morse 2015; Whiting 2008a). The participant was given a description of the study and then was asked to give verbal consent to continue with the interview. The interviews were guided by predetermined interview questions developed by the researcher. The interview questions (Appendix A) were based on previous literature and were divided into sections based on the objectives of the study (McIntosh & Morse 2015a; Whiting 2008a). The first interview was used to pilot the interview guide and changes were subsequently made thereafter. The semi-structured interviews were carried out in a conversational style where all questions were asked in an open-ended manner to allow for the participants to fully explain their experiences and to mitigate the researcher's bias coming through (McIntosh & Morse 2015a;

Whiting 2008a). Field notes were written by the researcher whilst the interviews were taking place (Appendix I). Interviews were transcribed verbatim from the recordings of the interviews (Gill et al. 2008a; Whiting 2008a; McIntosh & Morse 2015a). All recordings and field notes were saved onto a password protected computer.

A pilot study was completed before the research study to investigate the quality of the interview questions and online video-conferencing platform (Connelly 2008a). One participant, who met the inclusion criteria, took part in a semi-structured interview on Microsoft Teams. This was completed to understand whether the proposed interview questions were able to answer the research objectives (Creswell & Poth 2018a; Lincoln & Guba 1986a).

2.5.3 Data management

The POPI act and the HPCSA General Ethical Guidelines for Health Researchers guided the management of data (Health Professions Council of South Africa 2016a; South Africa 2013). This ensured that participants' information and rights were protected.

Once the interviews had been conducted, the researcher enlisted an external auditor to review each transcription to the original interview recordings to ensure transcription quality (Latchman 1997a; Poland 2001a). Each participant was given a study number to protect their privacy and all relevant data pertaining to each participant was allocated their particular study number (Saldana 2021a). The finalised transcriptions and field notes were then stored in a password-protected laptop in coded files. A code book was used to keep track of all codes given to participants and their information, as well as to keep track of the codes given to themes during data analysis (Benaquisto & Given 2008a; Saldana 2021a). The data will be kept for 5 years on a password-protected computer; thereafter all data will be destroyed. All text was reviewed prior to starting data analysis to ensure that the quality of all information was established.

2.6 DATA ANALYSIS

A qualitative content analysis approach was used to analyse the data (Erlingsson & Brysiewicz 2017). This method facilitated a systematic and structured process of identifying meaning units, condensing them, and categorizing data into codes that reflected key aspects of participants' discussions on yoga as a treatment modality by

South African occupational therapists (Erlingsson & Brysiewicz 2017). The analysis began with an inductive approach, where transcripts were carefully read to identify recurring phrases and concepts directly from the participants' narratives. Meaning units – segments of text conveying central ideas – were highlighted and condensed while preserving their core meaning. These condensed meaning units were then grouped into codes that reflected the essence of participants' perspectives on the therapeutic use of yoga within the context of South Africa (Erlingsson & Brysiewicz 2017).

Following transcription, the data was imported into MAXQDA for organization and coding. Codes were iteratively reviewed and grouped into categories that captured broader patterns in the data. For example, participants' descriptions of yoga as a tool for sensory and emotional regulation were categorized under "Regulation", while discussions about the use of yoga to address multiple therapeutic goals simultaneously were categorized under " Therapeutic Tool". The final stage of analysis involved interpreting these categories in relation to the study's research questions, drawing on both participant perspectives and relevant literature to provide deeper insight into the findings (Erlingsson & Brysiewicz 2017). This structured approach ensured that the analysis remained data-driven while allowing for a nuanced understanding of the ways in which occupational therapists in South Africa use yoga in their practice (Erlingsson & Brysiewicz 2017).

2.7 ETHICAL CONSIDERATIONS

Ethical clearance was obtained from the University of the Witwatersrand Human Research Ethics Committee (HREC) (Clearance number: M210953) (Appendix D). The ethical principles outlined by the HPCSA were adhered to during the research process (Health Professions Council of South Africa 2016b). An information sheet (Appendix B) was sent to the participants prior to taking part in the study. Following this, informed consent (Appendix C) was obtained from all the participants before partaking in the interviews. Confidentiality was maintained by assigning codes to participants and ensuring that identifying information was not included in the final report. All data were securely stored on a password protected computer, accessible only to the researcher and supervisor. Given the qualitative nature of the study, sensitivity was exercised during interviews to respect participants' experiences and

emotional boundaries. Participants were reminded of their right to refrain from answering any questions they found uncomfortable. Additionally, steps were taken to ensure cultural sensitivity and respect for the diverse contexts in which occupational therapists practice in South Africa. These steps included using neutral and open ended questions, allowing participants to choose the time and setting for their interviews, actively listening without judgment, and clarifying any ambiguities to ensure accurate understanding of participants' responses. Any potential conflicts of interest were disclosed, and the researcher remained reflexive throughout the process to minimize bias.

Rigour of research:

Using Lincoln and Guba's Evaluative Criteria (Lincoln & Guba 1986a) in order establish trustworthiness, the following factors were considered: credibility, transferability, dependability, and confirmability (Lincoln & Guba 1986a). Credibility was established by prolonged engagement with the data, ensuring the finding accurately reflected the participants' experiences and perspectives (Hunter, McCallum & Howes 2018a; Lincoln & Guba 1986a). Member checking was utilised by sharing initial themes with the participants to confirm that their responses were accurately interpreted. This was completed with three of the participants (P1, P2, and P4). This was completed with three of the participants (P1, P2, and P4), as the remaining participants were unavailable due to scheduling conflicts or other professional commitments. All participants that participated in the member checking process did not have any changes to the themes. Transferability was addressed by providing a thick description of the research context, participants, and methods, enabling readers to determine the applicability of the findings to other settings (Hunter et al. 2018a; Lincoln & Guba 1986a). Dependability was ensured through a detailed audit trail documenting all research decisions, processes, and changes during data collection and analysis. This included maintaining a research journal that recorded decisions made throughout the study, such as the rationale for selecting qualitative content analysis and adjustments made to the coding framework. Additionally, all transcriptions, coding processes, and category development were systematically documented in MAXQDA to ensure transparency and consistency and were audited by the supervisors of this study. This promotes transparency and allows for replication in future studies (Hunter et al. 2018a; Lincoln & Guba 1986a). As a researcher and

occupational therapist with an interest in yoga as a treatment modality, I acknowledged my potential biases during the research process. These biases may have included a predisposition to view yoga positively, an expectation of beneficial outcomes, or an inclination to interpret participants' responses in alignment with my own professional experiences and beliefs. To mitigate these and enhance confirmability, I engaged in reflexivity by maintaining a research journal, using in vivo coding to prioritize participants' voices, and adhering to a structured qualitative content analysis framework (Erlingsson & Brysiewicz 2017). These steps ensured the findings were grounded in the data rather than my own preconceptions. Additionally, peer debriefing with an experienced qualitative researcher was conducted to critically review the themes and interpretations, ensuring objectivity (Hunter et al. 2018a; Lincoln & Guba 1986a). By applying these strategies, this study upholds the rigor necessary to provide trustworthy insights into the use of yoga as a treatment modality by occupational therapists in South Africa.

2.8 CONCLUSION

This chapter outlined the methodological framework employed in this study, detailing the research design, participant selection, data collection, and data analysis processes. A qualitative research approach was adopted to explore the experiences and perspectives of South African occupational therapists who use yoga as a treatment modality in their practice. Semi-structured interviews were conducted with six occupational therapists, allowing for an in-depth exploration of their insights. Data were analysed using qualitative content analysis as described by Erlingsson and Brysiewicz (2017), ensuring a structured yet flexible approach to identifying key themes.

Ethical considerations were rigorously adhered to, with measures taken to ensure informed consent, confidentiality, and researcher reflexivity. The strategies used to enhance trustworthiness, including credibility, dependability, confirmability, and transferability, were also discussed to ensure the rigor of the study.

By employing this methodological approach, the study attempts to answer the research question and objectives. The next chapter will present the findings derived from this research, offering insights into the ways in which South African occupational

therapists use yoga as a treatment modality, the benefits observed, and the challenges encountered in practice.

Chapter 3 Submissible Manuscript

This chapter follows the format of a manuscript prepared for submission to a journal. The manuscript has been submitted as an original research article to the British Journal of Occupational Therapy (BJOT).

3.1 MANUSCRIPT DETAILS

This chapter is presented as a manuscript prepared for submission to a journal. The manuscript has been submitted (Appendix F) as an original research article to the British Journal of Occupational Therapy (BJOT) and has been written in accordance with their submission guidelines (Appendix E). BJOT aims to publish articles with international relevance that advance knowledge in research, practice, education, and policy in occupational therapy. This focus is in line with the aim of this study which looks at how South African occupational therapists use yoga as a treatment modality. BJOT is available to thousands of institutions via SAGE journals, and indexed in a large number of databases. The manuscript title is 'The Use of Yoga as a Treatment Modality by South African Occupational Therapists'.

3.2 DETAILS OF AUTHOR CONTRIBUTION

The primary researcher in this study is D. Evangelidis with F. Jackson and E. Conibear as co-authors and supervisors. The authors contributions to this manuscript are detailed in the Table 2.1 according to the relevant aspects of the Contributor Role Taxonomy (CRediT) (Allen, O'Connell & Kiermer 2019).

Table 2. Details of Author Contributions

CRediT Terms	D. Evangelidis	F. Jackson	E. Conibear
Conceptualisation	X	X	
Methodology	X	X	X
Formal Analysis	X	X	X
Investigation	X		
Resources	X		
Data Curation	X	X	X

Writing Manuscript – Draft	X		
Writing Manuscript – Reviewing & Editing	X	X	X
Supervision		X	X

3.3 ABSTRACT

3.3.1 Introduction

Yoga is increasingly recognized as a complementary treatment modality in healthcare, providing holistic benefits for physical, emotional, and sensory challenges. This study aimed to explore how South African occupational therapists use yoga as a treatment modality in their practice to enhance therapeutic outcomes and support client-centered care.

3.3.2 Method

A qualitative descriptive study was completed using semi-structured interviews which were conducted with 6 occupational therapists and analysed using qualitative content analysis.

3.3.3 Findings

The analysis revealed three emergent themes: (1) ‘Harnessing Yoga’ which encompasses how South African occupational therapists find yoga is a versatile and holistic therapeutic approach; (2) ‘Mindful Movements’ which highlights how yoga can play a role in enhancing sensory integration and emotional regulation; (3) ‘Increasing the OT Toolbox’ which shows how occupational therapists adapt yoga to the South African context and gain professional growth through yoga training.

3.3.4 Conclusion

Yoga is a valuable treatment modality used by occupational therapists in South Africa. Addressing barriers through expanded training, greater inclusivity, and further research into long-term impacts can enhance its integration. This study contributes to growing evidence supporting yoga as a complementary approach in occupational therapy.

3.4 KEY WORDS

Yoga-based interventions; Occupational therapy; Sensory integration; Emotional regulation; South African context

3.5 ARTICLE

3.5.1 Introduction

Yoga is an ancient mind-body practice that has gained global recognition for its physical, emotional, and psychological benefits (Clarke et al. 2015a; Mooventhan & Nivethitha 2020a). With an estimated 300 million practitioners worldwide, yoga is increasingly integrated into modern healthcare, including occupational therapy (OT) (Park et al. 2015). Rooted in ancient Indian philosophy, yoga incorporates physical postures (asanas), breathwork (pranayama), and mindfulness practices, making it a holistic intervention for physical and mental well-being (Mooventhan & Nivethitha 2020a). Traditionally associated with spiritual growth, yoga has evolved into a complementary health approach, particularly in rehabilitation, mental health, and chronic disease management (Khanna & Greeson 2013a; Montgomery et al. 2015a).

Occupational therapy is a client-centered profession that facilitates engagement in meaningful activities to promote well-being (AOTA 2020). Addressing physical, cognitive, and psychosocial challenges, OT interventions often incorporate holistic approaches to enhance participation in daily life (Jansen van Vuuren et al. 2020). The alignment between OT's core principles, function, self-regulation, and engagement, and yoga's emphasis on movement, mindfulness, and self-awareness supports the integration of yoga into OT practice (Hill et al. 2020). Research highlights yoga's benefits in addressing various conditions, including physical disabilities, mental health disorders, and neurological impairments (Andrews et al. 2020).

Studies demonstrate yoga's efficacy in enhancing posture, balance, flexibility, and muscle strength, making it relevant for individuals with musculoskeletal disorders, neurological conditions, and injuries (Mooventhan & Nivethitha 2020a). In rehabilitation, yoga has been used to improve motor control in stroke survivors, reduce chronic pain, and support mobility in conditions like Parkinson's disease (Andrews et al. 2020; Hill et al. 2020). Beyond physical benefits, yoga plays a crucial role in emotional and psychological regulation. Research shows its effectiveness in reducing stress, anxiety, and depression, reinforcing its application in mental health

interventions (Nguyen-Feng et al. 2019). The integration of breathing techniques, mindfulness, and meditation fosters emotional resilience and self-awareness, essential for individuals managing trauma, psychiatric disorders, and occupational stress (Andrews et al. 2020; Rose et al. 2021).

Yoga's adaptability makes it a viable intervention across diverse clinical and community settings. Unlike conventional therapies requiring specialized equipment, yoga can be practiced with minimal resources, making it an accessible and cost-effective intervention (Khanna & Greeson 2013a). Its principles of self-directed movement and mindfulness align with OT's emphasis on empowering clients in their rehabilitation and self-care (Andrews et al. 2020). Recognizing these benefits, professional organizations like the American Occupational Therapy Association (AOTA) support yoga as a complementary and integrative therapy, advocating for its evidence-based application in OT (Rose et al. 2021).

While research supports the integration of yoga into OT practice globally, its application within specific contexts, particularly in resource-constrained environments such as South Africa (SA), remains underexplored. South Africa's healthcare system is marked by significant socio-economic disparities, with approximately 55% of the population living below the poverty line and limited access to rehabilitation services (Gordon et al. 2020). Most occupational therapists in SA work in private healthcare, leaving lower-income populations with inadequate OT services (Ned et al. 2020). These disparities highlight the need for low-cost, scalable interventions like yoga, which can be implemented in public healthcare settings, schools, and community-based programs.

Yoga's accessibility makes it a promising tool for addressing healthcare inequities in SA. Community-based yoga programs in resource-limited settings have demonstrated positive outcomes in promoting well-being among underserved populations (Andrews et al. 2020; Hill et al. 2020). However, the extent to which South African occupational therapists use yoga, the methods they employ, and the perceived benefits and challenges remain largely unexplored. Additionally, cultural perceptions may influence yoga's acceptance and implementation, necessitating an understanding of how it can be adapted to align with local traditions and beliefs (Hill et al. 2020).

This study examines how South African occupational therapists integrate yoga into their clinical practice, the factors influencing its use, and its perceived impact on client

outcomes. By exploring therapists' perspectives and experiences, it aims to provide a deeper understanding of why and how yoga is incorporated into OT, as well as the opportunities and challenges associated with its use. This research contributes to the growing body of literature on complementary therapies in OT, offering insights for practitioners, policymakers, and educators seeking to expand therapeutic approaches.

This article argues that yoga is a valuable therapeutic modality that aligns with OT principles and has the potential to enhance therapeutic outcomes in South Africa's diverse healthcare landscape. Given the country's socio-economic challenges, integrating yoga into OT may offer an innovative, low-cost, and effective approach to addressing physical, mental, and emotional health needs (Andrews et al. 2020; Hill et al. 2020; Jansen van Vuuren et al. 2020). Yoga's emphasis on self-regulation, movement, and mindfulness complements OT's holistic approach, making it a relevant tool for promoting occupational engagement and well-being (Nguyen-Feng et al. 2019; Rose et al. 2021).

Furthermore, integrating yoga into OT facilitates a more client-centered approach, empowering individuals to take an active role in their rehabilitation. Yoga techniques such as breath control, meditation, and structured movement enhance self-awareness, reduce stress, and improve functional outcomes (Andrews et al. 2020; Rose et al. 2021). In SA, where high levels of stress, trauma, and mental health challenges require innovative interventions, yoga offers a promising solution beyond conventional therapy models (Gordon et al. 2020; Ned et al. 2020).

Despite its potential, integrating yoga into OT in SA presents challenges. Cultural perceptions, lack of formal training in yoga-based interventions, and resource limitations may hinder its widespread adoption. Addressing these barriers requires a nuanced understanding of how yoga can be adapted to fit the South African healthcare context, alongside efforts to educate and train occupational therapists in its application (Hill et al. 2020).

The use of yoga by South African occupational therapists as a holistic approach to rehabilitation, mental health, and self-regulation is already evident. Therapists incorporate yoga to address sensory processing challenges, improve motor coordination, enhance emotional regulation, and support overall well-being. Despite its growing use, there is limited research documenting its integration into OT practice and the specific conditions it is used to treat. This study investigates the ways in which

South African occupational therapists apply yoga in clinical practice, the factors enabling its implementation, and the challenges they face. By deepening our understanding of yoga's role in OT, this research aims to contribute to evidence-based practice and inform future training, policy, and intervention strategies. Ultimately, this study seeks to answer the question: How do occupational therapists in South Africa use yoga as a treatment modality?

3.5.2 Method

A descriptive, explorative qualitative research design was used to explore how South African occupational therapists use yoga as a treatment modality (Creswell & Poth 2018a). Semi-structured interviews facilitated an in-depth, interpretive understanding of participants' experiences within their specific contexts (Creswell & Poth 2018a) and provided insight into the potential of yoga as an effective occupational therapy intervention in South Africa (Creswell & Poth 2018a).

3.5.2.1 Participant Recruitment

The participants were occupational therapists who integrate yoga into their practices within South Africa. Purposive and snowball sampling was conducted via Facebook and WhatsApp groups. Once participants were eligible (hold a degree in OT, be registered with the Health Professionals Council of South Africa (HPCSA), practice in South Africa, integrate yoga into their OT interventions, and have yoga training) information sheets and consent forms were shared (Creswell & Poth 2018a; Palinkas et al. 2015a). These methods ensured maximum variation in participants' experiences and adherence to the study's focus (Creswell & Poth 2018a; Lincoln & Guba 1986a). Only 6 participants met the inclusion criteria for the study, providing a narrative of how and why South African occupational therapists use yoga in practice (Hennink et al. 2017a).

3.5.2.2 Data Collection

Data collection commenced following ethical clearance from the Human Research Ethics Committee (Medical) of the University of the Witwatersrand (Certificate no.: M210953). Participants received an information sheet and signed consent forms before scheduling semi-structured interviews conducted via Microsoft Teams. This platform provided flexibility and automatic transcription. Interviews, lasting 30–45 minutes, were guided by predetermined, open-ended questions based on the study

objectives and prior literature (McIntosh & Morse 2015a). The first interview served as a pilot, after which adjustments were to clarify ambiguous questions, improve the flow of the interview, and ensure that questions were interpreted consistently by participants. Field notes were taken during the interviews, and the interviews were transcribed verbatim, and stored securely.

3.5.2.3 Ethical Considerations

Ethical clearance was obtained from the University of the Witwatersrand Human Research Ethics Committee (Medical) (Certificate no.: M210953). Participants received an information sheet and provided informed consent before interviews. Confidentiality was ensured through coded identifiers, with no personal details included in the final report. Data were securely stored in password-protected files, accessible only to the researcher and supervisor. Sensitivity was maintained during interviews, with participants reminded of their right to skip uncomfortable questions. Cultural respect was prioritized, and potential conflicts of interest were disclosed. The researcher practiced reflexivity to minimize bias.

3.6. Findings

This section presents the findings from six semi-structured interviews conducted with occupational therapists in South Africa who integrate yoga into their practice. Using thematic analysis, three overarching themes and associated subthemes were identified, reflecting participants' experiences, perceptions, and strategies in applying yoga within occupational therapy contexts.

