

**Coping strategies for the prevention of burnout among
occupational therapists: A literature review**

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Abstract

The risk for occupational therapists of burnout in the workplace appears to be increasing. By identifying and implementing effective coping strategies for the prevention of burnout, occupational therapists can maintain their own overall health and well-being.

The aim of this study was to identify the coping strategies for reducing the risk and potentially preventing burnout among occupational therapists.

A review of the occupational therapy literature from 2010 to 2022 was conducted. A PICO framework was used to develop a research question, a search of online databases was conducted. Relevant literature was identified and screened prior to data extraction and thematic analysis.

A total of 20 papers were identified. The two main themes of external and internal strategies were identified as potential coping strategies for the prevention of burnout. Sub-themes included: Professional identity, job satisfaction, supervision, colleagues support, resilience, and mindfulness.

The review suggests internal and external coping strategies potentially reduce the risk of burnout for occupational therapists. Minimal evidence was found to demonstrate the effectiveness of coping strategies in clinical practice. Further research is recommended into the longitudinal impact of the identified coping strategies for burnout prevention.

Key words: Burnout, coping strategies, prevention, occupational therapists

Attestation of Authorship

“I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the qualification of another degree or diploma of a university or other institution of higher learning, except where due acknowledgement is made in the acknowledgements.”

Andrew O’Leary

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This project is also fondly dedicated to my “OT Dad” Mike Feighan, an inspirational occupational therapist, in Devon, United Kingdom. My mentor, hiking buddy and good friend, who suddenly passed away in 2021.

Table of Contents

Abstract.....	2
Attestation of Authorship	3
Acknowledgements	4
List of Tables.....	7
List of Figures.....	7
Chapter 1: Introduction.....	8
Background to the study	8
Statement of problem.....	8
Purpose of the literature review	9
Differentiating between burnout, stress, and coping strategies.	9
Burnout in healthcare research.....	12
Burnout in the occupational therapy literature	13
Burnout in the health professions: The New Zealand context.....	16
Rationale for the literature review	17
Research question and objectives	18
Summary	18
Chapter 2: Methodology.....	20
Development of the research question.....	20
Methodology selection.....	21
Rationale for the methodology selection	24
Eligibility criteria	24
Data sources and searches.....	26
Screening process	26
Data extraction.....	28
Data analysis	28
Summary	29
Chapter 3: Findings	30
Study characteristics	30
Identified themes.....	33
External coping strategies.	34
Maintaining professional identity	34
Sustaining a sense of job satisfaction.....	37
Benefiting from supportive supervision.....	40
Support from others.....	42
Opportunities for career development.....	43
Internal coping strategies	44

Work engagement	44
Being in the moment	45
Developing resilience	46
Using problem-solving and creativity	48
Spending time in nature.....	49
Taking personal responsibility	49
Summary of findings	51
Chapter 4: Discussion.....	53
Statement of findings	54
Discussion of findings	55
Comparing the findings with other healthcare disciplines.....	58
Limitations of this study	61
Recommendations for further research and practice	62
Conclusion	63
References	64
Appendix 1: Screenshot of mind map for research question.....	72
Appendix 2: Record of search strategy.....	73
Appendix 3: Inclusion criteria checklist.....	78
Appendix 4: Data extraction table	81
Appendix 5: Thematic analysis table.....	98
Appendix 6: Table of themes.....	110

List of Tables

Table 1: PICO formulation for research question.....	21
Table 2: The thematic analysis approach	28
Table 3: Articles included in the literature review	31
Table 4: Table of themes.....	33
Table 5: Summary of identified coping strategies.....	51

List of Figures

Figure 1: PRISMA flowchart for records included in the literature review.....	27
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Chapter 1: Introduction

The best treatment for burnout maybe prevention, as once burnout has set in, one has to consider recovery strategies (Kumar, 2016).

