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THE RELATIONSHIP BETWEEN COPING STRATEGIES UTILISED BY COMMUNITY SERVICE OCCUPATIONAL THERAPISTS AND THEIR EXPERIENCE OF BURNOUT

Nadia Struwig

Supervisor: Kirsty van Stormbroek

A research report submitted to the Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, in partial fulfilment of the requirements for the degree of Master of Science in Occupational Therapy

Johannesburg, November 2020

DECLARATION

I, Nadia Struwig (student number: 1911915) hereby declare that this research report is my own work. It is being submitted for the degree of Master of Science (Occupational Therapy) at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other university.



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DEFINITION OF TERMS

Community Service: A compulsory year of service for newly graduated health professionals in South Africa with the purpose of improving the supply of healthcare services in underserved areas (Department of Health, 2000).

Occupational therapy: A health profession which strives to develop health and wellbeing by using occupation which is client-centred, promoting the participation of the client in everyday life. This is achieved through collaboration with the client and community, improving their ability to take part in occupations which are essential by changing the occupation and/or environment to support engagement in occupation (World Federation of Occupational Therapists, 2012)

Primary healthcare: A form of essential healthcare which is universally accessible to all members of a community by being affordable and maintainable at every stage of life development. It is based on realistic, practical, acceptable technology and methods which are scientifically sound and focuses on the whole person, covering all forms of care (prevention, promotion, rehabilitative and palliative) (World Health Organization, 2019).

Burnout: "A syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions: feelings of energy depletion or exhaustion; increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and reduced professional efficacy. Burnout refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life" (International Classification of Diseases 11th Revision, 2020, 1st paragraph,)

Coping: Behavioural and psychological approaches that assist to understand, endure and lessen stress and anxiety in certain circumstances (Endler and Parker, 1990).

ACRONYMS

CISS	Coping Inventory for Stressful Situations
CPD	Continuing Professional Development
CS	Community Service
CSOT	Community Service occupational therapist
HPCSA	Health Professions Council of South Africa
ICF	International Classification of Functioning
MBI	Maslach Burnout Inventory
OTASA	Occupational Therapy Association of South Africa
PHC	Primary healthcare
REDCap	Research Electronic Data Capture
RuReSA	Rural Rehabilitation South Africa
WFOT	World Federation of Occupational Therapists
WHO	World Health Organization

ABSTRACT

Background: Occupational therapy graduates in South Africa are compelled to perform a year of Community Service before they can be independent practitioners. As novice health professionals transitioning to practice in challenging conditions, these new occupational therapists may be considered a vulnerable population, facing many stressors within the Primary healthcare system. These stressors include working in rural areas, and having limited access to physical (equipment, therapy areas etc.), professional (access to continuing professional development sessions, mentorship, networking opportunities etc.), and personal (coping skills, family support etc.) resources, which poses a challenge to providing services to clients and feeling competent as a therapist. Continuous exposure to these work-related stressors without successful ways of coping with this stress may lead to burnout. No research publications to date have described the coping strategies Community Service occupational therapists use, or how these coping strategies affect their experience of burnout.

Purpose: This study sought to determine whether there is a relationship between coping strategies utilised by Community Service occupational therapists and their experience of burnout.

Methods: A quantitative, descriptive, cross-sectional survey design was used. The online questionnaire included demographic information of the participants, the Maslach Burnout Inventory (which measures the three components of burnout, namely, emotional exhaustion, depersonalisation and low personal accomplishment) and the Coping Inventory for Stressful Situations (which measures forms of coping, namely, emotion-oriented coping, task-oriented coping and avoidance-oriented coping which consists of two subcomponents of avoidance and social distraction). Data collection commenced once ethical clearance was received. An invitation to participate in the online questionnaire was sent to all Community Service occupational therapists commencing Community Service in 2019 by using non-probability sampling. The questionnaire was administered via REDCap.

Analysis: Data were analysed using Statistica 13.5. Frequencies and percentages were obtained for dependent and independent variables. Correlations were tested by

using Spearman's rank-order correlations. The effect of demographic variables on burnout and coping were tested using Kruskal-Wallis tests. Responses to open ended questions were coded using inductive quantitative content analysis.

Results: There were 75 responses (which represented 31.92% of the CSOT population) used for the study. Around half of participants (49.33%) reported a strong support structure, with the main source of support being significant others (37.33%) and nuclear family (33.33%).

Participants who reported high levels of burnout for the three components of burnout were established. Fifty five percent of participants reported high levels of emotional exhaustion, 23% reported high levels of depersonalisation and 33% reported high levels of low personal accomplishment. Most of the participants felt emotionally exhausted a few times a month (mean 3.20, SD±1.35) and most participants felt a sense of personal accomplishment at least once a week (mean 4.16, SD±0.998).

The majority of participants used avoidance-oriented coping an average amount (62nd percentile), but more than task and emotion-oriented coping. Most participants reported using distraction-oriented coping falling in the 73rd percentile of the population and using social diversion coping falling in the 58th percentile of the population.

Correlations using Spearman's rank-order showed that emotional exhaustion had a low positive correlation with emotion-oriented coping (*p coefficient* =0.33, *p*<,05), suggesting that increased reports of emotional exhaustion were linked to increased use of emotion-focused coping. Depersonalisation had a low negative correlation with task-oriented coping (*p coefficient* =-0.396, *p*<,05), suggesting a link between depersonalisation and decreased use of task-oriented coping. Depersonalisation and emotion-oriented coping also had a low positive correlation (*p coefficient* =0.41, *p*<,05), suggesting that depersonalisation is linked to increased use of emotion-oriented coping. Personal accomplishment had a low positive correlation with task-oriented coping (*p coefficient* =0.32, *p*<,05), suggesting that feelings of personal accomplishment were linked to increased use of task-oriented coping. Personal accomplishment had a low negative correlation with the emotion-oriented coping (*p coefficient* =-0.32, *p*<,05), suggesting that feelings of personal accomplishment were linked to decreased use of emotion-oriented coping.

Participants with strong (median=4.5, range 4.13-5.13) and adequate (median 4.12, range 3.87-4.62) support systems had a greater sense of personal accomplishment (p=0.02) and participants who reported minimal social support (median 4.67, range 4.33-4.78) reported greater levels of emotional exhaustion (p=0.01). Participants who were satisfied with the supervision they received (median 57, range 50-64.50) used social diversion to a greater extent (p=0.001) and participants who were not satisfied with the supervision they received (median 4.00, range 2.56-4.67) reported greater levels of emotional exhaustion (p=0.017).

Participants who were very satisfied (median 4.75, range 4.38-5.38) and satisfied (median 4.37, range 3.94-4.88) with their jobs as CSOTs had a greater sense of personal accomplishment (p=0.0002), whereas participants who were not satisfied with their jobs experienced a greater sense of depersonalisation (p=0.047) and greater levels of emotional exhaustion (p=0.006).

Conclusion: More than half (55%) of the participating CSOT population reported high levels of emotional exhaustion. Correlations between the participants' experience of burnout and their coping strategies had low significance. A more significant relationship was found between certain demographic variables and forms of coping and components of burnout. Having strong and adequate support systems was associated with a greater sense of personal accomplishment and poor social support was associated with increased emotional exhaustion. Participants who were satisfied and very satisfied with their jobs had an increased sense of personal accomplishment while participants who were not satisfied with their jobs reported greater depersonalisation and emotional exhaustion. Decreased satisfaction with supervision was associated with increased emotional exhaustion and use of emotion-oriented coping.

The importance of supporting Community Service occupational therapists in developing task-oriented coping and the avoidance of emotion-oriented coping was highlighted in the research project. Facilitating CSOTs insight into their own experience of burnout and the forms of coping they use will support their ability to develop quality services to underserved South Africans and promote their health and wellbeing which in turn helps to avoid the experience of burnout. Further research could aim at exploring the specific interventions for burnout in the CSOT population

and using adaptive forms of coping at an individual and organisational level to prevent burnout.

CHAPTER 1: INTRODUCTION

This chapter will cover the context and justification for the research project. It will begin with an introduction to the history of Community Service (CS) and how it became compulsory for new occupational therapy graduates in South Africa. The experiences reported by Community Service occupational therapists (CSOTs), and how these experiences may influence burnout in the workplace will be described. Importantly, coping skills and the varying effects of different coping skills on burnout will briefly be addressed. Furthermore, the effects of demographic variables on burnout and coping will be described. The chapter concludes by laying out the problem statement, research question, aim of the study, and research objectives.

1.1 CONTEXT AND RATIONALE

1.1.1 History of CS in South Africa for occupational therapists

The compulsory year of CS was introduced by the South African Department of Health for newly graduating health professionals to provide healthcare in areas (such as rural and other underserved areas) which are lacking these services (Department of Health, 2000). CS for newly graduated South African healthcare professionals started in 1998 with medical doctors (Reid, 2001) and later broadened to include other healthcare professionals. Occupational therapy was included as a profession required to serve compulsory CS in 2003 (Reid, 2002).

The year of CS applied by the South African government has been identified as one of the 10 most successful healthcare interventions since apartheid was abolished in 1994 (Harrison, 2010). It aims to allow newly qualified healthcare professionals to practice their profession and develop skills by exposure to learning opportunities and mobilising healthcare professionals to rural, under privileged areas (Reid and Conco, 1999).

1.1.2 The experience of CSOTs

CS workers are new graduates entering the South African healthcare system, and lack experience when facing challenges within this system (Reid, 2002; Colby et al., 2018). They work in public health and rural areas which they may have never been exposed to before. A thesis done in 2014 by van Stormbroek with the CSOT population found that CSOTs described various challenging experiences related to their CS year (van Stormbroek and Buchanan, 2016; Van Stormbroek, 2014; van Stormbroek and Buchanan, 2019).

1.1.2.1 Facing challenges

In the existing literature it has been noted that CSOTs are afforded opportunities that come with CS, such as personal development. Nevertheless, CSOTs have also expressed feeling 'challenged' in their practice for various reasons. This includes factors such as having insufficient human and non-human resources at work, being faced with clinical difficulties in practice, and experiencing differences in culture and language relating to clients (van Stormbroek and Buchanan, 2016; Naidoo et al., 2017). Additionally, CSOTs have reported limited knowledge or skills required for their jobs as CSOTs in their practice areas, which may be due to feelings that there is insufficient undergraduate preparation for practice, or limited opportunities for professional development (van Stormbroek and Buchanan, 2016).

1.1.2.2 Professional identity and recognition

CSOTs have reported feeling 'proud' to be occupational therapists and meeting needs of clients in practice. This pride has also been linked with a strong professional identity as an occupational therapist (van Stormbroek and Buchanan, 2016). However, some CSOTs who have questioned their profession reported feeling like a physiotherapist. Reasons for this include not having resources to provide effective occupational therapy services, or the occupational therapy profession not being understood or recognised by other professions or clients with which they work (van Stormbroek and Buchanan, 2016).

1.1.2.3 Professional support

Supervision is the act of overseeing that correct practices is followed (Simpson and Weiner, 2002). Support and supervision specifically for newly qualified CSOTs in the South African context is the manner in which guidance is given to help equip the individual to deal with the demands of the work environment (van Stormbroek and Buchanan, 2016). Furthermore, importance of CSOTs having professional guidance, supervision, and support to assist with facing demands on the job has been identified in the literature (Van Stormbroek, 2014; van Stormbroek and Buchanan, 2016). The National Department of Health, sees these newly qualified therapists as qualified to practice and do not provide formal mentorship (Holland et al., 2013) which may be reasonable as these therapists need to meet certain outcome levels before graduating. However, evidence exists that says that novice therapists expect supervision and require professional support when starting work (Morley et al., 2007; Moores and Fitzgerald, 2017). CSOTs have mentioned experiencing feelings of responsibility and 'accountability' for the areas in which they work, and towards the clients that they see (van Stormbroek and Buchanan, 2016). This 'accountability', coupled with limited access to sufficient professional support and supervision, may place a great sense of work stress on CSOTs if not managed correctly.

1.1.2.4 Emotional challenges during the CS year

Many CSOTs have reported as sense of frustration as a result of limited resources (such as equipment and work areas) and having a limited budget. Additional 'frustrations' described in the literature were difficulties with communicating with clients, unethical behaviours from personnel, and having limited learning opportunities and supervision (van Stormbroek and Buchanan, 2016).

Feelings of being 'alone' have been reported by CSOTs who faced difficult interpersonal relations with colleagues, who had few colleagues, or lacked counsel and instruction in the workplace. CSOTs have also reported 'anxiety' which was mostly attributed to insecurity about applying skills in the workplace and having substantial workloads. CSOTs have also attributed substantial workloads to feeling 'overwhelmed' (van Stormbroek and Buchanan, 2016).

The feelings of being ‘overwhelmed’ and ‘anxious’ are symptoms of stress (Varvogli and Darviri, 2011) and CSOTs who are exposed to uncontrolled stress in the workplace over a long period may experience burnout (International Classification of Diseases 11th Revision, 2020).

1.1.3 Burnout in the workplace

CSOTs are subjected to various contextual stressors (Van Stormbroek, 2014; van Stormbroek and Buchanan, 2019; van Stormbroek and Buchanan, 2016) during their CS. As such, they are vulnerable to experiencing stress in the workplace and as a result may report high levels of perceived burnout. ‘Burnout’ is commonly defined as “a prolonged response to chronic interpersonal stressors on the job” (Maslach and Leiter, 2016, pg 103).

South African healthcare workers report experiencing more burnout than is reported by the general public and healthcare workers working overseas (Rajan and Engelbrecht, 2018; Colby et al., 2018). Literature suggests that there is a large number of South African experienced healthcare workers who report experiencing burnout in the workplace as a result of the kind of work they do and exposure to stressors at work (Du Plessis et al., 2014; Dubale et al., 2019).

Novice healthcare workers in South Africa are particularly at risk of burnout due to lack of knowledge and experience, which can cause feelings of anxiety and stress. Challenging workloads, working away from family and friends, and limited time for leisure pursuits also affects the standard of living of these new graduates (Colby et al., 2018; Liebenberg et al., 2018). Contextual stressors that CSOTs working in South Africa are exposed to include having limited access to human and non-human resources, a lack of structure and organisation, dealing with negative characteristics of patients, receiving limited feedback, and decreased support and supervision (Liebenberg et al., 2018).

Literature suggests numerous approaches to help healthcare workers expand their forms of coping with burnout (Hardy, 2019). A systematic review done by Wiederhold et.al. identifies that teaching physicians (who fall under the general category of

‘healthcare workers’) coping strategies is an important skill to manage burnout (Wiederhold et al., 2018).

1.1.4 Burnout and coping

Coping is defined as dealing with a set of circumstances with a favourable result (Cambridge, 2020), and coping is “a conscious response to external stressful or negative situations” (Endler and Parker, 1994, pg 50). Coping strategies involve behaviours or mental strategies that individuals use (Endler and Parker, 1990) and constitute one of the personal resources that CS therapists have to manage their CS experience (Reid, 2002).

Literature proposes that there is a link between the experience of burnout and the forms of coping that humans use. An international study by Shin et al. (2014) which performed a meta-analysis of 36 different studies found a relationship between burnout symptoms and coping strategies in participants from many different professions. The link between burnout and coping was especially significant in the nursing profession. Additionally, the study found negative correlations between the dimensions of burnout and coping that is problem/task focused, meaning that coping which focuses on finding solutions to problems could essentially decrease the experience of burnout. Positive correlations were found between the dimensions of burnout and coping which was emotion focused, meaning that perceived burnout may increase with increased use of coping which focuses on decreasing emotional responses to stressors (Shin et al., 2014). Another study found that the dimensions of burnout correspond separately to the different forms of coping in Polish physiotherapists (Nowakowska-Domagala et al., 2015). This suggests that a connection exists between experience of burnout and forms of coping in health professionals.

1.1.5 Demographic variables, burnout and coping

The effect that demographic variables have on burnout cannot be underestimated. This is supported by the literature that reports burnout in the occupational therapy population specifically. Emotional exhaustion has been found to have a relationship

with great workloads, defective work environments (Du Plessis et al., 2014), decreased supervisory support and religious association (Balogun et al., 2002). Depersonalisation has been associated with a great client load, not achieving deadlines, defective work environments, and deferring client appointments (Du Plessis et al., 2014). A decreased sense of personal accomplishment has been associated with being male, childless, being qualified below four years, poor income, great levels of administration, deferring client appointments (Du Plessis et al., 2014) and decreased support from work colleagues (Balogun et al., 2002). Furthermore, task-oriented coping specifically has been associated with longer service time, and increased age (Nowakowska et al., 2009) which indicates that demographic factors also have an effect on the forms of coping used. Therefore, demographic factors influence the experience of burnout and the forms of coping and need to be considered when the interaction between burnout and coping is studied.

1.2 JUSTIFICATION FOR THE STUDY

Sub-Saharan Africa possesses twenty five percent of the worlds' burden of disease, but only possesses three percent of the worlds' healthcare workers (World Health Organization, 2006). Healthcare professionals in South Africa are exposed to different contextual stressors affecting the health of the South African population. These contextual stressors are mainly social, economic and environmental in nature and include factors such as inequalities in income, an inadequate educational system, the quadruple burden of disease of non-communicable disease; violence and injury; tuberculosis and HIV; and challenges in constructive management of human resources (Dookie and Singh, 2012; Coovadia et al., 2009; Mayosi et al., 2012). Another example of a recent and novel stressor for South African healthcare professionals is the Coronavirus disease (COVID-19) which has caused a global pandemic (World Health Organization, 2020), and currently poses a great threat to both public and private healthcare resources in South Africa (National Institute for Communicalble Diseases, 2020) [1].

[1] The timeframe of the study from inception till the end of the data analysis was from March 2018 till 28 January 2020, but the researcher was cognisant of the importance of the research topic to the context of the pandemic when finalising the write up of the research report.

CSOTs, who find themselves faced with the aforementioned factors, are extending access to vital rehabilitation services for South Africans who need it most (Reid, 2002; van Stormbroek and Buchanan, 2017; Harrison, 2010). Their ability to fulfil this responsibility under challenging conditions is dependent upon their ability to cope with this role and avoid burnout. Existing research that explores the relationship between coping strategies and the experience of burnout in healthcare service providers in South Africa, and amongst occupational therapists, is limited.

As newly graduated healthcare professionals transitioning from university to practicing in South African PHC system, CSOTs report some challenging experiences (as outlined in the previous section) and may be at risk for experiencing burnout when faced with the contextual stressors.

Developing insight into the relationship between burnout and coping strategies through this research will assist educators in facilitating the development of adaptive coping strategies in undergraduate occupational therapy students as an essential soft skill. Understanding the link between burnout and coping in the South African context will also enable employers and the occupational therapy professional associations to support novice occupational therapists in developing coping strategies. This will support CSOTs' ability to develop and deliver quality health services to underserved South Africans while not compromising their health and wellbeing.

Understanding the burden of burnout and the coping strategies amongst CSOTs will inform further research into interventions that develop healthy coping strategies in therapists and seek to limit the experience of burnout amongst this population. Beyond application to the occupational therapy population alone, the results of this study may inform research relevant to other health professional groups in South Africa.

Furthermore, the identification of demographic factors which have an effect on burnout and forms of coping used by CSOTs is another important factor to consider. If specific demographic variables are protective, or place CSOTs at risk for burnout, then the use of maladaptive coping strategies need to be identified. If specific demographic variables are identified, the CSOT, employer, educators and professional organisations will be able to act collaboratively and proactively to address and mitigate the impact of these demographic factors. These actions would serve to strengthen services for rural and underserved communities by not compromising the health and

wellbeing of the group of therapists extending occupational therapy services on behalf of the occupational therapy profession.

1.3 STATEMENT OF THE PROBLEM

CSOTs experience many challenges, including working in rural areas that are not sufficiently resourced, a lack of infrastructure in communities, a lack of advocacy skills for the profession, budget constraints, and poor service design of allied health services (Ned et al., 2017; Naidoo et al., 2017; Morley, 2009; Morley, 2006). Meeting contextual challenges with limited support places CSOTs at risk of burnout (Gupta et al., 2012; McCombie and Antanavage, 2017).

Coping is a mediator between mental health and stress, and the results of stressful situations depend on the effectiveness of coping (Folkman and Lazarus, 1985). The use of ineffective coping mechanisms may increase the risk of burnout, and it is therefore important to explore the relationship between burnout symptoms and coping strategies (Nowakowska-Domagala et al., 2015). Lastly, the understanding of personal (internal) and demographic (largely external) factors that influence the experience of burnout in the CSOT population specifically is limited. Placing a focus on understanding these internal and external factors which have an effect on burnout and forms of coping could also assist all stakeholders when planning interventions which have been categorised as person-directed and organisation-directed (Awa et al., 2010).

1.4 RESEARCH QUESTION

What is the relationship between burnout experienced by Community Service occupational therapists in South Africa, and the coping strategies that they utilise?

1.5 AIM OF THE RESEARCH

To establish the nature of the relationship between burnout experienced by Community Service occupational therapists in South Africa and the coping strategies that they utilise.

1.6 RESEARCH OBJECTIVES

- To describe the demographic profile of Community Service occupational therapists.
- To describe the experience of burnout in Community Service occupational therapists by using the Maslach Burnout Inventory Human Services Survey 4th Edition (MBI-HSS).
- To determine which coping strategies South African Community Service occupational therapists' utilise by using the Coping Inventory for Stressful Situations (CISS).
- To determine the correlation between Community Service occupational therapists' experience of burnout and the coping strategies which they use.
- To describe the effect of the demographic variables on the experience of burnout and coping skills in Community Service occupational therapists.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The purpose of this study aims to explore the relationship between burnout experienced by CSOTs and the forms of coping they use. This chapter aims to describe the literature relevant to this study, to provide a critical review of this evidence, and how the study has been positioned within the gaps identified in the literature.

A search was conducted between March 2018 and June 2020 to gather the relevant information for this research report. The following data bases and search engines were used to search the literature: Google Scholar, University of the Witwatersrand Lib Guides (including Pubmed and OT seeker), Science Direct, Cinahl, Medline, and Africa Wide. Key words used in searches were *community service*, *occupational therapist*, *burnout*, and *coping*. The searches included national and international literature. Further literature was sought by using references found in relevant articles.

Building on the context of CS provided in Chapter 1, this chapter will firstly provide historical background of the South African PHC System and how CS for occupational therapists in South Africa originated. Literature that speaks to preparation for occupational therapy practice in South Africa will then be reviewed and stressors and contextual challenges faced by CSOTs in the primary healthcare system will then be discussed. An in-depth overview of the concepts of burnout, resilience and coping skills will then be provided. Finally, the relationship between burnout and coping skills in healthcare professionals, occupational therapists and CSOTs will be appraised. This chapter will also demonstrate how this study has been positioned within what is already known within literature, and what has not yet been established.

2.2 THE SOUTH AFRICAN PHC SYSTEM

South Africa's history has had a great impact on the current state of healthcare policies and services offered to its citizens. When apartheid was abolished in 1994 the newly elected government took responsibility for a healthcare system that faced challenges

of great inequality, discrimination and the historical unequal distribution of healthcare workers and services. This was as a result of a number of underlying factors including economic inequality between different races, immigrant workers, gender discrimination, violence, and destruction of family life (Coovadia et al., 2009; Baker, 2010).

Before 1994, the South African health system was fragmented with provincial governments placed in charge of hospitals, and local authorities placed in charge of promotive and preventative healthcare. In addition to this, South Africa was supplied with healthcare by a total of 14 isolated health departments (Coovadia et al., 2009; Baker, 2010).

Public healthcare in South Africa in the early 1990's was mainly hospital based and followed a curative approach. In 1992/1993, healthcare per person in poorer districts was 3.6 times less than in wealthier districts. Only 11% of total public health expenditure was granted at primary level, while 76% of public health expenditure supported acute hospitals. Furthermore, there was uneven distribution of resources between and within the different provinces (Coovadia et al., 2009; Baker, 2010).

Inequity existed between the public and private healthcare sectors. Only 23% of the population had access to private healthcare with approximately 60% of total healthcare expenditure awarded to the private sector. Additionally, most healthcare professionals were practicing within the private health sector, and healthcare professionals working in the public health sector favoured large urban hospitals over primary care facilities and facilities in rural areas (Coovadia et al., 2009; Baker, 2010).

The ruling-party, African National Congress, announced its first National Health Plan for South Africa in 1994 to address and reform the weaknesses within the healthcare system. The health plan outlined the reorganisation and revolutionisation of the health system using a PHC approach prioritising rural and under-resourced areas. A National Health Authority was established to structure and integrate the administration of comprehensive services, and Provincial Health Authorities were established in each of the nine provinces (African National Congress, 1994).

Furthermore, the White Paper for the transformation of Health Services was introduced to focus on the disparities in the healthcare system. Some aims included: merging the divided health system to form an all-inclusive National Health Service,

decreasing inequality in provision of healthcare services and improving access to comprehensive PHC services (Department of Health, 1997).

In order to achieve the aims set out in the White Paper for the transformation of health services there was a prioritisation of fair and impartial distribution of health professionals throughout South Africa, especially in the poor, aged, rural, and peri urban areas. Further action plans taken to achieve the aims were to implement rural allowances for healthcare professionals, the construction and upgrade of public healthcare facilities and the introduction of CS for new healthcare professional graduates (Reid, 2001).

2.3 CS AND OCCUPATIONAL THERAPY

Compulsory CS for graduating health professionals practicing in South Africa began with a group of medical doctors in 1998 (Reid, 2001) and later on expanded to other medical professions which included occupational therapy, in 2003. The South African Department of Health introduced the compulsory year of service to address difficulties with the provision of PHC services in rural and under supplied areas (Department of Health, 2000; Reid, 2002).

The CS year takes place directly after the completion of the respective healthcare degree and is a prerequisite for independent practice as a healthcare professional in South Africa. At the end of the final year of undergraduate study, occupational therapy students are given the opportunity to apply for placement at rural, impoverished and under-served areas. The National Department of Health places the students in placement areas that are applied for, or in posts that are unoccupied. Notification of placement occurs one to three months prior to the year of work commencement. Consideration of placement is given to individuals with special circumstances, including medical conditions that require access to specific health facilities or if the individual has school-going children. However, the newly qualified occupational therapist will often have to move to another city or province to complete the CS year (Department of Health, 2017a).

The implementation of CS had a positive effect on PHC in South Africa at the start as the programme has made more healthcare professionals available in the public sector.

Since the first implementation of the CS year, the number of occupational therapists in public healthcare has increased by approximately 33% (Harrison, 2010). However, in 2018, of the 5180 occupational therapists registered with the Health Professions Council of South Africa (HPCSA), only 25.2% worked in Public Healthcare, serving 84% of the South African population (Ned et al., 2020). Of the 25.2%, 32% of the total number of occupational therapists working in Public Healthcare were CSOTs (Department of Health, 2017a). Therefore, CSOTs are largely responsible for providing occupational therapy services to rural and remote populations who are populations with the greatest need for healthcare (Rural Health Advocacy Project, 2015) and constitute nearly 1/3rd of the workforce delivering services to 84% of the South African population (Ned et al., 2020).