Table 3. Demographic Information

Partic-ipant number	Where they work	Population they treat	Formal yoga training	Years of yoga experience	Population they use yoga with	Goals of treatment when using yoga
P1	Paediatric private practice	Paediatrics	Yes	2 years	Children • Sensory Integration • Autism Spectrum Disorder (ASD) • Attention Deficit Hyperactivity	• Sensory Regulation • Emotional Regulation • Motor Planning/ Praxis • Bilateral Integration

					Disorder (ADHD) • Dyspraxia	
P2	Sensory Integration Paediatric Private Practice	Paediatrics	Yes	4 years	Children • Sensory Integration • Autism Spectrum Disorder (ASD) • Attention Deficit Hyperactivity Disorder (ADHD) • Developmental Delays	• Sensory Regulation • Emotional Regulation • Postural Control • Balance • Motor Planning/ Praxis • Bilateral Integration
P3	Paediatric Private Practice and Private Schools (Mainstream and Special Educational Needs)	Paediatrics	Yes	6 years	Children • Sensory Integration • Autism Spectrum Disorder (ASD) • Attention Deficit Hyperactivity Disorder (ADHD) • Developmental Delays • Behavioral Difficulties	• Sensory Regulation • Emotional Regulation • Postural Control • Balance • Motor Planning/ Praxis • Bilateral Integration
P4	Paediatric private practice	Paediatrics	Yes	1 year	Children • Sensory Integration • Autism Spectrum Disorder (ASD) • Attention Deficit Hyperactivity Disorder (ADHD) • Developmental Delays	• Sensory Regulation • Emotional Regulation • Motor Planning/ Praxis • Bilateral Integration
P5	Private Mental Health Practice	Adults in Mental Health	Yes	5 years	Adults: • Trauma • Anxiety • Depression • Post Traumatic	• Emotional Regulation • Relaxation • Engagement in Leisure Activities

					Stress Disorder (PTSD)	• Wellbeing • Mindfulness
P6	Private Hospital Setting	Adults in Stroke Rehabilitation	Yes	8 years	Adults: • Stroke Rehabilitation • Hemiplegia	• Motor Planning/ Praxis • Balance • Bilateral Coordination • Spasticity • Hemiparesis • Motor Control • Mindfulness • Muscle Strength

Themes

Three themes emerged from the data, capturing how OTs in South Africa use yoga as a treatment modality based on their experiences.

Table 4. Themes

Number	Themes	Categories
Theme 1	Harnessing Yoga: A Versatile and Holistic Therapeutic Approach	'Incorporation'
		'Client-Centredness'
		'Therapeutic Tool'
Theme 2	Mindful Movements: Yoga's Role in Enhancing Sensory Integration and Emotional Regulation	'Body Awareness'
		'Regulation'
		'Customised Implementation'
Theme 3	Increasing the OT Toolbox: Professional Growth through Yoga Training	'South African Context'
		'Toolbox'
		'Upskilling'

Theme 1: Harnessing Yoga: A Versatile and Holistic Therapeutic Approach

This theme highlights how occupational therapists incorporate yoga as a flexible, client-centered, and multi-purpose intervention. Yoga is not used in isolation but as an integrated tool within OT to enhance therapeutic outcomes across diverse populations and needs.

'Incorporation'

Participants emphasized the seamless integration of yoga with traditional OT methods, reinforcing its role as a complementary intervention.

Participant 4: "Yoga can be incorporated into OT because it focuses on holistic wellness. At its core, OT is about helping people engage in meaningful activities, and yoga offers so many tools to support this."

This approach blends yoga-based strategies such as breathing exercises, mindfulness, and movement with OT interventions, creating a tailored therapeutic framework.

Participant 1 highlighted: "I find with the sensory integration side of OT; I think yoga is a really nice one that goes with it." They further explained its accessibility when additional training is unavailable: *"It complements the sensory integration aspect of OT really nicely... when you don't have extra training like NDT or MAES, yoga is quite a nice way to still work on kids who might have postural difficulties or movement challenges while staying within your competency."*

‘Client-Centered’

A client-centered approach was key, with OTs adapting yoga practices to fit different populations and settings.

Participant 3 stated: *"The beauty of yoga is that it's also client-centered—it can work for a wide range of abilities and goals."*

Therapists adjusted postures, breathing techniques, and mindfulness exercises to accommodate physical, cognitive, and emotional needs.

Participant 5 shared: *"I often use chair yoga for clients who are unable to get on the floor, and I use props like bolsters or blankets to provide comfort and support during the sessions."*

Additionally, Participant 2 encouraged experimentation: *"I'd also suggest experimenting with different techniques to see what resonates with clients—there's no one-size-fits-all approach."*

‘Therapeutic Tool’

Yoga was recognized as a multifaceted tool capable of addressing various therapeutic goals at once. Therapists noted its benefits for physical strength, flexibility, emotional regulation, and sensory integration.

Participant 4 stated: *"Yoga can help with body awareness, which is an important therapeutic tool for kids with proprioception issues, and it also offers ways to work on motor planning difficulties, which we see often in sensory integration."*

Beyond motor and proprioceptive benefits, yoga supported emotional regulation and relaxation.

Participant 4 noted: *"It promotes body awareness, emotional regulation, and relaxation—all key elements in OT practice."*

Participant 2 reinforced its alignment with sensory integration: *“Oh, it fits perfectly! In sensory integration, we’re always trying to help children regulate their nervous systems and process sensory input effectively. Yoga does exactly that. The movements provide proprioceptive and vestibular input, while the breathing and mindfulness practices help with emotional regulation.”*

Overall, these findings illustrate how OTs in South Africa integrate yoga as a dynamic and adaptable modality. Its tailored application ensures it remains an effective tool in achieving a broad range of therapeutic goals holistically.

Theme 2: Mindful Movements: Yoga’s Role in Enhancing Sensory Integration and Emotional Regulation

The second theme, 'Mindful Movements: Yoga's Role in Enhancing Sensory Integration and Emotional Regulation,' highlights the therapeutic benefits of yoga in supporting sensory processing and emotional well-being. Participants emphasized how yoga-based practices, such as mindful movement, breathing exercises, and relaxation techniques, contributed to improved body awareness, sensory regulation, and emotional self-management. These interventions were not only adaptable to different client populations but were also customized based on individual therapeutic needs and session structures.

<u>‘Body Awareness’</u>

Yoga was recognized as an effective tool for improving body awareness, particularly by enhancing proprioception and interoception. Participants discussed how guided movement and breathwork helped clients develop a greater sense of their bodies and internal states.

Participant 1 noted, *"I find quite a lot of the savasana and the mantras or meditations, there's some really nice ones for children where they go bit by bit through the bodies to help them think about, 'OK, what's your body feeling?', 'What are they feeling?', 'What's happening in the muscles?'"*

Similarly, Participant 4 stated, *"I've seen improvements in body awareness, motor planning, and even social skills."*

Participants also reflected on the impact of regular yoga practice in helping clients feel more connected to their bodies.

Participant 5 shared: *"Through regular yoga practice, he began to reconnect with his body in a way that felt safe."*

‘Regulation’

Participants highlighted the role of yoga in fostering both emotional and sensory regulation. Yoga-based breathing techniques, progressive relaxation, and grounding exercises were frequently used to help clients manage sensory sensitivities and emotional distress.

Participant 5 stated: *"After incorporating yoga, particularly the breathwork and grounding poses, she reported feeling regulated and much more in control of her anxiety."*

Similarly, Participant 2 emphasized the value of breathing techniques: *"The breathing techniques can be a game-changer for kids who struggle with anxiety or sensory overload—they learn to calm themselves down in stressful situations."*

Participant 6 reinforced: *"Yoga naturally supports all of these areas."*

‘Customised Implementation’

Participants adapted yoga practices to meet the individual needs and capabilities of their clients, considering factors such as attention span, physical endurance, and therapeutic goals.

Participant 1 explained: *"If I'm specifically using it with a client like the clients I'm using with it now, I do it every week. So with him we're starting off with the swings and then I'm trying to get it to build up a little bit more. So it's 20 minutes weekly."*

Yoga was also integrated into both individual and group settings, with variations in session length.

Participant 6 described their approach: *"I also lead a weekly group yoga session for those in the outpatient phase; these sessions are normally an hour long."*

Participant 4 stated, *"In the school setting, I run small group yoga sessions, where yoga is the primary focus."*

Overall, this theme underscores yoga's effectiveness as a therapeutic modality for enhancing sensory integration and emotional regulation. Through mindful movements and grounding techniques, occupational therapists were able to address clients' sensory and emotional needs in a holistic and meaningful way.

Theme 3: Increasing the OT Toolbox: Professional Growth through Yoga Training

The final theme, 'Increasing the OT Toolbox: Professional Growth through Yoga Training,' explores how OTs in SA perceive yoga as a valuable addition to their therapeutic practice. This theme highlights how therapists have expanded their skill sets through yoga training, incorporating its principles into their interventions to enhance client outcomes. Given the diverse and often resource-limited South African context, yoga emerged as a practical and impactful modality that therapists could integrate into various settings.

'South African Context'

Participants emphasized how yoga-based interventions were particularly well-suited to the South African context, where access to therapy resources is often limited. Yoga's minimal equipment requirements allowed therapists to implement effective interventions across different environments without the need for additional tools.

Participant 2 stated: *"That's the best part about using yoga in the South African context, you need minimal resources to complete it."*

The flexibility of yoga as a therapeutic tool was further reinforced by Participant 4 who shared: *"I'm moving around a lot between several schools, so not having to take equipment with me is so nice."*

Conversely, Participant 1 raises: *"If you have parents who are like "no, this seems a bit more religious" or anything like that, which some parents have said."*

These insights underscore the adaptability of yoga, but also a potential limitation of the implementation of yoga, as a therapeutic modality for South African occupational therapists.

‘Toolbox’

Therapists viewed yoga as a valuable addition to their professional toolbox, integrating its principles with OT practices to provide holistic and client-centered interventions. They recognized yoga’s potential to address a broad range of client needs, from physical rehabilitation to emotional and sensory regulation.

Participant 6, who specialized in neurorehabilitation, highlighted the applicability of yoga in this field: *“The course was pretty intense—it covered the fundamentals of yoga but also delved deep into how to adapt it for people with physical and neurological impairments, which, as you can imagine, is crucial for stroke patients.”*

Participant 5 who works in a psychiatric setting, stating: *“The training has had a huge impact on how I practice, especially in the psychiatric setting. I feel like it’s something that I can add into my toolbox.”*

Participant 1 emphasized: *“I think that's what's nice with the yoga therapy course that was done, was it was seen through a lens of OT and SI brought in with the yoga and how those match.”*

‘Upskilling’

Participants expressed a strong commitment to continuous professional development through yoga training, recognizing its value in enhancing both their clinical practice and personal well-being.

Participant 5 shared: *“There was also a strong focus on self-care for the practitioner, which was important because working in mental health can be emotionally taxing. Learning how to use yoga for my own emotional regulation has helped me be more present for my clients and avoid burnout. I feel like I was not only upskilling myself but also my clients.”*

Participant 2 described: *“Well, after practicing yoga for a couple of years, I knew I wanted to learn more—especially about how it could work with children. So, I did a 200-hour yoga teacher training to get a solid foundation. That training really deepened*

my understanding of yoga, but I knew I needed something more specific to tie it into OT."

Overall, this theme highlights the transformative impact of yoga training on occupational therapy practice. By integrating yoga into their therapeutic repertoire, South African OTs expanded their skill sets, improved adaptability, and provided impactful interventions tailored to their diverse work environments. Yoga emerged as a resource-efficient, holistic, and versatile approach, reinforcing the therapists' commitment to professional growth and innovative client care.

3.7. Discussion

Theme 1: 'Harnessing Yoga': A Versatile and Holistic Therapeutic Approach

The integration of yoga into OT offers a versatile and holistic approach to therapy, aligning with both the physical and emotional needs of diverse client populations in SA. Participants in this study highlighted yoga as a complementary tool within OT, often combining yoga-based techniques with traditional interventions. For instance, breathing exercises were paired with sensory integration to manage emotional regulation, while yoga poses addressed poor postural control for children with motor challenges. This integration aligns with Ferreira-Vorkapic et al. (2015), who found that combining yoga with OT strategies enhances both mental and physical health outcomes (Ferreira-Vorkapic et al. 2015). Participants also adapted yoga to suit different client groups, using visual cues for children with autism and accessible poses for clients with physical disabilities. This supports the World Federation of Occupational Therapists' (WFOT) emphasis on client-centered practice (WFOT 2012).

These findings suggest that yoga is not a one-size-fits-all solution but a dynamic tool that can be tailored to meet individual therapeutic goals. For example, yoga interventions addressed a variety of goals such as bilateral integration, core strength, emotional regulation, and body awareness. This versatility is particularly important in South African contexts, where therapists may lack access to specialized equipment. As noted by Gordon et al. (2020), yoga's low-resource requirements make it an ideal therapeutic tool in these settings (Gordon et al. 2020). However, as highlighted by Balasubramaniam et al. (2013), integrating yoga into OT requires additional training

and careful planning, which can present barriers in resource-limited environments (Balasubramaniam, Telles & Doraiswamy 2013). Thus, yoga's adaptability and ability to address multiple therapeutic goals simultaneously position it as a valuable modality in South African OT practice. While yoga shows promise across various populations, the challenges associated with its integration underscore the need for further research and the development of appropriate training and support structures for therapists.

Although yoga can be a powerful tool, some studies, such as Iyer et al. (2024), suggest that without proper modifications, yoga may not be easily adaptable to all populations, particularly those with more complex needs (Iyer, Bhargav & Bhat 2024). This highlights the importance of individualized approaches in the use of yoga as a treatment modality.

Theme 2: 'Mindful Movements': Yoga's Role in Enhancing Sensory Integration and Emotional Regulation

Yoga plays a crucial role in enhancing sensory integration and emotional regulation, with OTs in SA effectively using it to improve body awareness, emotional regulation, and address sensory difficulties in diverse client populations. Participants in this study emphasized yoga's ability to improve proprioception and interoception, particularly through balance poses, slow movements, and mindful breathing. Participants found these techniques particularly beneficial for children with sensory processing disorder, improving their coordination and confidence in navigating their environments. These findings align with Andrews et al. (2020) and Rose et al. (2021), who found that yoga improves motor planning and somatic awareness in various populations (Andrews et al. 2020; Rose et al. 2021). Additionally, yoga-based techniques such as diaphragmatic breathing and progressive muscle relaxation were used to support emotional regulation, especially in children with autism, who were able to self-soothe during sensory overstimulation. This supports Porges' (2009) Polyvagal Theory, which suggests controlled breathing can activate the parasympathetic nervous system, reducing stress (Porges 2009).

These findings demonstrate that yoga offers a multifaceted approach to OT practice, addressing both sensory and emotional regulation. The therapeutic benefits of yoga extend beyond in-session interventions, with participants noting that yoga techniques could be applied in everyday situations, promoting self-regulation in clients' daily lives.

This aligns with the broader evidence supporting yoga as an effective, low-cost therapeutic tool, particularly in resource-limited settings such as SA. However, it is important to consider that the effectiveness of yoga may vary depending on the severity of a client's sensory processing challenges. Ferreira-Vorkapic et al. (2015) noted that clients with significant sensory deficits may not respond as effectively to yoga (Ferreira-Vorkapic et al. 2015). Thus, while yoga has proven beneficial for enhancing sensory integration and emotional regulation, careful consideration of individual client needs is necessary to ensure its successful implementation. Customizing the frequency and duration of yoga sessions ensures its effectiveness across diverse populations, further enhancing its value in OT practice.

While yoga is a promising tool, Nguyen-Feng et al. (2019) suggest that its impact on emotional regulation may not be universally effective for all clients, indicating that some may require more intensive interventions (Nguyen-Feng et al. 2019). This highlights the importance of individualized approaches to yoga-based therapy in OT practice.

Theme 3: 'Increasing the OT Toolbox': Professional Growth through Yoga Training

Yoga training serves as a critical element in the professional growth of South African OTs, expanding their clinical toolbox and enabling them to address diverse client needs through holistic, adaptable interventions. Participants in the study recognized yoga as a valuable addition to their OT practice, particularly in South Africa's resource-constrained healthcare environment. Yoga's minimal equipment requirements make it ideal for both urban and rural settings, aligning with the findings of Gordon et al. (2020) and Ned et al. (2020), who highlight the need for cost-effective, accessible therapies in SA (Gordon et al. 2020; Ned et al. 2020). According to Atler et al. (2017), yoga promotes engagement in meaningful activities, supporting overall well-being, which is crucial to the SA context.

This integration of yoga into OT practices enables therapists to use a versatile, low-resource intervention, especially significant in low-income areas where access to specialized equipment may be limited. OTs have found yoga effective in addressing a wide range of client goals. Moreover, continuous professional development, such as certifications and workshops, allows therapists to enhance their knowledge and apply

yoga-based interventions more effectively. Andrews et al. (2020) emphasize the importance of upskilling in emerging therapeutic modalities, which strengthens therapist confidence and ensures evidence-based practices (Andrews et al. 2020). However, despite its benefits, there are challenges to integrating yoga into OT practice, particularly in South Africa's diverse cultural context. One participant noted that the perceived religious connotations of yoga deterred some clients from participating in yoga-based interventions, raising concerns about cultural sensitivity. This limitation is echoed by Patel and Veidlinger (2023), who suggest that cultural attitudes towards yoga may impact its acceptance and effectiveness in certain populations. This highlights the need for therapists to adapt yoga practices to respect cultural and personal beliefs, ensuring that yoga is used in a way that is accessible and comfortable for all clients.

The findings underscore the value of integrating yoga into South African OT practice. By adapting yoga for local contexts, expanding the OT toolbox, and prioritizing professional development, therapists enhance their ability to address diverse treatment goals, making yoga an invaluable modality for therapeutic intervention. However, further research into structured yoga training for OTs, along with cultural adaptations, could further facilitate its effective integration into mainstream OT education and practice, ensuring sustained and impactful outcomes for clients across the country.

3.8. Limitations and Recommendations

This study had several limitations. Conducting all interviews online, while beneficial for reaching dispersed participants, may have hindered non-verbal communication and rapport-building, affecting response quality (Hennink et al. 2017a). The small sample size of six participants, did not allow for data saturation and thus limited the generalizability of the study (Hennink et al. 2017a). Additionally, focusing solely on private-sector therapists reduces applicability to the public sector. Future research should consider a mixed-methods approach, a larger, more diverse sample, and longitudinal studies to explore the sustained impact of yoga in occupational therapy. Given yoga's holistic benefits, OTs should integrate it into practice, particularly for sensory regulation, postural control, and mental well-being, with structured guidelines or training programs to support implementation.

3.9. Conclusion

This study examined the use of yoga as a treatment modality by South African occupational therapists, using qualitative data from six semi-structured interviews conducted online. The findings highlight yoga's holistic approach to addressing physical, emotional, and sensory needs, aligning with the client-centered principles of OT. Participants noted its benefits in promoting relaxation, improving postural control, and enhancing well-being. However, barriers such as the lack of public sector representation were identified. These findings emphasize the need for broader awareness, training, and resources to support the integration of yoga into diverse practice settings. Future research should include larger, more diverse samples from both private and public sectors and explore the long-term impact of yoga interventions. Despite its limitations, this study contributes to the growing evidence supporting yoga as a complementary approach, demonstrating its potential to enrich occupational therapy and improve client outcomes.

3.10. Key Findings

- Yoga is utilized by occupational therapists in South Africa to support sensory regulation and emotional well-being.
- Therapists integrate yoga into interventions to enhance postural control and mindfulness.
- Challenges include cultural sensitivity, limited training, accessibility, and resources for implementing yoga in diverse settings.

3.11. What The Study Has Added

This study highlights the therapeutic potential of yoga in occupational therapy, offering insights into its benefits for sensory regulation, postural control, and mindfulness, while addressing challenges in practice and accessibility in South Africa.

3.12. Acknowledgements

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3.13. Research Ethics:

Ethical approval was obtained from the Human Research Ethics Committee (Medical) at the University of the Witwatersrand (M210953).

3.14. Consent

Informed consent was obtained from all participants prior to their involvement in the study. Consent was obtained verbally at the start of the interviews as well as in writing to ensure participants were fully aware of the study's purpose, procedures, potential risks, and benefits. Participants were also informed that their participation was voluntary, and they could withdraw at any time without consequence.