Background to the study

This research project began as a personal journey of recovery from burnout. I am an occupational therapist who has experienced workplace burnout. On reflection, my experience of burnout was of isolation and a gradual increase over time of emotional and physical exhaustion, insomnia, denial, cynicism, and self-questioning of my own professional competency. My prior knowledge of coping strategies for burnout, apart from clinical supervision and employer counselling support, was limited.

On my journey of recovery, I have learned about the potential coping strategies for the prevention of burnout. My personal and professional aim is that this project may potentially benefit my peers within New Zealand, through an increased awareness about potential coping strategies within the profession, and ultimately reducing the risk of another occupational therapist experiencing burnout.

Statement of problem

Burnout at work is a risk factor for occupational therapists. Burnout is not a new phenomenon in the workplace but is a growing one (McAlpine, 2021). The recent COVID-19 pandemic has also highlighted the increasing risk of burnout for healthcare workers (Gemine et al., 2021). Internationally, studies into burnout and potential coping strategies for occupational therapists have been conducted. However, within New Zealand the research has found minimal occupational therapy studies into burnout. It is this gap in the research that justifies the need for this literature review to be conducted.

Purpose of the literature review

The purpose of this literature review is to not about identifying the causes and prevalence of burnout, but to identify from the current literature what potential coping strategies can be used by occupational therapists in New Zealand to prevent or reduce the risk of workplace burnout.

Differentiating between burnout, stress, and coping strategies.

The literature review began with a definition for burnout. Burnout features in the International Classification of Diseases (ICD-11) and is defined by the World Health Organisation as not a medical condition but an “occupational phenomenon” specific to the workplace only, as a consequence of chronic stress at work that has not been successfully managed (WHO, 2019). The individual impact on the employee of experiencing burnout can result in symptoms including, low motivation, low frustration tolerance, emotional exhaustion or loss of energy, feeling cynical and disconnected from one’s work and workplace, blaming others, and potentially self-questioning one’s own professional competency (Freudenberger, 1986; Kumar et al., 2013; Maslach & Leiter, 2016; WHO, 2019). Burnout may result in the employee leaving their job or even their profession entirely (Lloyd & King, 2001).

As indicated by WHO (2019) burnout is a consequence of chronic stress in the workplace, therefore definitions of stress were explored within the healthcare literature. Hans Selye, a pioneer of medical research into stress, classified stress as being either enjoyable and productive (eustress) or harmful (distress), (Saxena, 1980). Research with animals in the 1930’s, identified the physiological fight or flight responses that animals displayed to noxious stimuli (Gross, 2015; Lazarus & Folkman, 1984; Selye, 1936; Tan & Yip, 2018). Subsequently stress was defined as the “non-specific response of the body to any demand made upon it, whether that was good or bad” (Selye, 1978, p.74).

Later research in psychology examined the psychological and human coping responses to stress and Lazarus and Folkman (1984) developed a transactional model of stress and coping. They describe the model as a dynamic model of stress and coping that emphasizes the importance of individual person-environment reactions to stress. Stress is suggested to be not solely an automatic response to noxious stimulus, as individual differences of the encountered stress and external environmental factors also influence the reaction (Lazarus, 1990; Lazarus & Folkman, 1984; Ntoumanis et al., 2009). Lazarus and Folkman (1984) defined stress as “a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding their resources and endangering their well-being” (Lazarus & Folkman, 1984, p.19).

The transactional model of stress and coping proposes that once an individual is presented with a stressful situation in their environment, they will conduct their own primary cognitive appraisal, to determine if that stress is irrelevant, benign-positive, harmful, a threat, or a challenge to them (Lazarus & Folkman, 1984). The stressful situation can then either be dismissed or responded too dependent on their individual appraisal (Lazarus & Folkman, 1984). This primary appraisal will determine if there is a need for a secondary appraisal response, and if it is deemed stressful and requiring input to remedy, individual coping strategies are implemented to reduce the stress (Lazarus, 1990; Lazarus & Folkman, 1984).