2.4 PREPARATION FOR OCCUPATIONAL THERAPY PRACTICE IN SOUTH AFRICA

Undergraduate curricula for occupational therapy set by universities in South Africa aim to create readiness for graduates to practice occupational therapy as a profession. Graduates are provided with a comprehensive education on the relationship between occupational engagement, health, and the environment or context in which occupational engagement occurs (The Health Proffesions Council of South Africa, 2008).

Undergraduate curricula do not specifically focus on preparing graduates for compulsory CS after graduation (Holland et al., 2013). In CS, the newly qualified occupational therapists are expected to work in a variety of placement areas. These areas may include new departments which have not received occupational therapy services, established departments and re-established occupational therapy departments (Holland et al., 2013). The newly qualified therapists could be placed alone in an area or form as part of an established department which means that there may be limited resources which the therapist can draw from (Holland et al., 2013).

CSOTs are often placed in rural settings and the South African Qualifications Authority's exit level outcomes for occupational therapists' states that qualified occupational therapists should provide services in various settings and environments

(SAQA, 2020). However, rural fieldwork placements are not included in all undergraduate occupational therapy degree curricula. A CS placement may thus be the first exposure to rural and under-served areas for the newly qualified occupational therapist (van Stormbroek and Buchanan, 2019). Rural placement, together with having to move from the new therapists' place of residence to another area, could also contribute to feelings of being unprepared for the transition from student to therapist (Toal-Sullivan, 2006).

The transition from being a graduate to a newly qualified CS worker in South Africa, also poses various challenges including a lack of physical resources, a lack of support and mentoring, and very limited finances to provide sufficient delivery of services (Hatcher et al., 2014). Working in healthcare and providing a service to patients with adverse prognoses may also cause sympathy and concern in new graduates and this may lead to feelings of stress (Nowakowska-Domagala et al., 2015).

2.5 STRESSORS AND CONTEXTUAL CHALLENGES FACED BY CSOTs IN THE PHC SYSTEM

Newly qualified healthcare professionals in South Africa are inexperienced and require guidance when practicing their professions within the contextual challenges of the South African PHC system (Reid, 2002). Their work performance, the way they adapt and deal with challenges, as well as their work contribution is largely dependent on their education and physical, personal and professional resources (Reid, 2002). CSOTs often work with restricted supervision and limited resources (Van Stormbroek, 2014). Therapists report that they find it difficult to use a PHC approach in rural areas which very limited resources, and they struggle with language barriers, a decreased understanding of clients' cultures and values, and difficulty dealing with change in their practice settings (Naidoo et al., 2017). Coping with these contextual realities is challenging (Van Stormbroek, 2014; Naidoo et al., 2017) with some CSOTs reporting that they feel 'overwhelmed' or they are 'just surviving' (van Stormbroek and Buchanan, 2016). As novice health professionals transitioning into practice in challenging conditions, CSOTs in South Africa may be considered a vulnerable population, facing many stressors within the PHC system. These stressors relate to various factors.

Firstly, CSOTs may not have access to appropriate supervisors and mentors and may have limited opportunities to observe other occupational therapists treating and interacting with clients (Holland et al., 2013). This may be due to a lack of staffing in the PHC system in South Africa. Research has suggested that access to these resources is important to provide support in the transition from being a new graduate to a novice therapist (Morley, 2009; McCombie and Antanavage, 2017; Khamisa et al., 2016; Morley, 2006; Kautzky and Tollman, 2008).

Secondly, the CSOTs who work in rural areas and primary levels of care have limited access to physical resources such as specialised occupational therapy equipment, appropriate therapy areas to see clients in, and no specific occupational therapy budget allocation. A long turnover time to receive ordered equipment also poses a problem to access of physical resources (Naidoo et al., 2017; Holland et al., 2013; Ned et al., 2017; van Stormbroek and Buchanan, 2019).

Thirdly, CSOTs may have a lack of professional resources including understaffing, minimal access to continuing professional development (CPD) opportunities, and a deficit in networking opportunities (Naidoo et al., 2017; Holland et al., 2013; Ned et al., 2017; van Stormbroek and Buchanan, 2019).

Fourthly, there is a shortage of personal resources such as having the necessary coping skills to deal with the aforementioned challenges, feelings of cultural incompetence (Naidoo et al., 2017) and not having direct access to support networks such as friends and family (van Stormbroek and Buchanan, 2019; Ned et al., 2017).

The limited access to the aforementioned physical, professional and personal resources pose a challenge to providing services to clients, and feeling competent as a therapist (Naidoo et al., 2017; Holland et al., 2013; Ned et al., 2017; van Stormbroek and Buchanan, 2019). Furthermore, CSOTs often work with clients that do not speak the same language as they do and who often come from different cultural and religious backgrounds, which makes delivery of accessible and appropriate services a challenge (Naidoo et al., 2017; Van Stormbroek, 2014). Additionally, novice occupational therapists may also be required to travel to, and provide services to, a large number of service sites, which poses challenges such as forming new relationships with clients at each site (Naidoo et al., 2017). CSOTs often treat clients with complex health disorders and often struggle to manage emotionally stressful

interactions with clients and their families which may lead to work stress and burnout (Kautzky and Tollman, 2008; Schlenz et al., 1995).

Considering the stressors and contextual challenges which CSOTs face, acknowledgement that the full responsibility for 'coping' with occupational stress and burnout as a CSOT who delivers services to the neediest with very little resources and support, does not rest on the CSOT alone. As a profession, occupational therapists are sending the least-resourced professionals into areas of greatest healthcare need. Thus, the employer and the profession have a responsibility to this cadre of therapists as is part of the responsibility of the healthcare system as a whole. Understanding CSOTs experience of burnout is part of this responsibility.

2.6 BURNOUT

The word 'burnout' was created by Herbert Freudenberger, an American psychologist, in the 1970s to report the results of extreme stress on people that work in helping professions (such as health professionals). Individuals who were "burned out" lacked energy and could not cope with work demands (Institute for Quality and Efficiency in Health Care, 2012).

Burnout is found in various populations and in different occupational settings. It may be experienced by people working in areas that require extreme relational interactions in any field as well as persons engaging in intense activities which they are not being paid for. The foundation and characteristics of burnout remain similar throughout all the aforementioned factors (Maslach and Jackson, 1981b).

Burnout was added to the International Classification of Diseases, 11th Revision (ICD-11) in 2019. It does not fall under medical conditions but is referred to as an 'occupational phenomenon' which influences health conditions or seeking of health services for reasons other than being ill or in a poor state of health. The definition in the ICD 11 states that:

> *Burn-out is a syndrome conceptualised as resulting from chronic workplace stress that has not been successfully managed. It is characterised by three dimensions: feelings of energy depletion or exhaustion; increased mental*

> *distance from one's job, or feelings of negativism or cynicism related to one's job; and reduced professional efficacy. Burn-out refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life (International Classification of Diseases 11th Revision, 2020, 1st paragraph,)*.

Another definition for burnout, based on the symptoms typically experienced in burnout, outlines "a syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment that can occur among individuals who do 'people work' of some kind" (Maslach, 1982, pg 3). In occupations where individuals work with people, emotional exhaustion is the most common experience they describe when experiencing burnout. Emotional exhaustion is characterised by severe tiredness when an individuals' emotional resources are exhausted, and this then leads to feelings of being overwhelmed and not being able to contribute at work on a psychological level (Maslach, 1998). Depersonalisation, which also forms part of burnout, refers to feelings of being emotionally detached from a person being treated and depicts cynicism and decreased empathy (Maslach, 1998). Lastly, reduced personal accomplishment involves feelings of inadequacy and decreased accomplishment in an individual's profession. It may mean that the individual is not satisfied with achievements at the workplace. The individual may have a decreased work rate, decreased self-confidence and may struggle to cope in the work place (Maslach, 1998).

2.6.1 Burnout and health

High levels of burnout can affect neural brain circuits and has been associated with changes to the amygdala. Changes of the amygdala could be responsible for people who are experiencing high degrees of burnout to not have the ability to regulate their negative emotions effectively (Golkar et al., 2014; Savic, 2013). Additionally, burnout is linked to cortical thinning of the brain and declining fine motor function (Savic, 2013). A distinct and consistent link between somatic symptoms (such as sleep disturbances and headaches) and emotional exhaustion, which forms part of burnout, has been found in research (Kahill, 1988). People experiencing higher degrees of burnout have

been found to have increased occurrences of physical illness when compared to people experiencing lesser degrees of burnout (Honkonen et al., 2006).

2.6.2 The impact of burnout

The consequences of burnout on an employee's mood and social interaction influence their ability to maintain therapeutic relationships with their clients and colleagues at work. These employees, who are expected to provide a service, withdraw from clients and may even subject their clients to abuse (Kahill, 1988).

Research also suggests that burnout may have several detrimental effects on other individuals and on places of work if not addressed appropriately. These effects include high work turnover, absenteeism and decreased commitment of employees (Bothma and Roodt, 2012) which impacts on the quality of care delivered to the public. Therefore the prevention and mitigation of burnout are especially important factors in healthcare and social services (Shin et al., 2014). Increasing levels of burnout in healthcare specifically will cause damage to the healthcare system by harming the workforce as well as clients receiving services if not addressed (Reith, 2018).

2.6.3 Managing burnout

Various individual stress-reducing strategies have been found to improve quality of life. Stress symptoms such as anxiety, pain and headaches can be effectively managed by stress reducing techniques such as muscle relaxation, breathing exercises, mindfulness, meditation, guided imagery and bio feedback (Varvogli and Darviri, 2011). Research to explore if these stress-reducing techniques are effective in addressing burnout specifically is minimal. However, a study done with a group of teachers found that the incidence of burnout can be reduced by teaching proactive management approaches (Pietarinen et al., 2013). Additionally, mindfulness meditation has been found to reduce emotional exhaustion for participants in meditation programmes (Galantino et al., 2005).

At an organisational level, burnout has been managed by factors aimed at improving the work setting and environment, as well as by using stress management training.

When employees have the necessary resources at their disposal to cope with high work demands, the risk of burnout is diminished. Expansion of work variety, improved autonomy and improved favourable circumstances for growth are effective resources that employers can adopt (Crawford et al., 2010; Green et al., 2014).

There is limited research that assesses the interventions that prevent burnout. This is due to various factors including cost implications, and collaboration between the researcher and the workplace in which participants are being studied (Maslach et al., 2012). Lacking the ability to provide intervention which makes great changes within the workplace itself (such as changing policies, procedures and making adjustments to management) additionally limits the research into interventions which prevent burnout (Conway et al., 2015). With the aforementioned in mind, as evidence for the effects of burnout on individuals increases, so the research into the means and ways for dealing with and addressing burnout will increase (Maslach et al., 1996-2018).

2.7 RESILIENCE, COPING AND BURNOUT

Resilience is having the means to return to a normal physical and psychological state after encountering a difficult situation, maintaining balance after being exposed to stressors, and the ability to adapt to long-standing affliction (Wu et al., 2013; Southwick and Charney, 2012). As all humans are exposed to stressors and trauma in life, it is important to comprehend how resilience develops. Resilience is applicable to developing appropriate coping skills and reducing dysfunctional ways of handling stress (Wu et al., 2013).

A systematic review regarding resilience of PHC professionals, which was conducted by Robertson et al (2016), compared thirteen studies and found that the term resilience is multifarious, taking an individuals' characteristics as well as their personal, social and work environment into account. The study also found that there is a relationship between resilient individuals' growth and their personal accomplishment. In this study, a great correlation was found between resilience, high degrees of tenacity and autonomy, and low degrees of avoiding challenges. Resilience was also closely related to features assisting individuals working in highly stressful positions, such as healthcare professionals (Robertson et al., 2016).

Historically, research has established that there is a negative relationship between resilience and burnout, and resilience in individuals working as health professionals is identified as the avoidance of burnout in relation to stress in the individuals' place of employment (Fertleman and Carroll, 2013). But the meaning of professional resilience is far greater than simply not being subjected to burnout, and takes into account the beneficial adjustment and modification of behaviour, and formation of the individual's resources (Jackson et al., 2007). Coping with stress, which is an aspect of resilience, can therefore be explored as a way of dealing with burnout.

2.8 COPING RELATED TO STRESS AND ANXIETY

Stress happens when pressure placed on an individual is more than what the individual can deal with. An individual will find a set of circumstances stressful if the individual does not possess the ability to cope with the stressor or if they are unable to identify a dangerous situation (Spielberger, 1976). An individual's stress response is objective and unique to that individual and there are different determinants whether a situation is seen as being stressful. These include the individuals mood, the objective circumstances which the individual is in, former encounters with the objective circumstances the individual is in, memories which surface as a result of the current circumstances, and the individuals specific coping skills (Endler and Parker, 1999; Schneiderman et al., 2005).

Understanding anxiety is also a key to conceptualising stress. There are two types of anxiety. Trait anxiety is having a susceptibility to anxiety, and state anxiety is a temporary response. State anxiety is usually the type of anxiety that an individual reacts to. An individual will expand on coping styles and evolve forms of coping to deal with states of anxiety that are caused by various intimidating and trying situations. Stress and anxiety can be addressed by particular forms of coping on a psychological and physical level. However, an individual's previous encounters, specific circumstances and personality traits can all have an effect on the form of coping used for a particular circumstance (Endler and Parker, 1990).

2.9 COPING STYLES

Coping refers to behavioural and psychological approaches that assist to understand, endure and lessen stress and anxiety in certain circumstances (Endler and Parker, 1990). Coping styles are the specific ways in which individuals deal with stressful circumstances (Folkman and Lazarus, 1985) and are valuable when an individual is faced with mental and physical health challenges. The role that coping styles play is apparent when dealing with an upsetting or unfortunate personal experience (Endler and Parker, 1999). Each individual may have a certain coping style or way to respond when faced with stressful life circumstances (Miller et al., 1988). Three fundamental coping styles, which will be used for the purposes of this research, have been described in the literature and will now be explained.

Firstly, task-orientated coping is used by individuals who engage in activities to deal with stress situations. In task-orientated coping, individuals seek information to cope with a stressful situation which may help in situations which can be controlled (Endler and Parker, 1990; Cosway et al., 2000). An example of this in the occupational therapy setting could be researching ways in which to manage a practice as the sole occupational therapist in a department. The second coping style is emotion-orientated coping which is used by individuals who focus on emotional experiences. They usually perform activities which focus on lessening emotional tension and often preoccupy themselves with negative attitudes which might cause more stress (Endler and Parker, 1990; Cosway et al., 2000). An example of this in an occupational therapy setting could be ruminating on emotional experiences such as having conflict with a supervisor in the work setting. The third coping style is avoidance-orientated coping, which includes distraction and social diversion. This coping style is used by individuals who avoid contact with the source of a stressor by performing other activities which may help in situations which cannot be controlled (Endler and Parker, 1990; Cosway et al., 2000). Examples of distraction could be to distract oneself with social media and social diversion example could be spending time with loved ones.

The style of coping is important in assessing stressful situations, determining the psychological effort needed when dealing with stressors, and determining the short and long-term effect of stress (Nowakowska-Domagala et al., 2015). As mentioned previously, novice occupational therapists are prone to facing various stressors which

in time may lead to burnout (McCombie and Antanavage, 2017). The effective use of coping strategies may thus reduce the occurrence of burnout in these health professionals.

2.10 COPING STRATEGIES AND BURNOUT IN HEALTH PROFESSIONALS

Work and employment is important for survival and employment occupies a large part of an individuals' day (Angelica and Bignotto, 2015). The expectations placed on employees has evolved and increased with the development and competitive nature of the open labour market. Changes which occur in economics, politics and in social circumstances also contribute to employee health and wellbeing and may lead to occupational stress (Malagris and Fiorito, 2015). Furthermore, an efficient healthcare system is of great importance as it has a great effect on a country's economy (Van der Colff and Rothmann, 2009).

Healthcare professionals are at great risk of occupational stress (Wilkins, 2007) which may lead to emotional exhaustion, depersonalisation, or a lack of personal accomplishment (the three characteristics of burnout). It is therefore important to develop coping skills to manage the stress associated with burnout (da Costa and Pinto, 2017).

Healthcare professionals who experience burnout may show decreased productivity and work engagement which influences client satisfaction and work ability negatively. Clients being treated by health professionals with burnout may not get the best care which may increase the expense of therapy for the client as well as the organisation (Wilski et al., 2015; Nowakowska-Domagala et al., 2015; Gupta et al., 2012; Shin et al., 2014).

Evidence suggests a relationship between the experience of burnout and the coping strategies that individuals in healthcare employ. A meta-analysis done on 36 different studies, explored the relationship between coping strategies and burnout symptoms in a variety of professions. A link between coping and burnout being more distinct in the nursing profession was found (Shin et al., 2014). Another study conducted with physiotherapists in Poland (Nowakowska-Domagala et al., 2015) found that different coping styles correspond separately with the separate components of burnout. This

suggests that professionals working in the health sector are likely to have a link between coping strategies and experience of burnout.

2.11 COPING STRATEGIES AND BURNOUT IN SOUTH AFRICAN HEALTHCARE PROFESSIONALS

In their exposure to these contextual stressors, South African healthcare professionals are at risk of experiencing burnout or "a prolonged response to chronic emotional and interpersonal stressors on the job" (Maslach et al., 2001, pg 397). A quantitative descriptive study was conducted which reported burnout in South African health professionals who work at six private rehabilitation centres. A total of 49 therapists from different disciplines participated. This study reported that 38.77% of these healthcare professionals had a decreased sense of personal accomplishment, 20.40% reported depersonalisation and 57.14% reported suffering from emotional exhaustion, 20.40% of which was related to the nature of their work and their exposure to work-related stressors (Du Plessis et al., 2014). These work-related stressors include lack of staff and dealing with difficult and complex disorders that their patients present with. Additional work-related stressors in the public health system include dispirited and demoralised PHC system and staff, a drawn out and complicated health transformation process, and lack of appropriate guidance and management (Kautzky and Tollman, 2008; Maphumulo and Bhengu, 2019).

When faced with the aforementioned stressors, South African healthcare providers draw on their resources to be able to cope with burnout. Although there is some evidence of literature discussing the prevalence of burnout in healthcare professionals in South Africa, there is limited research on the cause of occupational burnout in South Africa and how to address this burnout (Rajan and Engelbrecht, 2018).

2.12 COPING STRATEGIES AND BURNOUT IN OCCUPATIONAL THERAPISTS

Occupational therapists are at risk for burnout as they display empathy and encourage participation in daily life of the individuals' they treat, by using themselves as therapeutic agents. The experience of burnout in occupational therapists can be

related to various factors such as expanding workloads and impractical requests from patients, families and employers. Occupational therapists who experience burnout at work usually report emotional exhaustion and cynicism (Gupta et al., 2012; Gutiérrez et al., 2004; Brown and Pashniak, 2018). Additionally, occupational therapists often have emotionally stressful interactions with clients and their significant others which can eventually contribute to burnout. They are vulnerable to burnout as they work in healthcare which requires empathy, commitment, selflessness and constant optimism (Schlenz et al., 1995). Additionally, occupational therapy practice requires an intensive client-centered approach and therefore occupational therapists are at a risk for burnout. This is especially evident when one considers that occupational therapists are required to find balance between having the emotional capacity for handling their personal lives and having contact with clients and meeting their expected work duties (Stamm, 2010). The result of burnout in occupational therapists specifically is to the detriment of the therapists' health and the therapists work environment, and this may have negative effects on the organisation as client care will be affected negatively (Escudero-Escudero et al., 2020).

However, occupational therapists in a recent study in Texas were found to have greater levels of job satisfaction and lower levels of burnout as compared to other healthcare workers such as nurses who mainly treat clients in the acute phases of care. This may be attributed to strict qualification criteria, and experience in different areas of practice with different populations making occupational therapists a workforce which is easy to adapt and employ. This lessens feelings of frustration and despair in the workplace which in turn may lessen burnout (Chen, 2020).

Therefore, it is important for occupational therapists, occupational therapy educators, and occupational therapy students to develop personal insight and in so doing, identifying their risk for burnout. Additionally they need to develop skills to prevent burnout and occupational stress (Yuen, 1990; Zeman and Harvison, 2017).

2.12.1 Coping strategies and burnout in occupational therapists in South Africa

A study which was published in 2018 found that there is a shortage of occupational therapists in the South African healthcare system with 0.9 occupational therapists for every 10 000 people residing in South Africa. Between 2002-2018 there was a growth

of approximately 7.1% occupational therapists annually, but most of these therapists are found in provinces with more urban areas (Ned et al., 2020). Therefore, there is a shortage of occupational therapists in South Africa and this profession could face greater work stressors in the health sector as a result of this.

Even though occupational therapists in South Africa provide services to populations with extreme needs, the literature looking at coping strategies and burnout in South African occupational therapists is limited. One study investigating the prevalence of burnout in therapists in physical rehabilitation units in the South African private sector, which included occupational therapists, found that a decreased means of dealing with stress influenced emotional exhaustion considerably. The study also found that the standard of physical rehabilitation is affected by the support the therapists receive and how satisfied they are in their positions at work (Du Plessis et al., 2014). At the time of compilation of this literature review, no literature could be found that examined coping strategies and burnout in occupational therapists in the South African public healthcare system.

2.13.2 Coping strategies and burnout in South African CSOTs

A recent North American study found that novice occupational therapists graduating from the year 2000 onwards are prone to experience stress leading to burnout in their initial employment (McCombie and Antanavage, 2017). Therefore, it is important to explore the relationship between coping strategies and burnout in the novice therapist population. No information which explores coping strategies and burnout in South African CSOTs specifically could be found in the literature. However, due to CSOTs being novice practitioners in the South African healthcare system, similar patterns of burnout may be found as compared to newly graduated therapists in other countries. However, the experienced burnout of CSOTs may be intensified as they face various specific contextual challenges in the South African healthcare system. Contrarily, CSOTs' experienced burnout may be less than newly graduated therapists in other countries as they may have developed resilience as a result of maturing in the South African context.

2.15 CONCLUSION

CS for graduating healthcare workers was implemented to address the unequal healthcare distribution post-apartheid, and to provide healthcare services to underserved areas in South Africa (Reid, 2001). Preparation of these newly qualified occupational therapists for practice in PHC is not always sufficient to help deal with various stressors which they face in their jobs (Holland et al., 2013). Additionally, the Department of Health does not provide formal supervision and support for these newly qualified therapists and some of them experience feelings of being 'alone' and 'accountable' for managing whole client caseloads and running of departments (van Stormbroek and Buchanan, 2016) whilst practicing in a healthcare system that has to face increasing levels of diminished resources, questionable management, and governmental insufficiencies (Maphumulo and Bhengu, 2019).

Studies done with the CSOT population have reported that these novice therapists report facing contextual challenges in practice. These challenges may include the placement being the first time the CSOT has experienced healthcare in rural areas (van Stormbroek and Buchanan, 2019) and could be accompanied by contextual challenges such as having limited physical and human resources (Holland et al., 2013), not being able to understand the context which their clients live in, and not being able to communicate with clients (Van Stormbroek, 2014; Naidoo et al., 2017). Working in the public sector (where there is a shortage of occupational therapists with 0.9 occupational therapists for every 10 000 people residing in South Africa (Ned et al., 2020) and having limited human resources (such as a lack of appropriate mentorship and supervision) also places stress on CSOTs, and some of these therapists who took part in previous research studies have mentioned feelings of being 'overwhelmed' and 'anxious' (van Stormbroek and Buchanan, 2016).

Exposure to contextual challenges over a long period of time with limited resources to draw from may make CSOTs vulnerable to experiencing work stress. Chronic work stress which is not addressed effectively, coupled with defective ways of coping with this stress, could ultimately lead to the phenomena of burnout (International Classification of Diseases 11th Revision, 2020). Findings in the literature suggest that burnout has a negative effect on brain anatomy (Savic, 2013), physical health (Honkonen et al., 2006), mood, work performance (Bothma and Roodt, 2012) and

interpersonal relationships with colleagues and clients at work (Kahill, 1988). Therefore, the mitigation of perceived burnout is of utmost importance in the CSOT population.

CSOTs are the least resourced cadre of occupational therapists in terms of their level of experience and are often sent to remote and rural areas to help the South Africans who are the most disadvantaged. They provide a service to these clients in stressful work circumstances, with minimal human and non-human resources, and often with limited constructive ways of coping. Therefore, it is imperative that stakeholders (CSOTs, CSOTs' employers' and the occupational therapy profession as a whole) take responsibility to understand CSOTs' experiences of burnout and coping in relation to their work. This may ensure that defective ways of coping for CSOT's in South African PHC are addressed, and that their perceived burnout is lessened. Additionally, this could result in an insightful, resourceful and resilient CSOT workforce who are willing to stay in PHC and provide occupational therapy services to South Africans who need them most.

CSOT preparation, contextual challenges they face in practice, and experiences as a result of facing these challenges is recorded in the literature. However, specific studies which research the effect of these challenges and experiences on stress experienced at work, burnout and how to cope with this, is limited. Additionally, at the time of completion of this research report, studies describing the experience of burnout in occupational therapists in South African public service could not be found. Studies describing how CSOTs cope with occupational stress and burnout could also not be found in the literature. This research project is thus positioned to fill these gaps by describing burnout in CSOTs and investigating the relationship between burnout and the coping strategies CSOTs use.

CHAPTER 3: METHODOLOGY

3.1 INTRODUCTION

This chapter describes how the study was carried out. It includes the general design of the study, how the study population was chosen and how the sample size was calculated. Exclusion and inclusion criteria are outlined, and instruments used in the study are discussed. The study procedure is outlined followed by a description of the method of data collection, data management and analysis. Finally, the ethical considerations of the study are explained.

3.2 STUDY DESIGN

A quantitative, descriptive, cross-sectional survey design was employed to answer the research question. This allowed for the reporting of general trends or patterns in the study sample (Bouma et al., 2009). The study is descriptive as it describes burnout and coping amongst CSOTs and the possible relationship between burnout and forms of coping (Babbie, 1990). This relationship was investigated at one point in time (Thomas, 2009) due to the brevity of the CS period. A survey design, known to be versatile and flexible (Cresswell and Cresswell, 2018) was employed to allow a variety of questions to be asked to meet the research objectives.

3.3 STUDY POPULATION AND SAMPLE

The 2019 CSOTs was the population under study. According to the HPCSA registration statistics, the population was 95 with 87 females and 8 males (Health Proffesions Council of South Africa, 2019). However, the population was believed to consist of 235 therapists according to Prof de Witt, President of the Occupational Therapy Association of South African (De Witt, 2019).

Non-probability sampling was used in the study as the details of each member of the population were not available, which would have enabled a random sampling approach (Glen, 2015). All 2019 CSOTs with access to the survey were invited to

participate and this invitation was distributed via professional organisations such as the Occupational Therapy Association of South Africa (OTASA) and Rural Rehabilitation South Africa (RuReSA) and social media platforms (Facebook, Whatsapp groups). Participants were requested to forward the invitation to other CSOTs, thus also employing a measure of snowball sampling (Glen, 2014). The possibility of undercoverage (Bhandari, 2020) was anticipated but the sampling approach was feasible for the limitations linked to a minor dissertation.

3.3.1 Sample Size

With a population of 235 with a 5% margin of error, 95% confidence interval, and 50% response distribution, a sample size of 147 was required (Raosoft, 2004). This constituted a 58% response rate.