3.15. Declaration of Conflicting Interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

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3.17. Contributorship

D. Evangelidis contributed to the conceptualization, methodology, analysis, investigation, resources, data curation, writing, editing, and reviewing of the article. F. Jackson contributed to conceptualization, methodology, analysis, data curation, supervision, and reviewing and editing of the article. E. Conibear contributed to methodology, analysis, data curation, supervision, and reviewing and editing of the article.

3.18. Data Availability

The raw data is not publicly available for this study.

3.19. Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the position of any affiliated institution of the authors.

3.6 REFERENCES

Acabchuk, R., Brisson, J., Park, C., Babbott-Bryan, N., Parmelee, O. & Johnson, B., 2020, 'Therapeutic Effects of Meditation, Yoga, and Mindfulness-Based Interventions for Chronic Symptoms of Mild Traumatic Brain Injury: A Systematic Review and Meta-Analysis', *Applied Psychology: Health and Well-Being*, 13(1), 34–62.

Allen, L., O'Connell, A. & Kiermer, V., 2019, 'How can we ensure visibility and diversity in research contributions? How the Contributor Role Taxonomy (CRediT) is helping the shift from authorship to contributorship', *Learned Publishing*, 32(1), 71–74.

Andrews, A., Atler, K.., Dickman Portz, J., VanPuymbroeck, M., Rose, C. & Schmid, A., 2020, 'Occupational therapists' use of yoga in post-stroke care: A descriptive qualitative study', *British Journal of Occupational Therapy*, 84(4), 240–250.

AOTA, 2020, 'Occupational Therapy Practice Framework: Domain and Process - Fourth Edition', *The American Journal of Occupational Therapy*, 74(2), 7412410010p1-7412410010p87.

Arasappa, R., Bhargav, H., Ramachandra, K., Varambally, S. & Gangadhar, B., 2021, 'Perspective of patients referred to Yoga center in a tertiary neuropsychiatric hospital: A cross-sectional retrospective study', *Indian Journal of Psychiatry*, 63(6), 543–548.

Archibald, M., Ambagtsheer, R., Casey, M. & Lawless, M., 2019, 'Using Zoom Videoconferencing for Qualitative Data Collection: Perceptions and Experiences of Researchers and Participants', *International Journal of Qualitative Methods*, 18.

Atler, K., Puymbroeck, M. Van, Portz, J. & Schmid, A., 2017, 'Participant-perceived outcomes of merging yoga and occupational therapy: Self-management intervention for people post stroke', *British Journal of Occupational Therapy*, 80(5), 294–301.

Balasubramaniam, M., Telles, S. & Doraiswamy, P., 2013, 'Yoga on our minds: A systematic review of yoga for neuropsychiatric disorders', *Frontiers in Psychiatry*, 3(JAN).

Barahoei, A. & Jenaabadi, H., 2019, 'The releationship between mindfulness and high-risk behaviors mediated by social-virtual networks', *International Journal of High Risk Behaviors and Addiction*, 8(3), 3–8.

Behere, R. V., Arasappa, R., Jagannathan, A., Varambally, S., Venkatasubramanian, G., Thirthalli, J., Subbakrishna, D.K., Nagendra, H.R. & Gangadhar, B.N., 2011, 'Effect of yoga therapy on facial emotion recognition deficits, symptoms and functioning in patients with schizophrenia', *Acta Psychiatrica Scandinavica*, 123(2), 147–153.

Benaquisto, L. & Given, L., 2008a, *The SAGE Encyclopedia of Qualitative Research Methods Codes and Coding*, SAGE Publications, Inc., Thousand Oaks.

Benaquisto, L. & Given, L., 2008b, *The SAGE Encyclopedia of Qualitative Research Methods Codes and Coding*, SAGE Publications, Inc., Thousand Oaks.

Broad, W., 2012a, *The science of yoga: the risks and the rewards*, *Choice Reviews Online*, 49(12), 49-6912-49–6912.

Broad, W., 2012b, *The science of yoga: the risks and the rewards*, *Choice Reviews Online*, 49(12), 49-6912-49–6912.

Cabral, P., Meyer, H. & Ames, D., 2011a, 'Effectiveness of yoga therapy as a complementary treatment for major psychiatric disorders: A meta-analysis', *Primary Care Companion to the Journal of Clinical Psychiatry*, 13(4), 12.

Cabral, P., Meyer, H. & Ames, D., 2011b, 'Effectiveness of yoga therapy as a complementary treatment for major psychiatric disorders: A meta-analysis', *Primary Care Companion to the Journal of Clinical Psychiatry*, 13(4), 12.

Cagas, J., Biddle, S. & Vergeer, I., 2022, 'Why do people do yoga? Examining motives across different types of yoga participants', *International Journal of Sport and Exercise Psychology*.

Candray, H., Kinkel, C., Fox, A., Atler, K., Fling, B., Puymbroeck, M. Van, Crowe, B. & Schmid, A., 2022, 'An Exploration of Yoga in Occupational Therapy Practice for Multiple Sclerosis', *OTJR: Occupation, Participation and Health*, 43(2), 313–321.

Christiansen, C. & Townsend, E., 2010, *Introduction to Occupation: The Art and Science of Living*, 2nd edn., Pearson Education Inc., New Jersey.

Clark, L., Edwards, S., Thwala, J. & Louw, P., 2011a, 'The influence of yoga therapy on anxiety', *Inkanyiso: Journal of Humanities and Social Sciences*, 3(1), 24–31.

Clark, L., Edwards, S., Thwala, J. & Louw, P., 2011b, 'The influence of yoga therapy on anxiety', *Inkanyiso: Journal of Humanities and Social Sciences*, 3(1), 24–31.

Clarke, T.C., Black, L.I., Stussman, B.J., Barnes, P.M. & Nahin, R.L., 2015a, 'Trends in the use of complementary health approaches among adults: United States, 2002–2012', *National Health Statistics Reports*, (79), 16.

Clarke, T.C., Black, L.I., Stussman, B.J., Barnes, P.M. & Nahin, R.L., 2015b, 'Trends in the use of complementary health approaches among adults: United States, 2002–2012', *National Health Statistics Reports*, (79), 16.

Connelly, L., 2008a, 'Pilot Studies', *Medsurg Nursing*, 17(6), 411–412.

Connelly, L., 2008b, 'Pilot Studies', *Medsurg Nursing*, 17(6), 411–412.

Cope, D., 2014, 'Methods and Meanings: Credibility and Trustworthiness of Qualitative Research', *Oncology Nursing Forum*, 41(1), 89–91.

Creswell, J., 2014a, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 4th edn.

Creswell, J., 2014b, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 4th edn.

Creswell, J. & Poth, C., 2018a, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, SAGE Publications Inc.

Creswell, J. & Poth, C., 2018b, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, SAGE Publications Inc.

Erlingsson, C. & Brysiewicz, P., 2017, 'A hands-on guide to doing content analysis', *African Journal of Emergency Medicine*, 7(3), 93–99.

Esterhuizen, L., Naidoo, D. & Govender, P., 2021, 'Examining Wound Management in Hand Therapy within the South African Context', *South African Journal of Occupational Therapy*, 51(3).

Ferreira-Vorkapic, C., Feitoza, J.M., Marchioro, M., Simões, J., Kozasa, E. & Telles, S., 2015, 'Are There Benefits from Teaching Yoga at Schools? A Systematic Review of Randomized Control Trials of Yoga-Based Interventions', *Evidence-Based Complementary and Alternative Medicine*, 2015(1), 1–17.

Fossey, E., Harvey, C., Mcdermott, F. & Davidson, L., 2002a, 'Understanding and evaluating qualitative research', *Australian and New Zealand Journal of Psychiatry*, 36(6), 717–732.

Fossey, E., Harvey, C., Mcdermott, F. & Davidson, L., 2002b, 'Understanding and evaluating qualitative research', *Australian and New Zealand Journal of Psychiatry*, 36(6), 717–732.

Gill, P., Stewart, K., Treasure, E. & Chadwick, B., 2008a, 'Methods of data collection in qualitative research: Interviews and focus groups', *British Dental Journal*, 204(6), 291–295.

Gill, P., Stewart, K., Treasure, E. & Chadwick, B., 2008b, 'Methods of data collection in qualitative research: Interviews and focus groups', *British Dental Journal*, 204(6), 291–295.

Given, L., 2008, *The SAGE Encyclopedia of Qualitative Research Methods*.

Gordon, T., Booysen, F. & Mbonigaba, J., 2020, 'Socio-economic inequalities in the multiple dimensions of access to healthcare: The case of South Africa', *BMC Public Health*, 20(1), 1–13.

Grajo, L., Candler, C. & Sarafian, A., 2020a, 'Interventions within the scope of occupational therapy to improve Children's academic participation: A systematic review', *American Journal of Occupational Therapy*, 74(2), 1–33.

Grajo, L., Candler, C. & Sarafian, A., 2020b, 'Interventions within the scope of occupational therapy to improve Children's academic participation: A systematic review', *American Journal of Occupational Therapy*, 74(2), 1–33.

Gronski, M. & Doherty, M., 2020a, 'Interventions within the scope of occupational therapy practice to improve activities of daily living, rest, and sleep for children ages 0-5 years and their families: A systematic review', *American Journal of Occupational Therapy*, 74(2).

Gronski, M. & Doherty, M., 2020b, 'Interventions within the scope of occupational therapy practice to improve activities of daily living, rest, and sleep for children ages 0-5 years

and their families: A systematic review', *American Journal of Occupational Therapy*, 74(2).

Hayward, C. & Taylor, J., 2011, 'Eudaimonic Well-being: Its Importance and Relevance to Occupational Therapy for Humanity', *Occupational Therapy International*, 18(3), 133–141.

Health Professions Council of South Africa, 2016a, *General Ethical Guidelines for Health Researchers: Booklet 13*, Pretoria.

Health Professions Council of South Africa, 2016b, *General Ethical Guidelines for Health Researchers - Booklet 13*, Pretoria.

Hennink, M., Kaiser, B. & Marconi, V., 2017a, 'Code Saturation Versus Meaning Saturation: How Many Interviews Are Enough?', *Qualitative Health Research*, 27(4), 591–608.

Hennink, M., Kaiser, B. & Marconi, V., 2017b, 'Code Saturation Versus Meaning Saturation: How Many Interviews Are Enough?', *Qualitative Health Research*, 27(4), 591–608.

Hill, H., Swink, L., Atler, K., Anderson, A., Fling, B. & Schmid, A., 2020, 'Merging Yoga and Occupational Therapy for Parkinson's Disease improves fatigue management and activity and participation measures', *British Journal of Occupational Therapy*, 84(4), 230–239.

Hunter, D., McCallum, J. & Howes, D., 2018a, 'Defining exploratory-descriptive qualitative (EDQ) research and considering its application to healthcare', *Proceedings of Worldwide Nursing Conference 2018*, 4(1), 4–11.

Hunter, D., McCallum, J. & Howes, D., 2018b, 'Defining exploratory-descriptive qualitative (EDQ) research and considering its application to healthcare', *Proceedings of Worldwide Nursing Conference 2018*, 4(1), 4–11.

Iyer, S., Bhargav, H. & Bhat, R., 2024, 'Ideal Time to Practice Yoga: Insights from Traditional Yoga Texts and Observations from Scientific Studies: A Narrative Review', *Journal of Applied Consciousness Studies*, 12(2), 82–90.

Jansen van Vuuren, J., Okyere, C. & Aldersey, H., 2020, 'The role of Occupational Therapy in Africa: A scoping review', *South African Journal of Occupational Therapy*, 50(3).

Jelly, P., Sharma, R. & Verma, A., 2022, 'Life with Yoga for holistic health', *IP International Journal of Medical Paediatrics and Oncology*, 8(2), 54–56.

Joubert, R., 2010a, 'Exploring the history of occupational therapy's development in South Africa to reveal the flaws in our knowledge base', *South African Journal of Occupational Therapy*, 40(3), 21–26.

Joubert, R., 2010b, 'Exploring the history of occupational therapy's development in South Africa to reveal the flaws in our knowledge base', *South African Journal of Occupational Therapy*, 40(3), 21–26.

Khanna, S. & Greeson, J., 2013a, 'A narrative review of yoga and mindfulness as complementary therapies for addiction', *Complementary Therapies in Medicine*, 21(3), 244–252.

Khanna, S. & Greeson, J., 2013b, 'A narrative review of yoga and mindfulness as complementary therapies for addiction', *Complementary Therapies in Medicine*, 21(3), 244–252.

Kielhofner, G. & Forsyth, K., 1997a, 'The Model of Human Occupation: An Overview of Current Concepts', *British Journal of Occupational Therapy*, 60(3), 103–110.

Kielhofner, G. & Forsyth, K., 1997b, 'The Model of Human Occupation: An Overview of Current Concepts', *British Journal of Occupational Therapy*, 60(3), 103–110.

Korstjens, I. & Moser, A., 2018, 'Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing', *European Journal of General Practice*, 24(1), 120–124.

Latchman, D., 1997a, 'Transcription factors: An overview', *International Journal of Biochemistry and Cell Biology*, 29(12), 1305–1312.

Latchman, D., 1997b, 'Transcription factors: An overview', *International Journal of Biochemistry and Cell Biology*, 29(12), 1305–1312.

Law, M., Cooper, B., Strong, S., Stewart, D., Rigby, P., Letts, L. & Cooper, B., 1996, 'Client-centred practice Environment, physical Human activities and occupations Models, theoretical The Person-Environment-Occupation Model: A transactive approach to occupational performance', *Canadian Journal of Occupational Therapy*, 63(1), 9–23.

Lincoln, Y. & Guba, E., 1986a, 'But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation', *New Directions for Program Evaluation*, 1986(30), 73–84.

Lincoln, Y. & Guba, E., 1986b, 'But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation', *New Directions for Program Evaluation*, 1986(30), 73–84.

Madela, S., Harriman, N., Sewpaul, R., Mbewu, A., Williams, D., Sifunda, S., Manyaapelo, T., Nyembezi, A. & Reddy, S., 2023, 'Individual and area-level socioeconomic correlates of hypertension prevalence, awareness, treatment, and control in uMgungundlovu, KwaZulu-Natal, South Africa', *BMC Public Health*, 23(1), 1–15.

Mailoo, V., 2005, 'Yoga: An ancient occupational therapy?', *British Journal of Occupational Therapy*, 68(12), 574–577.

McIntosh, M. & Morse, J., 2015a, 'Situating and constructing diversity in semi-structured interviews', *Global Qualitative Nursing Research*, 2.

McIntosh, M. & Morse, J., 2015b, 'Situating and constructing diversity in semi-structured interviews', *Global Qualitative Nursing Research*, 2.

Milton, L., Bantel, S., Calmer, K., Friedman, M., Haley, E. & Rubarts, L., 2019a, 'Yoga and Autism: Students' Perspectives on the Get Ready To Learn Yoga Program', *The Open Journal of Occupational Therapy*, 7(4), 1–10.

Milton, L., Bantel, S., Calmer, K., Friedman, M., Haley, E. & Rubarts, L., 2019b, 'Yoga and Autism: Students' Perspectives on the Get Ready To Learn Yoga Program', *The Open Journal of Occupational Therapy*, 7(4), 1–10.

Montgomery, L., Schmid, A., Davis, T., Mitchell, J., Short, E. & Miller, K., 2015a, 'Changes in Emotional Regulation and Quality of Life After Therapeutic Yoga for Individuals With Traumatic Brain Injury', *American Journal of Occupational Therapy*, 69(Suppl. 1), 6911515229p1.

Montgomery, L., Schmid, A., Davis, T., Mitchell, J., Short, E. & Miller, K., 2015b, 'Changes in Emotional Regulation and Quality of Life After Therapeutic Yoga for Individuals With Traumatic Brain Injury', *American Journal of Occupational Therapy*, 69(Suppl. 1), 6911515229p1.

Mooventhan, A. & Nivethitha, L., 2020a, 'History, philosophy/concept, techniques of yoga and its effects on various systems of the body', *Yoga Mimamsa*, 52(2), 83.

Mooventhan, A. & Nivethitha, L., 2020b, 'History, philosophy/concept, techniques of yoga and its effects on various systems of the body', *Yoga Mimamsa*, 52(2), 83.

Moyo, A., 2021, *How SA's average 1GB mobile data price compares with the world*, *ITWeb*.

Naidoo, D., Wyk, J. Van & Joubert, R., 2017a, 'Community stakeholders' perspectives on the role of occupational therapy in primary healthcare: Implications for practice', *African Journal of Disability*, 6.

Naidoo, D., Wyk, J. Van & Joubert, R., 2017b, 'Community stakeholders' perspectives on the role of occupational therapy in primary healthcare: Implications for practice', *African Journal of Disability*, 6.

Nair, P., Kriplani, S., Kodali, P., Maheshwari, A., Bhalavat, K., Singh, D., Saini, S., Yadav, D., Keswani, J., Silwal, K., Sharma, H. & Tewani, G., 2023, 'Characteristics of patients who use yoga for pain management in Indian yoga and naturopathy settings: a retrospective review of electronic medical records', *Frontiers in Pain Research*, 4.

Ned, L., Tiwari, R., Buchanan, H., Niekerk, L. Van, Sherry, K. & Chikte, U., 2020, 'Changing demographic trends among South African occupational therapists: 2002 to 2018', *Human Resources for Health*, 18(1), 1–12.

Nguyen-Feng, V., Clark, C. & Butler, M., 2019, 'Yoga as an intervention for psychological symptoms following trauma: A systematic review and quantitative synthesis', *Psychological Services*, 16(3), 513–523.

Novak, I. & Berry, J., 2014a, 'Home program intervention effectiveness evidence', *Physical and Occupational Therapy in Pediatrics*, 34(4), 384–389.

Novak, I. & Berry, J., 2014b, 'Home program intervention effectiveness evidence', *Physical and Occupational Therapy in Pediatrics*, 34(4), 384–389.

O'Shea, M., Capon, H., Evans, S., Agrawal, J., Melvin, G., O'Brien, J. & McIver, S., 2022, *Integration of hatha yoga and evidence-based psychological treatments for common mental disorders: An evidence map*, *Journal of Clinical Psychology*, 78(9).

Palinkas, L., Horwitz, S., Green, C., Wisdom, J., Duan, N. & Hoagwood, K., 2015a, 'Purposeful sampling for qualitative data collection and analysis in mixed method implementation research HHS Public Access', *Adm Policy Ment Health*, 42(5), 533–544.

Palinkas, L., Horwitz, S., Green, C., Wisdom, J., Duan, N. & Hoagwood, K., 2015b, 'Purposeful sampling for qualitative data collection and analysis in mixed method implementation research HHS Public Access', *Adm Policy Ment Health*, 42(5), 533–544.

Park, C., Braun, T. & Siegel, T., 2015, 'Who practices yoga? A systematic review of demographic, health-related, and psychosocial factors associated with yoga practice', *Journal of Behavioral Medicine*, (38), 460–471.

Patil, N., Nagaratna, R., Tekur, P., Manohar, P., Bhargav, H. & Patil, D., 2018, 'A randomized trial comparing effect of yoga and exercises on quality of life in among nursing population with chronic low back pain', *International Journal of Yoga*, 11(3), 214.

Poland, B., 2001a, 'Transcription Quality', in J.F. Gubrium & J.A. Holstein (eds.), *Handbook of Interview Research*, pp. 628–649, SAGE Publications, Inc.

Poland, B., 2001b, 'Transcription Quality', in J.F. Gubrium & J.A. Holstein (eds.), *Handbook of Interview Research*, pp. 628–649, SAGE Publications, Inc.

Porges, S.W., 2009, 'The polyvagal theory: New insights into adaptive reactions of the autonomic nervous system', *Cleveland Clinic journal of medicine*, 76(2), S90.

Rena, R. & Mbukanma, I., 2023, 'Evaluating the Impacts of Covid-19 Pandemic on the Socioeconomic Status of South African Women', *Ikenga*, 24(1), 1–20.