The dynamic nature of the transactional model of stress and coping is further illustrated by cognitive reappraisal after coping strategies are implemented to determine whether the coping strategies have been successful or unsuccessful in managing the stress, or if further coping strategies are required (Lazarus & Folkman, 1984). Subsequently, coping has been defined as “constantly changing cognitive and behavioural efforts to manage specific external and/or

internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p.141).

Ultimately, how an individual copes and what strategies are used depends on their own appraisal of the stress encountered (Garrosa & Moreno-Jiménez, 2013; Lazarus & Folkman, 1984). These coping strategies can either be adaptive or maladaptive, by being problem focused, by attempting to directly solve the problem and seeking support or emotion focused, through managing emotions and distress (Lazarus & Folkman, 1984). Problem focused or emotion focused can be used separately or combined, dependent on appraisal of the best way to manage the stressful situation (Lazarus & Folkman, 1984).

Problem focused and emotion focused coping strategies have subsequently been identified in healthcare studies to manage stress or burnout (Gellis, 2002; Kravits et al., 2010; Obbarius et al., 2021). An example of use with occupational therapists is a study by Brice et al. (2001) who examined the coping strategies occupational therapists used when working with emotionally challenging clients with long term mental health needs. Brice (2001) found that the coping strategies occupational therapists used to meet emotional demands included using problem focused and emotion focused strategies, i.e., supportive staff and work environment, maintaining boundaries with clients and regular clinical supervision. The transactional model of stress and coping (Lazarus & Folkman, 1984), appears to be a useful practical tool for occupational therapists to understand individual responses to coping with stress, and therefore potentially preventing burnout.

Literature suggests that all workplaces will have varying levels of stress that an employee will experience, dependent on factors such as the requirements, expectations and demands of the job, the organisational structure and interpersonal relationships with others in the workplace

(Lloyd & King, 2001). Prolonged exposure to occupational stress has a major impact on the physical and mental health of the employee, patient care, work productivity and also on the employer, through absenteeism and financial costs (Bährer-Kohler, 2013; Lloyd & King, 2001). The employee may not be able to manage this prolonged exposure to occupational stress successfully which can lead to burnout (Lloyd & King, 2001).

In defining and discussing stress and burnout with the aim of differentiating them, what the literature shows is that burnout is a consequence of chronic stress in the workplace that overburdens the individual. The literature has identified coping strategies for managing stress, but it is important to identify coping strategies for burnout within healthcare research, occupational therapy literature, and the New Zealand context to gain an understanding of this phenomenon.

Burnout in healthcare research

In healthcare, the term burnout was identified by psychologist Herbert Freudenberger, who was working in a drug dependency treatment clinic in New York City (Costa, 2018; Freudenberger, 1974; Muheim, 2013). Freudenberger observed that the clients who attended the clinic often lacked motivation and were referred to as “Burnouts”, as their sole aim appeared to be to obtain drugs and not engage in any preventive treatment (Costa, 2018). Over a period of time, Freudenberger observed that the idealistically motivated volunteers who worked with these clients began to experience energy depletion and a loss of motivation, along with exhausting physical and mental health symptoms (Muheim, 2013). Freudenberger subsequently described ‘burnout’ as a state of physical and mental exhaustion caused by one’s professional life (Freudenberger, 1974; Kraft, 2006).

A self-questionnaire, the Maslach Burnout Inventory (MBI), (Maslach et al., 1996; Maslach & Leiter, 2016). Maslach et al.(1996) termed burnout as a psychological syndrome resulting from the three components of increased emotional exhaustion, depersonalisation and decreased personal accomplishment which the MBI measures. The MBI has been translated into multiple languages and used extensively in subsequent studies to measure burnout levels at a specific point of time (Maslach et al., 1996; Maslach & Leiter, 2016). Occupational therapy studies have used the MBI to measure levels of burnout (Balogun et al., 2002; Brown & Pranger, 1992; Jahrami, 2009; Painter et al., 2003; Rogers & Dodson, 1988; Schlenz et al., 1995; Sturgess & Poulsen, 1983).