3.3.2 Inclusion and exclusion criteria

Table 3.1 shows the inclusion and exclusion criteria that were employed.

Table 3.1 - Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
CSOTs commencing their CS year in 2019.	Internationally trained occupational therapists who are on the CS rotation to achieve their HPCSA registration. These occupational therapists were not trained at South African universities and may have gained work experience already.

3.4 INSTRUMENTATION

The choice of instruments used to collect data were guided by a review of the literature. The survey questionnaire was self-administered and included three sections: 1) Socio-

demographic profile (Appendix A2), 2) Maslach Burnout Inventory-Human Services Survey (Appendix B), 3) Coping Inventory for Stressful Situations (Appendix C).

3.4.1 Socio-demographic profile

The demographic questionnaire included personal demographic information, and questions regarding CSOTs' education (education demographics) and work experience (work demographics). For personal demographic information, the survey included questions around age, gender, marital status and family support structure. For education demographic information questions included the university from which the participant graduated and the year of graduation. Work demographic information included questions pertaining to employment such as place of work, level of supervision, resources, workload, and rural/urban place of work. The motive for this section was to gather information on how the participants experienced their practice in their respective contexts.

The practice profile components of the questionnaire gathered data around number of patients seen, number of service sites, information regarding staffing and supervision received. Information regarding work experience included aspects such as communication challenges with clients, understanding of clients' values, beliefs, attitudes and cultures, and satisfaction with one's job as a CSOT. Comment sections and scales were used to include richness of data and to allow participants to explain their answers. All these items were included due to the literature suggesting that various factors pose as stressors to novice therapists (Naidoo et al., 2017; Morley, 2009; Van Stormbroek, 2014) and exposure to these kinds of stressors presented over a long time may lead to burnout in initial employment (McCombie and Antanavage, 2017). The literature that guided inclusion of these items is contained in Appendix A1.

3.4.2 Maslach Burnout Inventory-Human Services Survey (MBI-HSS)

The initial publication of the MBI in 1981 occurred when there was little research and theory, but a great interest in the topic of burnout. As a result of this, the founders, C. Maslach and S.E Jackson saw the need to develop a standardized measuring tool for burnout which has been distributed to thousands of individuals from various countries

in different places of work (Maslach et al., 1996-2018). The MBI-HSS, which is the first version of the MBI is most used. It aims to determine how individuals working in helping professions experience burnout in relation to their profession and people who they come into contact with at work (Maslach and Jackson, 1981a). It consists of 22 items created to measure the three components of burnout (emotional exhaustion; depersonalisation; and personal accomplishment). A seven-point frequency scale is used for scoring each component ranging from 0- 'never experienced' to 6- 'experience such feelings every day' (Maslach and Jackson, 1981a). The scales for emotional exhaustion, depersonalisation and personal accomplishment are explained in depth in the Results, Chapter 4.

This MBI-HSS was designed for use with people working in the human services and healthcare. Scores indicating burnout are high for emotional exhaustion and depersonalisation and low for personal accomplishment.

The MBI-HSS does not overtly quantify what constitutes high and low scores for the three components of burnout. Low, moderate and high percentages for the three dimensions of burnout in this study were thus established by a review of the literature. Various cut offs for high, moderate and low levels for the three dimensions of burnout exist for frontline medical personnel such as doctors and nurses (Doulougeri et al., 2016) but the cut-offs chosen for this study were specifically taken from a study done with occupational and physiotherapists (Balogun et al., 2002) because allied health professionals are a different workforce who may face different work stressors to frontline medical staff. This ensured that the experiences of burnout of the participants would not be under-captured by making use of conservative cut-offs.

3.4.2.1 Reliability of the MBI-HSS

Internal reliability was determined by using data from early samples by using Cronbach's coefficient alpha (Tavakol and Dennick, 2011), which showed approximate values for emotional exhaustion (.90), depersonalisation (.79) and personal accomplishment (.71) with standard measurement error approximations for emotional exhaustion (3.80), depersonalisation (3.73) and personal accomplishment (3.73). Internal consistency for reliability coefficients for each component of burnout was shown over various samples (Maslach et al., 1996-2018).

3.4.2.2 Validity of the MBI-HSS

Scores for the different scales of burnout (emotional exhaustion, depersonalisation and personal accomplishment) have been correlated with impressions of others. A study conducted on 140 mental healthcare employees who were requested to report on designated co-workers' behaviours anonymously, and who filled out MBI-HSS as well, showed that people who were rated as being fatigued or emotionally drained scored higher on the emotional exhaustion and depersonalisation scales. Additionally, co-workers whose clients complained about them scored higher for depersonalisation. There was no significance in reporting of personal accomplishment (Maslach et al., 1996-2018).

3.4.3 Coping Inventory for Stressful Situations (CISS)

The CISS questionnaire was developed by N.S. Endler and J.D.A. Parker to measure different forms of coping (Endler and Parker, 1994). It was developed from different conceptual foundations and has been used in various research and application settings. The self-report questionnaire consists of 48 statements which describe the participants' coping behaviours in stressful situations and consists of the following scales: task-oriented coping, emotion-oriented coping, and avoidance-oriented coping (compromising distraction and social diversion). These scales are explained in the results chapter. The scales allow for accuracy when predicting a participants' coping, and the associations between personality traits and coping. The CISS has been standardised for adolescents, psychiatric patients and adults (Endler and Parker, 1999).

A five-point scale (ranging from 'not at all' to 'very much') is used to record the amount of times certain coping behaviour occurs (Endler and Parker, 2007). The CISS calculates scores in the three coping styles: task-oriented coping, consisting of 16 items; emotion-orientated coping, consisting of 16 items; and avoidance-orientated coping, consisting of 16 items. The two subscales of avoidance-oriented coping are distraction, which consists of eight items and social diversion which consists of five items. Participants were requested to record the frequency engaged in various coping activities when a stressful event occurs. The CISS takes approximately 10 minutes to complete. Totals for each coping style ranges between 16- 80 with lower scores

indicating less coping (Endler and Parker, 1999). Interpretation of results are explained in Chapter 4, Results.

3.4.3.1 Reliability of the CISS

Internal reliability was tested using Coefficient Alpha (Tavakol and Dennick, 2011) to see if items measure what they are intended to measure. For adults, the Coefficient Alpha reliability for the CISS Adult version for males was .90 for task-oriented coping, .90 for emotion-oriented coping, .81 for avoidance-oriented with .72 for distraction and .74 for social diversion subscales. The Coefficient Alpha reliability for the CISS Adult version for females was .87 for task-oriented coping, .89 for emotion-oriented coping, .82 for avoidance-oriented with .72 for distraction and .78 for social diversion subscales (Endler and Parker, 1999).

3.4.3.2 Validity of the CISS

A separate factor analysis (Cattell, 1978) (for the tree factors of task-oriented coping, emotion-oriented coping, and avoidance-oriented coping) for males and females of the CISS adult version was performed in a sample of college students and adults. This gave identical results. For the college students there were 119 males and 275 females and the adults there were 154 males and 130 females. The factor structures for the college student and adult group were very similar when using congruence coefficients to compare them (0.97) (Cattell, 1978) .

Construct validity has been shown in various studies when exploring the relationship between using the CISS and other measures, such as depression, social desirability and psychopathology (Endler and Parker, 1999).

3.5 PROCEDURE

The following sections will explain the recruitment process, how data was collected and how the data was managed.

3.5.1 Recruitment

Electronic questionnaires provided a base for accessing the maximum number of participants needed for the study and was a convenient way to access as many participants as possible without having to travel to the participants' place of work (Cresswell and Cresswell, 2018). Potential participants were invited to participate via social media platforms, email and by word of mouth. The researcher was notified of when a questionnaire was completed by an email sent by Research Electronic Data Capture (Patridge and Bardyn, 2018). Reminders to complete uncompleted questionnaires could only be sent via Research Electronic Data Capture (REDCap) if the research participants provided their email addresses.

As mentioned in section 3.3, non-probability sampling (Glen, 2015) and snowball sampling were used during the study (Glen, 2014). All South African CSOTs commencing their year of service in 2019 were invited to participate in the study via social media platforms such as the 2019 CSOTs' Facebook page, the ST's, PT's, OT's, DT's and Audio's page, the Occupational Therapists (RSA) page, and occupational therapy Whatsapp groups. Additionally, invitations were emailed to the Rural Health Advocacy group, RuReSA, the Western Cape occupational therapy forum, and OTASA. Participants were requested to forward the invitation to other CSOTs by forwarding the information sheet and link to the survey questionnaire.

3.5.2 Permissions

Data collection could only occur once ethical clearance was granted and licenses/permissions for the administrations of the MBI-HSS (Appendix D) and CISS Adult version (Appendix E) were purchased. Ethical clearance was granted by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand on 03 December 2018 with an ethics clearance number of M180719 (Appendix F).

The MBI manual 4th edition was purchased on 29 March 2019 to familiarise the researcher with the MBI. On 13 May 2019 approval was given by MindGarden.com, the suppliers of the MBI, for the researcher to administer the MBI-HSS to 50 research participants after purchasing the license for 50 MBI-HSS questionnaires. After data collection occurred, an additional 25 licenses were purchased from MindGarden.com

on 24 February 2020 to pay for the balance of the responses received from research participants (total 75 participants).

The CISS Manual was purchased and received on 17 April 2019 from Multi Health Systems Inc. (MHS) for the researcher to familiarise herself with the CISS. On 08 April 2019 approval was given by MHS, the suppliers of the CISS, for the researcher to administer the CISS to 50 research participants after purchasing the license for 50 CISS Adult questionnaires. After data collection occurred, an additional 25 licenses were purchased from MHS on 17 March 2020 to pay for the balance of the responses received from research participants (total 75 participants).

The demographic questionnaire, MBI-HSS and CISS together with a cover letter including all the information pertaining to the study were combined into a single document administered to participants through using REDCap software which allowed for provision of a secure environment for collection and storage of research information and for the capture and evaluation of the data (Patridge and Bardyn, 2018).

3.5.3 Data Collection

Data collection commenced on 01 July 2019 and ended on 28 January 2020. This gave a chance for all CSOTs who commenced their CS year in 2019 to participate in the study and it gave enough time for these therapists to have experienced clinical work in the PHC system.

3.5.4 Data Management

Study data were collected and managed using REDCap as an electronic data capture tool hosted by the University of the Witwatersrand (Harris et al., 2009 Apr). REDCap is a secure, web-based application designed to support data capture for research studies, providing: 1) an intuitive interface for validated data entry; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for importing data from external sources. REDCap stored the data in an anonymised way for data analysis.

When data collection ceased, data was exported from REDCap onto a Microsoft Excel spread sheet on the researcher's personal computer. Thereafter, data was cleaned and given numerical values to correspond with the research questionnaire in preparation for data analysis. Due to responses being anonymous, potential duplicate responses could not be eliminated from the study in order to avoid cross posting.

3.6 DATA ANALYSIS

Data were analysed using STATISTICA version 13.5 (TIBCO Software Inc., November 2018) with the research aims guiding the data analyses. Microsoft Word was used to put relevant results in table format where needed. Since data on the MBI-HSS was ordinal data and not normally distributed, non-parametric statistics were presented in the analysis of the results. Parametric means and standard deviations are also presented for the MBI-HSS. This allowed for congruency of analysis in relation to the CISS T scores which was normally distributed interval data, so parametric statistics were used for analysis of these results.

Table 3.2 below summarises the research objectives, variables used, type of data and statistical test used to analyse each variable.

Table 3. 2 - Research objectives, variables, type of data and statistical tests used

Objective	Variables	Type of data	Statistical test
Socio-demographic information	Dependent and independent variables	Nominal, ordinal and interval data	Frequencies and percentages
MBI-HSS used to establish the experience of burnout of the participants	Dependent variables	Ordinal data, cut-offs related to means	Frequencies and percentages Medians and quartile ranges as well as means and standard deviations
CISS Adult used to measure the forms of coping of research participants	Dependent variables	Ordinal data, T scores and percentiles interval data	Frequencies and percentages Medians and quartile ranges as well as means and standard deviations
The correlation between experience of burnout and coping skills used	More than one dependent variable	Ordinal data for MBI-HSS and interval data for CISS T scores	Nonparametric Spearman's-Rank order correlations
The effect of demographic variables on the experience of burnout and coping skills	Dependent and independent variables (two or more variables)	Nominal, ordinal and interval data	Nonparametric Kruskal-Wallis (also known as ANOVA by Ranks) test

The guidelines used for interpreting the Spearman's-Rank order correlations is found in Table 3.3.

Table 3. 3 - Guideline for interpretation of correlations (Hinkle et al., 2003)

Rule of Thumb for Interpreting the Size of a Correlation Coefficient

Size of Correlation	Interpretation
.90 to 1.00 (−.90 to −1.00)	Very high positive (negative) correlation
.70 to .90 (−.70 to −.90)	High positive (negative) correlation
.50 to .70 (−.50 to −.70)	Moderate positive (negative) correlation
.30 to .50 (−.30 to −.50)	Low positive (negative) correlation
.00 to .30 (.00 to −.30)	negligible correlation

Inductive quantitative content analysis was used to analyse ‘comments’ that participants added to justify or explain their answers in the online questionnaire. Data were coded and codes sorted into categories. The frequency of responses in each code and category were reported (Elo and Kyngäs, 2008).

3.7 ETHICAL CONSIDERATIONS

Ethical clearance was obtained from the University of the Witwatersrand Human Research Ethics Committee (ethics clearance number: M180719) before data collection commenced. Permission to use the CISS and MBI for research purposes was granted with a manual purchase for each measure and a license purchase for each administration of the measure. Social media administrators were asked for permission before the invitation for participants to participate in the study was posted on social media.

Additional ethical considerations for the research report were guided using the Declaration of Helsinki’s Ethical Principles for Medical Research (World Medical Association, 2020) and are discussed below:

3.7.1 Confidentiality and Anonymity

Participants were not required to provide their names and the use of REDCap (Patridge and Bardyn, 2018) ensured that responses could not be traced. Information collected was transferred to an Excel spreadsheet on the researcher's password protected personal computer to prepare for data analysis. This information was solely used for the study and only the researcher, research supervisor and statistician had access to the information collected. As mentioned in the HPCSA guidelines, any identifying data will be kept in a password protected location and will be destroyed after a period of two years after publication or in 6 years if no publication has taken place (Health Proffesions Council of South Africa, September 2016).

In the demographic questionnaire, the name of the participants' university was requested to determine if there were responses from each university and if there was an effect that this demographic variable had on perceived burnout and coping skills used by the participants. Thereafter the names of universities were removed and allocated numbers from 1 to 8 to maintain confidentiality of the universities when results were presented.

3.7.2 Informed consent

Potential participants were given the opportunity to make an informed, independent decision if they would like to take part in the study or not through the provision of an information letter (Appendix G). Completion of the survey questionnaire implied consent. Participants were informed that once they submitted the questionnaire they could no longer withdraw from the study as it would not be possible to disaggregate their anonymous response.

3.7.3 Beneficence and non-maleficence

The research provided an opportunity for participants to share their experiences and feelings related to their CS year and for this information to be shared with relevant stakeholders. Participants were thanked in advance for partaking in the study and for their contribution to the research in the information letter preceding the questionnaire.

Additionally, participants were given the opportunity to request the results of the research study once the research had ended.

The participants may be considered as part of a vulnerable population as they were in their first year of practicing as CSOTs. The researcher did not take this lightly and strived to not use her position as a senior occupational therapist or researcher to pressure participation in the study.

3.7.4 Justice

All CSOTs with access to social media, a smart phone or a computer were given the opportunity to participate in the research which allowed for the maximum amount of responses to be given and equal participation. This allowed recording of all experiences and different contexts in the research.

Taking the responsibility placed on the participants in their first year of practice into account, the research question aimed at unpacking a topic that looks at wellness in the workplace, coping with adversity, and preparedness and support for this population. Additionally, the research question is embedded in the purpose of supporting the provision of quality healthcare for all South Africans and aimed at providing South Africans with healthcare which is effective and supporting their rights.

3.7.5 Possible risk or benefit from the research

Potential participants were informed that there was no direct benefit to taking part in the study. Although there were no direct risks to participation, the participants were given information on steps to follow in the information letter should completion of the questionnaire have triggered any emotional distress. The researcher's contact details were made available, and participants were given contact details of the South African Depression and Anxiety Group (SADAG) to contact SADAG directly. The researcher gained permission from SADAG to use their services. These details were provided to participants in the information sheet preceding the questionnaire

Participants were also informed that participation in the research gave opportunity for contributing to knowledge that could help future CSOTs with improvement of services and wellness in the workplace.

3.7.6 Veracity

The purpose of the research was clearly conveyed in the information letter preceding the questionnaire to establish authenticity (Cresswell and Cresswell, 2018). The researcher was committed to avoid complicating or concealing findings so as not to skew research findings and strived to stay accountable to her supervisor during the research process (Cresswell and Cresswell, 2018). Additionally, the findings of the research study may be presented for a publication in an appropriate journal to expose the research to peer-review and to permit readers to evaluate whether the research findings are applicable, valid and generalisable.

3.8 CONCLUSION

A cross-sectional survey design was used during the study. An invitation to participate in an online questionnaire was sent to all CSOTs commencing CS in 2019 (n=235) by using non-probability sampling. The questionnaire was administered via REDCap. Data were analysed using Statistica 13.5. Frequencies and percentages were obtained for dependent and independent variables. Correlations were tested by using Spearman's Rank order correlations. The effect of demographic variables on burnout and coping were tested using Kruskal-Wallis tests.

CHAPTER 4: RESULTS

4.1 INTRODUCTION

The research participants and distribution of the survey questionnaire were described in the methodology chapter. A total of 105 responses were received (44.68% return rate). Of the 105 responses, 10 responses were discarded as they were not completed at all. A further 20 responses were deleted as the MBI and CISS parts of the questionnaires were not filled in. This resulted in a total number of 75 questionnaires that were analysed for the study. This represented 31.92% of the population. The results are presented following the order of the original questionnaire (Appendix A2) and research objectives.

4.2 DEMOGRAPHIC INFORMATION

4.2.1 Personal demographic information

The majority of participants (97.33%; n=73) were female with only two (2.67%) male participants. Table 4.1 shows that more than half of the participants (52%; n=39) were 23 years old. About two thirds of participants (65.33%; n=49) were single at the time of assessment with 21.33% (n=16) being in long-term relationships, and 13.33% (n=10) were married. The majority (96%; n=72) of participants did not have children. Around half of the participants reported having a strong support structure (49.33%; n=37), and 36% (n=27) of participants reported an adequate social support structure. The main source of support reported by participants were significant others (37.33%; n=28) and nuclear family (33.33%; n=25).

Table 4. 1 - Personal Demographic Information (n=75)

Age	**%**	**No.**
22	17,33	13
23	52,00	39
24	12,00	9
25	6,66	5
26	4,00	3
27	4,00	3
29	2,67	2
30	1,33	1
Total	**100**	**75**
Marital status	**%**	**No.**
Single	65,33	49
Married	13,33	10
Long term partnership	21,33	16
Total	**100**	**75**
Social Support Structure	**%**	**No.**
Absent	2,67	2
Minimal	12	9
Adequate	36	27
Strong	49,33	37
Total	**100**	**75**
Main Source of Support	**%**	**No.**
Significant other	37,33	28
Nuclear family	33,33	25
Friends	10,67	8
Colleagues	1,33	1
Multiple	16	12
Other	1,33	1
Total	**100**	**75**

4.2.2 Education demographics

Table 4.2 shows that almost a third of the participants (29.33%; n=22) graduated from University 4. There was one participant from University 8 who participated in the study, but this questionnaire was incomplete and therefore excluded from the study. The majority (93.33 %; n=70) of the participants graduated in 2018.

Table 4. 2 - Educational Demographic Information (n=75)

University	**%**	**No.**
1	12	9
2	21,33	16
3	16	12
4	29,33	22
5	2,67	2
6	14,67	11
7	4	3
8	0	0
Total	**100**	**75**
Graduation year	**%**	**No.**
2017	1,33	1
2018	93,33	70
2019	5,33	4
Other	0	0
Total	**100**	**75**

4.2.3 Work demographics

4.2.3.1 Location

summarises the work demographic information of the research participants. About a third of the participants (30.67%; n=23) worked in Gauteng Province at the time of data collection with 41.33% (n=31) of participants working in rural areas. Almost half of the participants (48%; n=36) received a rural allowance during their CS year.

Table 4. 3 - Location of work (n=75)

Province	**%**	**No.**
KwaZulu-Natal	12	9
Gauteng	30,67	23
Western Cape	5,33	4
Free State	17,33	13
Mpumalanga	12	9
Northern Cape	2,67	2
Eastern Cape	16	12
Northwest	2,67	2
Limpopo	1,33	1
Total	**100**	**75**
Placement area	**%**	**No.**
Rural	41,33	31
Deep rural	5,33	4
Urban	37,33	28
Peri-urban	16	12
Total	**100**	**75**

4.2.3.2 Level of service, service sites and patient load

A third of the participants (33.33%; n=25) provided services at multiple levels of care and 25.33% (n=19) of them provided services at district level. Less than half (45.33%; n=34) of the participants worked at a single service site with 49.33% (n=37) of participants treating from 51-100 patients on a monthly basis at the time of data collection (Table 4.4).

4.2.3.3 Occupational therapy staff and supervision received

As seen in Table 4.5 on page 48, one fifth (20%; n=15) of participants had no other occupational therapist in their department with 56% (n=42) having between 1 to 5 other occupational therapists at work. A small proportion (6.67%; n=5) of participants reported having no other team members, meaning they were the only rehabilitation health professional at their place of work.

The majority of participants (77.33%; n=58) reported that they had a supervisor, leaving 22.67% (n=17) of participants who did not have a supervisor. Of the participants who reported that they had a supervisor, 69.33% (n=52) reported having an occupational therapist as a supervisor. Additionally, 37.33% (n=28) of the participants who had a supervisor were satisfied with the supervision they received and 40% (n=30) were not satisfied with the supervision they received.

Table 4. 4 - Location of work (n=75)

Level of Service Provision	**%**	**No.**
Primary	14,67	11
District hospital services	25,33	19
Secondary/Regional	12	9
Tertiary	8	6
Central	1,33	1
Specialized	5,33	4
Multiple	33,33	25
Total	**100**	**75**
Number of service sites	**%**	**No.**
Single	45,33	34
2-5 sites	25,33	19
6-10 sites	20	15
More than 10 sites	9,33	7
Total	**100**	**75**
Number of patients treated monthly	**%**	**No.**
0-50 patients	28	21
51-100 patients	49,33	37
101-150 patients	13,33	10
151-200 patients	3,99	3
201-299 patients	2,66	2
300-400 patients	2,66	2
Total	**99,97**	**75**

Table 4. 5 - Occupational therapy staff and supervision received (n=75)

Total number of occupational therapists excluding participant (CSOT)	**%**	**No.**
0	20	15
1-5	56	42
6-10	13,33	10
11-15	5,33	5
16-25	1,33	1
26-30	3,99	3
Total	**99,98**	**75**
Supervisor	**%**	**No.**
Yes	77,33	58
No	22,67	17
Total	**100**	**75**
Discipline supervisor belongs to	**%**	**No.**
Occupational therapist	69,33	52
Physiotherapist	5,33	4
Speech therapist	2,67	2
Missing	22,67	17
Total	**100**	**75**
Satisfaction with supervision	**%**	**No.**
Yes	37,33	28
No	40	30
Missing	22,67	17
Total	**100**	**75**

Inductive quantitative content analysis was used to analyse participants' comments on the satisfaction and dissatisfaction with the supervision they received.

As seen in Table 4.6, of the participants that were satisfied with their supervision (37.33%, n=28), 74% (n=20) reported that they were satisfied with their supervision due to their *supervisors' skill and knowledge*. Participants explained:

> *They are knowledgeable and provide me with the adequate guidance that I need. Participant 2*
>
> *I receive good mentorship and guidance from my supervisor. Participant 64*

Fourteen participants (51.85%) were satisfied with their supervision due to the *positive characteristics shown by their supervisor* with a number of comments expressing a similar sentiment to this participant who explained that her supervisor is:

> *Always willing to help. Participant 11*

Thirteen participants (48.25%) were satisfied with their supervision as a result of the *frequency of supervision* with outstanding comments like,

> *My supervisor is always available. Participant 16*

Five (18.51%) participants justified their satisfaction with supervision according to the *number and type of supervisors* they had. One participant explained the presence of an,

> *…adequate ratio of supervisors to com Serves. Participant 11*

Table 4. 6 - Satisfied with supervision received (n=28)

Categories	Codes	No. (%)
Skilled and knowledgeable supervisor	• Supervisor is knowledgeable (n=5) • Supervisor facilitates growth and development (n=13) • Adequate delegation and allocation of duties (n=3) • Provides effective supervision (n=4)	20 (74)
Positive characteristics of supervisor	• Patient (n=3) • Willing to help, easily approachable (n=8) • Supportive, caring, understanding, provides encouragement (n=10)	14 (51.85)
Frequency of supervision	• Monthly meetings, supervision at every rotation (n=3) • Regular check ins (n=5) • Always available when needed (n=6)	13 (48.15)
Number and type of supervisors	• Enough supervisors (n=1) • Sufficient supervision from varied sources (n=4)	5 (18.51)

Table 4.7 below shows responses given by participants who were not satisfied with their supervision. Of the participants who were not satisfied with their supervision (40%, n=30), 56.67% (n=17) reported that they were dissatisfied as the supervision was *not optimal or of a good standard*. One participant explained,

No one really checks on me/watches me and guides me. Participant 53

Many participants who were dissatisfied with their supervision linked this to *unethical practice and poor interpersonal relations* with their supervisor (50%; n=15). One participant stated,

The supervising therapists do not hold themselves to the standard that they expect the comm serve to adhere to. Participant 51

Another therapist reiterated this experience explaining that her supervisor,

> *…develops own rules but doesn't obey them Participant 22*

A number of participants were not satisfied with their supervision because their supervisor was *not an occupational therapist* or had *limited knowledge in training CSOTs* (30%; n=9). Six (20%) participants were not satisfied with their supervision due to *organisational problems* and three (10%) participants did not believe that their supervisor had *sufficient skills*.

Table 4. 7 - Dissatisfaction with supervision received (n=30)

Categories	Codes	No. (%)
Supervision received is not optimal or of a good standard	• Limited assistance and feedback (n=10) • Poor facilitation of learning (n=10) • Limited time available for supervision (n=3) • Provides no communication or orientation (n=4)	17 (56.67)
Unethical practice and poor interpersonal relations with supervisor	• Poor role model (n=15) • Unethical treatment of patients and colleagues (n=6) • Inappropriate expectations (n=6) • Undermining CSOTs abilities and disregard for their opinions (n=2) • Miscommunicates and misunderstands (n=2)	15 (50)
Supervisor is not an occupational therapist or has limited knowledge in training CSOTs	• Limited or outdated knowledge (n=6) • Provides limited supervision (n=2) • Limited experience in what participant is interested in (n=4) • No clear protocols provided for therapy (n=2)	9 (30)
Organisational problems	• Understaffing of institution (n=1) • Limited contact with supervisor (n=3) • Supervisor appointed halfway through year (n=1) • Outdated work area (n=1)	6 (20)
Supervisor not possessing sufficient skill set	• Poor administrative skills (n=2) • Poor leadership skills (n=3) • No clear standards set (n=1)	3 (10)

4.2.3.4 Opportunities for learning and resources

Around half (56%; n=42) of the participants were able to observe another occupational therapist practice. Many missing responses (44%, n=33) were recorded for the question around colleagues' experience, although 22.67% (n=17) of the participants

reported their colleagues having 4-6 years' experience in the field. Many participants (60%; n=54) felt that they did not have enough resources available to provide comprehensive occupational therapy services.