Rose, C.M., Atler, K.E., Dickman Portz, J., Andrews, A.P. & Schmid, A.A., 2021, 'Participant-perceived occupational outcomes after two years of yoga for chronic pain', *British Journal of Occupational Therapy*, 84(12).

Saldana, J., 2021a, *The Coding Manual for Qualitative Researchers*, Sage Publications Inc.

Saldana, J., 2021b, *The Coding Manual for Qualitative Researchers*, Sage Publications Inc.

Schmid, A., Puymbroeck, M. Van, Fruhauf, C., Bair, M. & Portz, J., 2019a, 'Yoga improves occupational performance, depression, and daily activities for people with chronic pain', *Work*, 63(2), 181–189.

Schmid, A., Puymbroeck, M. Van, Fruhauf, C., Bair, M. & Portz, J., 2019b, 'Yoga improves occupational performance, depression, and daily activities for people with chronic pain', *Work*, 63(2), 181–189.

South Africa, 2013, *Protection of Personal Information Act*.

Statista, 2024, *Socioeconomic Indicators South Africa report 2024 | Statista*, *Statista*.

Statistics South Africa, 2020a, 'Quarterly Labour Force Survey', *Quarterly Labour Force Survey*, (September), 1–70.

Statistics South Africa, 2020b, 'Quarterly Labour Force Survey', *Quarterly Labour Force Survey*, (September), 1–70.

Stephens, I., 2017a, 'Medical Yoga Therapy', *Children*, 4(2), 12.

Stephens, I., 2017b, 'Medical Yoga Therapy', *Children*, 4(2), 12.

Stephens, J., Puymbroeck, M. Van, Sample, P. & Schmid, A., 2020a, 'Yoga improves balance, mobility, and perceived occupational performance in adults with chronic brain injury: A preliminary investigation', *Complementary Therapies in Clinical Practice*, 40(April), 101172.

Stephens, J., Puymbroeck, M. Van, Sample, P. & Schmid, A., 2020b, 'Yoga improves balance, mobility, and perceived occupational performance in adults with chronic brain injury: A preliminary investigation', *Complementary Therapies in Clinical Practice*, 40(April), 101172.

Stokes, A., Berry, K., Mchiza, Z., Parker, W., Labadarios, D., Chola, L., Hongoro, C., Zuma, K., Brennan, A., Rockers, P. & Rosen, S., 2017, 'Prevalence and unmet need for diabetes care across the care continuum in a national sample of South African adults: Evidence from the SANHANES-1, 2011-2012', *PLoS ONE*, 12(10), 2011–2012.

Taylor, S., Bogdan, R. & DeVault, M., 2016a, *Introduction to Qualitative Research Methods: A Guidebook and Resource*, 4th edn., John Wiley & Sons, Inc.

Taylor, S., Bogdan, R. & DeVault, M., 2016b, *Introduction to Qualitative Research Methods: A Guidebook and Resource*, 4th edn., John Wiley & Sons, Inc.

Thomas, D., 2003, *A general inductive approach for qualitative data analysis*.

Vergunst, R., Swartz, L., Hem, K.G., Eide, A.H., Mannan, H., MacLachlan, M., Mji, G., Braathen, S.H. & Schneider, M., 2017, 'Access to health care for persons with disabilities in rural South Africa', *BMC Health Services Research*, 17(1), 1–8.

Walls, H., Vearey, J., Modisenyane, M., Chetty-Makkan, C., Charalambous, S., Smith, R. & Hanefeld, J., 2016, 'Understanding healthcare and population mobility in Southern Africa: The case of South Africa', *South African Medical Journal*, 106(1), 14–15.

WFOT, 2012, 'Definitions of Occupational Therapy', *American Journal of Physical Medicine & Rehabilitation*, 19(1), 4.

Whiting, L., 2008a, 'Semi-structured interviews: guidance for novice researchers.', *Nursing Standard*, 22(23), 35–40.

Whiting, L., 2008b, 'Semi-structured interviews: guidance for novice researchers.', *Nursing Standard*, 22(23), 35–40.

Chapter 4 Synthesis

This chapter discusses the strengths and limitations of this study, and provides recommendations for future research, policy development and clinical application.

4.1 DISCUSSION

This study aimed to explore the use of yoga by occupational therapists in South Africa, focusing on the use of yoga as a treatment modality by South African occupational therapists, the training of therapists in yoga, and the perceived benefits and challenges associated with using yoga as a therapeutic modality. Through semi-structured interviews with six occupational therapists currently practicing yoga with their clients, several key findings emerged:

1. Integration of Yoga in Practice

   All participants reported regularly incorporating yoga into their occupational therapy sessions, emphasizing its role in enhancing sensory regulation, physical flexibility, and emotional well-being. The use of yoga as a treatment modality was perceived as particularly beneficial for clients with physical or sensory challenges, such as those with autism, anxiety, or musculoskeletal disorders. Participants highlighted that yoga's holistic nature, which combines breathwork, movement, and mindfulness, aligned well with the client-centered and individualized approach of occupational therapy.
2. Demographics of Clients Using Yoga

   Participants reported using yoga with a diverse range of clients, highlighting the versatility of yoga as a therapeutic tool across various demographic groups. The most common demographics included children with autism spectrum disorder (ASD) and Attention Hyperactivity Disorder (ADHD), as well as adults with musculoskeletal disorders and physical disabilities. Several therapists also mentioned using yoga with psychiatric clients to improve mental well-being, anxiety, and participation in activities of daily living.
3. Training in Yoga

The participants had varying levels of yoga training, including formal yoga teacher training courses and informal self-directed learning. While all therapists had personal yoga practice experience, there was a lack of standardized yoga training among them. Some participants expressed a desire for more formalized, structured training to deepen their understanding and application of yoga in therapy. Despite this, participants were confident in their ability to apply yoga techniques effectively in their practice, especially given their background in occupational therapy.

4. Perceived Benefits

   Yoga was widely regarded as a beneficial tool for improving clients' postural control, strength, balance, and coordination. Additionally, therapists noted improvements in clients' emotional regulation, relaxation, and focus. The therapeutic effects of yoga, such as reducing anxiety and enhancing body awareness, were often described as complementary to traditional occupational therapy interventions.

4.1.1 Discussion of Findings

The findings of this study suggest that yoga is a valuable and versatile therapeutic modality within the field of occupational therapy in South Africa. The integration of yoga into practice aligns with the holistic, client-centered approach that defines occupational therapy. The perceived benefits, including improvements in postural control, emotional regulation, and sensory processing, underscore the potential of yoga to address a wide range of therapeutic goals. These findings are consistent with existing literature, which suggests that yoga can be an effective tool for enhancing physical, cognitive, and emotional well-being (Field, 2011; Hensel et al., 2014).

However, the study also revealed that the implementation of yoga within occupational therapy practice is not without its challenges. The lack of standardized training and the limited availability of yoga-specific resources in South Africa were notable barriers to widespread adoption. While the participants had various levels of yoga training, the absence of a formal, structured framework for integrating yoga into occupational therapy practice means that therapists are relying heavily on their own experiences and personal practices. This is in contrast to other countries, where more formalized yoga training and certification programs for healthcare professionals are available (Hughes et al., 2020).

One of the key findings of this study is the need for more structured yoga training programs for occupational therapists. Many participants expressed interest in having more formalized, accredited yoga education that would enable them to integrate yoga techniques more effectively into their practice. This finding is consistent with the literature, which has highlighted the need for specific training programs that can bridge the gap between yoga and occupational therapy (Robinson et al., 2020). Developing such programs could help standardize the use of yoga in therapy, ensuring that therapists have the necessary skills to apply yoga safely and effectively for diverse client populations.

Retrospective Reflection on Barriers

Upon reflecting on the study design, one area that could have provided a more well-rounded view of the use of yoga in occupational therapy is the inclusion of more explicit questions about the barriers to implementing yoga within the South African context. While some challenges were mentioned by participants, such as the stigma surrounding the religious aspect of yoga, the interview schedule did not adequately allow for the exploration of these barriers in depth. The addition of a specific section addressing challenges related to cultural factors, societal perceptions of yoga, and resource limitations would have provided a more comprehensive understanding of the factors that influence the adoption of yoga in occupational therapy. For example, cultural attitudes towards yoga in South Africa could impact its acceptance and effectiveness as a therapeutic tool. This section could have also addressed the financial costs of yoga training for therapists and the lack of institutional support for integrating yoga into occupational therapy curricula.

By incorporating these topics into the interview schedule, the study could have captured a fuller range of challenges, allowing for a more nuanced discussion of how yoga is used as a treatment modality by South African occupational therapists. This retrospective reflection highlights the importance of considering contextual barriers in future research on this topic, especially in regions where yoga may not yet be widely recognized as a formal therapeutic modality.

Addressing Research Objectives

The study successfully addressed the research objectives, providing valuable insights into the use of yoga as a treatment modality by occupational therapists in South Africa. Specifically, the study achieved its aim of exploring how yoga is being used by occupational therapists, the training and qualifications of these therapists, and the perceived benefits of incorporating yoga into therapy. Through semi-structured interviews, the research was able to capture the lived experiences of therapists, offering a detailed understanding of their practices and perspectives.

However, as noted, a more comprehensive exploration of the barriers to yoga implementation in South Africa would have strengthened the study's findings and provided a more holistic view. Despite this, the research met its overall objectives by highlighting the potential of yoga as a therapeutic tool in South Africa and the need for further training and resources to support its integration into occupational therapy practice.

4.2 STRENGTHS AND LIMITATIONS OF STUDY

4.2.1 Strengths

This study has several notable strengths that contribute to its significance in understanding the use of yoga as a treatment modality by South African occupational therapists. Firstly, the qualitative research design allowed for an in-depth exploration of the personal experiences and perspectives of occupational therapists, offering rich insights into how yoga is integrated into therapy. By using semi-structured interviews, the study provided flexibility for participants to share their individual practices and reflections, ensuring a comprehensive view of the subject matter. Additionally, the inclusion of a sample of therapists practicing in various settings, including paediatric psychiatric and neuromusculoskeletal clients, strengthened the findings by representing a broad spectrum of occupational therapy practices across South Africa. The study's focus on real-world applications and experiences which also ensures that the findings are highly relevant and practical for professionals within the field. Furthermore, the study addresses a gap in the

existing literature, as there is limited research on the use of yoga by occupational therapists in South Africa, making it a valuable contribution to the global understanding of this innovative therapeutic modality. The combination of personal practice and professional expertise within the sample lends credibility to the findings, highlighting the potential of yoga to enhance therapeutic outcomes in a South African context.

4.2.2 Limitations

I. All interviews were conducted online, which may have impacted the depth of the data collected. Although online interviews are an effective method for reaching participants in geographically dispersed locations, they can limit non-verbal cues and the ability to establish rapport, potentially affecting the quality of responses.

II. Another limitation is the small sample size, with only six participants included in the study. While qualitative research often involves smaller sample sizes to allow for in-depth exploration, the limited number of participants may restrict the generalizability of the findings.

III. The sample was from the private sector, which may not reflect the experiences of occupational therapists working in the public sector. This lack of representation could limit the comprehensiveness of the findings.

IV. The data collection period was prolonged due to struggling to find participants and scheduling times to conduct the interviews.

V. A limitation of this study is that the interview schedule did not specifically include questions about the barriers to implementing yoga as a treatment modality, which would have provided a more comprehensive understanding of the challenges faced by occupational therapists in integrating yoga as a treatment modality into their practice, particularly in the South African context.

4.3 RECOMMENDATIONS

Based on the identified limitations, several recommendations can be made for future research. First, incorporating a combination of online and in-person interviews could provide a more comprehensive dataset by allowing researchers to capture non-verbal cues and build stronger rapport with participants. Second, future studies should aim to include a larger and more diverse sample size to enhance the transferability of the

findings. This could involve recruiting participants from both the private and public sectors to ensure a broader representation of occupational therapists in South Africa. Expanding recruitment efforts to include public sector professionals may provide valuable insights into the challenges and opportunities unique to that context, leading to a more nuanced understanding of yoga as a treatment modality. Additionally, longitudinal studies could explore the sustained impact and implementation of yoga-based interventions in occupational therapy, offering deeper insights into their effectiveness and practicality over time.

4.4 IMPLICATIONS

This study highlights the potential of yoga as a valuable therapeutic modality within occupational therapy practice, particularly for addressing sensory regulation, emotional well-being, and physical functionality. The findings suggest that yoga can be an effective tool for enhancing clients' postural control, strength, balance, and sensory and emotional regulation, making it particularly beneficial for individuals with conditions such as autism, anxiety, and musculoskeletal disorders. For occupational therapists, the study underscores the importance of incorporating a holistic, client-centered approach that draws on a range of therapeutic interventions, including yoga, to address the diverse needs of clients. The use of yoga can help expand the scope of occupational therapy practice, offering an alternative or complementary treatment approach that may be particularly useful for clients who struggle with more traditional occupational therapy methods. Furthermore, the study highlights the need for formalized training programs that can equip occupational therapists with the skills necessary to integrate yoga safely and effectively into their practice. These programs could be a valuable addition to occupational therapy curricula, both in South Africa and internationally, to ensure that therapists have the knowledge and confidence to incorporate yoga techniques into their therapeutic interventions. By fostering a broader understanding of yoga's benefits, this study encourages occupational therapists to explore innovative, evidence-based practices that can enhance client outcomes and contribute to the overall development of the field.

4.5 CONCLUSION

This study explored the use of yoga as a treatment modality by South African occupational therapists, offering insights into its application, benefits, and challenges within clinical practice. Using a qualitative research design, data was collected through six semi-structured interviews conducted online with occupational therapists from various settings. The findings revealed that yoga provides a holistic and versatile approach to addressing clients' physical, emotional, and sensory needs, aligning closely with the client-centered principles of occupational therapy. Participants highlighted its utility in promoting relaxation, improving postural control, and enhancing overall well-being. However, the study also identified several barriers, including inconsistent training among therapists, and a lack of public sector representation in the sample.

These findings underscore the importance of expanding awareness, training opportunities, and resources to support the integration of yoga across diverse practice settings. Future research should include larger, more diverse participant samples, incorporating perspectives from both private and public sectors, to ensure broader applicability. Additionally, exploring longitudinal outcomes would provide deeper insights into the sustained impact of yoga-based interventions in occupational therapy. Despite its limitations, this study offers a meaningful contribution to the growing body of literature on complementary approaches in occupational therapy, demonstrating the potential of yoga to enhance therapeutic practices and improve client outcomes in the South African context.

4.6 REFERENCES

Acabchuk, R., Brisson, J., Park, C., Babbott-Bryan, N., Parmelee, O. & Johnson, B., 2020, 'Therapeutic Effects of Meditation, Yoga, and Mindfulness-Based Interventions for Chronic Symptoms of Mild Traumatic Brain Injury: A Systematic Review and Meta-Analysis', *Applied Psychology: Health and Well-Being*, 13(1), 34–62.

Allen, L., O'Connell, A. & Kiermer, V., 2019, 'How can we ensure visibility and diversity in research contributions? How the Contributor Role Taxonomy (CRediT) is helping the shift from authorship to contributorship', *Learned Publishing*, 32(1), 71–74.

Andrews, A., Atler, K.., Dickman Portz, J., VanPuymbroeck, M., Rose, C. & Schmid, A., 2020, 'Occupational therapists' use of yoga in post-stroke care: A descriptive qualitative study', *British Journal of Occupational Therapy*, 84(4), 240–250.

AOTA, 2020, 'Occupational Therapy Practice Framework: Domain and Process - Fourth Edition', *The American Journal of Occupational Therapy*, 74(2), 7412410010p1-7412410010p87.

Arasappa, R., Bhargav, H., Ramachandra, K., Varambally, S. & Gangadhar, B., 2021, 'Perspective of patients referred to Yoga center in a tertiary neuropsychiatric hospital: A cross-sectional retrospective study', *Indian Journal of Psychiatry*, 63(6), 543–548.

Atler, K., Puymbroeck, M. Van, Portz, J. & Schmid, A., 2017, 'Participant-perceived outcomes of merging yoga and occupational therapy: Self-management intervention for people post stroke', *British Journal of Occupational Therapy*, 80(5), 294–301.

Balasubramaniam, M., Telles, S. & Doraiswamy, P., 2013, 'Yoga on our minds: A systematic review of yoga for neuropsychiatric disorders', *Frontiers in Psychiatry*, 3(JAN).

Behere, R. V., Arasappa, R., Jagannathan, A., Varambally, S., Venkatasubramanian, G., Thirthalli, J., Subbakrishna, D.K., Nagendra, H.R. & Gangadhar, B.N., 2011, 'Effect of yoga therapy on facial emotion recognition deficits, symptoms and functioning in patients with schizophrenia', *Acta Psychiatrica Scandinavica*, 123(2), 147–153.

Benaquisto, L. & Given, L., 2008, *The SAGE Encyclopedia of Qualitative Research Methods Codes and Coding*, SAGE Publications, Inc., Thousand Oaks.

Broad, W., 2012, *The science of yoga: the risks and the rewards*, *Choice Reviews Online*, 49(12), 49-6912-49–6912.

Cabral, P., Meyer, H. & Ames, D., 2011, 'Effectiveness of yoga therapy as a complementary treatment for major psychiatric disorders: A meta-analysis', *Primary Care Companion to the Journal of Clinical Psychiatry*, 13(4), 12.

Cagas, J., Biddle, S. & Vergeer, I., 2022, 'Why do people do yoga? Examining motives across different types of yoga participants', *International Journal of Sport and Exercise Psychology*.

Candray, H., Kinkel, C., Fox, A., Atler, K., Fling, B., Puymbroeck, M. Van, Crowe, B. & Schmid, A., 2022, 'An Exploration of Yoga in Occupational Therapy Practice for Multiple Sclerosis', *OTJR: Occupation, Participation and Health*, 43(2), 313–321.

Clark, L., Edwards, S., Thwala, J. & Louw, P., 2011, 'The influence of yoga therapy on anxiety', *Inkanyiso: Journal of Humanities and Social Sciences*, 3(1), 24–31.

Clarke, T.C., Black, L.I., Stussman, B.J., Barnes, P.M. & Nahin, R.L., 2015, 'Trends in the use of complementary health approaches among adults: United States, 2002–2012', *National Health Statistics Reports*, (79), 16.

Connelly, L., 2008, 'Pilot Studies', *Medsurg Nursing*, 17(6), 411–412.

Creswell, J., 2014, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 4th edn.

Creswell, J. & Poth, C., 2018, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, SAGE Publications Inc.

Erlingsson, C. & Brysiewicz, P., 2017, 'A hands-on guide to doing content analysis', *African Journal of Emergency Medicine*, 7(3), 93–99.

Esterhuizen, L., Naidoo, D. & Govender, P., 2021, 'Examining Wound Management in Hand Therapy within the South African Context', *South African Journal of Occupational Therapy*, 51(3).

Ferreira-Vorkapic, C., Feitoza, J.M., Marchioro, M., Simões, J., Kozasa, E. & Telles, S., 2015, 'Are There Benefits from Teaching Yoga at Schools? A Systematic Review of Randomized Control Trials of Yoga-Based Interventions', *Evidence-Based Complementary and Alternative Medicine*, 2015(1), 1–17.

Fossey, E., Harvey, C., Mcdermott, F. & Davidson, L., 2002, 'Understanding and evaluating qualitative research', *Australian and New Zealand Journal of Psychiatry*, 36(6), 717–732.

Gill, P., Stewart, K., Treasure, E. & Chadwick, B., 2008, 'Methods of data collection in qualitative research: Interviews and focus groups', *British Dental Journal*, 204(6), 291–295.

Gordon, T., Booysen, F. & Mbonigaba, J., 2020, 'Socio-economic inequalities in the multiple dimensions of access to healthcare: The case of South Africa', *BMC Public Health*, 20(1), 1–13.

Grajo, L., Candler, C. & Sarafian, A., 2020, 'Interventions within the scope of occupational therapy to improve Children's academic participation: A systematic review', *American Journal of Occupational Therapy*, 74(2), 1–33.