Several models of burnout have also been used to explain the process of burnout. Maslach et. al. (2001) suggested that burnout could be caused because of a chronic person-work setting mismatch with the person and with the main areas of work life: values, fairness, reward, community, workload, and control. A model of occupational wellbeing and burnout from psychology, the Job Demands-Resources model (Bakker & Demerouti, 2007; Demerouti et al., 2001) proposes that when job demands are high and job resources are low, burnout may occur.

Burnout in the occupational therapy literature

The research will focus on the occupational therapy literature from 2010 to 2022, it was however seen as important to gain an understanding of the professions early understanding and response to burnout. A review of the occupational therapy literature up to 2010, identified the presence of studies about burnout and coping strategies in the 1980's. Internationally there were a number of studies, which appear to have been sparked by the development of the MBI.

In Australia, a survey by Sturgess and Poulsen (1983) of occupational therapists within one geographical area, used the MBI to measure difference in levels of burnout amongst

occupational therapists who worked in mental health settings, compared to those who work in paediatric or physical rehabilitation settings. The reported findings found that occupational therapists working in mental health experienced lower levels of job satisfaction and a lower perceived sense of personal accomplishment, than their peers in other settings (Sturgess & Poulsen, 1983). Recommendations from this study suggested strategies for the prevention of burnout, including occupational therapy professional organisations promoting the improvement of working conditions for practitioners and more information about burnout to be provided at an undergraduate level.

In the USA (Rogers & Dodson, 1988) used the MBI to measure burnout levels among a randomly selected sample of 99 occupational therapists in different areas of practice. The findings suggested that on average occupational therapist experience lower levels of burnout than other health professionals, although they may be prone to decreased feelings of personal accomplishment (Rogers & Dodson, 1988).

Brollier et al. (1986) reviewed the healthcare literature and indicated that potential causes of burnout related to individual characteristics, i.e. personality types, locus of control of the stress situation, work environment i.e. role ambiguity, role conflict, work overload, and extra-organisational stressors, i.e. personal life stressors, The suggested preventive strategies for burnout among occupational therapists included: self-recognition of stress, work/life balance, relaxation, stress reduction techniques, staff development, management development, organisational problem solving, job restructuring, good quality and creative supervision, and a twice yearly “burnout check-up” with a staff development specialist, who is not a direct supervisor, to discuss any concerns.

Further cross-sectional surveys and literature reviews in the occupational therapy literature identified preventive strategies for stress and potentially burnout at work. These preventive strategies included: personal strategies to recognise and cope with one's own stressors at work, stress awareness training/counselling, relaxation, physical exercise, balancing one's lifestyle, supportive supervision, performance appraisal, continuing staff development, developing formal and informal staff support networks inside and outside the workplace, use of humour with staff/clients, self-care, time management, and taking personal responsibility (Balogun et al., 2002; Brown & Pranger, 1992; Cox, 1988; Craik, 1988; Leonard & Corr, 1998; Rees & Smith, 1991; Sweeney et al., 1991, 1993).

Bassett and Lloyd (2001) in a literature review of stress and burnout from the occupational therapy literature reported factors that increased work stress and burnout included working with difficult clients, resource shortages, a lack of supervision and ongoing training, not having a clear career structure, along with a lack of professional identity. Painter et al. (2003) examined whether the practice setting influenced levels of burnout. Findings suggested that occupational therapists who were employed in mental health or long-term rehabilitation settings experienced higher levels of burnout than in other settings. A recommendation from this study to prevent the risk of burnout, was for occupational therapists to review if their work setting of choice provided a suitable person-environment fit to meet the occupational therapists' skills, values, aspirations, lifestyle, and experience.