Table 4. 8 - Opportunities for learning and resources (n=75)

Able to observe another occupational therapist practice	**%**	**No.**
Yes	56	42
No	44	33
Total	**100**	**75**
Occupational therapy colleagues' years of experience	**%**	**No.**
0-3 years	16	12
4-6 years	22,67	17
7-10 years	13,33	10
More than 10 years	4	3
Missing	44	33
Total	**100**	**75**
Sufficient resources to provide occupational therapy services	**%**	**No.**
Yes	40	30
No	60	45
Total	**100**	**75**

Inductive quantitative content analysis was used to analyse participants' responses to having enough resources available to provide comprehensive occupational therapy services (Table 4.9).

Table 4. 9 - Resources are not sufficient (n=45)

Categories	Codes	No (%)
Policies, procedures, processes, which affect human and non-human resources	• Problematic procurement procedure (n=18) • Poor financial management and budgeting (n=10) • Rapid discharge due to bed pressure, high caseloads and waiting lists (n=3) • Understaffing and frozen posts (n=4) • Minimal assistance, supervision and support (n=6) • Other professions not understanding occupational therapy role and resources needed (n=4) • Setting up of a whole occupational therapy department independently (n=4) • No specialized services available (n=4) • Department under construction (n=1)	33 (73.33)
Equipment and non-consumable stock	• Old, broken or inappropriate equipment for population (n=18) • Insufficient consumable stock (n=16) • Participants purchasing consumable items from personal finances (n=3) • Furniture is defective or absent (n=3) • Long waiting periods (n=2)	32 (71.11)
Treatment sites, facilities and infrastructure	• Inadequate/inappropriate space for treatment and administration (n=9) • Rooms which are distracting for patients (n=2) • Poor facilities with limited access (n=3)	9 (20)

Of the participants who reported that their resources were not sufficient (60%, n=45), 73.33% (n=33) reported that *policies, procedures and processes affect human and non-human resources negatively*. Participants explained,

> *There is very little resources and most gets denied from procurement. Participant 57*
>
> *The department is run solely by myself and has not received funding for several years. Participant 33*
>
> *Other professionals seem to not understand the role of OT outside of hands and wheelchairs. Participant 17*

Many participants (71.11%; n=32) expressed that their *equipment and non-consumable stock* were insufficient. One participant commented that there was,

> *No basic resources such as water, clothing, self-care objects, facilities to provide therapy. Participant 42*

Another participant explained that,

> *Resources in our department is old and does not work effectively. Some resources are outdated and not population specific. Participant 31*

Nine participants (20%) expressed concerns regarding *treatment sites and facilities*. One explanation provided was that,

> *Space for therapy is inadequate or inappropriate at most. Participant 17*

Of the participants who reported that they had sufficient resources (n=30) (Table 4.10), 83.33% (n=25) reported that their departments had *all the necessary equipment and supplies:*

The OT department at the hospital I work at is well equipped to provide services. For example: splinting, pressure garments, plinths, paeds apparatus, hands area etc. Participant 65

Some participants (20%; n=6) expressed that their personal *creativity and resourcefulness* helped with gaining resources for their departments while others (6.67%; n=2) reported *sufficient therapy space*.

Table 4. 10 - Resources are sufficient (n=30)

Categories	Codes	No. (%)
Has all the necessary equipment and supply thereof	• Department has the essentials (n=8) • Department has multiple resources (n=6) • Department has enough equipment/consumables (n=11)	25 (83.33)
Therapist creativity and resourcefulness	• Participants make equipment (n=5) • Well-resourced department created by previous staff (n=1)	6 (20)
Sufficient therapy space	• Enough therapy and non-therapy areas which are decently sized (n=2)	2 (6.67)

4.2.3.5 Challenges and job satisfaction

As seen in Table 4.11, 65.33% of participants (n=49) experienced challenges with communicating with their clients (Table 4.11).

Table 4. 11 - Communication challenges with clients (n=75)

Communication challenges with clients	%	No.
Yes	65,33	49
No	34,67	26
Total	**100**	**75**

Inductive quantitative content analysis was used to analyse participants' responses to experiencing challenges with communicating with clients (Table 4.12 and 4.13). Twenty-six (34.67%) participants reported not experiencing challenges when communicating with clients. Seventeen (65.39%) of these participants reported *no to little communication difficulties when communicating with clients*. Six (23.07%) participants used *communication aides* and three (4.09%) participants used *other communication means*.

Table 4. 12 - No challenges when communicating with clients (n=26)

Categories	Codes	No (%)
No to little communication difficulties when communicating with clients	• Participant is multilingual or a good communicator (n=12) • Clients communicate in participants' home language or a similar language (n=5) • Able to connect with patients (n=1)	18 (69.23)
Use of communication aides	• Translators (family or staff) assist to help get the right message to clients (n=5) • Communication strategies provided by the hospital (n=1)	6 (23.07)
Other communication means	• Learning new vocabulary (n=1) • Using gestures and demonstrations (n=1)	2 (7.69)

Of the participants who reported experiencing challenges when communicating with clients (65.33%, n=49) (Table 4.13), 55.10% (n=27) reported that they could not *speak the language* of clients which they treat. Twenty-five (51.02%) participants experienced *language discordance* and commented that language barriers exist when communicating with clients. Participants who reported *difficulties with translation services* were 20.41% (n=10). As participant 12 explained,

> *We do not have translators and other hospital staff are frustrated when I ask them to translate. Participant 12*

Ten participants (20.41%) attributes difficulties in communicating with clients to *client factors*. Two participants (4.09%) explained that they had *no training* of clients' primary languages at university.

Table 4. 13 - Challenges when communicating with clients (n=49)

Categories	Codes	No. (%)
Participant cannot speak the language of the clients being treated	• Does not speak the same language as clients (n=27)	27 (55.10)
Language discordance	• Big language barrier (n=18) • Can't understand client's language complexity (n=7)	25 (51.02)
Difficulties with translation services	• Colleagues assist with translation (n=2) • No translator available (n=1) • Hospital staff frustrated when asked to translate (n=2) • Patient jargon and important medical information lost in translation (n=5)	10 (20.41)
Client factors affecting communication	• Communication hindered by clients' condition/impairment (n=7) • Clients' have negative attitude if not understood (n=3)	10 (20.41)
No training of the language	• Not taught how to speak the language at university (n=1) • Training of language is very basic (n=1)	2 (4.09)

Table 4.14 below shows participants who experienced challenges with trying to understand clients' values, beliefs, attitudes and cultures. Less than half (40%, n=30) of the participants reported that they experienced difficulties with understanding clients' values, beliefs, attitudes and cultures with 60% (n=45) of participants reporting no challenges (Table 4.15).

Table 4. 14 - Challenges with understanding clients' values, beliefs, attitudes and cultures (n=75)

Challenges with understanding clients' values, beliefs, attitudes and cultures	%	No. (%)
Yes	40	30
No	60	45
Total	**100**	**75**

Inductive quantitative content analysis was used to analyse participants' responses to experiencing challenges with trying to understand clients' values, beliefs, attitudes and cultures. Twenty-nine (64.44%) participants, who did not experience challenges, reported aiming to understand their clients' values, beliefs, attitudes and cultures *through varied means*. One participant commented,

> *Different cultures have different beliefs but I have learned that everyone is entitled to their own opinion. I have had to learn to put my beliefs aside at times. Participant 65*

Twenty participants (44.44%) reported being *prepared to understand* clients' values, beliefs, attitudes and cultures before the CS year through different means. One participant reported,

> *University prepared me for dealing with patients with different values, beliefs and cultures. Participant 28*

Three participants (6.67%) understood that *traditional practices take preference* for clients.

Table 4. 15 - No challenges with trying to understand clients' values, beliefs, attitudes and cultures (n=45)

Categories	Codes	No. (%)
Pursuing understanding through varied means	• Understand clients' main aim (n=12) • Embracing varying cultural backgrounds/beliefs (n=12) • Colleagues help participants to understand clients (n=4) • Clients' values don't conflict with therapy (n=2)	29 (64.44)
Preparedness to understand	• University preparedness (n=8) • Previous exposure to many cultures (n=4) • Clients and participants have similar cultural backgrounds, beliefs and values (n=9)	20 (44.44)
Participants understand that traditional practices take preference	• Understanding why clients seek traditional methods of healing (n=3)	3 (6.67)

Of the participants who reported experiencing challenges with understanding clients' values, beliefs, attitudes and cultures (40%, n=30) (Table 4.16), 53.33% (n=16) reported experiencing challenges with *understanding cultural differences* with explanations such as,

> *Cultural differences when it comes to social norms have been influencing therapy a lot as sometimes woman are not even allowed to speak to men, and are not to look men in the eyes. Participant 8*

Participants who experienced challenges with *understanding traditional medicine practices*, were 36.67% (n=11). One participant reported,

> *Many clients believe in and use traditional medicine - my understanding is limited. They do not feel comfortable discussing this with me. Participant 12*

One participant described an example of patients and therapists conceptualising problems differently,

> *There were a few instances where children would be ingesting Marijuana for medicinal purposes and to assist with delayed milestones. I have a patient who is almost 2 years old and not walking and his parents are of the opinion that their ancestors have not accepted the child and thus need to perform religious ceremonies and that occupational therapy is not necessary. Participant 8*

Participants who experienced difficulties with *understanding clients' values and compliance* with therapy (36.67%; n=11) provided various reasons for this, one participant explained,

> *It is still, after seven months of working in this environment extremely difficult to understand the logic and ways of thinking of some/ most of my patients although I try very hard to see where they are coming from. Participant 56*

Participants *struggling to relate to clients' beliefs* were 20% (n=6) with participants providing comments such as,

> *I'm struggling to make our relationship equal, because they relate to me as if I am a doctor who knows everything. Participant 1*

Table 4. 16 - Challenges with trying to understand clients' values, beliefs, attitudes and cultures (n=30)

Categories	Codes	No. (%)
Understanding cultural differences	• Difficult to understand cultural differences and norms (n=15) • Cultural relevance not covered in undergraduate studies (n=1) • Stigma around certain conditions (n=2)	16 (53.33)
Understanding traditional medicine practices	• Clients seek traditional healers instead of occupational therapy (n=11) • Clients don't comply with therapy due to traditional medicine (n=5)	11 (36.67)
Understanding clients' values and compliance	• Participants struggle to target client's true needs due to limited understanding (n=9) • Clients don't value independence (n=3)	11 (36.67)
Participants struggle to relate to clients' beliefs	• Clients have unrealistic expectations/beliefs (n=3) • Clients give up on therapy after not understanding PHC system (n=3)	6 (20)

Just over a third of participants (34.67%; n=26) were *partially satisfied* with their jobs as CSOTs (Table 4.17), with 32% (n=24) of participants reporting being *satisfied*. Sixteen participants (21.33%) were *very satisfied* with their jobs and 12% (n=9) of participants were *not satisfied* with their job as a CSOT (see table 4.17).

Table 4. 17 - Satisfaction with job as a CSOT (n=75)

Satisfaction with job as a CSOT	%	No.
Not satisfied	12	9
Partially satisfied	34,67	26
Satisfied	32	24
Very satisfied	21,33	16
Total	**100**	**75**

Inductive quantitative content analysis was used to gain further insight into participants' responses on the level of satisfaction with their jobs, and comments for each degree of satisfaction were analysed and are reported separately.

As seen in Table 4.18, of the participants that were *not satisfied* with their jobs as CSOTs (n=9), 66.67% (n=6) reported that their dissatisfaction with their jobs was due to a *lack of human and non-human resources.* The following participant highlighted the absence of human resources,

> *I have no support as the sole OT within the remote area, it is continually challenging to communicate with other team members, the understanding of OT in the area is limited despite efforts to change. Participant 33*

Five participants (55.56%) who were *not satisfied* with their jobs linked this to *feelings/emotions* experienced from being in the workplace. One therapist described,

> *I feel hopeless and useless as I am not rendering a service of good quality. Participant 25*

Three participants (33.33%) who were *not satisfied* with their jobs attributed this to *client related frustrations*. A participant explained,

I also at times feel that I struggle to find compassion and sympathy for patients that do not take responsibility for their own health and see the professional as an expert rather than a partner (and patients are often reluctant to engage in goal setting with the therapists to guide their own therapy). Participant 9

Table 4. 18 - Dissatisfaction with job as a CSOT (n=9)

Categories	Codes	No. (%)
Lack of human and non-human resources	• Unethical staff behaviour (n=7) • Lack of support, recognition and learning opportunities (n=3)	6 (66.67)
Participants negative feelings/emotions	• Participants not confident in their own skills (n=2) • Stress in workplace affects emotional and mental wellbeing (n=4)	5 (55.56)
Client related frustrations	• Clients who do not take responsibility for their own health (n=3)	3 (33.33)

As seen in Table 4.19, of the participants that answered this question (n=26), 92.31% (n=24) reported that they were only *partially satisfied* with their jobs as CSOTs due to the *lack of human and non-human resources*. One participant explained,

I don't feel as if I am giving a type of service that is of great value, due to having no support, no means of assistance, I'm expected to run an entire OT department seeing in and out patients both paeds and adults. I am also expected to be accountable for the entire rehab department due to having the highest qualification, which I think is unfair to me. Participant 13

Eight (30.77%) participants were *partially satisfied* with their jobs due to feelings of being *stressed, overwhelmed and discouraged.* One participant provided the following comment,

However, I also feel that my responsibilities are substantial, which in turn places an indescribable emotional and physical stress on me. This leads me to often question my happiness with my profession. Participant 6

Two participants (7.69%) linked their partial job satisfaction to c*ontextual limitations* and eight (30.77%) participants attributed their partial satisfaction to *positive experiences* in their job.

Table 4. 19 - Partially satisfied with job as a CSOT (n=26)

Categories	Codes	No. (%)
Lack of human and non-human resources	• No support or assistance, lack of supervision and learning (n=16) • Working outside of scope (n=3) • Unrealistic responsibilities (n=2) • Understaffed departments (n=7) • Not prepared by university (n=3)	24 (92.31)
Stressed, overwhelmed and discouraged	• Physical and emotional stress (n=5) • Negative work environment negatively affecting passion (n=3) • Not recognised or valued by other team members (n=3)	8 (30.77)
Positive experiences	• Satisfactory resources (n=2) • Ample learning opportunities (n=5) • Enjoy working with patients (n=2)	8 (30.77)
Contextual limitations	• Not enough time to build therapeutic relationships (n=1) • Only seeing clients in 1 clinical area (n=1)	2 (7.69)

As seen in Table 4.20, 32% (n=24) of the participants were *satisfied* with their jobs as CSOTs. Fifteen of these participants (62.5%) reported that they were satisfied with

their jobs as CSOTs due to the *positive experiences* of being an occupational therapist and many participants provided comments such as,

> *I love being an OT. Participant 1*
>
> and
>
> *I have enjoyed the work. Participant 72*

Twelve participants (50%) were satisfied with their jobs, but still experienced *areas of dissatisfaction*. Eleven (45.83%) participants were satisfied with their jobs due to *learning and growth opportunities* and five (20.83%) participants were satisfied with their jobs due to the *satisfaction in their placement area*.

Table 4. 20 - Satisfied with job as a CSOT (n=24)

Categories	Codes	No. (%)
Positive experiences	• Enjoy being an occupational therapist (n=10) • Collegiality (n=3) • Making a difference (n=2)	15 (62.5)
Some areas of dissatisfaction still present	• Lack of human and non-human resources (n=5) • Minimal learning (n=2) • Great expectations with feelings of incompetence (n=4) • Lack of immediate supervision, little support (n=6) • Individuals not understanding the role of occupational therapy (n=2)	12 (50)
Learning and growth opportunities	• Many learning opportunities (n=11) • Receiving significant support (n=2)	11 (45.83)
Satisfaction in placement area	• Diverse clients (n=4) • Sufficient resources (n=1)	5 (20.83)

As seen in Table 4.21, of the participants that were *very satisfied* with their jobs (21.33%, n=16), 62.5% (n=10) reported that they were very satisfied with their job due to the *positive experiences* of being an occupational therapist,

> *…[you] can finally have continuity of care for the patient throughout the year which means you see progress and feel like you are truly making a difference in someone else's life. Participant 2*

Eight (50%) participants who were very satisfied with their supervision due to *available human and non-human resources*. One participant commented that,

> *I am gaining experience in different fields of OT, getting great supervision and have the resources available to treat. Participant 65*

Finally, three (18.75%) participants were *very satisfied* with their jobs as a result of *cohesion with staff members*.

Table 4. 21 - Very satisfied with job as a CSOT (n=16)

Categories	Codes	No. (%)
Positive experiences	• Participants enjoy their jobs (n=8) • Seeing progress and making a difference (n=4)	10 (62.5)
Available human and non-human resources	• Learning and growing (n=7) • Access to human and non-human resources (n=2) • Good supervision (n=1)	8 (50)
Cohesion with other staff	• Good multi-disciplinary team (n=1) • Colleagues who treat participants as their equal (n=1) • Supportive staff (n=1)	3 (18.75)

4.3 THE EXPERIENCE OF BURNOUT OF PARTICIPANTS USING THE MASLACH BURNOUT INVENTORY HUMAN SERVICES (MBI-HSS) FOURTH EDITION

The three components of burnout syndrome as measured by the MBI-HSS, namely, emotional exhaustion, depersonalisation and lack of personal accomplishment (Maslach et al., 1996-2018) is shown in Table 4.22.

Table 4. 22 - Maslach Burnout Inventory-Human Services Survey 4th Edition scoring for participants (n=75)

Variable	Mean	Standard deviation	Median	Lower quartile	Upper quartile
Emotional Exhaustion	3.20	1.35	3.22	2.11	4.33
Depersonalisation	1.78	1.16	1.60	0.80	2.40
Personal Accomplishment	4.16	0.998	4.25	3.63	4.88

The emotional exhaustion scale, consisting of nine items, measures participants' feelings of emotional exhaustion at work with high scores indicating high levels of perceived burnout (Maslach et al., 1996-2018). As seen in Table 4.22 the mean scale score of 3.20, SD±1.35 indicates that most of the participants felt emotional exhaustion a few times a month, but not weekly. Table 4.23 below indicates the level (low, moderate and high levels classified by Balogun et al. (2002)) of burnout participants experienced with 55% (n=41) reporting high levels of emotional exhaustion at the time of data collection.

The depersonalisation scale, consisting of five items, measures uncaring or indifferent responses to clients of participants, with greater scores indicating high amounts of perceived burnout (Maslach et al., 1996-2018). The mean score of 1.78, SD±1.16 for participants as shown in Table 4.22 indicates that most of the participants experienced

depersonalisation a few times a year or less. Table 4.23 indicates that 23% (n=17) of the participants reported high levels of depersonalisation at the time of data collection.

The personal accomplishment scale, consisting of eight items measures feelings of capability and success when participants work with their clients. Low personal accomplishment scores indicate higher perceived burnout (Maslach et al., 1996-2018). As shown in Table 4.22, the participant's mean score for personal accomplishment was 4.16, SD±0.998 indicating that participants felt a sense of personal accomplishment at least once a week. This indicates that the participants showed lower levels of perceived burnout on the personal accomplishment scale. Table 4.23 below shows that 28% (n=21) of the participants reported high levels of personal accomplishment (and low levels of burnout) at the time of data collection. Twenty-five (33%) participants reported low levels of personal accomplishment with lower scores suggesting higher levels of burnout.

Table 4. 23 - Level of Burnout

Burnout Variables	**Level of Burnout**		
	High No. (%)	Moderate No. (%)	Low No. (%)
Emotional Exhaustion	41 (55)	23 (31)	11 (15)
Depersonalisation	17 (23)	28 (37)	30 (40)
Personal Accomplishment	21 (28)	29 (39)	25 (33)
A high score for emotional exhaustion and depersonalisation and a low score for personal accomplishment indicate high burnout.			
Emotional exhaustion scores: >27 is high, between 17-26 is moderate and <16 is low			
Depersonalisation scores: >13 is high, between 7-12 is moderate, <6 is low			
Personal accomplishment scores: >39 is high, between 32-38 is moderate, <31 is low (Balogun et al., 2002)			

4.4 FORMS OF COPING USED BY PARTICIPANTS AS MEASURED BY THE COPING INVENTORY FOR STRESSFUL SITUATIONS (CISS)

The participants' raw scores for coping which were converted to T-scores during the profiling process, are shown in Table 4.24. The median, lower quartiles, upper quartiles and standard deviations for the different subscales of coping (task, emotion, avoidance with two subscales for avoidance, namely, distraction and social diversion) are also included in this table. The T-scores correspond directly to percentiles on the scored profile form of the CISS with the 50th percentile representing the position of coping which sits between the above average, and below average levels of coping (Endler and Parker, 1999).

Table 4. 24 - Coping Inventory for Stressful Situations scoring for participants (n=75)

Variable	Median	Lower quartile	Upper quartile	Percentile	Mean	Standard deviation
Task T-score	50	41	55	50th	48.72	9.71
Emotion T-score	50	45	58	50th	51.03	9.42
Avoidance T-score	53	48	61	62nd	54.23	9.70
Distraction T-score	56	47	62	73rd	55.79	11.195
Social Diversion T-score	52	43	59	58th	51.41	10.18

The task subscale, which consists of 16 items, reports aiming toward planning and problem solving during the task or stressful situation (Endler and Parker, 1999). As seen in Table 4.24 the median scale task T-score of 50 indicates that most of the

participants scored in the average range placing them in the 50th percentile for using task-oriented coping. Table 4.25 below shows that 11.99% of the participants used high levels of task-oriented coping.

The emotion subscale, consisting of 16 items, depicts emotional reactions in response to stressful situations in order to decrease that situation, which may be constructive or not (Endler and Parker, 1999). As seen in Table 4.24 the median scale emotion T-score of 50 indicates that most of the participants scored in the average range placing them in the 50th percentile for using emotion-oriented coping. Table 4.25 below shows that 22.66% of the participants used high levels of emotion-oriented coping.

The avoidance subscale, consisting of 16 items, shows how participants keep away from stressful situations by using distraction (subscale of avoidance consisting of 8 items) in the form of tasks, or by using social diversion (subscale of avoidance consisting of 5 items) to decrease stress (Endler and Parker, 1999). Table 4.24 shows that the median scale T score for avoidance is 53 which indicates that most of the participants are in the 62nd percentile of the population for that category and use avoidance-oriented coping an average amount, but more than task and emotion-oriented coping. Additionally, the distraction median scale T-score of 56 is slightly above average, indicating that most participants used distraction-oriented coping more often falling at the 73rd percentile of the population. The social diversion T-score median of 52 indicates that the participants used social diversion coping more often falling at the 58th percentile of the population but still use social diversion an average amount. Table 4.25 below shows that 32% of the participants used high levels of avoidance-oriented coping with 37.33% using high levels of distraction and 20% using high levels of social-diversion.

Table 4. 25 - Levels of coping (n=75)

Coping forms	Level of Coping		
	High (%)	Moderate (%)	Low (%)
Task-oriented	11.99	64	22.67
Emotion-oriented	22.66	33.33	43.99
Avoidance-oriented	32	38.67	29.33
Distraction	37.33	29.33	33.33
Social diversion	20	38.67	41.33%

4.5 THE CORRELATION BETWEEN CSOTs' EXPERIENCE OF BURNOUT AND THE COPING STRATEGIES WHICH THEY UTILISE

Spearman's rank-order Correlations, measuring the monotonic relationship between variables (Leard Statistics, 2020b) were used to determine if there were correlations between the participants' experience of burnout and the coping strategies which they use. Correlations were made for the three components for burnout and five subscales for coping. A positive correlation shows that if there is a high score on one variable, there will be a corresponding high score on the other variable. A negative correlation shows that if there is a high score on one variable, there will be a low score on the other variable. Marked correlations are significant at p <,05. The correlations are tabulated below (see Table 4.26).

The emotional exhaustion scale for burnout has a negligible correlation (bordering on a low negative correlation) with task T-scores for coping at *p coefficient* =-0,28, p<,05, which suggests that high levels of emotional exhaustion in participants was correlated to a decreased use of task-oriented coping. Additionally, the emotional exhaustion scale has a low positive correlation with the emotion T-scores for coping at *p coefficient*=0,33, p<,05, suggesting that high levels of emotional exhaustion in participants correlate with an increased use of emotion-oriented coping. The emotional exhaustion scale for burnout has a negligible correlation (bordering on a low positive

correlation) with distraction T-scores for coping at *p coefficient* =0,25, *p*<,05, which suggests that high levels of emotional exhaustion in participants correlated to increased use of distraction coping.

The depersonalisation scale for burnout has a low negative correlation with the task T-scores for coping at *p coefficient* =-0,397, *p*<,05, which suggests that participants who reported high levels of feelings of depersonalisation used task-oriented coping less. Additionally, the depersonalisation scale for burnout has a low positive correlation with the emotion T-scores for coping at *p coefficient* =0,41, *p*<,05, suggesting that participants who reported high levels of feelings of depersonalisation used emotion-oriented coping to a greater degree.

The personal accomplishment scale for burnout has a low positive correlation with the task T-scores for coping at *p coefficient* =0,32, *p*<,05, which suggests that participants who experienced a high sense of personal accomplishment used task-oriented coping more frequently. Additionally, the personal accomplishment scale for burnout has a low negative correlation with the emotion T-scores for coping at *p coefficient* =-0,32, *p*<,05, which suggests that participants who experienced a high sense of personal accomplishment used emotion-oriented coping less frequently.

Table 4. 26 - Spearman Rank-Order Correlations between Maslach Burnout Inventory and Coping Inventory for Stressful Situations scores

Variable	Personal Accomplishment	Depersonalisation	Emotional Exhaustion
Task T -scores	**0,32***	**-0,396***	**-0,28***
Emotion T - scores	**-0,32***	**0,41***	**0,33***
Avoidance T - scores	-0,12	0,08	0,11
Distraction T - scores	-0,22	0,14	**0,25***
Social diversion T - scores	0,06	-0,04	-0,08

*Marked correlations are significant at p <,05

4.6 THE EFFECT OF THE DEMOGRAPHIC VARIABLES ON THE EXPERIENCE OF BURNOUT AND COPING SKILLS IN CSOTs

A Kruskal-Wallis (also known as ANOVA by Ranks) test is used to decide whether there are noteworthy contrasts in the statistics between two or more variables (Leard Statistics, 2020a). Kruskal-Wallis tests were used to determine if the personal and work demographic variables of the research participants have an effect on the experience of burnout or on the forms of coping the participants used at the time of completion of the questionnaire. All demographic variables were tested, but only the variables that showed significance when related to burnout and coping ($p \leq 0.05$, and $p \leq 0.01$ and lower for highly significant variables) are reported in this section.

The effect the participants' demographic variables had on their experience of burnout is shown in Table 4.27 below.