Gronski, M. & Doherty, M., 2020, 'Interventions within the scope of occupational therapy practice to improve activities of daily living, rest, and sleep for children ages 0-5 years and their families: A systematic review', *American Journal of Occupational Therapy*, 74(2).

Hayward, C. & Taylor, J., 2011, 'Eudaimonic Well-being: Its Importance and Relevance to Occupational Therapy for Humanity', *Occupational Therapy International*, 18(3), 133–141.

Health Professions Council of South Africa, 2016a, *General Ethical Guidelines for Health Researchers: Booklet 13*, Pretoria.

Health Professions Council of South Africa, 2016b, *General Ethical Guidelines for Health Researchers - Booklet 13*, Pretoria.

Hennink, M., Kaiser, B. & Marconi, V., 2017, 'Code Saturation Versus Meaning Saturation: How Many Interviews Are Enough?', *Qualitative Health Research*, 27(4), 591–608.

Hill, H., Swink, L., Atler, K., Anderson, A., Fling, B. & Schmid, A., 2020, 'Merging Yoga and Occupational Therapy for Parkinson's Disease improves fatigue management and activity and participation measures', *British Journal of Occupational Therapy*, 84(4), 230–239.

Hunter, D., McCallum, J. & Howes, D., 2018, 'Defining exploratory-descriptive qualitative (EDQ) research and considering its application to healthcare', *Proceedings of Worldwide Nursing Conference 2018*, 4(1), 4–11.

Iyer, S., Bhargav, H. & Bhat, R., 2024, 'Ideal Time to Practice Yoga: Insights from Traditional Yoga Texts and Observations from Scientific Studies: A Narrative Review', *Journal of Applied Consciousness Studies*, 12(2), 82–90.

Jansen van Vuuren, J., Okyere, C. & Aldersey, H., 2020, 'The role of Occupational Therapy in Africa: A scoping review', *South African Journal of Occupational Therapy*, 50(3).

Jelly, P., Sharma, R. & Verma, A., 2022, 'Life with Yoga for holistic health', *IP International Journal of Medical Paediatrics and Oncology*, 8(2), 54–56.

Joubert, R., 2010, 'Exploring the history of occupational therapy's development in South Africa to reveal the flaws in our knowledge base', *South African Journal of Occupational Therapy*, 40(3), 21–26.

Khanna, S. & Greeson, J., 2013, 'A narrative review of yoga and mindfulness as complementary therapies for addiction', *Complementary Therapies in Medicine*, 21(3), 244–252.

Kielhofner, G. & Forsyth, K., 1997, 'The Model of Human Occupation: An Overview of Current Concepts', *British Journal of Occupational Therapy*, 60(3), 103–110.

Korstjens, I. & Moser, A., 2018, 'Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing', *European Journal of General Practice*, 24(1), 120–124.

Latchman, D., 1997, 'Transcription factors: An overview', *International Journal of Biochemistry and Cell Biology*, 29(12), 1305–1312.

Law, M., Cooper, B., Strong, S., Stewart, D., Rigby, P., Letts, L. & Cooper, B., 1996, 'Client-centred practice Environment, physical Human activities and occupations Models, theoretical The Person-Environment-Occupation Model: A transactive approach to occupational performance', *Canadian Journal of Occupational Therapy*, 63(1), 9–23.

Lincoln, Y. & Guba, E., 1986, 'But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation', *New Directions for Program Evaluation*, 1986(30), 73–84.

Madela, S., Harriman, N., Sewpaul, R., Mbewu, A., Williams, D., Sifunda, S., Manyaapelo, T., Nyembezi, A. & Reddy, S., 2023, 'Individual and area-level socioeconomic correlates of hypertension prevalence, awareness, treatment, and control in uMgungundlovu, KwaZulu-Natal, South Africa', *BMC Public Health*, 23(1), 1–15.

McIntosh, M. & Morse, J., 2015, 'Situating and constructing diversity in semi-structured interviews', *Global Qualitative Nursing Research*, 2.

Milton, L., Bantel, S., Calmer, K., Friedman, M., Haley, E. & Rubarts, L., 2019, 'Yoga and Autism: Students' Perspectives on the Get Ready To Learn Yoga Program', *The Open Journal of Occupational Therapy*, 7(4), 1–10.

Montgomery, L., Schmid, A., Davis, T., Mitchell, J., Short, E. & Miller, K., 2015, 'Changes in Emotional Regulation and Quality of Life After Therapeutic Yoga for Individuals With Traumatic Brain Injury', *American Journal of Occupational Therapy*, 69(Suppl. 1), 6911515229p1.

Mooventhan, A. & Nivethitha, L., 2020, 'History, philosophy/concept, techniques of yoga and its effects on various systems of the body', *Yoga Mimamsa*, 52(2), 83.

Naidoo, D., Wyk, J. Van & Joubert, R., 2017, 'Community stakeholders' perspectives on the role of occupational therapy in primary healthcare: Implications for practice', *African Journal of Disability*, 6.

Nair, P., Kriplani, S., Kodali, P., Maheshwari, A., Bhalavat, K., Singh, D., Saini, S., Yadav, D., Keswani, J., Silwal, K., Sharma, H. & Tewani, G., 2023, 'Characteristics of patients who use yoga for pain management in Indian yoga and naturopathy settings: a retrospective review of electronic medical records', *Frontiers in Pain Research*, 4.

Ned, L., Tiwari, R., Buchanan, H., Niekerk, L. Van, Sherry, K. & Chikte, U., 2020, 'Changing demographic trends among South African occupational therapists: 2002 to 2018', *Human Resources for Health*, 18(1), 1–12.

Nguyen-Feng, V., Clark, C. & Butler, M., 2019, 'Yoga as an intervention for psychological symptoms following trauma: A systematic review and quantitative synthesis', *Psychological Services*, 16(3), 513–523.

Novak, I. & Berry, J., 2014, 'Home program intervention effectiveness evidence', *Physical and Occupational Therapy in Pediatrics*, 34(4), 384–389.

O'Shea, M., Capon, H., Evans, S., Agrawal, J., Melvin, G., O'Brien, J. & McIver, S., 2022, *Integration of hatha yoga and evidence-based psychological treatments for common mental disorders: An evidence map*, *Journal of Clinical Psychology*, 78(9).

Palinkas, L., Horwitz, S., Green, C., Wisdom, J., Duan, N. & Hoagwood, K., 2015, 'Purposeful sampling for qualitative data collection and analysis in mixed method implementation research HHS Public Access', *Adm Policy Ment Health*, 42(5), 533–544.

Park, C., Braun, T. & Siegel, T., 2015, 'Who practices yoga? A systematic review of demographic, health-related, and psychosocial factors associated with yoga practice', *Journal of Behavioral Medicine*, (38), 460–471.

Patil, N., Nagaratna, R., Tekur, P., Manohar, P., Bhargav, H. & Patil, D., 2018, 'A randomized trial comparing effect of yoga and exercises on quality of life in among nursing population with chronic low back pain', *International Journal of Yoga*, 11(3), 214.

Poland, B., 2001, 'Transcription Quality', in J.F. Gubrium & J.A. Holstein (eds.), *Handbook of Interview Research*, pp. 628–649, SAGE Publications, Inc.

Porges, S.W., 2009, 'The polyvagal theory: New insights into adaptive reactions of the autonomic nervous system', *Cleveland Clinic journal of medicine*, 76(2), S90.

Rena, R. & Mbukanma, I., 2023, 'Evaluating the Impacts of Covid-19 Pandemic on the Socioeconomic Status of South African Women', *Ikenga*, 24(1), 1–20.

Rose, C.M., Atler, K.E., Dickman Portz, J., Andrews, A.P. & Schmid, A.A., 2021, 'Participant-perceived occupational outcomes after two years of yoga for chronic pain', *British Journal of Occupational Therapy*, 84(12).

Saldana, J., 2021, *The Coding Manual for Qualitative Researchers*, Sage Publications Inc.

Schmid, A., Puymbroeck, M. Van, Fruhauf, C., Bair, M. & Portz, J., 2019, 'Yoga improves occupational performance, depression, and daily activities for people with chronic pain', *Work*, 63(2), 181–189.

South Africa, 2013, *Protection of Personal Information Act*.

Statista, 2024, *Socioeconomic Indicators South Africa report 2024 | Statista*, *Statista*.

Statistics South Africa, 2020, 'Quarterly Labour Force Survey', *Quarterly Labour Force Survey*, (September), 1–70.

Stephens, I., 2017, 'Medical Yoga Therapy', *Children*, 4(2), 12.

Stephens, J., Puymbroeck, M. Van, Sample, P. & Schmid, A., 2020, 'Yoga improves balance, mobility, and perceived occupational performance in adults with chronic brain injury: A preliminary investigation', *Complementary Therapies in Clinical Practice*, 40(April), 101172.

Stokes, A., Berry, K., Mchiza, Z., Parker, W., Labadarios, D., Chola, L., Hongoro, C., Zuma, K., Brennan, A., Rockers, P. & Rosen, S., 2017, 'Prevalence and unmet need for diabetes care across the care continuum in a national sample of South African adults: Evidence from the SANHANES-1, 2011-2012', *PLoS ONE*, 12(10), 2011–2012.

Taylor, S., Bogdan, R. & DeVault, M., 2016, *Introduction to Qualitative Research Methods: A Guidebook and Resource*, 4th edn., John Wiley & Sons, Inc.

Vergunst, R., Swartz, L., Hem, K.G., Eide, A.H., Mannan, H., MacLachlan, M., Mji, G., Braathen, S.H. & Schneider, M., 2017, 'Access to health care for persons with disabilities in rural South Africa', *BMC Health Services Research*, 17(1), 1–8.

Walls, H., Vearey, J., Modisenyane, M., Chetty-Makkan, C., Charalambous, S., Smith, R. & Hanefeld, J., 2016, 'Understanding healthcare and population mobility in Southern Africa: The case of South Africa', *South African Medical Journal*, 106(1), 14–15.

WFOT, 2012, 'Definitions of Occupational Therapy', *American Journal of Physical Medicine & Rehabilitation*, 19(1), 4.

Whiting, L., 2008, 'Semi-structured interviews: guidance for novice researchers.', *Nursing Standard*, 22(23), 35–40.

4.7 APPENDICES

Appendix A: Interview Questions

Question	Probes	Things to say	Things to listen for
1. Can we start off with you telling me a little bit about your journey into yoga?	• What setting do you currently work in? • So do you work predominantly in private or government? • So how would you describe the demographics of the cases you typically see? • How did you find out about yoga and what made you pursue it? • Describe the type of training you've had.	• Hmmm interesting, can you tell me more? • Oh yes, what else? • Can we unpack that a little more? • Am I correct in saying you mean xxx? • Hmmm, interesting, can you explain those treatment techniques? • Oh interesting, can you expand on that a little bit.	• What setting and scope they work in • Additional training for yoga • Why they were interested in yoga • Personal experiences
2. Can you describe what a session looks like when you use yoga with your clients?	• So how long are your yoga sessions with your clients? • With who do you predominantly use yoga with? • How often do you use it with clients? • Are your sessions only yoga based or do you bring in OT interventions as well? • What type of goals do you use yoga to achieve?		• Type of patients they treat (diagnosis, age, socio-economic status etc.) • How long do they see clients for • How often do they use yoga • Do they only do yoga or do they mix it with traditional OT techniques • What goals do they use yoga to achieve
3. How do you decide to use yoga techniques over traditional OT treatment modalities?	• What is your decision process when deciding to use yoga in your session? • Do you find yoga to be an effective treatment modality?		• Why they use yoga instead of/in conjunction with OT techniques • Do they find it to be effective • Do they feel that clients reach their therapy goals when using yoga • Do their clients enjoy yoga
4. Can you tell me about the benefits and perceptions of your clients using yoga? Do you feel your clients benefit from using yoga and what are	• So, do they reach their treatment goals when using yoga? • Do your clients enjoy using yoga as a treatment modality? • What do they think about using yoga in their OT sessions?		

their perceptions to doing yoga in their sessions?			
5. Can you tell me about how you think yoga fits into Occupational Therapy?	Hmmm, can we unpack that a little bit?		• Do they believe yoga fits into OT

Appendix B: Study Information Document

Study title: ***The use of yoga as a treatment modality by South African Occupational Therapists***

Good Day,

I am Dimitra Evangelidis, an occupational therapist completing a Master's degree in Occupational Therapy at the University of the Witwatersrand. I am completing research on the use of yoga as a treatment modality by South African occupational therapists.

The aim of this study is to investigate whether South African occupational therapists use yoga as a treatment modality, who they use it with and what treatment goals they use yoga to reach.

I am inviting you to take part in this research study:

What is involved in this study?

1. This is a qualitative study which will include online interviews to gather the information needed. You will be asked to take part in an online interview which is expected to take 30-45 minutes. Additionally, you will also be asked to review the transcription of your interview to confirm that what you said is properly transcribed.
2. The online interviews will be recorded for transcription after completion and will be kept in a password protected computer for 5 years.
3. The questions that will be asked will be surrounding your use of yoga as a treatment technique, who you use it with and whether you find it effective.

Participation is voluntary:

You may withdraw from this study at any time without having to give a reason. The study is completely voluntary and not taking part in it, or withdrawing from it, carries no penalty of any sort.

Risks of being involved in the study:

No risk to participants is anticipated.

Benefits of being a part of the study:

There is no direct benefit by taking part in this study.

Indirectly the profession may benefit, in that your information may be able to inform future use of yoga as a treatment technique in occupational therapy.

Confidentiality

Personal information will be treated in the strictest confidence. Procedures that will be put in place are:

- All information will be kept on a password protected computer which only the principal investigator and supervisor will have access to.
- Each participant will be given a code and that will be used moving forward so that your anonymity is maintained.
- No participant will be identified by name in any report or publication arising out of the study

Reimbursements:

There is no cost in participating and nor is there any payment as such. However, if required, the participant can contact the principal investigator and request to be reimbursed for data costs after conducting the online interview.

If you have any queries or concerns or would like further clarity, more information may be obtained from Dimitra Evangelidis on tel. no. 072 041 2703 or at email address, 1075457@students.wits.ac.za, or from my supervisor, Faye Jackson, on tel. no. 011 717 3712 or at email address Faye.Jackson@wits.ac.za

Study results

I will be pleased to send a summary of the study results to any participant on request, free of charge

This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg ("Committee"). A principal function of this Committee is to safeguard the rights and dignity of all human subjects who agree to participate in a research project and the integrity of the research. If you have any concern over the way the study is being conducted, please contact the Chairperson of this Committee who is Professor Clement Penny, who may be contacted on telephone number 011 717 2301, or by e-mail on Clement.Penny@wits.ac.za. The telephone numbers for the Committee secretariat are 011 717 2700/1234 and the e-mail addresses are Zanele.Ndlovu@wits.ac.za and Rhulani.Mukansi@wits.ac.za.

Thank you for reading this study information sheet.

Dimitra Evangelidis

BSc (OT)

November 2021

Appendix C: Informed Consent

INFORMED CONSENT TO TAKE PART IN THE FOLLOWING STUDY:

THE USE OF YOGA AS A TREATMENT MODALITY BY SOUTH AFRICAN OCCUPATIONAL THERAPISTS.

I understand that:

1. I have been given a Participant Information Sheet which explains the nature and processes involved in this study, which is attached hereto.
2. I was given time to read it, or had it read to me, in the language I best understand.
3. I was given time to ask any questions I wanted to and found any answers given to me to be reasonable and satisfactory.
4. I believe I fully understand why the study is being conducted and what the intended outcomes will be.
5. I understand that, even if I initially consent to take part in the study, I may subsequently withdraw at any time and would not be required to give any reasons; if that happened, any data collected about me for the purposes of the study would immediately be destroyed, unless I give consent for it to be retained.
6. I have been given a range of contact details, listed below. If I require further information or become concerned about any aspect of this study I am free to speak to any of these contacts.

Dimitra Evangelidis, principal researcher, cell phone number:0720412703, email: 1075457@students.wits.ac.za

Professor CB Penny, Chairperson of the Human Research Ethics Committee (Medical) at the University of Witwatersrand, on telephone no. 011 717 2301, or by e-mail at Clement.Penny@wits.ac.za.

Ms. Z Ndlovu or Mr Rhulani Mkansi, Committee Secretariat, telephone nos.: 011 717 2700 or 1234, or by e-mail at: Zanele.Ndlovu@wits.ac.za or Rhulani.Mkansi@wits.ac.za

I agree to take part in the abovementioned study.

Name of Participant: _____
Date: _____
Place: _____
Signature or mark: _____

CONSENT FORM FOR AUDIO RECORDING OF STUDY PARTICIPATION

THE USE OF YOGA AS A TREATMENT MODALITY BY SOUTH AFRICAN OCCUPATIONAL THERAPISTS.

I understand that:

- The recording will be stored in a secure location (password protected computer) with restricted access to the researcher and the research supervisor.
- The recording will be transcribed and any information that could identify me will be removed.

- The recordings will be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years, if no publications arise from this research.

- Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg.
- Direct quotes from my interview, without any information that could identify me, may be cited in the research report or other write-ups of research.

I hereby consent to audio recording of the interview.

Name of Participant: _____
Date: _____
Place: _____
Signature or mark: _____

CONSENT FORM FOR VISUAL RECORDING OF STUDY PARTICIPATION

THE USE OF YOGA AS A TREATMENT MODALITY BY SOUTH AFRICAN OCCUPATIONAL THERAPISTS.

I understand that:

- The recording will be stored in a secure location (password protected computer) with restricted access to the researcher and the research supervisor.
- The recording will be transcribed and any information that could identify me will be removed.
- My face and voice will not be identifiable in any visual recording.

- The recordings will normally be erased within either (a) two (2) years of the publication of the research findings, or (b) six (6) years, if no publications arise from this research, or:
- The film, with all identifying information directly linked to me removed, will be stored permanently and may be used for future research.

- Anyone wishing to access this information in the future will first have to obtain the approval of the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg.
- Direct quotes from my interview, without any information that could identify me, may be cited in the research report or other write-ups of research.

I hereby consent to visual recording of the interview.

Name of Participant: _____

Date: _____
Place: _____
Signature or mark: _____

Appendix D: Ethical Clearance Certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

R49 Ms D Evangelidis

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M210953

NAME: (Principal Investigator)	Ms D Evangelidis
DEPARTMENT:	School of Therapeutic Sciences Department of Occupational Therapy Medical School University
PROJECT TITLE:	*The use of yoga as a treatment modality by South African occupational therapists*
DATE CONSIDERED:	2021/10/01
DECISION:	Approved unconditionally
CONDITIONS:	
NOTE:	If contact information regarding student study participants is required, please contact the Registrar's office - <Nicoleen.Potgieter@wits.ac.za>
SUPERVISOR:	Ms F Jackson
APPROVED BY:	Dr CB Penny, Chairperson, HREC (Medical)
DATE OF APPROVAL:	2022/01/25

This Clearance Certificate is valid for 5 years from the date of approval. An extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office secretariat on the 3rd floor, Phillip Tobias Building, Parktown, University of the Witwatersrand, Johannesburg.

I/we fully understand the conditions under which I am/we are authorized to carry out the above-mentioned research and I/we undertake to ensure compliance with these conditions. Should any departure be contemplated from the research protocol as approved, I/we undertake to submit details to the Committee. **I agree to submit a yearly progress report**. When a funder requires annual re-certification, the application date will be one year after the date when the study was initially reviewed. In this case, the study was initially reviewed in **September** and therefore reports and re-certification will be due in the month of **September** each year. Unreported changes to the study may invalidate the clearance given by the HREC (Medical).

Signature of Principal Investigator Date

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG	HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

Office of the Deputy Vice-Chancellor (Research and Innovation)

TO: Ms D Evangelidis
School of Therapeutic Sciences
Department of Occupational Therapy
Medical School
University

E-mail: 1075457@students.wits.ac.za

CC: Supervisor: Ms F Jackson
<Faye.Jackson@wits.ac.za>
and <HREC-Medical Research Office@wits.ac.za>

FROM: Mr Iain Burns
Human Research Ethics Committee (Medical)
Tel: 011 717 1252

E-mail: Iain.Burns@wits.ac.za

DATE: 2022/01/25

REF: R14/49

PROTOCOL NO: **M210953** (This is your ethics application reference number. Please quote it in all enquiries, oral or written, relating to this study.)