Interestingly, a systematic review (Edwards & Burnard, 2003) examined the effectiveness of stress management interventions for mental health occupational therapists. The review included occupational therapy studies into burnout (Brice, 2001; Brollier et al., 1986; Brown & Pranger, 1992; Rogers & Dodson, 1988; Sturgess & Poulsen, 1983; Sweeney et al., 1991). Edwards and Burnard (2003) reported that no studies had measured the effectiveness of stress management

interventions among occupational therapists working in mental health and recommended further longitudinal research to be conducted.

Within the New Zealand occupational therapy literature, Hocking (1988) presented findings for the prevention of burnout based on the findings of an earlier study (Brollier et al., 1986). Hocking (1988) indicated that occupational therapy managers and supervisors have an important role in burnout prevention, by provision of supportive supervision and a support network. A study of occupational therapists working within mental health settings reported that the workload and organisational structure and processes were the primary sources of stress, and a recommendation to reduce stress levels was that educational facilities prepare practitioners for working in generic and specialist roles (Lloyd et al., 2003).

The impact of COVID-19 pandemic (2020-to present time) has seen negative changes to occupational therapists within the workplace. In the UK, a survey of 1500 occupational therapists and students by Ward and Casterton (2020) reported that study participants were displaying early signs and symptoms of burnout. Specific negative changes included the impact on individual work/life balance, reduced access to supervision and mentorship, and reduced personal health and well-being, all known signs of burnout.

Burnout in the health professions: The New Zealand context

A survey conducted during COVID-19, suggested that as many as 11% of New Zealand's general workforce at any one time were experiencing burnout (Haar, 2022). Essential workers in New Zealand, who were individuals who worked during lockdown periods, were suggested to be at higher risk of burnout (14%) than non-essential workers (9%) (Haar & O'Kane, 2022).

There have been no studies with occupational therapists, but other healthcare professions have conducted their own studies into burnout. Tabakakis et al.(2020) reported increased risks in nurses of burnout specifically associated with the practice environment and workplace bullying (Tabakakis et al., 2020). In psychiatry, Kumar et al., (2013) found that emotional exhaustion remained consistently stable, however depersonalisation and personal accomplishment reduced over a 3-year longitudinal study, indicating an increasing risk of burnout. In 2021 burnout appears to affect one in three psychiatrists in New Zealand (Chambers & Frampton, 2022).

Occupational stress has been related to work stressors with Māori in the workplace (Stewart & Gardner, 2015). They found cultural differences include institutional racism, limited cultural safety and non-Māori not valuing Māori cultural competencies (Stewart & Gardner, 2015). Furthermore, non-Māori employees may request their Māori colleagues in the workplace to deal with Māori issues, as they may not feel comfortable doing so. Obligations to whanau, iwi and hapu can also increase occupational stress for Māori employees (Stewart & Gardner, 2015).

Rationale for the literature review

The writer's own personal experience of burnout has provided inspiration and impetus for this project. This "lived experience" of burnout resulted in a personal passion to identify the coping strategies that could prevent or reduce the risk of burnout occurring to other occupational therapists within Aotearoa New Zealand.

While the results of this study will positively benefit the writer personally, importantly other occupational therapists, the occupational therapy profession, healthcare organisations and educational facilities within New Zealand might also benefit.

Research question and objectives

The aim of a literature review is to identify the evidence for, and the current gaps in the literature about coping strategies to prevent burnout. The writer's researchers own passion and interest in this topic has led to the development of the research question with relates particularly to occupational therapists.

The following research question underpins this literature review:

What coping strategies can occupational therapists in New Zealand use to prevent burnout?

This literature review seeks to reduce the knowledge gap and raise awareness among occupational therapists within New Zealand, about coping strategies to reduce the risk or prevent burnout. To achieve this objective the following will be undertaken:

1. To systematically identify a range of literature sources that collectively provides an in-depth understanding of burnout and potential coping strategies.
2. To critically review, map and summarise an overview of the literature to provide evidence synthesis applicable to the occupational therapy profession.
3. To interpret the evidence-base to occupational therapists working within the New Zealand healthcare context.