Participants with strong (median=4.5, range 4.13-5.13) and adequate (median=4.12, range 3.87-4.62) support systems had a greater sense of personal accomplishment. Kruskal-Wallis results for social support and a sense of personal accomplishment were H=9.64, *p*=0.022, with a mean rank for personal accomplishment of 14.5 for absent social support, 24.83 for minimal social support, 34.96 for adequate social support and 44.69 for strong social support (see Appendix H for Kruskal-Wallis results tables).

Participants who were very satisfied (median=4.75, range 4.38-5.38) and satisfied (median=4.37, range 3.94-4.88) with their jobs as CSOTs had a greater sense of personal accomplishment with a highly significant score. Kruskal-Wallis results for job satisfaction and a sense of personal accomplishment were H=19.22, *p*=0.0002, with a mean rank for personal accomplishment of 14.11 for not satisfied with job, 34.98 for partially satisfied, 40.21 for satisfied with job and 53.03 for very satisfied with job.

Participants who experienced a greater sense of depersonalisation with a highly significant score graduated from the University 3 (median=2.20, range 1.80-3.20) followed by University 2 and 4 (median=1.90). Kruskal-Wallis results for university and depersonalisation were H=19.62, *p*=0.003, with a mean rank for University 3 of 51.00, 43.22 for University 2, and 42.12 for University 4.

Participants who had a supervisor (median=1.80, range 1.00-2.4) reported to experience depersonalisation more than those who did not have a supervisor (median=1.00, range 0.6-2.00). Kruskal-Wallis results for supervisor and depersonalisation were H=3.84, *p*=0.05, with a mean rank of 40.66 for having a supervisor and 28.91 for not having a supervisor.

Participants who were not satisfied with their jobs as CSOTs (median=3.00, range 2.00-3.40) reported a greater sense of depersonalisation. Kruskal-Wallis results for job satisfaction and depersonalisation were H=7.94, *p*=0.05, with a mean rank of 51.89 for not satisfied.

Emotional exhaustion was influenced by the age of the participants with the greatest emotional exhaustion reported in a 27-year-old participant (median=4.78, range 4.00-4.78) followed by the 24-year-old participants (median=4.33, range 3.89-4.56). Kruskal-Wallis results for age and emotional exhaustion were H=14.70, *p*=0.04, with a mean rank of 61.67 for 27 years and 54.83 for 24 years.

Participants who reported minimal social support (median=4.67, range 4.33-4.78) reported greater levels of emotional exhaustion. Kruskal-Wallis results for social support and emotional exhaustion were H=11.22, *p*=0.01, with a mean rank of 60.28 for minimal social support.

Participants who were not satisfied with the supervision they received (median=4.00, range 2.56-4.67) reported greater levels of emotional exhaustion. Kruskal-Wallis results for satisfaction with supervision and emotional exhaustion were H=5.68, *p*=0.02, with a mean rank of 34.60 for not satisfied with supervision.

Lastly, participants who were not satisfied with their jobs as CSOTs (median=4.11, range 4.00-4.78) experienced greater levels of emotional exhaustion with a highly significant value. Kruskal-Wallis results for job satisfaction with and emotional exhaustion were H=12.39, *p*=0.006, with a mean rank of 53.39 for not satisfied with job.

Table 4. 27 - The effect of demographic variables on the experience of burnout

Burnout variable	Demographic variable	Median (Lower and upper Quartile)		p value
Personal Accomplishment	Social support	Absent	2.18 (0.38-4.00)	0,022*
		Minimal	3.50 (3.13-4.00)	
		Adequate	4.12 (3.87-4.62)	
		Strong	4,50 (4.13-5.13)	
	Satisfaction with job as a CSOT	Not satisfied	3.12 (1.75-3.75)	0,0002**
		Partially satisfied	4.06 (3.50-4.88)	
		Satisfied	4.37 (3.94-4.88)	
		Very satisfied	4.75 (4.38-5.38)	
Depersonalisation	University graduated from	1	1.20 (0.80-2.40)	0,003**
		2	1.90 (1.10-3.20)	
		3	2.20 (1.80-3.20)	
		4	1.90 (1.00-2.40)	
		5	0.80 (0.20-1.40)	
		6	0.80 (0.60-1.20)	
		7	0.00 (0.00-0.60)	
	Supervisor	Yes	1.80 (1.00-2.40)	0,050*
		No	1.00 (0.60-2.00)	

	Satisfaction with job as a CSOT	Not satisfied	3.00 (2.00-3.40)	0,047*
		Partially satisfied	1.60 (0.80-2.40)	
		Satisfied	1.80 (1.00-2.60)	
		Very satisfied	1.10 (0.60-1.70)	
Emotional Exhaustion	Age	22	2.44 (2.11-3.33)	0,040*
		23	3.00 (1.89-4.33)	
		24	4.33 (3.89-4.56)	
		25	2.89 (2.00-3.00)	
		26	4.00 (1.78-4.33)	
		27	4.78 (4.00-4.78)	
		29	3.33 (2.33-4.33)	
		30	0.11 (0.11-0.11)	
	Social support	Absent	2.94 (1.89-4.00)	0,011*
		Minimal	4.67 (4.33-4.78)	
		Adequate	2.78 (2.11-4.00)	
		Strong	3.22 (2.00-4.33)	
	Satisfaction with supervision	Yes	2.61 (2.00-3.72)	0,017*
		No	4.00 (2.56-4.67)	
		Not satisfied	4.11 (4.00-4.78)	0,006**

	Satisfaction with job as a CSOT	Partially satisfied	3.61 (2.44-4.33)	
		Satisfied	3.17 (2.39-4.33)	
		Very satisfied	2.17 (1.61-3.06)	

Significance at p≤0.05* and high significance at p≤0.01**

The effect the participants' demographic variables had on the forms of coping they utilised is shown in Table 4.28 below.

Participants who worked in peri-urban areas (median=56.50, range 51.50-63.00) and urban areas (median=54.00, range 47.50-58.00) utilised emotion-oriented coping to a greater degree. Kruskal-Wallis results for work area and emotional-oriented coping were H=11.24, *p*=0.01, with a mean rank of 51.08 for peri-urban areas and 41.79 for urban areas.

Participants who did not receive a rural allowance (median=55.00, range 48.00-60.00) used emotion-oriented coping to a greater degree as compared to participants who did receive a rural allowance (median=46.50, range 44.00-52.50). Kruskal-Wallis results for rural allowance and emotional-oriented coping were H=5.30, *p*=0.02, with a mean rank of 43.56 for not receiving a rural allowance.

Participants who were not satisfied with the supervision which they received (median=53.50, range 46.00-62.00) utilised emotion-oriented coping more than participants who were satisfied with the supervision which they received (median=49.50, range 43.00-54.00). Kruskal-Wallis results for rural supervision satisfaction and emotional-oriented coping were H=5.06, *p*=0.03, with a mean rank of 34.32 for not satisfied and 24.34 for satisfied with supervision.

Participants who utilised avoidance-oriented coping the most were 26 (median=64, range 48.00-67.00) and 24 (median=61, range 56.00-63.00) years old. Kruskal-Wallis results for age and avoidance-oriented coping were H=13.81, *p*=0.05, with a mean rank of 45.33 for 26 years and 52.61 for 24 years.

Participants with the greatest (above 15) and the least number (0-5) of occupational therapists in their departments (median 54.17) used avoidance-oriented coping more

frequently. Kruskal-Wallis results for age and avoidance-oriented coping were H=25.81, *p*=0.03, with a mean rank of 38.24 for 0-5 occupational therapists and 29.81 for above 15 occupational therapists.

Participants who had greater satisfaction with the supervision they received (median=58, range 50.50-62.50) used avoidance-oriented coping to a greater extent than participants who were not satisfied with their supervision (median=52, range 44.00-58.00). Kruskal-Wallis results for satisfaction with supervision and avoidance-oriented coping were H=4.89, *p*=0.02, with a mean rank of 34.57 for satisfied with supervision and 24.77 for not satisfied with supervision.

Additionally, participants who were satisfied with the supervision they received (median=57, range 50.00-64.50) used social diversion to a greater extent with a high significant value. Kruskal-Wallis results for satisfaction with supervision and social diversion were H=10.28, *p*=0.001, with a mean rank of 36.84 for satisfied with supervision and 22.65 for not satisfied with supervision.

Table 4. 28 - The effect of demographic variables on the forms of coping used by participants

Coping variable	Demographic variable	Median (Lower and upper Quartile)		p value
Emotion-Oriented coping	Placement area	Rural	46.00 (43.00-53.00)	0,011*
		Deep rural	41.50 (36.00-57.50)	
		Urban	54.00 (47.50-58.00)	
		Peri urban	56.50 (51.50-63.00)	
	Rural allowance	Yes	46.50 (44.00-52.50)	0,021*
		No	55.00 (48.00-60.00)	
	Satisfaction with supervision	Yes	49.50 (43.00-54.00)	0,029*
		No	53.50 (46.00-62.00)	
Avoidance-Oriented coping	Age	22	57.00 (51.00-66.00)	0,045*
		23	52.00 (47.00-58.00)	
		24	61.00 (56.00-63.00)	
		25	57.00 (54.00-61.00)	
		26	64.00 (48.00-67.00)	
		27	39.00 (37.00-52.00)	
		29	52.50 (44.00-61.00)	
		30	41.00 (41.00-41.00)	
		0-5	54.17 (36-72)	0,026*

	Total number of occupational therapists in department excluding participant (with average medians)	6-10	51.17 (39-67)	
		11-15	46.67 (42-52)	
		>15	54.17 (51-61)	
	Satisfaction with supervision	Yes	58 (50.50-62.50)	0,018*
		No	52 (44.00-58.00)	
Social Diversion-Oriented coping	Satisfaction with supervision	Yes	57.00 (50.00-64.50)	0,001**
		No	48.00 (41.00-55.00)	

Significance at p≤0.05* and high significance at p≤0.01**

4.7 SUMMARY

There were 105 responses of which 75 were used for the study. The 75 responses represented 31.92% of the CSOT population. Participants who reported a strong support structure were 49.33% with the main source of support being significant others (37.33%) and nuclear family (33.33%).

Inductive content analysis was performed for explanations of answers including satisfaction with supervision, sufficient resources to provide comprehensive occupational therapy services, experiencing challenges communicating with clients, experiencing challenges with trying to understand clients' values, beliefs, attitudes and cultures, and satisfaction with job as a CSOT.

The percentage of participants who had high scores of burnout were 55% for emotional exhaustion, 23% for depersonalisation and 33% for low personal accomplishment. Most of the participants felt emotionally exhausted a few times a month with a mean scale score of 3.20, SD±1.35 and participants felt a sense of personal accomplishment at least once a week (mean 4.16, SD±0.998).

The majority of the participants were in the 62nd percentile for use of avoidance-oriented coping and used avoidance an average amount, but more than task and

emotion-oriented coping. Additionally, most participants reported using distraction-oriented coping falling in the 73rd percentile of the population and using social diversion-oriented coping falling in the 58th percentile of the population.

Correlations using Spearman's rank-order showed that the emotional exhaustion scale has a low positive correlation with the emotion-oriented coping at *p coefficient*=0,33, *p*<,05. The depersonalisation scale for burnout had a low negative correlation with the task T-scores for coping at *p coefficient* =-0,397, *p*<,05. Additionally, the depersonalisation scale for burnout has a low positive correlation with the emotion T-scores for coping at *p coefficient* =0,41, *p*<,05. The personal accomplishment scale for burnout had a low positive correlation with the task T-scores for coping at *p coefficient* =0,32, *p*<,05. Additionally, the personal accomplishment scale for burnout has a low negative correlation with the emotion T-scores for coping at *p coefficient* =-0,32, *p*<,05.

Participants who were very satisfied (median=4.75, range 4.38-5.38) and satisfied (median=4.37, range 3.94-4.88) with their jobs as CSOTs had a significantly greater sense of personal accomplishment (*p*=0.0002). Additionally, participants who experienced a greater sense of depersonalisation with a highly significant score (*p*=0,003) graduated from the University 3 (median=2.20, range 1.80-3.20) followed by the University 2 and University 4 (median 1.90). Participants who were not satisfied with their jobs as CSOTs (median=4.11, range 4.00-4.78) experienced greater levels of emotional exhaustion with a highly significant value (*p*=0.006).

Participants who were satisfied with the supervision they received (median=57, range 50.00-64.50) used social diversion to a greater extent with a high significant value (*p*=0.001).

These results will be discussed in detail in Chapter 5.

CHAPTER 5: DISCUSSION

The results of the research study will be discussed in the order of objectives. The chapter will therefore start with a discussion of the demographic profile of participants. Participants' experience of burnout and coping strategy utilisation will then be reviewed and interpreted in the light of evidence. This will be followed by an interpretation of the relationship between these concepts. Finally, the influence that demographic variables have on burnout and coping will be discussed.

5.1 DEMOGRAPHIC INFORMATION

5.1.1 Personal demographics

The majority of the participants were female 97.33% (n=73), closely reflecting the gender distribution of the South African occupational therapy population of which 95% are female (Ned et al., 2020). The age of participants corresponds to the age demographic of studies conducted with the CSOT population (van Stormbroek and Buchanan, 2016).

5.1.2 Educational demographics

Almost a third of the participants (29.33%; n=22) graduated from University 4. The greatest number of participants worked in Gauteng at the time of data collection. A study performed by Maseko et al. in 2012 looked at aspects which occupational therapy students consider when choosing their CS placement. The participants in the study preferred placement in urban areas, and most of the participants were influenced by factors such as closeness to home, contact with family, and previous exposure obtained during their undergraduate studies. Financial reasons were found to have little effect on deciding placement (Maseko et al., 2014). The greater representation of University 4 could be because the participants resided and studied in Gauteng which lead them to seek Community Service (CS) placement areas close to home and families. Most participants graduated in 2018 which was expected as this was the year before data collection commenced.

5.1.3 Work demographics

5.1.3.1 Location

Almost a third of the participants (30.67%, n=23) worked in Gauteng at the time of data collection. This may be because the researcher resides in Gauteng and requested colleagues and classmates to forward the questionnaire to CSOTs which they knew at the time of data collection. The distribution also corresponds to a study done in 2014 with the CSOT population where the majority of participants (26.2%) were from Gauteng (Van Stormbroek, 2014). Furthermore, most CSOT posts (with a total of 89 in 2018) are in Gauteng (Department of Health, 2019) which is a strong reason for the greater response rate from Gauteng province.

A total of 37.33% (n=28) of participants worked in urban areas and 16% (n=12) worked in peri-urban areas at the time of data collection which is not expected as the purpose of the CS year is to supply underserved and rural areas with healthcare services (Reid, 2018). Furthermore, the sample may have underrepresented rural therapists as access to online surveys are likely poorer in rural areas. A total of 46.66% (n=35) of the participants worked in rural and deep rural areas at the time of data collection which can be attributed to the fact that CS workers are usually placed in rural and underserved areas in their year of CS (Reid, 2002). Additionally, a previous research study done with the CSOT population by Van Stormbroek, had a total of 45% of participants who were situated in rural areas (Van Stormbroek, 2014). This 45% closely corresponds with the number of research participants in this study, but more rural CSOT placements were expected. This finding may be explained by the smaller sample size and greater number of responses from CSOTs in urban and peri urban areas (total of 53.33%) in this study. A greater number of rural placements for 2018 was expected as provincial health departments are expected to provide more resources in the form of CS workers to underserved and rural areas in district and PHC facilities with the plan to phase out CS placement in central hospitals and urban areas from 2018/2019 (Department of Health, 2017a).

5.1.3.2 Level of service and patient load

A third of the participants (33.33%, n=25) provided services at multiple levels of care. This is expected as CSOTs who work in rural areas typically provide services at multiple levels of care ,such as outreach, according to the service site at which they work (Bateman, 2012). However, only 14.67% (n=11) of the participants provided services at primary levels of care which was not expected as this is where occupational therapy services are expected to be growing in keeping with PHC and the plan to provide more resources in the form of CS workers to underserved and rural areas in district and primary level facilities with the plan to phase out CS placement from central hospitals and urban areas from 2018/2019 (Department of Health, 2017a). The study done by Van Stormbroek (2014) reported 32% working at primary levels of care which is 17.33% more than the amount of participants reported in this study. This finding could be due to the small sample size of the participants with most responses yielded from CSOTs practicing in urban and peri-urban areas. Furthermore, the option of choosing *providing a service at multiple levels* in the questionnaire could have included primary levels of care, which could potentially lead to under-capturing the number of participants working in primary healthcare.

Approximately half (49.33%, n=37) of the participants treated 51-100 patients on a monthly basis at the time of data collection which is similar to a median of 83 found in a study by van Stormbroek (Van Stormbroek, 2014).

5.1.3.3 Occupational therapy staff and supervision

One fifth (20%; n=15) of participants had no other occupational therapist in their departments and 6.67% (n=5) of participants reported having no other team members, meaning they were the only allied health professional at their place of work. This concurs with previous research done with CSOTs reporting that CSOTs are often left to run departments in rural practice by themselves with minimal support/supervision (Naidoo et al., 2017). Van Stormbroek (2014) also reported 11% (n=10) of participants being the only occupational therapist at their treatment site which is less than the participants in this study.

Despite formal supervision often being deficient in rural areas (Steenbergen and Mackenzie, 2004) a majority of 77.33% (n=58) of participants reported that they did have a supervisor which is 12.27% less than what was reported by the 2014 cohort of CSOTs (89.6%) (Van Stormbroek, 2014). The reason for this could be that there were only 75 responses analysed for this study and the study performed in 2014 by Van Stormbroek had 103 responses which were analysed. This was a greater demographic representation of the study. Furthermore, the 'freezing of posts' in governmental healthcare which leads to the decrease of permanent staff could also have an effect on the decrease in supervision received as there is less permanent staff being employed due to lack of budget (Rural Health Advocacy Project, 2013).

Supervision from a knowledgeable occupational therapist promotes the development of skills and improves the standard of care clients receive (Melman et al., 2016). Of the participants who reported that they had a supervisor, 69.33% (n=52) reported having an occupational therapist as a supervisor which is 6.93% more than the cohort of CSOTs in 2014 (62.4%). This finding is expected as the literature states that having a supervisor of the same discipline is a useful characteristic (Toal-Sullivan, 2006).

Local and international studies done with novice occupational therapists emphasise the importance of having a supervisor and enough guidance and support on the job in the transition from being a new graduate to novice practitioner (Van Stormbroek, 2014; Morley et al., 2007). The importance of supervision and mentorship is also highlighted in several studies and supervision has been associated with greater job satisfaction (McCombie and Antanavage, 2017; Melman et al., 2016)

It is common for there to be a mismatch between supervision and expectations (van Stormbroek and Buchanan, 2019) and therefore, decreased satisfaction with supervision in the first year of occupational therapy practice was not surprising in the participants. Novice occupational therapists who have reported dissatisfaction with supervision have provided various reasons for this, such as having unrealistic expectations regarding formal supervision and support (Morley et al., 2007), and inadequate supervision which does not meet the needs of the CSOT (Van Stormbroek, 2014). In this study 40% of the participants who did have a supervisor were not satisfied with the supervision they received (n=30, missing responses=17 participants who did not have a supervisor).Van Stormbroek's total study sample reported 65.9%

of participants who were not satisfied with the supervision they received and therefore a straight comparison cannot be made with this study. This research study was completed six years prior to this study (2014) and recommendations made in previous studies regarding supervision for occupational therapists in rural healthcare could have informed improvements or changes in the current implementation of the CS year (Reid, 2018).

International studies which have looked at the satisfaction of occupational therapists in their first year of practice have found that supervision satisfaction changes over time. A study done by Golos and Tekuzener (2019) which looks at the satisfaction of occupational therapists in the first year of practice in Israel has shown decreased satisfaction with supervision and practice environment when comparing this to their expectations before resuming work (as a student). Another study by Melman et al. (2016) with new occupational graduates from Australia found that supervision frequency decreases from being a student to new practitioner and supervision efficaciousness differs over time (Melman et al., 2016).

Supervisor characteristics have been connected to supervision satisfaction in previous studies. In this study, 20 participants were satisfied with their supervision because their supervisor was skilled and knowledgeable, and 14 participants were satisfied with their supervision due to their supervisor's positive characteristics. This concurs with the literature that suggests that there is a definite link between satisfaction with supervision and supervisors skill and experience (Toal-Sullivan, 2006; Hummell and Koelmeyer, 1999). Positive characteristics of supervisors such as creating a supportive atmosphere which promotes a sense of freedom (Steenbergen and Mackenzie, 2004) was also found to have a definite impact on the level of satisfaction of novice occupational therapists.

Supervision and support are vitally important to ease the changeover from new graduate to qualified occupational therapist (Moores and Fitzgerald, 2017; Van Stormbroek, 2014). Thirteen participants were satisfied with their supervision due to the frequency of supervision they received which is similar to the literature which states that lack of supervision has been found to negatively affect this changeover from new graduate to qualified practitioner (Hummell and Koelmeyer, 1999) and may negatively influence management of clients (Nemutandani et al., 2006).

CSOTs often work with no formal support from the Department of Health (Holland et al., 2013). The participants in this study often reported decreased confidence in their ability and skills. A structured supervision and support programme to develop CSOT competence in the field including, providing access to continuing professional development, supervision and mentorship programmes, and leadership programmes for rural CSOTs could address this (Van Stormbroek, 2014).

5.1.3.4 Opportunities for learning and resources

According to research, newly qualified occupational therapists greatly value observing the practice of other occupational therapists (Morley, 2009). Around half (56%; n=42) of the participants were able to observe another occupational therapist practice. This is less than was expected as Van Stormbroek's 2014 study reports that 67.7% of the CSOT participants reported being able to observe other occupational therapists practice (Van Stormbroek, 2014). Again, this could be due to the comparatively lower response rate. One would expect that there would be more participants who can observe other occupational therapists' practice due to the research which has already stated the importance of observing other occupational therapists practice (Morley, 2009; Van Stormbroek, 2014). A reason for the decrease in opportunities to observe other occupational therapists practice could be related to the freezing of posts for permanent occupational therapy staff (Ned et al., 2020) which leads to a decrease of experienced occupational therapists in the public sector, and rural areas specifically . Furthermore, the attempted shift to move more CSOTs into rural and underserved areas may result in having less access to other occupational therapists who favour working in urban and more populated areas (Ned et al., 2020).

It is expected that CSOTs would report limited access to resources and that this limited access to resources would affect the service which they provide (Van Stormbroek, 2014). Previous studies report that limited essential resources hinder and restrict service delivery in CS dieticians (Paterson et al., 2007). Another study done by Parker et al. (2012) showed that their study sample had restricted space to perform their work and limited resources to engage in work effectively.

The 2013 CSOT cohort results reported that participants did not have acceptable equipment (69.7%) or treatment areas (65.2%) (van Stormbroek and Buchanan, 2019)

which is more than the participants in this study (60%, n=45). The participants felt that they did not have sufficient resources to provide an effective occupational therapy service due to difficulties with resource procurement (n=18), equipment being inappropriate (n=18), and lacking consumable stock (n=16). Of the participants who reported that they had sufficient resources (40%, n=30), 8% (n=6) reported that they used their own creativity to develop their own resourcefulness.

The question regarding resources in the questionnaire did not specifically ask the participants if they felt resourceful. More participants could have reported being resourceful if asked this specifically. The cohort of 2013 CSOTs of 34.4% reported feeling resourceful in areas with minimal resources (van Stormbroek and Buchanan, 2019). Promotion of the development of personal resources for the participants could be a valuable characteristic to develop when working in the public sector which is often under resourced.

5.1.3.5 Communication challenges

In this study, 65.33% (n=49) of participants reported experiencing difficulties communicating with clients which was less than the Van Stormbroek (2014) study of 73.9% of participants reporting communication difficulties. This could be due to the change of therapist demographic with a greater number of occupational therapists who are non-English first language speakers (Ned et al., 2020). The rates reported are an improvement but remain high and participants who did not experience communication difficulties with clients were multilingual (n=12) or spoke the clients home language (n=5).

Difficulties when communicating with clients has been found as a prevalent issue in studies done with the professionals in healthcare. In South Africa specifically, there are 11 official languages with English being the favoured language in healthcare (Benjamin et al., 2016). Additionally, there are communication barriers in approximately 80% of communication when performing medical interviews (Penn, 2007). In healthcare, professional interactions with clients are negatively affected by language barriers which cause a loss of therapeutic meaning (McCarthy et al., 2013). Nurturing relationships with clients are also limited by using translators (McCarthy et al., 2013) or technology which only serves to manage language differences between

healthcare workers and clients (van Stormbroek and Buchanan, 2019). Furthermore, client satisfaction with healthcare has been found to improve as the healthcare worker becomes more competent in the client's language (Levin, 2011). Therefore, language proficiency is an important trait to attain as a CSOT.

Suggestions for compulsory language modules in undergraduate studies and language courses for continuing professional development for qualified therapists have been suggested to address challenges with communicating with clients (van Stormbroek and Buchanan, 2019). Additionally, the majority of occupational therapists in South Africa (66%) are English and Afrikaans speaking, and mainly situated in urban and peri-urban areas. This has a negative effect on the provision of services and the fair distribution of occupational therapy services (Ned et al., 2020). Efforts to shift the occupational therapy population to represent the population served may assist with improving the fair distribution of occupational therapy services and challenges with communicating with clients.

5.1.3.6 Challenges with cultural competence

Understanding clients' values, beliefs, attitudes and cultures was reported by 60% (n=45) of the participants. This question aimed at getting an idea of how the participants' perceived their own cultural competence or cultural sensitivity when treating their clients. The 2013 cohort of CSOTs (van Stormbroek and Buchanan, 2019) who considered themselves basically culturally competent (55.6%) believed that cultural competence influenced the quality and applicability of care their clients received. The disproportion of representation of occupational therapists (Ned et al., 2020) could contribute to the fact that only 60% of participants felt that they were culturally competent.

The basis for occupational therapy assessment and intervention is activity or occupation which has meaning and gives purpose, but this depends on the cultural context in which the activities occur. Occupational therapy practice also focuses on attaining aims, independence and balance, but this might not be important to clients (Finlay, 1997). Evaluating cultural competence includes understanding how one views culture, being aware of one's own culture and knowing how to reach out and connect with clients in the context of their communities (Awaad, 2003). Research has shown

that undergraduate curricula needs to contribute to the development and growth of understanding clients' beliefs, values and cultures (Van Stormbroek, 2014), but attempts to get the occupational therapy profession to better represent cultural groups in South Africa could assist with enriching perspectives within the profession and contribute towards growth in cultural competence of CSOTs.

Although a better cultural representation will help in urban settings, it is inevitable that all occupational therapists will come across cultures that are not their own (e.g. refugees). However, there is a need to interrogate occupational therapy epistemology globally, and specifically in South Africa given the context of colonialism and apartheid (Guajardo et al., 2015). The majority of South African occupational therapists remain white and female which continues to pose an issue (Ned et al., 2020). Furthermore, a recent publication has called for a shift from the construct of cultural competence to cultural humility (Agner, 2020). Cultural humility has been proposed as a way to develop ways to strive at reducing colonialism and ethnocentrism (Whalley Hammell, 2013).