PROJECT TITLE: *The use of yoga as a treatment modality by South African occupational therapists*

Please find attached the Clearance Certificate for the above project. I hope it goes well and that an article in a recognized publication comes out of it. This will reflect well on your professional standing and contribute to Government funding of the University.

MSWorks2000/Iain0007/Clearscan.wps

Appendix E: British Journal of Occupational Therapy Submission Guidelines

Research Article

Research articles should normally be between 2,000–5,000 words (main text, not including references) and should have not more than 35 references**.** Table text is not generally considered part of the word count unless the table is deemed unnecessary since the text would be more appropriate within the main text. Articles with more than this may be returned at submission.

Quantitative, qualitative and mixed method studies are all eligible for submission. A research article should be original and present an advance in knowledge that has international relevance.

Submissions reporting RCTs should be of registered trials, with the full registration details in your title page and the trial number in your abstract.

Title Page: Ensure full ethics approval information (including year) and any acknowledgements required are in your separately uploaded Title page. This does not go to reviewers.

Abstract: A structured abstract of around 200 words should be supplied under the headings Introduction, Method, Results (or Findings) and Conclusion. Do not include references in your abstract. Avoid abbreviations or acronyms in the abstract unless absolutely necessary. If you have to use an abbreviation you must state it in full the first time, and also restate the full name with abbreviation on the first mention in the main text.

Article structure:

Most research article submissions will be structured with the following sections:

Introduction*:* A brief rationale for the study and an outline of the primary aims, hypotheses or research questions.

Literature review: A critical appraisal of current relevant literature, identifying limitations in knowledge and a rationale for the study.

Method: Justification of method(s) of data collection and analysis, described to allow replication of the study, with coherence between methodology, data collection and analysis. Issues concerning validity, reliability, trustworthiness, credibility and ethics must be addressed. Please note singular is the norm (Method).

Results/Findings: The results must be presented in a way that is accessible to readers and clearly linked to the aim(s) of the research and methods employed.

Discussion and implications: The implications of the study for occupational therapy must be outlined and the contribution of the study to the current state of knowledge stated. Limitations must be addressed and further areas of work outlined.

Conclusion: A clear summary of the main points of the paper. Please note singular is the norm (Conclusion).

Include ANONYMIZED information on ethics approval in your article and a sentence confirming written informed consent, or why it was not required.

Include these before your Reference list (if published they will appear in text boxes in the article):

Key findings – a summary statement of two or three bullet point key findings. These should not exceed 30 words in total (10–15 words each).

What the study has added – a succinct statement of how the study has contributed to the relevant field. This should be a single sentence, of around 30 words in total.

Tables and figures: We normally request a maximum of four in total unless there are special circumstances, which must be explained in your cover letter (or by emailing us to discuss). Large tables or other additional supplementary data can be hosted online only by Sage.

Appendices: Please keep these to a minimum and only include where the information is vital and not available elsewhere.

Journal Layout:

Accepted articles will be copy-edited using the Sage house style, which is based on Harvard. You do not need to prepare a camera-ready copy of your article but, for information, can consult the house style.

Title page: Please prepare and upload a separate Title page, in Word, that is not part of your main article file. This page does not go to reviewers. Do not upload a pdf. The title page should contain:

- **Full title of the manuscript and short title**
- **Authors' names,** listed in order for publication, with current position (job title) and affiliations
- **Name, postal address and email address of the corresponding author**
- **Research ethics**: All papers reporting studies involving human participants or data must state which Ethics Committee or Institutional Review Board approved the study, or waived the requirement for approval, providing the full name and institution of the

review committee in addition to the approval number. If applicable, please also include this information in the Methods section of your manuscript. If this is not applicable to your manuscript, please state 'Not applicable' in this section.

- **Consent statement**: Please state whether informed consent to participate was obtained from participants and whether the consent was written or verbal. If the requirement for informed consent to participate has been waived by the Ethics Committee or Institutional Review Board, please state this. If this is not applicable to your manuscript, please state 'Not applicable' in this section. Submissions containing any data from an individual person (including individual details, images or videos) must include a statement confirming that informed consent for publication was provided by the participant(s) or a legally authorized representative. Non-essential identifying details should be omitted.
- **Declaration of conflicting interests**: The Author(s) confirm that there is no conflict of interest' OR list any conflicts of interest.
- **Statement of contributorship**: For multi-authored papers this statement should outline what each party contributed to the authorship of the paper. Authors should be identified by their initials. An example is shown below.
    - LM and HG researched literature and conceived the study. EF was involved in protocol development, gaining ethical approval, patient recruitment and data analysis. AB wrote the first draft of the manuscript. All authors reviewed and edited the manuscript and approved the final version of the manuscript.
- **Funding**: List any funding sources that funded this research or, if no funding, 'This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.'
- **Acknowledgements**: The acknowledgements should also be included here — these should state clearly who is being acknowledged and why. Include any contributors who do not qualify for authorship (for example an academic supervisor who is not directly involve in the research study).
- **Patient and public involvement data:** Patient and public involvement in research is defined as an active partnership between patients/members of the public and researchers. BJOT collects data on patient and public involvement in the research published within the journal. As part of the submissions questions, we ask that authors submitting research articles include the following statement in their manuscript on the title page:

'During the development, progress, and reporting of the submitted research, Patient and Public Involvement in the research was:

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BJO-036-Feb-2025-RP

Title
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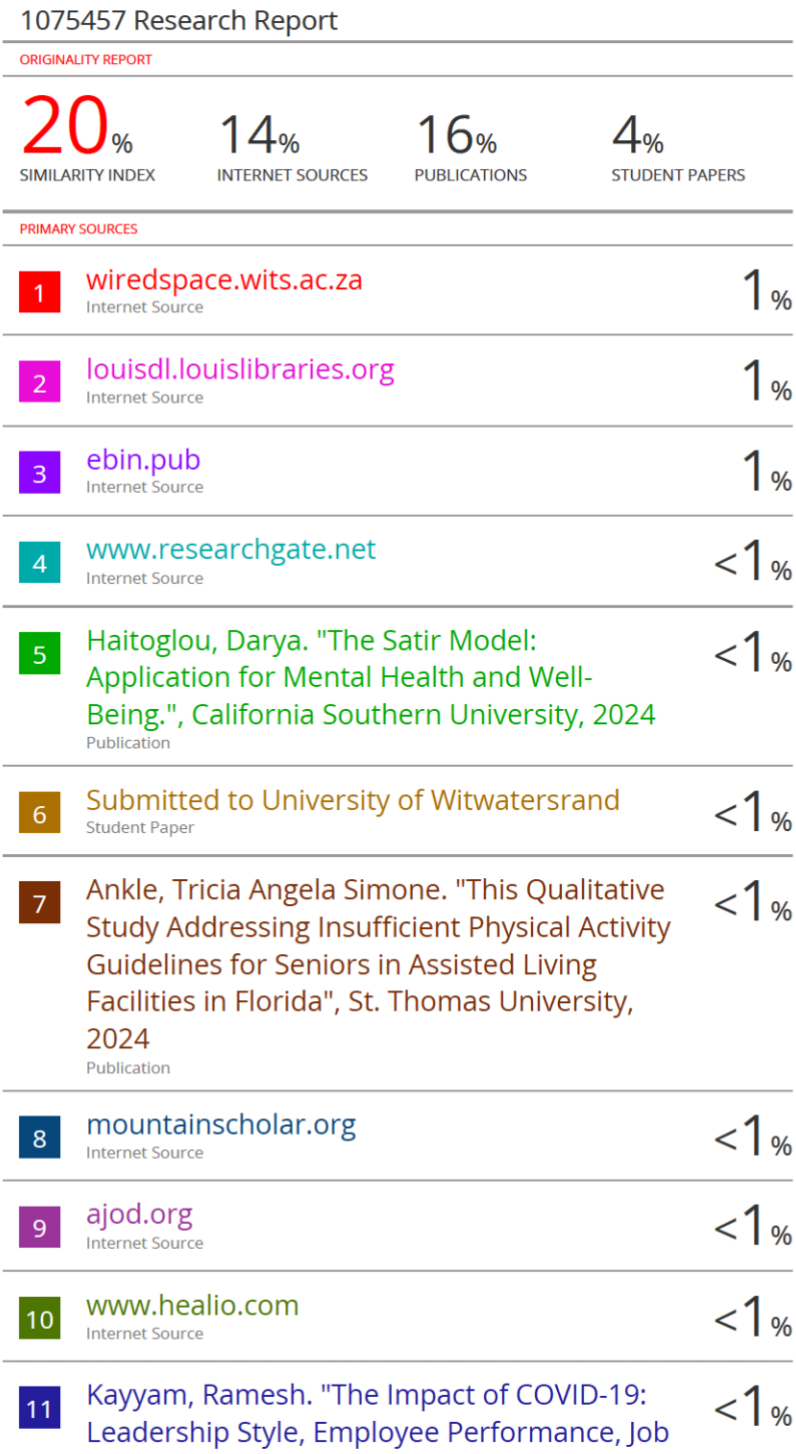

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I hereby declare the following:

- I am aware that plagiarism (the use of someone else's work without their permission and/or without acknowledging the original source) is wrong.
- I confirm that the work submitted for assessment for the above degree is my own unaided work except where I have explicitly indicated otherwise.
- I have followed the required conventions in referencing the thoughts and ideas of others.
- I understand that the University of the Witwatersrand may take disciplinary action against me if there is a belief that this is not my own unaided work or that I have failed to acknowledge the source of the ideas or words in my writing.
- I have included as an appendix a report from "Turnitin" (or other approved plagiarism detection) software indicating the level of plagiarism in my research document.

Signature: D Evangelidis Date: 21 January 2025

1

Appendix I: Field Notes Example

Field Notes – Interview with Participant 4

Date: 2 September 2024

Location: Online

Duration: ~45 minutes

General Impressions:

- The participant seemed really open and comfortable from the start. They smiled a lot and used their hands a lot when explaining things, especially when talking about their journey into yoga.
- When asked about the benefits, they spoke with more energy—clearly passionate about how yoga helps their clients.
- There was a slight hesitation when talking about challenges, like they were being careful with their wording.

Key Takeaways:

1. **How They Use Yoga in OT:** They see yoga as something that works *with* OT rather than replacing anything. They mix mindfulness, breathing, and movement into sessions instead of doing full yoga-only sessions.
2. **Client Reactions:** Younger kids, especially those with sensory challenges, seem to love it. Older kids and teens can be a bit resistant at first, but they come around once they see the benefits.

Nonverbal Cues:

- They were really enthusiastic when talking about how they use yoga and their journey into yoga.

Final Thoughts:

- Their experience matches up with what other participants have been saying—yoga works well for sensory regulation, but not everyone understands its value.
- It's clear there's a need for more awareness and better training on how yoga can be used in OT.
- I need to ask more questions around barriers and what they find difficult with implementing yoga in their OT sessions.

Appendix J: Protocol Submitted to Ethics

CANDIDATE'S SURNAME: [Please print]	**EVANGELIDIS**	FIRST NAME/S:	**DIMITRA**	STUDENT NUMBER:	**1075457**

CURRENT QUALIFICATIONS: **BSc (OT)**

TEL: **(011) 706 1134**	CELL: **072 041 2703**	E-MAIL: **1075457@students.wits.ac.za**	FAX: **N/A**

DEGREE FOR WHICH PROTOCOL IS BEING SUBMITTED: **MSc (OT**)

PART-TIME/FULL-TIME: **PART-TIME** Sex: F **X** M

DISSERTATION/RESEARCH REPORT: **RESEARCH REPORT** **50%** contribution towards degree

FIRST REGISTERED FOR THIS DEGREE: TERM: **1** YEAR: **2021**

DEPARTMENT: **OCCUPATIONAL THERAPY**

TITLE OF PROPOSED RESEARCH: THE USE OF YOGA AS A TREATMENT MODALITY BY SOUTH AFRICAN OCCUPATIONAL THERAPISTS

CANDIDATE'S SIGNATURE:  DATE: **22 JUNE 2021**

SUPERVISOR 1 (NAME & SURNAME): **FAYE SINNETT** **100% Supervision**

SUPERVISOR'S QUALIFICATIONS: **BSc OT, MSc OT (WITS)**

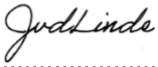
SUPERVISOR'S DEPARTMENT: **OCCUPATIONAL THERAPY**

SUPERVISOR'S ADDRESS / TEL / E-MAIL: **Khanya Block, Wits Education Campus, 7 York Road,** faye.sinnett@wits.ac.za **011 717 3712**

SYNOPSIS OF RESEARCH:
[Use reverse side of this page if more space is required]
SEE OVERLEAF

WITS ETHICS NOT REQUIRED: Yes No WITS ETHICS PENDING: Yes No WITS ETHICS APPROVED: Yes No (circle appropriate symbol)* ***Please note the final human ethics clearance certificate or animal ethics certificate must be available prior to starting research**		IF Y SUPPLY ETHICS CLEARANCE CERTIFICATE AS ATTACHMENT AND INCLUDE ETHICS NUMBER HERE:

As supervisor/s, I/we confirm that I have read the protocol which has been submitted for assessment

SIGNATURE OF SUPERVISOR/S:		22/06/21
PROTOCOL ACCEPTED BY HEAD OF DEPARTMENT	 ..... SIGNATURE	17/06/2021 ..... DATE
SIGNATURE PG OFFICE STAFF ……..	REGISTERED YES….. NO…..	STAMP

Synopsis of Research

Introduction: Yoga has been considered an upcoming and leading form of exercise globally (Clarke et al. 2015b; Gronski & Doherty 2020b; Mooventhan & Nivethitha 2020b). The hype around yoga as a form of exercise has been pinpointed to the benefits of achieving mindfulness and movement (Gronski & Doherty 2020b; Mooventhan & Nivethitha 2020b). A large body of research has been conducted, outlining the benefits of yoga. Some of these benefits include; an increase in the decision making to engage in health-leading activities, a decrease in stress and anxiety, and an overall improvement in quality of life (Clark et al. 2011b; Mooventhan & Nivethitha 2020b). Although the above-mentioned benefits do appear to have a positive outcome, it is not clear whether these outcomes correlate to the outcomes of OT treatment goals. Thus, the question is posed as to why OTs are using yoga in their OT treatment, as well as how this is being incorporated, specifically within a South African context.

Justification of the study: South Africa has a high unemployment rate and yoga is a practice that requires little to no resources to engage in therefore is cost effective. Yoga can be participated in after OT treatment is completed to maintain skills. There is a research gap in OTs perceptions of using yoga as a treatment modality.

Aim of the study: The aim of this research is to describe the use of yoga as a treatment modality by South African occupational therapists.

Proposed methodology: A descriptive explorative qualitative research design will be used. Purposive and snowball sampling will be used, and data will be collected using semi-structured interviews. All transcriptions will be uploaded into the online qualitative thematic coding system, MAXQDA, to analyse and present emergent themes. These themes will be coded and interpreted in relation to previous literature.

Expected outcomes: The researcher expects to find that there is a gap in the knowledge on using yoga as a treatment modality in South African OT practice and that OTs use it in their practice

Background and Need for the Study

Introduction

Yoga has been considered an upcoming and leading form of exercise globally (Clarke et al. 2015b; Gronski & Doherty 2020b; Mooventhan & Nivethitha 2020b). The hype around yoga as a form of exercise has been pinpointed to the benefits of achieving mindfulness and movement (Gronski & Doherty 2020b; Mooventhan & Nivethitha 2020b). A large body of research has been conducted, outlining the benefits of yoga, and the positive impact it has on being able to effectively engage in activities of daily living (Clark et al. 2011b; Schmid et al. 2019b; Grajo, Candler & Sarafian 2020b). Some of these benefits include; an increase in the decision making to engage in health-leading activities, a decrease in stress and anxiety, and an overall improvement in quality of life (Clark et al. 2011b; Mooventhan & Nivethitha 2020b). Subsequently, various health care practitioners, specifically allied health care workers, began adopting yoga as a medium of treatment with their clients. Although the above-mentioned benefits do appear to have a positive outcome, it is not clear whether these outcomes correlate to the outcomes of occupational therapy (OT) treatment goals. Thus, the question is posed as to why occupational therapists (OTs) are using yoga in their OT treatment, as well as how this is being incorporated, specifically within a South African (SA) context.

Problem Statement

The use of yoga as a therapeutic modality within the scope of OT, has increased significantly both globally, and within the South African context (Clark et al. 2011b; Clarke et al. 2015b). Although the use of yoga has already been adopted by various professionals, it appears that there is limited research on the use thereof in OT (Schmid et al. 2019b). More specifically, the effects and outcomes that this treatment modality has on clients is unclear, due to the lack of evidenced based research (Cabral, Meyer & Ames 2011b; Clark et al. 2011b; Montgomery et al. 2015b). There are apparent gaps in existing international research studies regarding the use of yoga as a mode of treatment in OT. These gaps can be attributed to the limitations of the studies, which are namely: small sample sizes; lack of standardised assessment tools that indicate improvement; limited variation in terms of diversity in participants; and the exclusion of qualitative analysis

included in the results of such studies (Cabral et al. 2011b; Milton et al. 2019b; Schmid et al. 2019b). It is thus essential that further research be done on the use of yoga within the scope of OT, keeping in mind and eliminating the limitations of previous studies (Cabral et al. 2011b; Milton et al. 2019b; Schmid et al. 2019b). Additionally, previous studies have focused on the client outcomes when completing yoga as part of their treatment regime. OTs views on the effectiveness of using yoga as a form of treatment with various diagnoses have yet to be considered (Cabral et al. 2011b; Montgomery et al. 2015b; Milton et al. 2019b; Schmid et al. 2019b). Moreover, although these studies have effectively examined the use of yoga within the scope of OT, the results have not portrayed these experiences with detailed qualitative accounts, but have rather quantified these experiences (Cabral et al. 2011b; Montgomery et al. 2015b; Milton et al. 2019b; Schmid et al. 2019b). Without evidence based practice, that outlines the experience as well as tried and tested techniques of how to incorporate yoga into OT sessions, there could be detrimental consequences (Stephens 2017b; Stephens et al. 2020b). These consequences may have a direct correlation to a client's physical and mental well-being (Stephens 2017b; Stephens et al. 2020b). Thus, it is imperative that additional research be conducted, entailing detailed accounts from South African OTs on how and why yoga strategies are utilized in treatment plans. This will inform OTs and future research in understanding whether yoga as a treatment approach has effective outcomes, and how these outcomes can be achieved within the South African context.

Research Question

To describe the use of yoga as a treatment modality by South African occupational therapists?

Aim of the Study

The aim of this study is to describe the use of yoga as a treatment modality by South African occupational therapists.

Objectives of the Study

The objectives of this study are to:

1. Describe the extent to which South African occupational therapists use yoga as a treatment modality.
2. Describe the demographics of clients that occupational therapists use yoga as a treatment modality with.
3. Determine what treatment goals occupational therapists aim to reach when using yoga as a treatment modality and how these goals are met.

Significance of the Study

OT is a health care service that is required amongst various populations, specifically in the SA context, given the quadruple burden of disease and the implications on quality of life (Kielhofner & Forsyth 1997b; Joubert 2010b). South Africa currently has an unemployment rate of 32,6% (Statistics South Africa 2020b). Subsequently, OT services are rarely affordable for the population utilizing private healthcare, and when provided within the government healthcare sector, human and material resources are scarce and thus adequate treatment or OTs are not accessible (Naidoo, Van Wyk & Joubert 2017b). Yoga is a practice that requires little to no resources to engage in, thus categorizing the incorporation of yoga practices into OT treatment plans makes it more affordable and accessible (Clark et al. 2011b; Grajo et al. 2020b). More specifically, minimal room space and equipment is required thus reducing treatment costs. In addition to affordability, carry over into the home environment would appear more structured and fluid. Continuation of home programs are generally more attainable with a significant amount of free online yoga resources, such as YouTube videos, for the client to access and perform in their own environment (Novak & Berry 2014b). Yoga therapy as a tool that yields results, could benefit the South African population by reducing the cost of intervention and making the continuation of OT more accessible. Yoga is already being used as a treatment technique by OTs (Clark et al. 2011b; Montgomery et al. 2015b; Schmid et al. 2019b), therefore this study would begin the discussion in trying to better understand why South African OTs use yoga in their treatment, which clients South African OTs use yoga with, and what treatment goals are aligned with yoga. Thus, the current study will serve as a baseline for future research regarding evidence-based practice using yoga as a treatment modality.