Summary

Burnout at work appears to be an increasing risk factor for occupational therapists. The aim of this literature review is to identify potential coping strategies for the prevention of burnout among occupational therapists. Stress, burnout, and coping strategies have been defined, and

healthcare and occupational therapy literature prior to 2010 has been reviewed. Chapter 2 discusses the methodology selection.

Chapter 2: Methodology

In chapter 1 the research question was introduced along with the purpose and objectives of the study. Chapter 2 focuses on the development of the research question and the methodology selection. The rationale for the methodology selection is highlighted along with inclusion and exclusion criteria, the search strategy, and the data extraction and analysis process.

Development of the research question

The research question originated from the writers own personal experience of burnout and aimed to identify from the evidence, the coping strategies for burnout in the occupational therapists. A mind map was comprised of the factors that were relevant to the writer's own burnout experience (Appendix 1), and this confirmed an interest in identifying research into what can be done to prevent or reduce the risk of burnout among occupational therapists.

The research question was developed using the PICO acronym (Table 1). The PICO (Population/problem, Intervention/issue, Context, and Outcome) tool has been widely used previously to enable researchers to define their research question and subsequently their search strategy (Aveyard et al., 2021) and provides a comprehensive range of results, when using a combination of key terms and synonyms (Cooke et al., 2012). Using PICO, the following key terms for the research question were developed with alternative terms to assist the search strategy (Table 1).

Table 1*PICO Formulation for Research Question*

PICO	Population	Intervention or Issue	Context	Outcome
Key term	Occupational therapists	Burnout	New Zealand	Coping strategies
Alternative term	Allied health professional health professional	Work stress, emotional exhaustion	Healthcare, mental health, physical health	Prevention, reduce risk, management, interventions, support strategies

Methodology selection

Different research methodologies were considered to answer the research question. Healthcare research methodology can generally be divided into two world views or paradigms, quantitative and qualitative, and have different methods for conducting studies (Creswell & Creswell, 2018; Creswell & Poth, 2018; Ellis, 2014a). Quantitative research is a deductive reasoning process, that generally starts with a researcher's hypothesis focused on establishing a cause-and-effect relationship among variables, through measurable data, measurement tools and statistics collected in a pre-organised logical manner (Ellis, 2014a, 2014b). A quantitative methodology to explore this research question might have included a survey of occupation therapists, using a measurement of burnout and their use of coping strategies to investigate the correlations between burnout and coping strategies. Conversely, qualitative research uses an inductive reasoning process where the researcher seeks to understand people's experiences about a phenomenon of interest, without any preconception of what research findings they will find (Ellis, 2014b, 2014a). A qualitative methodology suitable for this research question

could have included interviews with occupational therapists who have recovered from burnout. Selecting the correct methodology to answer the research question was therefore fundamental to the research design (Ellis, 2014b).

The purpose of this study was to identify what are the coping strategies that occupational therapists can use to reduce the risk or prevent burnout. Therefore, the methodology required an approach that would provide evidence and lived experiences about coping strategies for occupational therapists, which could then be considered or proposed within the New Zealand context to occupational therapists. This indicated the need to take an approach that could gather data from both quantitative and qualitative literature to allow for the identification of the lived experiences or opinions of occupational therapists.

A factor considered was the researchers own personal situation at the time of the study. The writer is a non-practicing occupational therapist in New Zealand recovering from workplace burnout, which limited the methodology selection. Direct access to occupational therapists was therefore restricted and therefore, a literature review was the methodology selected as this was achievable for the writer (Aveyard, 2019).