5.1.3.7 Job satisfaction

Job satisfaction in occupational therapy is usually related to the work done, whereas dissatisfaction is expressed due to the work environment and decreased work status (Moore et al., 2006). Moore et al. (2006) found that occupational therapists in urban Australia reported satisfaction with treating their clients and making a difference in clients' lives. The diverse nature of occupational therapy and the freedom to perform their work coincided with the feeling of satisfaction on the job. The participants who reported dissatisfaction with their jobs in this study gave reasons such as the unspecified role of occupational therapy compared to other health professionals and financial constraints (Moore et al., 2006).

Swanepoel (2010) in her dissertation which focused on satisfaction of occupational therapists in the public health sector in the Free State found that there were 'clusters of satisfaction' which could influence job satisfaction in South African occupational therapists. These were: "Working with people, making a difference and success with clients, characteristics of the occupational therapy profession, relationships with colleagues and advantages of working in the public health sector." (Swanepoel, 2010,

pg 226). ‘Clusters’ which were identified as possible causes of job dissatisfaction were: “status, salary, promotion, characteristics of the public health sector, and the work environment” (Swanepoel, 2010, pg 227).

Participants in this study who were not satisfied with their jobs as CSOTs reported unethical staff behaviour (n=7), lack of support, recognition and learning opportunities (n=3), not being confident in their own skills (n=2), stress in workplace affecting emotional and mental wellbeing (n=4), and clients who do not take responsibility for their own health (n=3). There was no mention of salary or promotion (as in the clusters found above), which may be as this is the first job CSOTs have, and salary and promotion is not their immediate priority. The study by Maseko et al. mentioned previously also stated that students do not choose CSOT placement based on financial reasons (Maseko et al., 2014) which supports this finding.

Seventy-five percent of the cohort of 2013 CSOTs reported job satisfaction when working with clients (van Stormbroek and Buchanan, 2016) with comments provided relating closely to the comments of the research participants. The CSOTs in this study who reported that they were satisfied and very satisfied their jobs (53.33%, n=40) mostly reported enjoying occupational therapy as a profession (n=10), having friendly colleagues engaging in teamwork (n=3), being able to make a difference in clients’ lives (n=2), having many learning opportunities (n=11), and receiving significant support (n=2). All these reports could fall within the ‘clusters of satisfaction’ as mentioned by Swanepoel (Swanepoel, 2010).

The role, identity and recognition of occupational therapy as a profession, and working in an environment which provides sufficient human and non-human resources are reported to contribute to job satisfaction in occupational therapists (Swanepoel, 2010). Pride in occupational therapy as a profession, proper supervision and having occupational therapy colleagues contributes to CSOTs identities. Furthermore, seeing how occupation-based practice contributes to occupational therapy’s role within the multi-disciplinary team further contributes to CSOTs confidence and role within the team (van Stormbroek and Buchanan, 2016) and this strong occupational identity leads to job satisfaction. Therefore, these aspects should be strived toward to prevent job dissatisfaction for the CSOT population.

5.2 THE EXPERIENCE OF BURNOUT OF PARTICIPANTS USING THE MASLACH BURNOUT INVENTORY HUMAN SERVICES (MBI-HSS) FOURTH EDITION

5.2.1 Who has burnout? Interpreting MBI-HSS scores

Conceptualising whether the participants had low, moderate or high levels of burnout was a difficult process when interpreting the results, as there were conflicting ideas in the research on how to report the experience of burnout. Literature guided this interpretation process.

Cut-off scores for measures indicate scores which are believed to depict the border between the norm and different clinical ranges (Jacobson and Truax, 1991) such as low, moderate and high. Various studies in the literature report difficulty with establishing low, moderate and high cut offs for the three components of burnout using the MBI-HSS (Doulougeri et al., 2016). According to Maslach and Leiter, the creators of the MBI-HSS, burnout should be seen as a continuing experience rather than a concrete diagnosis. As a result, they have cautioned against using set cut-offs for the MBI and have removed these cut-offs in the latest MBI manual as they were believed to have no diagnostic validity (Maslach et al., 1996-2018). Further research by Maslach and Leiter has led to the development of burnout profiles by determining trends of the burnout experience (Leiter and Maslach, 2016), but the use of these profiles has not been validated when using the MBI-HSS specifically, and were therefore not used in this study.

Previous burnout studies which have been done with healthcare professionals have not been overt in their reporting of the burnout cut offs for the three dimensions of burnout. A systematic review of 50 articles done by (Doulougeri et al., 2016) which looked at the classification and diagnosis of burnout in doctors and nurses between 2011-2012 found that there were discrepancies between studies when defining burnout and providing cut-offs for low, moderate and high levels of the three components of burnout. Furthermore, some studies were found to be too conservative and to under report burnout rates by strictly reporting burnout when high emotional exhaustion and depersonalisation and low personal accomplishment exist together, and not considering each component separately. Therefore, this research report aimed at describing each component of burnout individually with cut-offs which were

not too conservative in order to capture the true experience of burnout for the participants.

Therefore, the frequency of the participants experienced burnout was recorded, but cut-offs were also used to capture and make it easier for the researcher to see whether the participants were indeed experiencing high, moderate or low levels of burnout. The cut-offs that were used were used from a study done with occupational and physiotherapists in New York (Balogun et al., 2002) as they were the only cut-offs which could be found in the research to measure burnout in occupational therapists using the MBI-HSS specifically. Possible implications of using these cut offs could be under or over-reporting of the experience of burnout in this study's participants. An ongoing lack of clarity around interpreting MBI-HSS scores demonstrates a gap in the literature and need for further research.

5.2.2 MBI results

More than half of participants reported high levels of emotional exhaustion (55%). A third (33.3%) of participants experienced high levels of reduced personal accomplishment and 23% reported high levels of depersonalisation. These results were not surprising given the challenging context in which the CSOT population works.

The CSOT work environment, like any other work environment, is influenced by aspects such as the economy, social issues and political factors. Such an environment, coupled with decreased resources can place great pressure on individuals in the work place (Maslach and Leiter, 2016). As mentioned in the literature review, South African healthcare workers work in conditions which are not optimal and face challenges of being understaffed, having high client numbers and decreased physical resources (Reid, 2002; Young, 2016; Barron and Padarath, 2017). This has worsened with the current COVID-19 situation in the world, as the African healthcare system has a decreased capacity to deal with the physical and human resources required to deal with the pandemic. This decreased capacity places great stress on the healthcare workers in Africa and South Africa as a whole (Chersich et al., 2020). These factors may likely contribute to higher levels of burnout than the normal population with increased psychological disorders due to stress with South African healthcare workers reporting greater amounts of perceived burnout than international

healthcare workers (Rajan and Engelbrecht, 2018; Colby et al., 2018). Furthermore, working in a therapeutic setting which often follows a rehabilitative approach, often adds pressure to reach aims within time limits (Du Plessis et al., 2014) which could also contribute to CSOT work stress and the experience of burnout.

Depersonalisation is characterised by feelings of cynicism at work which may affect feelings of empathy toward clients and feelings of emotional detachment (Maslach, 1998) and this may lead to decreased quality of client care. It usually occurs when an individual's work becomes so emotionally demanding that it reduces their capacity to meet the needs of their clients. The individual distances him/herself from the client by disregarding them and treating them impersonally which allows the individual to manage his/her work demands. A well-founded link between exhaustion and depersonalisation exists in the research due to withdrawal being an instant reaction to exhaustion (Maslach et al., 2001). Therefore, the results may indicate that 77% of the participants did not allow emotional exhaustion to hinder their interactions with clients in the form of depersonalisation which is usually the phase of burnout that follows after emotional exhaustion (Innstrand et al., 2002). However, the low levels of depersonalisation for the participants may be due to this being their first year of practice and further time in the profession could yield greater levels of depersonalisation. This could be an interesting topic for research with participants who have more than one year's experience.

Du Plessis et al. conducted a study in 2010 looking at the prevalence of burnout in South African therapists (of which occupational therapists form part) working in private rehabilitation centres with 57.14% of these therapists reporting high emotional exhaustion. Depersonalisation was experienced by 20.40% of participants and 38.77% reported low personal accomplishment (Du Plessis et al., 2014). The results in this study are therefore similar to the findings by Du Plessis et al. (2014) even though this study looks at therapists practicing in private healthcare with different environmental stressors (with a smaller response rate of 49 participants with 14 occupational therapists) they are still the same profession, providing therapy services (the same type of work) to South Africans (the same therapy population).

International research done with therapists (mainly physiotherapists and occupational therapists) using the MBI as a measure for burnout is shown in Table 5.1 below.

Interestingly, the results measured for burnout differ for each country. Results for the Balogun et al study in 2002 for emotional exhaustion is the only result which is similar to the emotional exhaustion experienced by the participants (55%). As mentioned before, healthcare workers in South Africa face many contextual stressors which the participants in the studies in the table may not necessarily face, and this is why the results vary greatly.

Table 5. 1 - International studies with occupational therapists and physiotherapists and Maslach Burnout Inventory

Study	This study	(Balogun et al., 2002)	(Gupta et al., 2012)	(Nowakowska-Domagala et al., 2015)
Location	South Africa	New York	Canada	Poland
Population	CSOTs	Physiotherapists and occupational therapists	Occupational therapists	Physiotherapists
Emotional exhaustion (high)	**55%**	**58%**	34.8%	17%
Depersonalisation (high)	23%	94%	43.5%	16%
Personal accomplishment (low)	33.32%	97%	24.6%	15%

Burnout in healthcare workers influences quality of life, quality of care for clients and places strain on the economy. Healthcare workers with burnout have even been reported to have elevated suicide rates. The effects that burnout has on individuals highlights the importance of identification, intervention and prevention of burnout at work (Wiederhold et al., 2018; Robertson et al., 2016).

When considering the participants emotional exhaustion (55% reporting high levels of emotional exhaustion) as an indicator of burnout, then the participants have high levels of burnout in the emotional exhaustion scale but not the depersonalisation (23%) or low sense of personal accomplishment (33.32%) scales. Therefore, all three components of burnout were not taken into account as a unit, but separately to avoid under reporting the levels of burnout experienced by the participants.

Maslach and Leiter have reported aspects that may contribute toward burnout (Leiter and Maslach, 2016) and the aspects which are most relevant to the CSOT population will now be discussed. If an individual is presented with *great workloads* it decreases the capacity of the individual to perform the work leaving decreased possibility for restoration, recovery and balance with the individual not being efficient and developing skills at work. Participants who have reported great workloads especially with regards to staff shortages due to frozen posts (n=4), high caseloads (n=3) and setting up of whole occupational therapy departments independently (n=4) have provided comments such as,

> *Our case load is huge! We are 2 OT comm serves, with 2 additional therapists. One of which is a hands therapist, the other OT is the supervisor who currently is acting head of clinical Support (Allied Health) as the post is vacant. She only see's babies until they are able to walk. All the other pathologies are seen by the 2 comm serves. We have to run an outpatient clinic in the morning and then see ward patients after lunch. Participant 8*

And,

> *Currently we are short on staff, there is no time for finding resources or making resources. Participant 31*

A decreased sense of *control* experienced when the individual has no control in factors affecting work, independence at work, or attaining resources particularly corresponds with burnout (Leiter and Maslach, 2016). Participants who reported difficulty with attaining resources at work reported problems with procurement (n=18), poor financial management in the workplace (n=10), inappropriate equipment (n=18), insufficient

consumable stock (n=16), and inappropriate treatment space (n=9). As one participant commented,

> *There are limited essential resources, or even when resources become available they are limited e.g. wheelchair stock has not arrived for the whole duration of this year, our heat gun to make splints broke, we do not have a sewing machine to make pressure garments etc. Participant 62*

Another participant reported,

> *We for example have no table trays and all the resources they taught us to use in University. We must work with what we have, and most of the time have very little. Participant 43*

One participant reported inappropriate equipment and treatment area,

> *I work in a 2m by 4m office - I don't have access to a bobath plinth, my office is not wheelchair accessible, I have no access to any form of assistive devices, I cannot perform pediatric therapy sessions in my small office. Participant 25*

Minimal *reward* and recognition at work could cause workers feeling devalued and cause greater levels of burnout (Leiter and Maslach, 2016). Participants who reported lack of support and recognition and learning opportunities (n=19) provided comments such as,

> *Community service occupational therapist experiences many challenges in the workplace as we are freshly graduated from university, and sometimes we are expected to know everything already. There is no space for learning as well, as most departments in government are understaffed and you focus more on seeing all the patients instead of really enjoying the treatment process. Participant 29*

Some participants reported not being recognised and valued by other team members (n=3) providing comments such as,

> *The doctors within the hospital do not refer patients even after explaining which patients I see and advocating for OT. It's frustrating to continually fight to have patients referred. Participant 20*

If an individual does not feel a sense of *community* when relating with colleagues and clients, the incidence of burnout may be greater (Leiter and Maslach, 2016). Participants who reported difficulties relating with clients due to difficulties with understanding cultural differences and norms (n=15) provided comments such as,

> *[University] prepares therapists to work in diverse contexts, and to learn to suspend our beliefs in order to be client centred. Even so, I struggle with differing understandings of development, different priorities for treatment, and poor response to home programs - indicating that I am not always targeting the true needs of my patients. My clients tend to be 'passive' in the sense that they won't tell me if something is wrong or that they won't manage to do something that I have suggested. I'm struggling to make our relationship equal, because they relate to me as if I am a doctor who knows everything. Participant 1*

A sense of *fairness* and equality in the workplace will foster a sense of respect in the workplace avoiding negative feelings such as cynicism and anger (Leiter and Maslach, 2016). Some participants felt that their supervisors were unethical and had poor relationships with their supervisors (n=15), which influenced their sense of fairness at the workplace with comments such as,

> *My supervisor is not a good role model. He often signs the register to say that he is at work but does not see patients in the ward or in the department, as he roams the hospital grounds socializing with other members of staff. Participant 27*

And,

> *Responsibility for many tasks is placed on the comm serve leaving the other therapists with little to do within the department. Participant 9*

Addressing the aspects of *great workloads, control, reward, community* and *fairness* (Leiter and Maslach, 2016) in the CSOT workplace by using various strategies could assist with the mitigation of burnout in the workplace and should be considered when implementing organisational strategies to lessen the prevalence of burnout in CSOTs.

The contextual factors found in the literature which influence burnout vary. Hospital and governmental rules may decrease the ability to make independent decisions in the work place especially when it comes to frequency and time spent in client care, and this may increase burnout (Fred and Scheid, 2018). Working with a low-income population in healthcare with no power to address the origins of medical concerns may also result in burnout (Fred and Scheid, 2018). Studies done with nurses report stressors at work caused by decreased access to resources which includes, uncooperative and demotivated work colleagues, necessary equipment which is not available, understaffing, poor supervision and support, insufficient salaries, and poor recognition of work done (Fred and Scheid, 2018; Rothmann and Malan, 2011). Similarly, these contextual factors are also present in the South African context with CSOTs in this study reporting similar experiences (as described above).

5.2.3 The long-term effects of burnout

The long-term effects of burnout in the workplace have also been described in the literature. Burnt-out employees may influence their colleagues negatively through negative interactions with colleagues at work, and burnout is often connected to dissatisfaction and work withdrawal, poor job commitment, absentia and great rates of employee replacement (Maslach and Leiter, 2016). This has a negative effect on employee wellness and performance which influences client management and satisfaction within healthcare negatively (Maslach and Leiter, 2016; Fred and Scheid, 2018). In the CSOT population the negative effects of burnout could drive the employee to question their role in the profession, and to seek to provide services in areas which pose less contextual stressors and are not underserved, reinforcing the unfair distribution of occupational therapy services. This should be avoided by providing prevention strategies for burnout in the workplace.

Approaches for the treatment and prevention of burnout have been described in the literature and mainly focus on the use of coping mechanisms, fostering resilience,

improving the work environment and independence in the work place (Hardy, 2019). Maslach et. al. (2016) have mentioned the most commonly used strategies which include:

> *changing work patterns (e.g., working less, taking more breaks, avoiding overtime work, balancing work with the rest of one's life); b) developing coping skills (e.g., cognitive restructuring, conflict resolution, time management); c) obtaining social support (both from colleagues and family); d) utilising relaxation strategies; e) promoting good health and fitness; and f) developing a better self-understanding (via various self-analytic techniques, counselling, or therapy) (Maslach and Leiter, 2016,pg 109; Maslach, 1998).*

These strategies mostly target the practitioner, but the employer, tertiary institutions and professional organisations should also play a role in promoting the use of strategies to prevent burnout in the workplace. A review performed by Awa et al. (2010) divides burnout intervention into person-directed (such as personal skills training or relaxation) and organisation-directed (such as management skill training) interventions. The findings of this study suggest that person-directed interventions are beneficial in the short term (less than 6 months) and person-directed intervention in combination with organisation-directed intervention has effects which continues over a longer period (greater than 12 months). The study also suggests additional intervention courses as the effects of these interventions decrease over time (Awa et al., 2010).

Recommendations for the treatment and prevention of burnout in the CSOT population will be discussed in the conclusion chapter.

5.3 FORMS OF COPING USED BY PARTICIPANTS AS MEASURED BY THE COPING INVENTORY FOR STRESSFUL SITUATIONS (CISS)

Thirty two percent of the participants used high levels of avoidance-oriented coping with 37.33% using high levels of distraction and 20% using high levels of social-diversion. Avoidance focuses on keeping away from stressors and stressful circumstances in the forms of pursuits and mental change. This can be by using

distraction with the use of tasks or using social diversion to decrease feelings of stress (Endler and Parker, 1999).

A study done by researchers in Sweden looked at distraction and if it is a healthy or unhealthy way to regulate emotions. A sample of 172 adults in clinics and 638 adults in the community was used and two clearly distinguishable groups emerged. The first group, who coped better with their emotions and stress, were those that combined distraction with acceptance of their situation. These participants showed greater wellness levels and quality of life but were the lesser group that emerged from the results in the study. The second group, who avoided solving the stressful situation by using distraction without accepting the situation were the greater group emerging from the results and experienced less wellness levels and decreased quality of life. Therefore, the use of distraction being an unhealthy or healthy way of coping with stress depends on the situation the individual is in (Wolgast and Lundh, 2017) and it is important to face issues but also not to ruminate on them. The CISS in this study did not focus on what type of distraction the participants used and therefore, it cannot be determined whether their use of distraction was healthy or unhealthy.

Literature reporting the prevalence of specific forms of coping as measured by the CISS was minimal. Rather, correlations between the levels of burnout and the forms of coping were found and will be discussed in the next section. Additionally, task-oriented coping has been found as an effective way to deal with stress and will also be discussed in the following section.

5.4 THE CORRELATION BETWEEN CSOTS' EXPERIENCE OF BURNOUT AND THE COPING STRATEGIES WHICH THEY UTILISE

An individual's way of coping is usually formed as part of his/her character (Moos and Holahan, 2003), but burnout is time-related and may happen in particular circumstances and therefore burnout could be affected by forms of coping. Exhaustion at work could affect ways of coping by compromising more adaptive coping styles (Moos and Holahan, 2003), but coping style could affect the occurrence of specific disorders (Moos and Holahan, 2003) and therefore maladaptive coping could trigger disorders such as mental disorders. This research study found that emotional

exhaustion has a low positive correlation with emotion-oriented coping. Depersonalisation has a low negative correlation with task-oriented coping and a low positive correlation with emotion-oriented coping. Furthermore, personal accomplishment has a low positive correlation with task-oriented coping and a low negative correlation with emotion-oriented coping.

There was limited literature reporting correlations between forms of coping and experience of burnout in occupational therapists specifically. However, four applicable studies with other healthcare professionals were found in the literature that used the MBI and CISS to report burnout and coping skills. Interestingly, these articles were all published between 2014 and 2015, were all cross-sectional studies and reported similar findings.

Although the test used to study correlations was different, a study done with 155 Polish physiotherapists from five rehabilitation centres from March till June 2013 found similar findings to this research study that emotion-focused coping had a positive correlation with emotional exhaustion and depersonalisation. Emotion-focused coping had a negative correlation to personal accomplishment and task-focused coping had a negative correlation with emotional exhaustion and depersonalisation. However, the correlations with avoidance-oriented coping and burnout were insignificant. The main result of this study found that coping strategies is a mediator between locus of control and emotional wellness. Participants who found themselves in stressful circumstances with decreased control felt a greater sense of burnout when they used emotion-oriented coping and felt less burnt out when they used task-oriented coping. The recommendations of this study were to include task-oriented coping and improve awareness of being able to manage situations in programmes for physiotherapists to prevent burnout (Wilski et al., 2015).

Another study with 117 Polish physiotherapists reported the correlations between ways of coping and burnout. Findings demonstrated that task-oriented coping had positive effects and that emotion-oriented coping had negative effects on burnout. Negative correlations were found between task-oriented coping and all components of burnout with positive correlations of emotion-oriented coping with the three components of burnout (emotional exhaustion, depersonalisation and low sense of personal accomplishment). There were also no reciprocal correlations between coping

styles and burnout symptoms. Participants who used many task-oriented coping strategies were found to have slightly higher job satisfaction and the use of task-oriented coping was associated with decreased levels of burnout (Nowakowska-Domagala et al., 2015).

A meta-analysis of 36 studies with 9729 participants in various professions (students, teachers, health professionals etc.) performed by researchers at Korea University in 2014 found similar results to the aforementioned study of Nowakowska-Domagala et.al. (2015). Problem/task-focused coping correlated negatively with the three components of burnout and emotion-focused coping correlated positively with all three components of burnout. The association between burnout and coping was found to be strongest in the nursing profession (Shin et al., 2014).

The last study by Howlett et.al. was performed in 2014 in Canada with 315 participants (emergency physicians, nurses and support staff). This study found that task-oriented coping had a negative correlation with emotional exhaustion and depersonalisation and positive correlation with personal accomplishment). Emotion-oriented coping had positive correlations with emotional exhaustion and depersonalisation and negative correlation with personal accomplishment. Significant correlations were not found between avoidance and burnout. This study also mentioned that participants' wellness and client goals could be improved with reduction in burnout by the development of adaptive coping style as an intervention. Increased burnout was found in participants who used emotion- oriented coping and decreased burnout was found in participants who used task-oriented coping (Howlett et al., 2015).

These studies all focused on the correlation between perceived burnout and coping strategies mainly used by professionals in healthcare (excluding one study). An explanation for the similar findings to this study could be that healthcare professionals work in similar environments and are faced with similar work stressors. Even though the correlations in this research study were low, they appeared to follow the same pattern for task and emotion-oriented coping and can therefore be seen as significant as the findings follow a similar trend.

In the literature, task-oriented coping has been used largely if stressful situations are considered to be changeable whilst emotion-oriented coping is used in situations which cannot always be changed (Folkman and Lazarus, 1980) and therefore task-

oriented coping focuses on changing a stressful situation and can be seen as an adaptive way of coping. All the aforementioned studies have mentioned that it is important to adopt task-oriented (problem focused) coping in work areas where employees face great work demands (e.g. high workloads). This could also assist to promote feelings of being in control at work (Wilski et al., 2015). Therefore, facilitating CSOTs' development of insight into their coping strategies, which include task-oriented coping strategies and avoiding the use of emotion-oriented coping, is an important skill to attain. This could positively influence CSOTs development in the profession and may have a positive effect on burnout prevention strategies. Ways in which task-oriented coping could be developed to prevent burnout in CSOTs will be discussed in Chapter 6.

5.5 THE EFFECT OF THE DEMOGRAPHIC VARIABLES ON THE EXPERIENCE OF BURNOUT AND COPING SKILLS IN CSOTS

5.5.1 The effect of demographic variables on the components of burnout

5.5.1.1 Support systems

A small majority (n=49) of participants were single and most (96%; n=72) of the participants did not have children, which corresponds with the South African statistics of persons who get married or live with their partners and have children as they become older (Statistics South Africa, 2018). The main source of support reported by participants were significant others (37.33%; n=28) and nuclear family (33.33%; n=25). The majority of the participants are in the young adulthood stage of development (18-40 years old) , where family support is usually taken over by support from a significant other or friends (Tanner, 2011).

Participants with strong and adequate support systems had a greater sense of personal accomplishment (p=0.022) whilst participants who reported minimal social support reported greater levels of emotional exhaustion (p=0.011). This concurs with a meta-analysis of 144 published articles done by Halbesleben, which found that support from sources outside of the workplace (such as social support from family members) was closely related to greater personal accomplishment. On the other hand, social support that was work related was found to be closely related to experiencing

greater emotional exhaustion, which is a negative association. Furthermore, the study also highlighted the role that social support plays in burnout etiology (Halbesleben, 2006). Work related social support was not included as part of the work demographic survey questionnaire in the present study so conclusions regarding whether the social support at work affected the experience of burnout of the participants could not be made. However, only two participants reported receiving their main support from colleagues at work. Recommendations regarding social support for the CSOT population will be discussed in the conclusion chapter.

5.5.1.2 Job satisfaction

Participants who were satisfied and very satisfied with their jobs as CSOTs had a greater sense of personal accomplishment with a highly significant score (p=0.0002). Participants who were not satisfied with their jobs as CSOTs reported a greater sense of depersonalisation (p=0.047) and experienced greater levels of emotional exhaustion with a highly significant value (p=0.006). This is expected as an individual who experiences gratification from working with clients would be thought to have a greater sense of success and competence at work. A recent study done by Adarkwah and Hirsch from January 2019 to April 2019 in Germany with 674 endoscopy nurses looked at the correlation between risk of burnout and job satisfaction. The findings were that work satisfaction was an indicator of decreased emotional exhaustion and depersonalisation and increased sense of personal accomplishment (Adarkwah and Hirsch, 2020). It is important to note that these findings cannot simply be generalised to occupational therapists but they are very similar to the results of this study representing CSOTs specifically.

5.5.1.3 University graduated from

Depersonalisation is a feeling of detachment from clients that an individual comes into contact with. The individual could feel irritated by the client and have a pessimistic attitude toward the client at work (Maslach and Leiter, 2016). Participants who experienced a greater sense of depersonalisation with a highly significant score (p=0,003) graduated from the University 3 followed by the University 2 and 4. A

specific reason for these results or similar results could not be found in the literature. Further research could look into the levels of depersonalisation experienced by undergraduate occupational therapists at each of these universities and how this can be addressed by different means. Research reporting depersonalisation in students is limited and was not relevant to this specific finding.

5.5.1.4 Supervision

Participants who had a supervisor reported experiencing greater depersonalisation than those who did not have a supervisor (p=0.050). This finding was unexpected as the literature conveys the message that clinical supervision of a good standard usually results in decreased depersonalisation (Edwards et al., 2006; Kalliath and Beck, 2001). However, participants who had a supervisor and were not satisfied with the supervision they received reported greater levels of emotional exhaustion (p=0.017). This finding partly agrees with some of the literature and the expectations of the researcher. Whole studies (mostly done with the nursing population in healthcare) have been dedicated to the effect of clinical supervision on burnout with the common findings being that good clinical supervision often results in decreased feelings of emotional exhaustion and depersonalisation (Edwards et al., 2006; Kalliath and Beck, 2001). The question about satisfaction of supervision did not yield a significant p value for depersonalisation (p=0.308) but did yield a significant p value for emotional exhaustion (p=0.011).This suggests that having access to a supervisor is not enough, but satisfaction with supervision is key to avoid emotional exhaustion in the participants.