The current research will assist in defining whether yoga is a viable and feasible treatment modality, using the accounts of experienced OTs.

Literature Overview

What is Yoga?

Yoga is a collection of physical, mental, and spiritual practices created in ancient India (Mooventhan & Nivethitha 2020b). It is described as being an abstinent discipline, which includes “breath control, simple meditation, and the adoption of specific bodily postures, and is practiced for health and relaxation” (2 p. 1,17). The first documented records of the practice of yoga have been dated back to 5000 years ago, however it is thought to be believed that yoga started before that (Broad 2012b). The first mention of the Sanskrit word “Yuj", which is the root of the word yoga, first emerged in the Vedas – four ancient scriptures. At this period, yoga was a form of ceremonies or rituals to broaden your mind (Mooventhan & Nivethitha 2020b). Following this period, the creation of the Bhagavad Gita, which is known to be the oldest known yoga scripture, was created. This included more about the narrative of yoga and the philosophies that surrounded it instead of the practical elements that we know of today (Mooventhan & Nivethitha 2020b). It was not until 2000 years ago that yoga became more defined with the ‘eight limbs of yoga’ which set out means for living a life of purpose and meaning (Broad 2012b). It also included various groups of movements to assist in leading a healthier life (Broad 2012b). Yoga was only practiced in eastern countries until the early 19th century when it migrated to the western populations which also saw many teachers and gurus travelling to the west (Mooventhan & Nivethitha 2020b). Influential yoga teachers began to gain fame and collect a following. This led to the modern yoga era, which is characterised by various forms of yoga that are easily available online or at gyms and studios (Mooventhan & Nivethitha 2020b).

Emergence of Yoga in Occupational Therapy

Occupational therapy is a practical science that concentrates on the therapeutic application of information regarding occupation and wellbeing (Christiansen & Townsend 2010). The fundamental aim of OT is to enable an individual to take part in the occupations they want and need, thus enabling them to participate fully in everyday life as a member

of society (Christiansen & Townsend 2010). This can involve improving or maintaining one's capacities to engage in occupation and/or adapting the activity or environment to facilitate engagement (Christiansen & Townsend 2010). Ultimately, occupational therapy ensures engagement in activities of daily living and quality of life for all. As previously mentioned, these are proven benefits of engaging in the practice of yoga.

Yoga became popular in the late 20th century with many people engaging in it due to the benefits listed above, as well as the sense of community that accompanies practicing yoga (Mooventhan & Nivethitha 2020b). Gradually, yoga began filtering into OT practice as the benefits were being researched and proven to be accurate (Mailoo 2005). Yoga started emerging in the scope of psychiatric OT to relieve anxiety, decrease stress, and assist clients with enhanced engagement in daily activities (Cabral et al. 2011b; Clark et al. 2011b). In the study "A narrative review of yoga and mindfulness as complementary therapies for addiction", it was proven that yoga was shown to decrease addictive behaviours and self-inflicted harm in patients (Khanna & Greeson 2013b; Barahoei & Jenaabadi 2019). This gradually allowed yoga to start streaming into all aspects of OT; for example, paediatrics, neurology and return to work. Additionally, yoga is now being used as a treatment modality by other health professionals such as physiotherapists, psychologists, and biokineticists, to reap similar health and well-being benefits (Stephens et al. 2020b).

Yoga Therapy

The use of yoga as a treatment modality within various allied health practices has led to the term 'yoga therapy' to be developed and used (Cabral et al. 2011b; Stephens 2017b). This is a broad term that has developed over the last 3 decades that represents the specific use of yoga to meet therapeutic goals related to physical, psychological, emotional, or spiritual wellbeing (Cabral et al. 2011b; Stephens 2017b). This has been adopted by many health practitioners as it is a form of yoga that can be adapted to target specific treatment goals without formal prior training (Stephens 2017b). Yoga therapy has been proven to show the same benefits as a true yoga practice whilst simultaneously reaching other treatment goals through other treatment modalities (Stephens 2017b). This may seem that the treatment process is more successful, however with limited evidence-based research and evident gaps in these studies, yoga therapy is yet to be supported by

substantial practice techniques, protocols, models, and frames of references. This suggests that there is limited regulation and standardisation of treatment techniques and protocols. This can lead to unfavourable consequences for the client and for the professional applying the yoga to their specific therapy.

The Use of Yoga Therapy in South Africa

Numerous studies have been completed on the effectiveness of yoga as a treatment modality on populations around the globe with the majority taking place in Europe and the United States of America (Cabral et al. 2011b; Grajo et al. 2020b). Limited research, however, has been completed in South Africa. In 2011, Clark et al. completed a study to evaluate the effectiveness of yoga therapy on an individual's perceived anxiety (Clark et al. 2011b). This was one of the initial studies completed in the country that studied the effectiveness of yoga therapy on a South African population (Clark et al. 2011b). This research provided systematic evidence that yoga therapy is an alternate successful and cost effective intervention to reduce anxiety in participants from the Eastern Cape (Clark et al. 2011b). Nonetheless, further randomised controlled studies with larger sample sizes were recommended (Clark et al. 2011b).

It is known that South African allied health practitioners are using yoga as an alternative form of treatment (Clark et al. 2011b). However, without evidence-based practice, the effect that using yoga has on reaching potential treatment goals and on the client's physical and mental well-being is not known. Th current study could be of great significance in starting the process of researching yoga therapy within a South African context, with the hope that it could provide a cost-effective form of treatment that is easily accessible and provides a sense of community to all who participate.

Methodology

Study Design

This study is a qualitative descriptive, explorative research design. Qualitative research allows the researcher to take an interpretive and naturalistic approach to understand whether South African OTs use yoga as a treatment modality (Creswell 2014b; Fossey et al. 2002b). It aims to delve into questions regarding the development of an understanding

of the meaning of humans' worlds and their experiences within specific contexts (Fossey et al. 2002b; Taylor, Bogdan & DeVault 2016b). A descriptive, explorative research design allows the researcher to interpret the personal experiences and opinions of experts in the field of OT and yoga (Creswell 2014b; Taylor et al. 2016b; Creswell & Poth 2018b). The purpose of using this research design is to further understand the experiences of OTs using yoga to explore whether yoga can be used in the future as an effective OT treatment modality, to be used in the South African context.

Data Collection

Research Context

The current research study will take place in SA. All participants will be South African residents and work in the country, either in government or private healthcare institutions. Inclusion of OTs in government and private healthcare sectors ensures equal representation within the SA context, and will allow for contrasting views to emerge (Lincoln & Guba 1986b; Cope 2014; Creswell & Poth 2018b). The researcher will access participants from all scopes of OT i.e., psychiatry, paediatrics, and neuromusculoskeletal.

Research Participants:

The following inclusion criteria will have to be met:

- Have obtained a degree in OT.
- Be registered with the Health Professionals Council of South Africa (HPCSA).
- Have yoga training.
- Be a South African resident.
- Currently practice OT and yoga with their clients.

All participants will be required to fit these criteria to be included in this study and can identify as any gender. Prior yoga training can include formal and informal courses. Completing a yoga teacher training course, being registered with an affiliated yoga body, or practicing yoga consistently will be accepted as part of the inclusion criteria.

Sampling Method and Eligibility Criteria

Purposive Sampling will be used to find participants who currently use yoga as a treatment modality within their OT practice (Creswell & Poth 2018b). The participants will be

recruited through OTASA, Facebook and WhatsApp groups by sending out the requirements to be a part of the study and a summary of the study. The researcher will then send the information sheet (Appendix B) and consent form (Appendix C) to the participants. Snowball sampling will then be utilised to find more participants that use yoga as a treatment technique (Palinkas et al. 2015b; Creswell & Poth 2018b). These sampling methods will be used to ensure that these inclusion criteria are met and that there is maximum variation in the experience of South African OTs using yoga in their treatment (Lincoln & Guba 1986b; Creswell & Poth 2018b).

The sample size is expected to consist of 15-20 participants where data saturation is estimated to be reached within this number of participants (Hennink, Kaiser & Marconi 2017b). The researcher will strive to reach meaning saturation as this will ensure that an in-depth narrative on how and why South African OTs use yoga is collected (Hennink et al. 2017b; Creswell & Poth 2018b).

Methods and Procedure for Data Collection

Data collection will only begin when ethical clearance is obtained from the Human Research Ethics Committee (Medical) of the University of the Witwatersrand. Once this is obtained, all participants will receive an information sheet (Appendix B) and a consent form (Appendix C) that they will be required to sign to participate in the study. Once this is completed, a time and date will be agreed upon to complete the semi-structured interviews, which will be used as the mode for data collection in this study (Gill et al. 2008b). Due to the current COVID-19 pandemic and inclusion of occupational therapists throughout South Africa, interviews will take place on an online video-conferencing site such as Zoom or Microsoft Teams.

Each recorded interview is estimated to be 30-45 minutes long. This will allow enough time for the participants give an extensive narrative on why and how they use yoga (Gill et al. 2008b; Whiting 2008b; McIntosh & Morse 2015b). The interviews will be guided by predetermined interview questions developed by the researcher. The interview questions (Appendix A) will be based on previous literature and will be divided into sections based on the objectives of the study (Whiting 2008b; McIntosh & Morse 2015b). The interviews will be carried out in a conversational style where all questions will be asked in an open-

ended manner to allow for the participants to fully explain their experiences and to mitigate the researcher's bias coming through (Whiting 2008b; McIntosh & Morse 2015b). Field notes will be written by the researcher whilst the interviews are taking place. Word for word transcription will be done from the recordings of the interviews, and sent to the participants to ensure their words were captured correctly (Gill et al. 2008b; Whiting 2008b; McIntosh & Morse 2015b). All recordings and field notes will be saved onto a private password-protected laptop.

Data Management

Once the interviews have been conducted, the researcher will enlist an external auditor to review each transcription to the original interview recordings to ensure transcription quality (Latchman 1997b; Poland 2001b). Each participant will be given a study number to protect their privacy and all relevant data pertaining to each participant will be allocated their particular study number (Saldana 2021b). The finalised transcriptions and field notes will then be stored in a password-protected laptop in coded files. A code book will be used to keep track of all codes given to participants and their information, as well as to keep track of the codes given to themes during data analysis (Benaquisto & Given 2008b; Saldana 2021b). The data will be kept for 5 years on a password-protected computer; thereafter all data will be destroyed. All text will be reviewed prior to starting data analysis to ensure that the quality of all information is established.

Exploratory Study

An exploratory study will be completed prior to the research study to investigate the quality of the interview questions and online video-conferencing platform (Connelly 2008b). One participant, that meets the inclusion criteria, will take part in a semi-structured interview on the chosen online video-conferencing platform. This will be completed to understand whether the proposed interview questions are detailed enough to answer the research objectives and whether the correct online video-conferencing platform is suitable. An external auditor will then review all documents prior to commencing the interview process. This will ensure the trustworthiness and transparency of the study (Lincoln & Guba 1986b; Creswell & Poth 2018b).

Data Analysis and Interpretation

An inductive coding approach will be taken when analysing the data. This allows the researcher to take a bottom-up approach and create codes derived directly from the data (Fossey et al. 2002b; Thomas 2003; Benaquisto & Given 2008b; Given 2008). This approach enables the researcher to identify the key themes in discussing yoga as a treatment modality with the participants using their own words (Fossey et al. 2002b; Thomas 2003; Benaquisto & Given 2008b; Given 2008). These key themes will be taken from the words of the participant by using *in vivo* coding. *In vivo* coding will assist the researcher in building a rich narrative to answer the research objectives (Thomas 2003; Benaquisto & Given 2008b; Saldana 2021b). All transcriptions will be uploaded into the online qualitative thematic coding system, MAXQDA, to analyse and present emergent themes. These themes will be coded and interpreted in relation to previous literature to answer the research objectives and question (Benaquisto & Given 2008b; Taylor et al. 2016b).

Rigor of Research

Using Lincoln and Guba's Evaluative Criteria (Lincoln & Guba 1986b) in order establish trustworthiness, the following factors were taken into account: credibility, transferability, dependability, and confirmability (Lincoln & Guba 1986b). To ensure credibility, the researcher will demonstrate prolonged engagement with the participants (Lincoln & Guba 1986b; Hunter, McCallum & Howes 2018b). This will be completed during the interview and if the interview runs over the intended time limit, the researcher will conduct a follow up interview to ensure all information is gathered. Triangulation of sources will be used by using purposive sampling to have participants of all sectors and scopes, and to ensure that participants with contrasting viewpoints are included in the study (Lincoln & Guba 1986b; Hunter et al. 2018b). This study will also include negative case analysis by discussing themes that do not support the explanations emerging from the data (Lincoln & Guba 1986b; Hunter et al. 2018b). Finally, member checking will be used by giving the participants the analysis of the data to check the validity of the data obtained (Lincoln & Guba 1986b; Hunter et al. 2018b).

To guarantee transferability, the researcher will ensure to use in-depth descriptions of the data and to use previous literature to best explain the emergent themes (Lincoln & Guba 1986b). Once all data has been interpreted, the researcher will get another scholar to

complete an external audit to ensure the dependability of the study (Lincoln & Guba 1986b). Lastly, to guarantee confirmability, the researcher will ensure a transparent audit trail throughout. The researcher will also complete a reflexive journal to keep track of the research process. By outlining the process of this research collection in the protocol, there is a transparent description of the steps taken to complete the research study (Lincoln & Guba 1986b; Hunter et al. 2018b).

Ethical Considerations

Ethical clearance from the University of the Witwatersrand Human Research Ethics Committee (Medical) will be obtained prior to performing the research study. An information sheet (Appendix B) will be sent to the participants prior to taking part in the study. Following this, informed consent (Appendix C) will be obtained from all the participants before partaking in the interviews. All participants will be informed that they can withdraw from the study at any time without any ramifications. There will be no use of personal or private information that could lead to identification of participants and all information will be used for the purpose of this study. All information will be coded, and each participant will be assigned a study number which will be kept on a password-protected computer that only the researcher has access to.

Time Frame of the Project

	2021								2022												2023	
	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OVT	NOV	DEC	JAN	FEB
Research Protocol																						
Protocol Submission																						
Ethics Application																						
Literature Review																						
Data Collection																						
Data Analysis & Write Up																						
Submit First Draft																						
Edits & Final Submission																						

Budget

Description	Breakdown	Cost
Internet Fees to reimburse participants	1GB per hour for video call x no. of participants (~20 participants) x R39	1GB x 20 participants x R39,00 = R780

Participants will be supplemented with data to ensure that no costs will be incurred. This will be calculated by multiplying the number of minutes of the interview by gigabytes per minute by the cost per gigabytes. According to Zoom, it is estimated to use approximately 1GB per hour for a video call (Archibald et al. 2019). The cost of one GB of data is estimated to cost R39,00 in South Africa today (Moyo 2021). These costs will be covered independently by the researcher.

References

Acabchuk, R., Brisson, J., Park, C., Babbott-Bryan, N., Parmelee, O. & Johnson, B., 2020, 'Therapeutic Effects of Meditation, Yoga, and Mindfulness-Based Interventions for Chronic Symptoms of Mild Traumatic Brain Injury: A Systematic Review and Meta-Analysis', *Applied Psychology: Health and Well-Being*, 13(1), 34–62.

Allen, L., O'Connell, A. & Kiermer, V., 2019, 'How can we ensure visibility and diversity in research contributions? How the Contributor Role Taxonomy (CRediT) is helping the shift from authorship to contributorship', *Learned Publishing*, 32(1), 71–74.

Andrews, A., Atler, K.., Dickman Portz, J., VanPuymbroeck, M., Rose, C. & Schmid, A., 2020, 'Occupational therapists' use of yoga in post-stroke care: A descriptive qualitative study', *British Journal of Occupational Therapy*, 84(4), 240–250.

AOTA, 2020, 'Occupational Therapy Practice Framework: Domain and Process - Fourth Edition', *The American Journal of Occupational Therapy*, 74(2), 7412410010p1-7412410010p87.

Arasappa, R., Bhargav, H., Ramachandra, K., Varambally, S. & Gangadhar, B., 2021, 'Perspective of patients referred to Yoga center in a tertiary neuropsychiatric hospital: A cross-sectional retrospective study', *Indian Journal of Psychiatry*, 63(6), 543–548.

Archibald, M., Ambagtsheer, R., Casey, M. & Lawless, M., 2019, 'Using Zoom Videoconferencing for Qualitative Data Collection: Perceptions and Experiences of Researchers and Participants', *International Journal of Qualitative Methods*, 18.

Atler, K., Puymbroeck, M. Van, Portz, J. & Schmid, A., 2017, 'Participant-perceived outcomes of merging yoga and occupational therapy: Self-management intervention for people post stroke', *British Journal of Occupational Therapy*, 80(5), 294–301.

Balasubramaniam, M., Telles, S. & Doraiswamy, P., 2013, 'Yoga on our minds: A systematic review of yoga for neuropsychiatric disorders', *Frontiers in Psychiatry*, 3(JAN).

Barahoei, A. & Jenaabadi, H., 2019, 'The releationship between mindfulness and high-risk behaviors mediated by social-virtual networks', *International Journal of High Risk Behaviors and Addiction*, 8(3), 3–8.

Behere, R. V., Arasappa, R., Jagannathan, A., Varambally, S., Venkatasubramanian, G., Thirthalli, J., Subbakrishna, D.K., Nagendra, H.R. & Gangadhar, B.N., 2011, 'Effect of yoga therapy on facial emotion recognition deficits, symptoms and functioning in patients with schizophrenia', *Acta Psychiatrica Scandinavica*, 123(2), 147–153.

Benaquisto, L. & Given, L., 2008a, *The SAGE Encyclopedia of Qualitative Research Methods Codes and Coding*, SAGE Publications, Inc., Thousand Oaks.

Benaquisto, L. & Given, L., 2008b, *The SAGE Encyclopedia of Qualitative Research Methods Codes and Coding*, SAGE Publications, Inc., Thousand Oaks.

Broad, W., 2012a, *The science of yoga: the risks and the rewards*, *Choice Reviews Online*, 49(12), 49-6912-49–6912.

Broad, W., 2012b, *The science of yoga: the risks and the rewards*, *Choice Reviews Online*, 49(12), 49-6912-49–6912.

Cabral, P., Meyer, H. & Ames, D., 2011a, 'Effectiveness of yoga therapy as a complementary treatment for major psychiatric disorders: A meta-analysis', *Primary Care Companion to the Journal of Clinical Psychiatry*, 13(4), 12.

Cabral, P., Meyer, H. & Ames, D., 2011b, 'Effectiveness of yoga therapy as a complementary treatment for major psychiatric disorders: A meta-analysis', *Primary Care Companion to the Journal of Clinical Psychiatry*, 13(4), 12.

Cagas, J., Biddle, S. & Vergeer, I., 2022, 'Why do people do yoga? Examining motives across different types of yoga participants', *International Journal of Sport and Exercise Psychology*.

Candray, H., Kinkel, C., Fox, A., Atler, K., Fling, B., Puymbroeck, M. Van, Crowe, B. & Schmid, A., 2022, 'An Exploration of Yoga in Occupational Therapy Practice for Multiple Sclerosis', *OTJR: Occupation, Participation and Health*, 43(2), 313–321.

Christiansen, C. & Townsend, E., 2010, *Introduction to Occupation: The Art and Science of Living*, 2nd edn., Pearson Education Inc., New Jersey.

Clark, L., Edwards, S., Thwala, J. & Louw, P., 2011a, 'The influence of yoga therapy on anxiety', *Inkanyiso: Journal of Humanities and Social Sciences*, 3(1), 24–31.