5.5.1.5 Age of participants

The age of participants influenced emotional exhaustion (p=0,040) with the greatest emotional exhaustion reported in a 27-year-old participant followed by the 24-year-old participants. A meta-analytic study of 51 studies to determine if age has an effect on burnout in nurses was done in Spain by Gomez-Urquiza et al. A significant negative correlation between age and emotional exhaustion was found with younger nurses who reported higher levels of emotional exhaustion with a minimal mean effect size.

Moderating variables which explained the correlation between age and emotional exhaustion identified in this study were the characteristics of the study (professional experience and personal accomplishment), gender and relationship status (Gomez-Urquiza et al., 2017).The identification of moderators suggests that age alone cannot be linked to emotional exhaustion and that characteristics associated with age could be affecting the correlations to a greater extent. Another study done with family medicine physicians in Srpska in 2010 found that the participants working more than 21 years and who were 46 years old and over, had significant emotional exhaustion as compared to younger participants with less years of work (Stanetić and Tesanović, 2013) suggesting that the moderating variable here is years of service. Due to the study not being specific to the occupational therapy population, it is suggested that the association of age and burnout could be an interesting topic in future research.

5.5.2 Effect of demographic variables on the forms of coping

5.5.2.1 Task-oriented coping

Demographic variables had no effect on task-oriented coping. As discussed before, task-oriented coping aims at solving problems and is viewed as a constructive way of coping that can reduce burnout (Howlett et al., 2015). A study performed by Nowakowska (2009) found that greater use of task-oriented coping is related to longer time of service and increased age. Humans' coping styles can modify and change or be sustained if they are successful (Nowakowska et al., 2009). Therefore, if not presented with the opportunity to develop more adaptive coping strategies, coping styles that are unsuccessful will be the only coping styles available for use. The participants in this study may have not yet developed effective task-oriented coping related to working due to it being in their first year of service. Further research should set out to discover which variables are associated with task-oriented coping in the CSOT population to promote the development of task-oriented coping in this population.

5.5.2.2 Emotion-oriented coping

Participants who worked in peri-urban areas and urban areas reported greater use of emotion-oriented coping (p=0.011). The literature does not provide an explanation for this finding specifically. Further research could delve into the prevalence of the different forms of coping in therapists who practice in urban and peri urban areas versus therapists who work in rural and deep rural areas to establish if these findings are similar to the sample in this study.

Participants who were not satisfied with the supervision that they received utilised emotion-oriented coping more than participants who were satisfied with the supervision they received (p=0.029). Supervision and support for the CSOT population specifically is crucial when transitioning from a new graduate to therapist. It assists CSOTs with feelings of competence whilst practicing and promotes success when providing clients with a service. Participants who were not satisfied with the supervision they received could then feel as if they are not competent to practice and may experience greater use of emotion-oriented coping. This could be because they are not focusing on solving a specific problem or have not learnt how to cope with work related stressors effectively from a supervisor. Therefore, satisfactory supervision is important to support adaptive coping strategies and in turn, CSOTs with adaptive coping strategies may possibly feel more satisfied from supervision received.

5.5.2.3 Avoidance-oriented coping

Participants who utilised avoidance-oriented coping the most were 26 and 24 years old (p=0.045), studies which correlate avoidance-oriented coping with age could not be found in the literature but this result could be influenced by other variables which are moderators between age and use of avoidance oriented-coping. This could be another interesting topic for further study. Additionally, participants with the greatest (above 15) and the least number (0-5) of occupational therapists in their departments used avoidance-oriented coping more frequently (p=0.026). No relevant literature could be found to explain this. What is known is that avoidance-oriented coping is used to stay away from stressful circumstances by distracting oneself or by using social diversion (Endler and Parker, 1999) such as engaging in social media or socially engaging with others. As mentioned before, distraction (which forms part of avoidance)

can be seen as a healthy or unhealthy form of coping depending on how it is used (Wolgast and Lundh, 2017). It is difficult to interpret the relevance of these findings as it is not known whether the participants used avoidance in a healthy or unhealthy way.

Participants who had greater satisfaction with the supervision they received used avoidance-oriented coping (p=0.018) and social diversion (which forms part of avoidance-oriented coping) with a high significant value (p=0.001) to a greater extent than participants who were not satisfied with their supervision. This means that these participants avoided stressful situations by seeking out comfort from others. As mentioned before, participants who were not satisfied with their supervision used emotion-oriented coping more which is viewed as a more maladaptive way of coping as it increases burnout, and avoidance oriented coping was not found to have an effect on burnout (Howlett et al., 2015) which could be the reason why the participants who were satisfied used avoidance oriented coping to a greater extent.

5.6 STRENGTHS AND LIMITATIONS OF THE STUDY

This study is the first study to document the prevalence of burnout in the CSOT population 17 years after the year of CS was implemented by the National Department of Health. It is also the first study to document the forms of coping CSOTs use and the first study that reports the correlation between CSOTs' experience of burnout and the coping strategies that they utilise. Furthermore, it is the first study which looks at how demographic factors influence the experience of burnout and the use of different forms of coping in CSOTs.

This study has expanded on work done by Van Strormbroek and Buchanan in 2014, which describes CSOTs experiences and demographic factors (Van Stormbroek, 2014) with similar findings being reported even if the sample size only represented 31.92% of the CSOT population. Because of this sample size, generalisation of the findings in this study to the whole CSOT population or to novice occupational therapists in other countries should be done with caution.

The three parts of the questionnaire were well reasoned out. Literature was used to establish demographic information which would be relevant and valuable to the study. Open ended questions were included for some closed ended questions to provide

richness of data and to give the participants an opportunity to 'voice' their experiences. Furthermore, the data coding process for open ended questions was overseen and checked by the research supervisor to check the researchers reasoning for the provided codes. The second part of the research questionnaire contained the MBI-HSS which is the measure used most universally to report the prevalence of burnout with proven reliability and validity in the literature. The final part of the questionnaire contained the CISS which has also been recorded as a reliable and valid measurement instrument of coping.

According to Manfreda et al., an acceptable response rate of a web based electronic questionnaire is 11% less than the average response rate of other survey methods (Manfreda et al., 2008). Higher response rates for studies are mostly preferred, but low response rates (closer to 20%) often have more accurate data (Visser et al., 1996). Surveys with lower rates of response reduce the demographic representation of the population, but not to a great extent (Holbrook et al., 2005). Therefore, the response rate of 31.92% of the study can be viewed as acceptable.

It is not known if the research questionnaire reached the whole CSOT population and only 75 complete responses were analysed for the study from a total of 105 responses, this could be due to various factors such as the participants not having access to social media or technology such as a computer and smartphone with sufficient data to complete the questionnaire. Additionally, some participants could have received the invitation to take part in the survey but did not opt to do so. The aforementioned factors may have caused an undercoverage bias (Bhandari, 2020) and/or a non-response bias (Stockemer, 2019) which could have skewed the findings in the results. For example, if the participants with more adaptive coping skills were the participants who mostly answered and submitted the survey questionnaire, the results would look more positive. Or if the participants with mostly maladaptive coping skills responded to the survey, the results would look more negative.

The survey was a self-reported questionnaire and data collected in this manner could also create distortion and bias due to the researcher not being able to control situational elements (such as the environmental setting where the participants filled in the questionnaire whilst the participants filled in the survey). Furthermore, the study

was a cross sectional study which could create temporal bias as the study was conducted in one point in time (Thomas, 2009).

Pilot testing of the survey questionnaire was also not done. This could have been a useful way to identify areas of the survey which could have been improved to ensure a better response rate and to effectively recruit more participants (Hassan et al., 2006). Literature also suggests that web-based response rates can be improved by making use of various different ways of responding to the survey, for example, sending an invitation electronically and following up with a letter, or contacting participants by use of post and through the internet to improve response rates (Millar and Dillman, 2011). This should be considered in future studies to improve the amount of responses for studies which are similar to this research project.

5.7 SUMMARY

The participants reported similar demographic information to research which has previously been performed with CSOTs. The prevalence of burnout experienced, and the forms of coping used by the CSOT population demonstrated areas of similarity and differences to the findings in the literature. Correlations between the participants' experience of burnout and the coping strategies which they used had low significance. Greater significance was found between certain demographic variables, the forms of coping and the components of burnout. The strengths and limitations of the research study were reported to provide the reader with an opportunity to assess the findings and how these findings contribute to what is already known in the literature.

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

This section will provide a summary of the aim, objectives and findings of this study. The effect the results have on practice influenced the proposals made regarding education, practice and future research, which are described in this chapter.

6.1 ANSWERING THE RESEARCH AIM AND OBJECTIVES

A total of 105 responses were received and 30 questionnaires were excluded as they were incomplete, leaving 75 questionnaires which were analysed for the study. This represented 31.92% of the 2019 CSOT population. Most participants reported adequate (36%) or strong (49.33%) social support, with significant others (37.33%) and nuclear family (33.33%) constituting the most common sources of support. The greatest number of participants practiced in Gauteng (30.67%). The majority of the participants worked in rural areas (41.33%), and urban areas (37.33%) followed by peri-urban (16%) and deep rural (5.33%) areas. A third of the participants (33.33%) worked at multiple levels of care followed by district hospitals (25.33%) and primary levels (14.67%) of care. The rest of the participants worked at secondary/regional level (12%) followed by tertiary (8%), specialised (5.33%) and central (1.33%) levels of care.

Inductive quantitative content analysis was used to analyse the reasons that participants provided for their answers. Forty percent of participants who had a supervisor were not satisfied with the supervision they received with 37.33% of the participants who were satisfied with their supervision (missing responses n=17). Sixty percent of the participants reported that they did not have sufficient resources to provide comprehensive occupational therapy services. Just over 65% experienced challenges communicating with clients, and 40% experienced challenges with trying to understand clients' values, beliefs, attitudes and cultures. Twelve percent of the participants were not satisfied with their jobs with 34.67% reporting being partially satisfied with their jobs. Just over half (53.33%) of participants reported satisfaction with their jobs.

Most of the participants felt emotionally exhausted a few times a month with a mean scale score of 3.20, SD±1.35 and participants felt a sense of personal accomplishment at least once a week (mean 4.16, SD±0.998). Percentages for low, moderate and high levels of burnout by using cut offs for burnout scores, were used to calculate the percentage of participants who had high scores of burnout components with the following scores: 55% for emotional exhaustion, 23% for depersonalisation and 33% for low personal accomplishment.

The majority of the participants were in the 62nd percentile for use of avoidance-oriented coping and used avoidance an average amount, but more than task and emotion-oriented coping. Additionally, most participants were in the 73rd percentile for using distraction-oriented coping, and in the 58th percentile for using social diversion-oriented coping.

Spearman's rank-order correlations showed low positive and negative correlations between the components of burnout and forms of coping. Emotional exhaustion had a low positive correlation with emotion-oriented coping at *p coefficient*=0.33, *p*<,05. Depersonalisation had a low negative correlation with the task-oriented coping at *p coefficient* =-0.397, *p*<,05, and a low positive correlation with emotion-oriented coping at *p coefficient* =0.41, *p*<,05. Personal accomplishment had a low positive correlation with the task-oriented coping at *p coefficient* =0.32, *p*<,05, and a low negative correlation with emotion-oriented coping at *p coefficient* =-0.32, *p*<,05. The importance of developing task-oriented coping and avoiding the use of emotion-oriented coping to avoid burnout was highlighted in the discussion chapter. Avoidance-oriented coping was not seen as a good or a bad form of coping. The use of avoidance-oriented coping as an adaptive or maladaptive form of coping depended on how the participants approached coping with a specific stressor that was not established in this study.

Participants with strong (median=4.5, range 4.13-5.13) and adequate (median=4.12, range 3.87-4.62) support systems had a greater sense of personal accomplishment (*p*=0.022) and participants who reported minimal social support (median=4.67, range 4.33-4.78) reported greater levels of emotional exhaustion (*p*=0.011).

Participants who had a supervisor (median=1.80, range 1.00-2.40) reported to experience a greater sense of depersonalisation (*p*=0.050). Participants who were satisfied with the supervision they received (median=57, range 50.00-64.50) used

social diversion to a greater extent with a high significant value (p=0.001) and participants who were not satisfied with the supervision they received (median=4.00, range 2.56-4.67) reported greater levels of emotional exhaustion (p=0.017).

Participants who were very satisfied (median=4.75, range 4.38-5.38) and satisfied (median=4.37, range 3.94-4.88) with their jobs as CSOTs had a greater sense of personal accomplishment with a highly significant score (p=0.0002), whereas participants who were not satisfied with their jobs as CSOTs experienced a greater sense of depersonalisation (p=0.047) and greater levels of emotional exhaustion with a highly significant value (p=0.006).

Participants who graduated from the University 3 (median=2.20, range 1.80-3.20) followed by the University 2 and University 4 (median=1.90) experienced a greater sense of depersonalisation with a highly significant score (p=0,003).

Demographic factors had no effect on task-oriented coping in the participants. Those who worked in peri-urban areas (median=56.50, range 51.50-63.00) and urban areas (median=54.00, range 47.50-58.00) and did not receive rural allowances (median=55.00, range 48.00-60.00) utilised emotion-oriented coping to a greater degree (p=0.011 for placement area and p=0.021 for rural allowance).

Participants who were not satisfied with the supervision which they received (median=53.50, range 46.00-62.00) utilised emotion-oriented coping to a greater degree (p=0.011) and those who had greater satisfaction with the supervision they received used avoidance-oriented coping (median=58, range 50.50-62.50) and social diversion (median=57, range 50.00-64.50) to a greater extent with a high significant value (p= 0.02 for avoidance-oriented coping and p=0.001 for social diversion).

These findings and further aspects which were covered in the results and discussion chapters informed the recommendations which have been created for this study.

6.2 RECOMMENDATIONS

This section will look at recommendations for education, practice and further research.

6.2.1 Education

Preparation and the CS year:

- University preparation should include undergraduate modules in the areas which have been identified as important in the literature and in this study to prepare for the CSOT year. These include modules in cultural humility and sensitivity, and language proficiency. These modules could occur in the first and second years of study before clinical rotations start and then be assessed in the clinical years to promote integration of knowledge and skill (Wrenn and Wrenn, 2009).
- It is acknowledged that language modules provided as part of the occupational therapy curriculum which cover the dominant language in the province where the University is situated are compulsory in only some institutions offering occupational therapy as a degree. Challenges do exist with how proficient the occupational therapy student may be in that specific language learnt, and if the language learnt is even needed in the context of their CS year. Therefore, once the CSOT is placed in a placement area, continuing professional development (CPD) courses in the predominant language at the CS placement area should be made available. CPD points should be awarded for language courses and language courses should be made available throughout the year e.g. by OTASA. This can be done through the clinical placement area or possibly through online teaching or app-based language courses which would act as a further incentive. Learning while immersed in the setting of the language being learnt will further strengthen the value of these language courses.
- Undergraduate curricula should also include courses on how to access and use translation services. This will add to CSOTs resources when starting their CS year. This information could also be included in a CPD module during the CS year.
- All undergraduate occupational therapy students should be exposed to rural clinical rotations and a variety of placement areas (paediatrics, geriatrics, physical and mental health). They should have the opportunity to learn about the practice management involved in procurement of human (such as supervisors, mentors etc.) and non-human (such as equipment and consumable/non- consumable stock) resources in these clinical areas. This will

add to the CSOTs resourcefulness if they are faced with running entire occupational therapy departments by themselves (van Stormbroek and Buchanan, 2016).

- Additionally, undergraduate occupational therapy students should be exposed to different levels of care in fieldwork placements which will include primary, secondary / district hospital services, tertiary, central and specialised levels of care. This will expose them to the different levels of care they can work in during and after the CS year and assist them in understanding the healthcare system and their role within it.
- In the undergraduate occupational therapy course, occupational therapy students register with the HPCSA and are made aware of the occupational therapy association of South Africa (OTASA) and what role OTASA plays in promoting and supporting the profession and providing a service to its members. Occupational therapy students should be encouraged to become members of OTASA during their undergraduate course. This can be done by having an OTASA representative give an information session to occupational therapy undergraduates. There is a discussion group portal available on the OTASA website specifically for occupational therapy students, and students who are OTASA members have access to a variety of resources on the OTASA website such as a list of mentors, newsletters and the South African Journal of Occupational Therapy (OTASA, 2020). It is also important for occupational therapy students to develop an active voice in the organisation so that OTASA becomes increasingly representative and responsive to the needs of CSOTs.
- In the same way, occupational therapy students will benefit from receiving information about Rural Rehabilitation South Africa (RuReSA) and how this organisation focuses on providing rural rehabilitation to rural areas in South Africa (Rural Rehabilitation South Africa, 2014-2016). This will add to future CSOTs resources and will give an opportunity for networking with other occupational therapists working in rural areas. It may also act as a way in which CSOTs can access support and possible supervision during their CS year.
- Occupational therapy is a shortage profession (World Federation of Occupational Therapists, 2016b). In South Africa specifically, there are no universities in the Eastern Cape or Mpumalanga which offer occupational

therapy as a degree. The Eastern Cape is one of South Africa's poorest (with underdeveloped infrastructure and great unemployment rates) and most underdeveloped provinces. There are almost 4,100,000 residents who do not reside in urban areas with the greatest condensed areas in peri-urban and rural areas (Human Sciences Research Council, 2012). Therefore, it would be wise to provide occupational therapy as an undergraduate course in this area as a local university may have a positive outcome on clinical occupational therapy services the rural communities in the Eastern Cape. Furthermore, universities are mostly located in urban areas but having rural sites can extend access to rural areas. This has been done by Stellenbosch University who founded Ukwanda Rural Clinical School serving the rural Western and Eastern Cape (Stellenbosch University, 2020).

Avoiding burnout in the CSOT population:

- The recent ICD-11 classification and definition of burnout gives a better understanding of burnout and provides the opportunity to teach undergraduate students and CSOTs various points about burnout. These include, what burnout is, what causes it, how it is identified and how it can be avoided in university as well as in the workplace by using different strategies (that have been proven effective in the literature). These topics could include interpersonal skills training and communication, managing emotions and stressful scenarios and using relaxation techniques (Wiederhold et al., 2018). Additional topics which could add value to this education could be on resilience training and how to foster resilience in preparation for the CSOT year and throughout the CS year (as students may have greater capacity to engage in this content during CS than at undergraduate level), as well as developing constructive coping strategies.
- Participants reported greater emotional exhaustion associated with insufficient social support, and satisfaction with supervision resulted in greater reports of personal accomplishment and less reports of emotional exhaustion. At an undergraduate level, if occupational therapy students learn the protective value of social support and supervision, they can be encouraged to develop this throughout their undergraduate and CS years. This can be done by including

these topics in the undergraduate curriculum or as part of CPD in the CS year. Additionally, the Head of the Health Science Office of Student Success at the University of the Witwatersrand has suggested that undergraduate health science students be required to complete a compulsory module in their degree that covers essential ‘soft skill’ training. These ‘soft skills’ could foster the development of adaptive coping, effective self-management and development of resilience which will assist with navigating through studies, work and life (Maleka, 2020). Additionally, the WFOT 2016 minimum standards for education of occupational therapists also speaks to the importance of 'soft professional skills' (World Federation of Occupational Therapists, 2016a). which could also serve as an effective way to develop occupational therapy students’ insight into the value of social support and supervision.

Promoting the use of task-oriented coping:

- Undergraduate curricula should include courses on how to develop insight into the coping strategies that they employ, the advantages and disadvantages of these coping strategies and then promoting the use of task-oriented/problem-focused coping as this type of coping was found to have a low positive correlation with personal accomplishment. The courses should also include topics such as identifying and treating signs of emotional exhaustion and depersonalisation, in order to prevent burnout. Education on avoiding the use of emotion-oriented coping should also be included as the use of emotion-oriented coping has been positively correlated with emotional exhaustion and depersonalisation. These courses could be included in the self-reflection part of the occupational therapy undergraduate curricula. Reflection as a learning strategy throughout the undergraduate years adds to occupational therapy students’ personal resources and can be continued after graduation. These same courses could be made available for already practising CSOTs in the form of CPD activities. Keeping this reflection in mind, fostering work-life balance throughout the undergraduate and working years is also important to avoid burnout. Balance can be achieved through role-modelling at university and avoiding overcrowding of curricula to allow students to pursue balance.

6.2.2 Practice

CSOT placement:

- CSOTs continue to be placed in urban areas for their CS year, despite the plan by the DOH to avoid placing CS workers in urban areas, away from well-resourced hospitals such as academic and teaching hospitals. The development of occupational therapy services in rural areas need to be a priority in PHC so that these underserved areas have access to occupational therapy services. In order to do this, leadership development and recruitment of experienced occupational therapists, or retention of CSOTs in placement areas through creation of posts needs to occur. This may ensure greater continuity of services in rural areas so that the responsibility of serving rural areas does not rely on CSOTs alone. This could be done through providing financial incentives, post graduate opportunities for rural therapists, appropriate support and supervision and the process could be driven or informed by OTASA and RuReSA.
- CSOTs should be provided with comprehensive orientation to their place of work throughout placement. During this time, it is imperative that they learn how to procure human and non-human resources in their specific workplace and learn how to perform all the administrative aspects involved in working in that area (practice management). A contact person should be made available who can be contacted when the CSOT needs to ask questions regarding policies and processes. This will lead to feelings of competence and autonomy at work and decrease workplace stress which may contribute to burnout.
- Translation services which the CSOT can access need to be made available when the CSOT treats clients who speak a different language. These translation services could work according to a booking schedule on a computerised system such as Google calendar so that the translator will be available when the CSOT requires assistance. Virtual translation services through a call centre of medical interpreters could be a further option to address this.

- Insufficient social support led to greater reports of emotional exhaustion in the participants. Providing supervision and mentorship are means to foster and encourage therapists to develop social support. Furthermore, satisfaction with supervision results in reduced use of emotion-oriented coping and emotional exhaustion, and greater reports of personal accomplishment. Therefore, support and supervision are of vital importance to the CSOT population to avoid maladaptive ways of coping and burnout. Placement in rural, under resourced areas for the CSOT population is unavoidable and therefore, successful opportunities for support, supervision, growth and development need to be made available to the CSOT population. This can be done by putting successful supervision, mentoring and educational programmes into place. These programmes could be offered as a collaborative effort by the Department of Health, and RuReSA, and be informed by universities, and OTASA as “voices” of the occupational therapy profession in South Africa to cater for the specific needs of the CSOT population
- There is very little opportunity for therapists to grow in support and supervision roles. Therefore, the professional organisations such as OTASA and RuReSA (and potentially universities), and the employer need to take a more active role in developing good supervisors. Examples are providing CPD accredited courses, mentorship programmes, and communities of practice for therapists to develop their knowledge and skill within supervision and their support and mentorship of younger therapists. Furthermore, recognition for outstanding supervisors in the profession may be very valuable. Annual awards for outstanding supervisors could be instituted by OTASA and RuReSA to outstanding supervisors.

Job satisfaction

- Job satisfaction leads to a greater sense of personal accomplishment and job dissatisfaction leads to greater reports of emotional exhaustion and depersonalisation in the participants. Therefore, job satisfaction should be promoted in the CSOT population as far as possible. The determinants of job satisfaction as reported by the participants were: positive experiences, having

learning and growth opportunities, available human and non-human resources, and cohesion with other staff. Therefore, the employer should try to promote the determinants of job satisfaction for CSOTs at the workplace. Examples are to provide learning and growth opportunities, providing resources which are of value to CSOTs, and promoting cohesion with other staff through team buildings. Furthermore, job satisfaction does not only depend on the employer and job satisfaction can be derived from intrinsic factors such as creating own growth and learning opportunities and positive experiences within the work environment making this a shared responsibility between the employer and employee (Sypniewska, 2014).

- Some participants reported that they were not satisfied in their jobs due to only seeing a specific population of clients (e.g. only working in mental health). The placement of CSOTs in speciality institutions should be avoided as they are novice therapists who should be afforded the opportunity to discover their field of choice by being exposed to a variety of placement areas and develop knowledge and skill across multiple areas of practice. This could be done by giving CSOTs the opportunity to rotate to different institutions in one area or seeing a variety of patients in primary care by travelling to different clinics on different days. Opportunities to learn by means of observation of other occupational therapists' practice and learning about handling techniques with clients should be included in these rotations. Virtual opportunities could be explored where real opportunities to watch other occupational therapists' practice aren't possible. The CSOTs themselves, could become adept in identifying their learning needs and explore opportunities to meet these needs. Access to watching other occupational therapists' practice was found to be of value in the research, but CSOTs do not always have the means to reach areas where they can observe other occupational therapists' practice. This could be addressed by transport arrangements by the employer to allow CSOTs to reach urban areas to access practicing occupational therapists and mentorship programmes for CSOTs. As mentioned earlier, virtual opportunities may be a possibility to address this if consent is obtained. Due to the COVID-19 pandemic this year, telehealth has been approved by the WHO as an acceptable mode for occupational therapy intervention and can be used in

training (Powell, 2020). An example of implementation could be to use a platform like Microsoft Teams for novice therapists to watch a treatment session done by an experienced occupational therapist with all the necessary consent and privacy settings being considered.

Reducing the risk of burnout:

- CSOTs who experience burnout may be less productive and less efficient at work and this influences client satisfaction and care negatively. Therefore, the identification of the factors which cause burnout in CSOTs need to be addressed. CSOT managers should communicate with CSOTs effectively and involve them in decisions regarding client treatment which give CSOTs a sense of control in the workplace and decreases feelings of stress and burnout. Older (non-novice) therapists should also develop insight into their own burnout and coping and develop skills to deal with this. This could model these important skills for junior therapists and may also change aspects of the work environment that put therapists at risk for experiencing burnout. The focus on promoting task-oriented coping and avoid emotion-oriented coping in the workplace by use of workshops and providing skills training (as explained under the education section) should be strived for. Developing task-oriented coping will also decrease stress and burnout in the workplace.

6.2.3 Further Research

- This study was a cross sectional study which could have created a temporal bias. Further longitudinal studies with the same research objectives are required so that conclusions about trends in the CSOTs forms of burnout and coping styles which they use can be made. When the CSOT burnout profile can be validated, this profile can be used to determine the creation of a burnout intervention programme for CSOTs specifically. Ongoing research can test the effectiveness of a burnout intervention programme for CSOTs, or the impact a burnout prevention programme has on CSOTs.

- The literature has reported that burnout is associated with a variety of workplace stressors. This study has identified specific factors which have an effect on burnout in CSOTs. The literature also suggests that there are a variety of different interventions for the prevention and treatment of burnout in healthcare professionals, but not for novice occupational therapists specifically. Further studies need to include implementation of these interventions as part of burnout prevention programmes and determine which of these interventions and programmes CSOTs found successful or not.
- Virtual translation services through a call centre of medical interpreters could be a further option to address translation issues in the CSOT population. This would need to be researched in future studies and could cover comparing the communication and cultural sensitivity of therapists who have access to such a service and those who do not have access to such a service.
- Another interesting study for further research is to establish if resilience has an effect on the prevention of burnout and how to foster resilience in CSOTs to prevent burnout in this population specifically.
- Further longitudinal studies into the effect of demographic factors which have an effect on burnout (work and non-work-related social support, supervision and job satisfaction specifically) can be done.
- Further longitudinal studies can look at how to develop task-oriented coping and strategies which CSOTs find effective to lead to competent practice and if these strategies and task-oriented coping promotes the mitigation of burnout.
- Teamwork has been found to lead to success in the work environment and prevent stress leading to burnout due to supportive relationships and therefore the effect of interdisciplinary teamwork in CSOT year is another topic of further research.
- Emotional exhaustion and the prevention thereof were key issues that were identified in this research study. Further studies could focus on the understanding of this specific component of burnout and how to prevent or treat it in CSOTs.

- The current COVID-19 crisis has led to the use of online platforms for therapeutic intervention through Telehealth services in order to prevent the spread of the virus (World Federation of Occupational Therapists, 2020). These web-based services could be helpful in addressing some of the needs of CSOTs when providing care to clients or accessing training opportunities. Examples of these are, providing healthcare at primary healthcare levels through online education groups to clients, and receiving CPD training and mentoring via online platforms. Further research into the use of this technology in the CS year, its value as well as implementation strategies for using it in CS placement areas will be of value.

6.3 FINAL CONCLUSION

Some key factors were highlighted in this research project. Firstly, demographic variables were found to have had a greater influence on the perceived burnout and forms of coping than the influence of specific forms of coping on burnout. This suggests that the factors external to the participants had a greater effect on them than their personal, internal factors. Secondly, 55% of the participants experienced emotional exhaustion with the main contributing factors being poor social support, decreased job satisfaction, and decreased satisfaction with supervision, thus emphasising the importance of addressing these factors in the workplace to prevent burnout. Thirdly, the importance of developing an adaptive form of coping in the participants intrinsically (personally) and extrinsically (in the work environment) was highlighted. Lastly, developing participants understanding into the forms of coping they use, and their own experience of burnout will assist them to have self-insight and develop their own professional boundaries which will assist with providing effective services to the greater South African population.

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APPENDIX A1: REASONING FOR SOCIODEMOGRAPHIC PROFILE

Number:	Type of question:	Classification item:	Justification:
1	Age	Demographic	(Canadas-De la Feunte et al., 2015, pg 1) found that "there were statistically significant differences in burnout levels associated with age"
2	Gender	Demographic	(Canadas-De la Feunte et al., 2015, pg 1) found that "there were statistically significant differences in burnout levels associated with gender"
3	Marital status	Demographic	(Canadas-De la Feunte et al., 2015, pg 1) found that "there were statistically significant differences in burnout levels associated with marital status"
4	Children	Demographic	(Canadas-De la Feunte et al., 2015, pg 1) found that "there were statistically significant differences in burnout levels associated with having children"
5	Social support structures	Yes/no with unstructured component	According to a study done by (Gupta et al., 2012) spending time with family was included as a coping strategy.
6	University graduated from	Demographic	To develop a profile from where the participants graduated from
7	Year of graduation	Demographic	To develop a profile of when the participants graduated
8	Province allocated	Demographic	To develop a profile of where the participants are placed
9	Location Rural/Urban	Demographic	To develop of the participants' location
10	Rural allowance received	Yes/no answer	To develop a profile of how many participants receive a

			rural allowance
11	Level of Healthcare (Primary, Secondary, Tertiary, Other)	Multiple response item	(Canadas-De la Feunte et al., 2015, pg 1) found that "there were statistically significant differences in burnout levels associated with level of healthcare"
12	Number of service sites and type of service offered at these sites	Demographic	Working at various sites pose challenges such as forming relationships at each site (Morley, 2009).
13	Number of patients seen monthly	Demographic	To develop a profile of participants' workload.
14	Number of occupational therapists in department excluding participant.	Numerical	It has been found that working solo influences changeover to practice as an OT (Morley, 2009).
15	Number of these occupational therapists who are also currently completing their community service year.	Numerical	Peer support could decrease levels of burnout (Petersen et al., 2008)
16	Number of other team members in department	Numerical	New therapists find support from other experienced therapists (Morley, 2009).
17	Supervisor yes/no and supervisors' profession	Yes / No with opportunity to qualify response	(Morley, 2006) found that supervision is important to help with the shift into the role of being a novice therapist.
18	Satisfaction with supervision support	Yes/no with unstructured component	To develop a profile of participants satisfaction with their supervision.
19	Able to observe other OTs treat	Yes/No response	Novice therapists appreciate the opportunity to observe other OTs practice (Morley, 2009).
20	Resources available to deliver OT service	Yes/no response with unstructured component	CSOTs experience challenges to work in areas which lack resources (Naidoo et al., 2017)
21	Challenges with communication	Yes/No with unstructured component	CSOTs experience challenges in practice when communication difficulties are experienced (Naidoo et al., 2017; Van Stormbroek, 2014)
22	Cultural competence	Yes/No with unstructured	According to (Naidoo et al., 2017,pg 41) CSOTs

		component	experience “difficulty in translating their understanding of their profession in a way that merged with the culture of the population they were serving”.
23	Job satisfaction	Yes/No with Likert type response	(Khamisa et al., 2016) found that lack of support at work is associated with burnout.

APPENDIX A2: SOCIO DEMOGRAPHIC PROFILE

Demographic data	
How old are you? (years)	_____
Gender	◯ Male ◯ Female
Marital status	◯ Single ◯ Married ◯ Divorced ◯ Long term partnership ◯ I do not wish to disclose this information
Children	◯ I am a parent ◯ I am not a parent ◯ I do not wish to disclose this information
Which best describes your social support structure (being part of a social network where you feel you are being cared for and assisted by others).	◯ Absent ◯ Minimal ◯ Adequate ◯ Strong
Who would you report as being your main source of support?	_____ (eg. My mother/friend/spouse etc)
Which university did you graduate from?	◯ Free State ◯ Cape Town ◯ Pretoria ◯ Stellenbosch ◯ Limpopo ◯ Western Cape ◯ KwaZulu-Natal ◯ Witwatersrand
In what year did you complete your undergraduate occupational therapy programme?	_____
In which province are you working as a Community Service occupational therapist?	◯ Eastern Cape ◯ Gauteng ◯ Free State ◯ KwaZulu-Natal ◯ Limpopo ◯ Mpumalanga ◯ Northwest ◯ Northern Cape ◯ Western Cape
Which type of area have you been placed in?	◯ Rural (fair distance from town/city, sparsely populated) ◯ Deep rural (substantial distance from town/city, isolated and very sparsely populated) ◯ Urban (town or city) ◯ Peri-urban (surrounding an urban area)
Do you receive a rural allowance?	◯ Yes ◯ No ◯ I do not wish to disclose this information

At what level/s of care do you provide services? (more than one opinion may be selected)	☐ Primary ☐ District hospital services ☐ Secondary /Regional ☐ Tertiary ☐ Central ☐ Specialized ☐ Other
Please specify if you chose other.	_____
How many different service sites do you deliver a service to? Please mention these (e.g. facility-based or community based service areas)	_____
Approximately how many patients do you see per month?	_____
What is the total number of occupational therapists in your department excluding yourself?	_____
How many of these occupational therapists are also currently completing their community service year?	_____
Which other team members are in your department?	☐ None ☐ Physiotherapists ☐ Speech therapists ☐ Dietitians ☐ Social workers ☐ Psychologists ☐ Nurses ☐ Doctors ☐ Other
If other was selected, please specify the discipline.	_____
Please state the number of individuals in each discipline (e.g. if there are 3 physiotherapists, type: Physiotherapists-3)	_____
Do you have a supervisor?	◯ Yes ◯ No
If yes, to which discipline does your supervisor belong? (e.g. occupational therapist / physiotherapist / speech therapist)	_____
Are you satisfied with the supervision you receive?	◯ Yes ◯ No
Please provide an explanation for your answer.	_____
Are you able to observe other occupational therapists practice?	◯ Yes ◯ No

Please select the most appropriate statement. Most of the occupational therapists that you work with:	◯ Have 0-3 years of experience ◯ Have 4-6 years of experience ◯ Have 7-10 years of experience ◯ Have more than 10 years of experience
Do you feel that you have sufficient resources available to provide comprehensive occupational therapy services?	◯ Yes ◯ No
Please explain your answer.	_____
Do you experience challenges with communicating with clients?	◯ Yes ◯ No
Explain your answer.	_____
Have you experienced challenges with trying to understand clients' values, beliefs, attitudes and cultures?	◯ Yes ◯ No
Provide an explanation for your answer.	_____
How satisfied are you with your job as a Community Service occupational therapist?	◯ I am not satisfied ◯ I am partially satisfied ◯ I am satisfied ◯ I am very satisfied
Provide an explanation for your answer.	_____

APPENDIX B: MBI ITEMS EXAMPLE

For use by Nadia Struwig only. Received from Mind Garden, Inc. on February 24, 2020

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To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

Maslach Burnout Inventory forms: Human Services Survey, Human Services Survey for Medical Personnel, Educators Survey, General Survey, or General Survey for Students.

The three sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument form may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

Citation of the instrument must include the applicable copyright statement listed below.
Sample Items:

MBI - Human Services Survey - MBI-HSS:
I feel emotionally drained from my work.
I have accomplished many worthwhile things in this job.
I don't really care what happens to some recipients.

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Sincerely,

Robert Most
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MBI EXAMPLE ITEMS



PREVIEW

APPENDIX C: CISS ITEMS EXAMPLE

May 25, 2020, 6:37 PM
(12 days ago)

Hello Nadia,

Thank you for your returning the Permissions Form.

Please accept this email as confirmation that MHS has granted you permission to cite the follow 6 items from the CISS in your research report:

2. Focus on the problem and see how I can solve it.
3. Think about the good times I've had.
13. Feel anxious about not being able to cope.
27. Think about the event and learn from my mistakes.
35. Talk to someone whose advice I value.
44. Take some time off and get away from the situation.

Thank you,
Betty
Betty Mangos - Permissions & Licensing Specialist



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CISS ITEM EXAMPLES

2. Focus on the problem and see how I can solve it.
3. Think about the good times I've had.
13. Feel anxious about not being able to cope.
27. Think about the event and learn from my mistakes.
35. Talk to someone whose advice I value.
44. Take some time off and get away from the situation.

All answers for these questions are scored from 1-Not at all to 5-Very much (Endler and Parker, 2007)

APPENDIX D: MBI PERMISSIONS

Approval for Remote Online Use of a Mind Garden Instrument

Effective date is June 6, 2020 for:

Nadia Struwig

You submitted your Application for Remote Online Use at 12:12 am EDT on May 11, 2019.

mind garden [v2]

Remote online use of the Mind Garden instrument stated below is approved for the person on the title page of this document.

Your name:

Nadia Struwig

Email address:

classiccleopatra@gmail.com

Company/institution:

University of the Witwatersrand

Mind Garden Sales Order or Invoice number for your license purchase:

HCAZTGEFC

The name of the Mind Garden instrument you will be using:

Maslach Burnout Inventory

Please specify the name of and web address for the remote online survey website you will be using and describe how you will be putting this instrument online:

I am in the process of creating a RedCap survey including the MBI, a demographic questionnaire and a coping skills questionnaire. Participants will be sent a link to open the questionnaire through RedCap.

Please include any other comments or explanations you would like to provide about your remote online use of a Mind Garden instrument:

I will send the link to the survey to one of your representative when completed.

The Remote Online Survey License is a data license for research purposes only. This license grants one permission to collect and disclose (a) item scores and scale scores, (b) statistical analyses of those scores (such as group average, group standard deviation, T-scores, etc.) and (c) pre-authorized sample items only, as provided by Mind Garden, for results write-up and publication.

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added 13 September 2018

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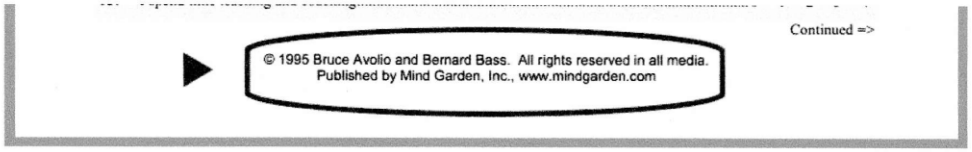
Question	Answer
I will administer this Mind Garden instrument for research purposes only.	I agree to this condition.
I will **not** send Mind Garden instruments in the text of an email or as a PDF file to survey participants.	I agree to this condition.
I will put the instrument copyright statement (from the footer of my license document; includes the copyright date, copyright holder, and publisher details) on every page containing questions/items from this instrument.	I agree to this condition.
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I will remove this online survey at the conclusion of my data collection and I will personally confirm that it cannot be accessed.	I agree to this condition.

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APPENDIX E: CISS PERMISSIONS

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Netcare Rehabilitation Hospital
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APPENDIX F: ETHICAL CLEARANCE

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

Office of the Deputy Vice-Chancellor (Research & Post Graduate Affairs)

TO: Ms N Struwig
School of Therapeutic Sciences
Department of Occupational Therapy
Medical School
University

E-mail: classiccleopatra@gmail.com

CC: Supervisor: Ms K van Stormbroek <Kirsty.vanStormbroek@wits.ac.za>
and <HREC-Medical.ResearchOffice@wits.ac.za>

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

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

DATE: 03/12/2018

REF: *R14/49*

PROTOCOL NO: **M180719** *(This is your ethics application study reference number. Please quote this reference number in all correspondence relating to this study)*

PROJECT TITLE: *The relationship between coping strategies utilized by community service occupational therapists and their experience of burnout*

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 the Government funding of the University.

MSWorks2000/Iain0007/Clearscan.wps

UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG

R14/49 Ms N Struwig

HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)
CLEARANCE CERTIFICATE NO. M180719

NAME: (Principal Investigator)	Ms N Struwig
DEPARTMENT:	School of Therapeutic Sciences Department of Occupational Therapy Medical School University
PROJECT TITLE:	The relationship between coping strategies utilized by community service occupational therapists and their experience of burnout
DATE CONSIDERED:	27/07/2018
DECISION:	Approved unconditionally
CONDITIONS:	
SUPERVISOR:	Ms K van Stormbroek
APPROVED BY:	Dr CB Penny, Chairperson, HREC (Medical)
DATE OF APPROVAL:	03/12/2018

This clearance certificate is valid for 5 years from date of approval. Extension may be applied for.

DECLARATION OF INVESTIGATORS

To be completed in duplicate and **ONE COPY** returned to the Research Office Secretary on 3rd floor, Phillip V Tobias Building, Parktown, University of the Witwatersrand, Johannesburg.
I/We fully understand the conditions under which I am/we are authorised 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 resubmit 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 of the meeting when the study was initially reviewed. In this case, the study was initially reviewed in **July** and will therefore reports and re-certification will be due early in the month of **July** each year. Unreported changes to the application may invalidate the clearance given by the HREC (Medical).

Principal Investigator Signature _____ Date _____

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

APPENDIX G: INFORMATION LETTER



Dear Community Service occupational therapist

Invitation to participate in a research project: The relationship between coping strategies utilised by Community Service occupational therapists and their experience of burnout.

I am an occupational therapist currently completing a Masters in Occupational Therapy degree at the University of the Witwatersrand.

I would like to invite all Community Service occupational therapists performing their Community Service year from January 2019 to participate in a research project that aims to describe ***the relationship between coping strategies utilised by Community Service occupational therapists and their experience of burnout.***

The objectives of the research project are as follows:

- To describe the demographic profile of Community Service occupational therapists.
- To determine which coping strategies South African Community Service occupational therapists utilise by using the Coping Inventory for Stressful Situations (CISS).
- To describe the experience of burnout in Community Service occupational therapists by using the Maslach Burnout Inventory (MBI).
- To determine the correlation between the coping strategies Community Service occupational therapists utilise, and their experience of burnout.
- To describe the relationship between the demographic factors, coping skills and experience of burnout in Community Service occupational therapists.

Your participation in the study is completely voluntary. Should you choose to participate, you will be required to complete an online survey questionnaire. Once you have submitted your responses online, you will be unable to withdraw them. By completing the survey, you are indicating consent to participate in this study. You will not be required to provide your name. The survey software (Redcap) will ensure that your response is anonymous. Any demographic data that could be linked to individual participants will be coded to ensure anonymity. All data will be kept on the researcher's password protected computer. Only the researcher, statistician and research supervisor will have access to the data.

There is no risk to participation in the research project and there are no direct benefits. Your participation in the research project, however, could be a valuable to understanding the relationship between burnout and coping strategies in a South African context. This knowledge could assist educators in developing adaptive coping strategies in undergraduate occupational therapy students and inform professional organisations in providing appropriate support and development strategies for Community Service occupational therapists.

This survey consists of 3 parts: 1) A socio-demographic profile, 2) The Coping Inventory for Stressful Situations and 3) The Maslach Burnout Inventory-Human Services Survey. It should take approximately 30 minutes to complete the survey. Instructions of how to complete the survey will be found by following the link below.

To complete the survey, please follow this link https://.....

If completion of the questionnaire elicits any psychological distress or discomfort, please cease completion of the questionnaire and use the details below to contact the South African Depression and Anxiety Group who is aware of the study. Alternatively, you may contact the researcher via phone or email (please see details below) so that you can be directed to the assistance/support that you require.

A follow up email or phone call will be made to distressed participants that have made contact with the researcher to ensure they have received the necessary assistance/support.

A summary of the research project, once completed, can be made available to you at your request. Please email this request to the researcher using the details below.

Results of the research project will be submitted to a peer-reviewed journal for publication.

This study has been approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand, Johannesburg ("Committee"). The ethics clearance certificate number is M180719. 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

Your consideration to participate in this research project is greatly appreciated. If you have any questions pertaining to this research project, please contact me.

Kind regards,

Nadia Struwig

B. Occupational Therapy

Email: 1911915@students.wits.ac.za/ Telephone: 081 421 1278

Kirsty van Stormbroek

Supervisor

kirsty.vanstormbroek@wits.ac.za

South African Depression and Anxiety group contact details:

SADAG Helpline 0800 323 323 (24 hours)

SMS 31393

Email office@anxiety.org.za

APPENDIX H: KRUSKAL-WALLIS TEST RESULTS

Burnout

Personal accomplishment

Depend.: Personal Accomplishment	Kruskal-Wallis ANOVA by Ranks; Personal Accomplishment (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: social support Kruskal-Wallis test: H (3, N= 75) =9,643027 p =,0219			
	Code	Valid N	Sum of Ranks	Mean Rank
Absent	1	2	29,000	14,50000
Minimal	2	9	223,500	24,83333
Adequate	3	27	944,000	34,96296
Strong	4	37	1653,500	44,68919

Depend.: Personal Accomplishment	Kruskal-Wallis ANOVA by Ranks; Personal Accomplishment (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: satisfied job as CSOT Kruskal-Wallis test: H (3, N= 75) =19,21526 p =,0002			
	Code	Valid N	Sum of Ranks	Mean Rank
Not satisfied	1	9	127,0000	14,11111
Partially satisfied	2	26	909,5000	34,98077
Satisfied	3	24	965,0000	40,20833
Very satisfied	4	16	848,5000	53,03125

Depersonalisation

Depend.: Depersonalisation	Kruskal-Wallis ANOVA by Ranks; Depersonalisation (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: university Kruskal-Wallis test: H (6, N= 75) =19,62050 p =,0032			
	Code	Valid N	Sum of Ranks	Mean Rank
1	1	9	311,5000	34,61111
2	2	16	691,5000	43,21875
3	3	12	612,0000	51,00000
4	4	22	926,5000	42,11364
5	5	2	39,0000	19,50000

Depend.: Depersonalisation	Kruskal-Wallis ANOVA by Ranks; Depersonalisation (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: university Kruskal-Wallis test: H (6, N= 75) =19,62050 p =,0032			
	Code	Valid N	Sum of Ranks	Mean Rank
6	6	11	253,5000	23,04545
7	7	3	16,0000	5,33333

Depend.: Depersonalisation	Kruskal-Wallis ANOVA by Ranks; Depersonalisation (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: supervisor Kruskal-Wallis test: H (1, N= 75) =3,836692 p =,050			
	Code	Valid N	Sum of Ranks	Mean Rank
Yes	1	58	2358,500	40,66379
No	2	17	491,500	28,91176

Depend.: Depersonalisation	Kruskal-Wallis ANOVA by Ranks; Depersonalisation (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: satisfied job as CSOT Kruskal-Wallis test: H (3, N= 75) =7,939110 p =,0473			
	Code	Valid N	Sum of Ranks	Mean Rank
Not satisfied	1	9	467,0000	51,88889
Partially satisfied	2	26	947,5000	36,44231
Satisfied	3	24	992,0000	41,33333
Very satisfied	4	16	443,5000	27,71875

Emotional exhaustion

Depend.: Emotional Exhaustion	Kruskal-Wallis ANOVA by Ranks; Emotional Exhaustion (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: Age Kruskal-Wallis test: H (7, N= 75) =14,70314 p =,0400			
	Code	Valid N	Sum of Ranks	Mean Rank
22	22	13	403,000	31,00000
23	23	39	1438,000	36,87179
24	24	9	493,500	54,83333
25	25	5	132,000	26,40000
26	26	3	118,000	39,33333
27	27	3	185,000	61,66667
29	29	2	79,500	39,75000

Depend.: Emotional Exhaustion	Kruskal-Wallis ANOVA by Ranks; Emotional Exhaustion (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: Age Kruskal-Wallis test: H (7, N= 75) =14,70314 p =,0400			
	Code	Valid N	Sum of Ranks	Mean Rank
30	30	1	1,000	1,00000

Depend.: Emotional Exhaustion	Kruskal-Wallis ANOVA by Ranks; Emotional Exhaustion (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: social support Kruskal-Wallis test: H (3, N= 75) =11,22284 p =,0106			
	Code	Valid N	Sum of Ranks	Mean Rank
Absent	1	2	62,500	31,25000
Minimal	2	9	542,500	60,27778
Adequate	3	27	889,000	32,92593
Strong	4	37	1356,000	36,64865

Depend.: Emotional Exhaustion	Kruskal-Wallis ANOVA by Ranks; Emotional Exhaustion (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: satisfied supervision Kruskal-Wallis test: H (1, N= 58) =5,679394 p =,0172			
	Code	Valid N	Sum of Ranks	Mean Rank
Yes	1	28	673,000	24,03571
No	2	30	1038,000	34,60000

Depend.: Emotional Exhaustion	Kruskal-Wallis ANOVA by Ranks; Emotional Exhaustion (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: satisfied job as CSOT Kruskal-Wallis test: H (3, N= 75) =12,38572 p =,0062			
	Code	Valid N	Sum of Ranks	Mean Rank
Not satisfied	1	9	480,500	53,38889
Partially satisfied	2	26	1076,500	41,40385
Satisfied	3	24	919,500	38,31250
Very satisfied	4	16	373,500	23,34375

Forms of coping

Emotion-oriented coping

Depend.: Emotion	Kruskal-Wallis ANOVA by Ranks; Emotion (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: type of area Kruskal-Wallis test: H (3, N= 75) =11,23737 p =,0105			
	Code	Valid N	Sum of Ranks	Mean Rank
Rural	1	31	1001,500	32,30645
Deep rural	2	4	65,500	16,37500
Urban	3	28	1170,000	41,78571
Peri-urban	4	12	613,000	51,08333

Depend.: Emotion	Kruskal-Wallis ANOVA by Ranks; Emotion (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: rural allowance Kruskal-Wallis test: H (1, N= 75) =5,302523 p =,0213			
	Code	Valid N	Sum of Ranks	Mean Rank
Yes	1	36	1151,000	31,97222
No	2	39	1699,000	43,56410

Depend.: Emotion	Kruskal-Wallis ANOVA by Ranks; Emotion (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: satisfied supervision Kruskal-Wallis test: H (1, N= 58) =5,063851 p =,0244			
	Code	Valid N	Sum of Ranks	Mean Rank
Yes	1	28	681,500	24,33929
No	2	30	1029,500	34,31667

Avoidance-oriented coping

Depend.: Avoidance	Kruskal-Wallis ANOVA by Ranks; Avoidance (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: Age Kruskal-Wallis test: H (7, N= 75) =13,81372 p =,0546			
	Code	Valid N	Sum of Ranks	Mean Rank
22	22	13	586,500	45,11538

Depend.: Avoidance	Kruskal-Wallis ANOVA by Ranks; Avoidance (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: Age Kruskal-Wallis test: H (7, N= 75) =13,81372 p =,0546			
	Code	Valid N	Sum of Ranks	Mean Rank
23	23	39	1306,000	33,48718
24	24	9	473,500	52,61111
25	25	5	226,500	45,30000
26	26	3	136,000	45,33333
27	27	3	39,000	13,00000
29	29	2	74,000	37,00000
30	30	1	8,500	8,50000

Depend.: Avoidance	Kruskal-Wallis ANOVA by Ranks; Avoidance (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: total occupational therapists Kruskal-Wallis test: H (14, N= 75) =25,81015 p =,0274			
	Code	Valid N	Sum of Ranks	Mean Rank
0	0	15	510,0000	34,00000
1	1	18	574,5000	31,91667
2	2	11	484,0000	44,00000
3	3	6	383,0000	63,83333
4	4	1	1,0000	1,00000
5	5	6	328,0000	54,66667
6	6	3	72,5000	24,16667
7	7	4	114,5000	28,62500
8	8	3	142,5000	47,50000
13	13	1	12,5000	12,50000
14	14	2	51,5000	25,75000
15	15	1	10,5000	10,50000
22	22	1	26,0000	26,00000
28	28	1	26,0000	26,00000
29	29	2	113,5000	56,75000

Depend.: Avoidance	Kruskal-Wallis ANOVA by Ranks; Avoidance (Copy of Cleaned with descriptions final (002)) Independent (grouping) variable: satisfied supervision Kruskal-Wallis test: H (1, N= 58) =4,892860 p =,0270			
	Code	Valid N	Sum of Ranks	Mean Rank
Yes	1	28	968,0000	34,57143
No	2	30	743,0000	24,76667

Social diversion

Depend.: Social diversion	Kruskal-Wallis ANOVA by Ranks; Socialdiversion T scores (Cleaned with descriptions final with CISS manual entries) Independent (grouping) variable: Are you satisfied with the supervision you receive? Kruskal-Wallis test: H (1, N= 58) =10,27899 p =,0013			
	Code	Valid N	Sum of Ranks	Mean Rank
Yes	1	28	1031,500	36,83929
No	2	30	679,500	22,65000

APPENDIX I: ACCEPTANCE OF TITLE

UNIVERSITY OF THE
WITWATERSRAND,
JOHANNESBURG

Private Bag 3 Wits, 2050
Fax: 027117172119
Tel: 02711 7172076

Reference: Mrs Sandra Benn
E-mail: sandra.benn@wits.ac.za

22 August 2018
Person No: 1911915
PAG

Ms N Struwig
Postnet Suite 224
Private Bag X9
Melville
2092
South Africa

Dear Ms Struwig

Master of Science in Occupational Therapy: Approval of Title

We have pleasure in advising that your proposal entitled 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

Mrs Sandra Benn
Faculty Registrar
Faculty of Health Sciences

APPENDIX J: TURNITIN REPORT

The relationship between coping strategies utilised by Community Service occupational therapists and their experience of burnout

ORIGINALITY REPORT

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Publication

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