Clark, L., Edwards, S., Thwala, J. & Louw, P., 2011b, 'The influence of yoga therapy on anxiety', *Inkanyiso: Journal of Humanities and Social Sciences*, 3(1), 24–31.

Clarke, T.C., Black, L.I., Stussman, B.J., Barnes, P.M. & Nahin, R.L., 2015a, 'Trends in the use of complementary health approaches among adults: United States, 2002–2012', *National Health Statistics Reports*, (79), 16.

Clarke, T.C., Black, L.I., Stussman, B.J., Barnes, P.M. & Nahin, R.L., 2015b, 'Trends in the use of complementary health approaches among adults: United States, 2002–2012', *National Health Statistics Reports*, (79), 16.

Connelly, L., 2008a, 'Pilot Studies', *Medsurg Nursing*, 17(6), 411–412.

Connelly, L., 2008b, 'Pilot Studies', *Medsurg Nursing*, 17(6), 411–412.

Cope, D., 2014, 'Methods and Meanings: Credibility and Trustworthiness of Qualitative Research', *Oncology Nursing Forum*, 41(1), 89–91.

Creswell, J., 2014a, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 4th edn.

Creswell, J., 2014b, *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*, 4th edn.

Creswell, J. & Poth, C., 2018a, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, SAGE Publications Inc.

Creswell, J. & Poth, C., 2018b, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, SAGE Publications Inc.

Erlingsson, C. & Brysiewicz, P., 2017, 'A hands-on guide to doing content analysis', *African Journal of Emergency Medicine*, 7(3), 93–99.

Esterhuizen, L., Naidoo, D. & Govender, P., 2021, 'Examining Wound Management in Hand Therapy within the South African Context', *South African Journal of Occupational Therapy*, 51(3).

Ferreira-Vorkapic, C., Feitoza, J.M., Marchioro, M., Simões, J., Kozasa, E. & Telles, S., 2015, 'Are There Benefits from Teaching Yoga at Schools? A Systematic Review of Randomized Control Trials of Yoga-Based Interventions', *Evidence-Based Complementary and Alternative Medicine*, 2015(1), 1–17.

Fossey, E., Harvey, C., Mcdermott, F. & Davidson, L., 2002a, 'Understanding and evaluating qualitative research', *Australian and New Zealand Journal of Psychiatry*, 36(6), 717–732.

Fossey, E., Harvey, C., Mcdermott, F. & Davidson, L., 2002b, 'Understanding and evaluating qualitative research', *Australian and New Zealand Journal of Psychiatry*, 36(6), 717–732.

Gill, P., Stewart, K., Treasure, E. & Chadwick, B., 2008a, 'Methods of data collection in qualitative research: Interviews and focus groups', *British Dental Journal*, 204(6), 291–295.

Gill, P., Stewart, K., Treasure, E. & Chadwick, B., 2008b, 'Methods of data collection in qualitative research: Interviews and focus groups', *British Dental Journal*, 204(6), 291–295.

Given, L., 2008, *The SAGE Encyclopedia of Qualitative Research Methods*.

Gordon, T., Booysen, F. & Mbonigaba, J., 2020, 'Socio-economic inequalities in the multiple dimensions of access to healthcare: The case of South Africa', *BMC Public Health*, 20(1), 1–13.

Grajo, L., Candler, C. & Sarafian, A., 2020a, 'Interventions within the scope of occupational therapy to improve Children's academic participation: A systematic review', *American Journal of Occupational Therapy*, 74(2), 1–33.

Grajo, L., Candler, C. & Sarafian, A., 2020b, 'Interventions within the scope of occupational therapy to improve Children's academic participation: A systematic review', *American Journal of Occupational Therapy*, 74(2), 1–33.

Gronski, M. & Doherty, M., 2020a, 'Interventions within the scope of occupational therapy practice to improve activities of daily living, rest, and sleep for children ages 0-5 years and their families: A systematic review', *American Journal of Occupational Therapy*, 74(2).

Gronski, M. & Doherty, M., 2020b, 'Interventions within the scope of occupational therapy practice to improve activities of daily living, rest, and sleep for children ages 0-5 years and their families: A systematic review', *American Journal of Occupational Therapy*, 74(2).

Hayward, C. & Taylor, J., 2011, 'Eudaimonic Well-being: Its Importance and Relevance to Occupational Therapy for Humanity', *Occupational Therapy International*, 18(3), 133–141.

Health Professions Council of South Africa, 2016a, *General Ethical Guidelines for Health Researchers: Booklet 13*, Pretoria.

Health Professions Council of South Africa, 2016b, *General Ethical Guidelines for Health Researchers - Booklet 13*, Pretoria.

Hennink, M., Kaiser, B. & Marconi, V., 2017a, 'Code Saturation Versus Meaning Saturation: How Many Interviews Are Enough?', *Qualitative Health Research*, 27(4), 591–608.

Hennink, M., Kaiser, B. & Marconi, V., 2017b, 'Code Saturation Versus Meaning Saturation: How Many Interviews Are Enough?', *Qualitative Health Research*, 27(4), 591–608.

Hill, H., Swink, L., Atler, K., Anderson, A., Fling, B. & Schmid, A., 2020, 'Merging Yoga and Occupational Therapy for Parkinson's Disease improves fatigue management and activity and participation measures', *British Journal of Occupational Therapy*, 84(4), 230–239.

Hunter, D., McCallum, J. & Howes, D., 2018a, 'Defining exploratory-descriptive qualitative (EDQ) research and considering its application to healthcare', *Proceedings of Worldwide Nursing Conference 2018*, 4(1), 4–11.

Hunter, D., McCallum, J. & Howes, D., 2018b, 'Defining exploratory-descriptive qualitative (EDQ) research and considering its application to healthcare', *Proceedings of Worldwide Nursing Conference 2018*, 4(1), 4–11.

Iyer, S., Bhargav, H. & Bhat, R., 2024, 'Ideal Time to Practice Yoga: Insights from Traditional Yoga Texts and Observations from Scientific Studies: A Narrative Review', *Journal of Applied Consciousness Studies*, 12(2), 82–90.

Jansen van Vuuren, J., Okyere, C. & Aldersey, H., 2020, 'The role of Occupational Therapy in Africa: A scoping review', *South African Journal of Occupational Therapy*, 50(3).

Jelly, P., Sharma, R. & Verma, A., 2022, 'Life with Yoga for holistic health', *IP International Journal of Medical Paediatrics and Oncology*, 8(2), 54–56.

Joubert, R., 2010a, 'Exploring the history of occupational therapy's development in South Africa to reveal the flaws in our knowledge base', *South African Journal of Occupational Therapy*, 40(3), 21–26.

Joubert, R., 2010b, 'Exploring the history of occupational therapy's development in South Africa to reveal the flaws in our knowledge base', *South African Journal of Occupational Therapy*, 40(3), 21–26.

Khanna, S. & Greeson, J., 2013a, 'A narrative review of yoga and mindfulness as complementary therapies for addiction', *Complementary Therapies in Medicine*, 21(3), 244–252.

Khanna, S. & Greeson, J., 2013b, 'A narrative review of yoga and mindfulness as complementary therapies for addiction', *Complementary Therapies in Medicine*, 21(3), 244–252.

Kielhofner, G. & Forsyth, K., 1997a, 'The Model of Human Occupation: An Overview of Current Concepts', *British Journal of Occupational Therapy*, 60(3), 103–110.

Kielhofner, G. & Forsyth, K., 1997b, 'The Model of Human Occupation: An Overview of Current Concepts', *British Journal of Occupational Therapy*, 60(3), 103–110.

Korstjens, I. & Moser, A., 2018, 'Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing', *European Journal of General Practice*, 24(1), 120–124.

Latchman, D., 1997a, 'Transcription factors: An overview', *International Journal of Biochemistry and Cell Biology*, 29(12), 1305–1312.

Latchman, D., 1997b, 'Transcription factors: An overview', *International Journal of Biochemistry and Cell Biology*, 29(12), 1305–1312.

Law, M., Cooper, B., Strong, S., Stewart, D., Rigby, P., Letts, L. & Cooper, B., 1996, 'Client-centred practice Environment, physical Human activities and occupations Models, theoretical The Person-Environment-Occupation Model: A transactive approach to occupational performance', *Canadian Journal of Occupational Therapy*, 63(1), 9–23.

Lincoln, Y. & Guba, E., 1986a, 'But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation', *New Directions for Program Evaluation*, 1986(30), 73–84.

Lincoln, Y. & Guba, E., 1986b, 'But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation', *New Directions for Program Evaluation*, 1986(30), 73–84.

Madela, S., Harriman, N., Sewpaul, R., Mbewu, A., Williams, D., Sifunda, S., Manyaapelo, T., Nyembezi, A. & Reddy, S., 2023, 'Individual and area-level socioeconomic correlates of hypertension prevalence, awareness, treatment, and control in uMgungundlovu, KwaZulu-Natal, South Africa', *BMC Public Health*, 23(1), 1–15.

Mailoo, V., 2005, 'Yoga: An ancient occupational therapy?', *British Journal of Occupational Therapy*, 68(12), 574–577.

McIntosh, M. & Morse, J., 2015a, 'Situating and constructing diversity in semi-structured interviews', *Global Qualitative Nursing Research*, 2.

McIntosh, M. & Morse, J., 2015b, 'Situating and constructing diversity in semi-structured interviews', *Global Qualitative Nursing Research*, 2.

Milton, L., Bantel, S., Calmer, K., Friedman, M., Haley, E. & Rubarts, L., 2019a, 'Yoga and Autism: Students' Perspectives on the Get Ready To Learn Yoga Program', *The Open Journal of Occupational Therapy*, 7(4), 1–10.

Milton, L., Bantel, S., Calmer, K., Friedman, M., Haley, E. & Rubarts, L., 2019b, 'Yoga and Autism: Students' Perspectives on the Get Ready To Learn Yoga Program', *The Open Journal of Occupational Therapy*, 7(4), 1–10.

Montgomery, L., Schmid, A., Davis, T., Mitchell, J., Short, E. & Miller, K., 2015a, 'Changes in Emotional Regulation and Quality of Life After Therapeutic Yoga for Individuals With Traumatic Brain Injury', *American Journal of Occupational Therapy*, 69(Suppl. 1), 6911515229p1.

Montgomery, L., Schmid, A., Davis, T., Mitchell, J., Short, E. & Miller, K., 2015b, 'Changes in Emotional Regulation and Quality of Life After Therapeutic Yoga for Individuals With Traumatic Brain Injury', *American Journal of Occupational Therapy*, 69(Suppl. 1), 6911515229p1.

Mooventhan, A. & Nivethitha, L., 2020a, 'History, philosophy/concept, techniques of yoga and its effects on various systems of the body', *Yoga Mimamsa*, 52(2), 83.

Mooventhan, A. & Nivethitha, L., 2020b, 'History, philosophy/concept, techniques of yoga and its effects on various systems of the body', *Yoga Mimamsa*, 52(2), 83.

Moyo, A., 2021, *How SA's average 1GB mobile data price compares with the world*, *ITWeb*.

Naidoo, D., Wyk, J. Van & Joubert, R., 2017a, 'Community stakeholders' perspectives on the role of occupational therapy in primary healthcare: Implications for practice', *African Journal of Disability*, 6.

Naidoo, D., Wyk, J. Van & Joubert, R., 2017b, 'Community stakeholders' perspectives on the role of occupational therapy in primary healthcare: Implications for practice', *African Journal of Disability*, 6.

Nair, P., Kriplani, S., Kodali, P., Maheshwari, A., Bhalavat, K., Singh, D., Saini, S., Yadav, D., Keswani, J., Silwal, K., Sharma, H. & Tewani, G., 2023, 'Characteristics of patients who use yoga for pain management in Indian yoga and naturopathy settings: a retrospective review of electronic medical records', *Frontiers in Pain Research*, 4.

Ned, L., Tiwari, R., Buchanan, H., Niekerk, L. Van, Sherry, K. & Chikte, U., 2020, 'Changing demographic trends among South African occupational therapists: 2002 to 2018', *Human Resources for Health*, 18(1), 1–12.

Nguyen-Feng, V., Clark, C. & Butler, M., 2019, 'Yoga as an intervention for psychological symptoms following trauma: A systematic review and quantitative synthesis', *Psychological Services*, 16(3), 513–523.

Novak, I. & Berry, J., 2014a, 'Home program intervention effectiveness evidence', *Physical and Occupational Therapy in Pediatrics*, 34(4), 384–389.

Novak, I. & Berry, J., 2014b, 'Home program intervention effectiveness evidence', *Physical and Occupational Therapy in Pediatrics*, 34(4), 384–389.

O'Shea, M., Capon, H., Evans, S., Agrawal, J., Melvin, G., O'Brien, J. & McIver, S., 2022, *Integration of hatha yoga and evidence-based psychological treatments for common mental disorders: An evidence map*, *Journal of Clinical Psychology*, 78(9).

Palinkas, L., Horwitz, S., Green, C., Wisdom, J., Duan, N. & Hoagwood, K., 2015a, 'Purposeful sampling for qualitative data collection and analysis in mixed method implementation research HHS Public Access', *Adm Policy Ment Health*, 42(5), 533–544.

Palinkas, L., Horwitz, S., Green, C., Wisdom, J., Duan, N. & Hoagwood, K., 2015b, 'Purposeful sampling for qualitative data collection and analysis in mixed method implementation research HHS Public Access', *Adm Policy Ment Health*, 42(5), 533–544.

Park, C., Braun, T. & Siegel, T., 2015, 'Who practices yoga? A systematic review of demographic, health-related, and psychosocial factors associated with yoga practice', *Journal of Behavioral Medicine*, (38), 460–471.

Patil, N., Nagaratna, R., Tekur, P., Manohar, P., Bhargav, H. & Patil, D., 2018, 'A randomized trial comparing effect of yoga and exercises on quality of life in among nursing population with chronic low back pain', *International Journal of Yoga*, 11(3), 214.

Poland, B., 2001a, 'Transcription Quality', in J.F. Gubrium & J.A. Holstein (eds.), *Handbook of Interview Research*, pp. 628–649, SAGE Publications, Inc.

Poland, B., 2001b, 'Transcription Quality', in J.F. Gubrium & J.A. Holstein (eds.), *Handbook of Interview Research*, pp. 628–649, SAGE Publications, Inc.

Porges, S.W., 2009, 'The polyvagal theory: New insights into adaptive reactions of the autonomic nervous system', *Cleveland Clinic journal of medicine*, 76(2), S90.

Rena, R. & Mbukanma, I., 2023, 'Evaluating the Impacts of Covid-19 Pandemic on the Socioeconomic Status of South African Women', *Ikenga*, 24(1), 1–20.

Rose, C.M., Atler, K.E., Dickman Portz, J., Andrews, A.P. & Schmid, A.A., 2021, 'Participant-perceived occupational outcomes after two years of yoga for chronic pain', *British Journal of Occupational Therapy*, 84(12).

Saldana, J., 2021a, *The Coding Manual for Qualitative Researchers*, Sage Publications Inc.

Saldana, J., 2021b, *The Coding Manual for Qualitative Researchers*, Sage Publications Inc.

Schmid, A., Puymbroeck, M. Van, Fruhauf, C., Bair, M. & Portz, J., 2019a, 'Yoga improves occupational performance, depression, and daily activities for people with chronic pain', *Work*, 63(2), 181–189.

Schmid, A., Puymbroeck, M. Van, Fruhauf, C., Bair, M. & Portz, J., 2019b, 'Yoga improves occupational performance, depression, and daily activities for people with chronic pain', *Work*, 63(2), 181–189.

South Africa, 2013, *Protection of Personal Information Act*.

Statista, 2024, *Socioeconomic Indicators South Africa report 2024 | Statista*, *Statista*.

Statistics South Africa, 2020a, 'Quarterly Labour Force Survey', *Quarterly Labour Force Survey*, (September), 1–70.

Statistics South Africa, 2020b, 'Quarterly Labour Force Survey', *Quarterly Labour Force Survey*, (September), 1–70.

Stephens, I., 2017a, 'Medical Yoga Therapy', *Children*, 4(2), 12.

Stephens, I., 2017b, 'Medical Yoga Therapy', *Children*, 4(2), 12.

Stephens, J., Puymbroeck, M. Van, Sample, P. & Schmid, A., 2020a, 'Yoga improves balance, mobility, and perceived occupational performance in adults with chronic brain injury: A preliminary investigation', *Complementary Therapies in Clinical Practice*, 40(April), 101172.

Stephens, J., Puymbroeck, M. Van, Sample, P. & Schmid, A., 2020b, 'Yoga improves balance, mobility, and perceived occupational performance in adults with chronic brain injury: A preliminary investigation', *Complementary Therapies in Clinical Practice*, 40(April), 101172.

Stokes, A., Berry, K., Mchiza, Z., Parker, W., Labadarios, D., Chola, L., Hongoro, C., Zuma, K., Brennan, A., Rockers, P. & Rosen, S., 2017, 'Prevalence and unmet need for diabetes care across the care continuum in a national sample of South African adults: Evidence from the SANHANES-1, 2011-2012', *PLoS ONE*, 12(10), 2011–2012.

Taylor, S., Bogdan, R. & DeVault, M., 2016a, *Introduction to Qualitative Research Methods: A Guidebook and Resource*, 4th edn., John Wiley & Sons, Inc.

Taylor, S., Bogdan, R. & DeVault, M., 2016b, *Introduction to Qualitative Research Methods: A Guidebook and Resource*, 4th edn., John Wiley & Sons, Inc.

Thomas, D., 2003, *A general inductive approach for qualitative data analysis*.

Vergunst, R., Swartz, L., Hem, K.G., Eide, A.H., Mannan, H., MacLachlan, M., Mji, G., Braathen, S.H. & Schneider, M., 2017, 'Access to health care for persons with disabilities in rural South Africa', *BMC Health Services Research*, 17(1), 1–8.

Walls, H., Vearey, J., Modisenyane, M., Chetty-Makkan, C., Charalambous, S., Smith, R. & Hanefeld, J., 2016, 'Understanding healthcare and population mobility in Southern Africa: The case of South Africa', *South African Medical Journal*, 106(1), 14–15.

WFOT, 2012, 'Definitions of Occupational Therapy', *American Journal of Physical Medicine & Rehabilitation*, 19(1), 4.

Whiting, L., 2008a, 'Semi-structured interviews: guidance for novice researchers.', *Nursing Standard*, 22(23), 35–40.

Whiting, L., 2008b, 'Semi-structured interviews: guidance for novice researchers.', *Nursing Standard*, 22(23), 35–40.

Appendix K: Student's contribution to article and agreement of co-authors

Declaration: Student's contribution to article(s) and agreement of co-author(s)

I, Dimitra Evangelidis, student number 1075457, declare that this Research Report is my own work and that I contributed adequately towards research findings published in the article(s) stated below which are included in my Research Report .

Signature of Student 

Date: 22 February 2025

Name of Primary Supervisor: Faye Jackson

Signature of Primary Supervisor

Date: 22 February 2025

Agreement by co-authors: By signing this declaration, the co-authors listed below agree to the use of the article(s) by the student as part of her Research Report. In cases where the student is not the 1st author of a published article, the primary supervisor must explain (under comments) why the student is entitled to use the paper for her degree purposes.

Article 1:
Title:
……
……
Journal name, year, volume and page numbers:
……..

Authors	Name	Signature	Date
1st author			
2nd author			
3rd author			
4th author			
5th author			
6th author			

Comments by primary supervisor:

Appendix L: Approval Of Title

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16 January 2025
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Miss D Evangelidis
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South Africa

Dear Miss Dimitra Evangelidis

Master of Science in Occupational Therapy: Approval of Title

We have pleasure in advising that your proposal entitled *The use of yoga as a treatment modality by South African occupational therapists* has been approved. Please note that any amendments to this title have to be endorsed by the Faculty's higher degrees committee and formally approved.

Yours sincerely

Ms Sandra Munesar
Faculty Registrar
Faculty of Health Sciences