Several literature review methods were considered. Initially the methodology considered to answer the research question was a scoping review of the literature. The scoping review methodological framework originated in 2005 (Arksey & O'Malley, 2005) and has since been refined (Levac et al., 2010; Peters, Marnie, et al., 2020). A scoping review is an exploratory study that can be a precursor to a systematic review, that systematically maps the literature on a topic, defining key concepts and potentially identifying any gaps in the literature (Levac et al., 2010). The aim of a scoping review is not to achieve a critically appraised and synthesised result to the research question but to map and provide an overview of available evidence (Munn

et al., 2018). Scoping reviews have also been conducted previously into burnout by other health disciplines (Bullock et al., 2017; Kaminski, 2020; Silva e Silva et al., 2020).

The latest best evidence guidance for conducting a scoping review is provided by the Joanna Briggs Institute (JBI), and in the JBI manual (Peters, Godfrey, et al., 2020). This scoping review method requires a team approach, of at least two researchers to review the evidence collected and then select the studies for review based on eligibility criteria (Peters, Godfrey, et al., 2020; Peters, Marnie, et al., 2020; Pollock et al., 2021). It was determined that this was not a realistic option. During supervision, a potential alternative method to answer the research question was identified, using a systematic process to conduct a literature review, which is suitable for an individual project at postgraduate level (Aveyard, 2019; Aveyard et al., 2021).

Typically, there are two types of literature reviews, narrative or non-systematic reviews, and systematic reviews, which may or may not include a meta-analysis (Gregory & Denniss, 2018). A systematic review with meta-analysis was not considered a suitable option for this study as like a scoping review it also requires a team of researchers (Munn et al., 2018).

Aveyard et al. (2021) proposes a replicable format for a systematic approach to a literature review that can be done by an independent researcher where the intention is to answer the research question. By following this format, the researcher was able to conduct a standalone literature review that is systematic in its process but does not require the strict profile of a systematic review (Aveyard, 2019; Aveyard et al., 2021).

The literature review systematic approach developed by Aveyard (2019) recommends the literature review has four key components.

1. The research question is provided in the introductory section of the review with a clear rationale why the review is being conducted.
2. A methods section which clearly states the search strategy and how the evidence will be appraised and analysed.
3. A results section where findings are appraised and clearly presented.
4. A discussion section for the findings and recommendations for practice.

Rationale for the methodology selection

For this study the most suitable method to answer the research question requires data about occupational therapists personal or lived experiences of burnout. Therefore, a systematic approach to review the available literature following a pre-ordained format that can be replicated and duplicated was chosen (Aveyard, 2019; Aveyard et al., 2021).

The writer acknowledged personal factors when selecting the research method. The potential that a personal experience of burnout can have an impact on bias in the research, either from selection bias of studies or data collection and analysis (Smith & Noble, 2014) is acknowledged. By applying a systematic approach, the researcher is remaining objective about the literature review, remaining neutral, and not pre-empting the outcomes from the beginning to the end (Aveyard, 2019; Aveyard et al., 2021).

Eligibility criteria

The literature review involved a comprehensive and exhaustive search for suitable evidence (Aveyard, 2019; Aveyard et al., 2021; Peters, Godfrey, et al., 2020; Peters, Marnie, et al., 2020; Pollock et al., 2021). Research evidence reviewed included qualitative and quantitative studies. Evidence was eligible in the review if relevant to the research question and met inclusion

criteria (Aveyard, 2019; Aveyard et al., 2021), and “cherry picking” evidence for convenience was avoided (Aveyard, 2019).

The inclusion criteria set a date on the evidence from 2010 onwards. The rationale for this date was to allow the most recent evidence only to be included in the literature review. The evidence to be included was limited to literature relevant to the occupational therapy profession in healthcare.

Evidence was included in the review if it met the following criteria:

- Articles conducted by occupational therapists or other healthcare professions about burnout and coping strategies with reference to occupational therapy.
- Articles that identify potential coping strategies for burnout for occupational therapists
- Articles from 2010 onwards

Evidence was excluded if it was in the following criteria:

- Articles not relevant to the research question
- Not related to healthcare
- Non-empirical articles (including comments, editorials, and opinion articles)
- Articles not in English
- Articles not available in full text

Data sources and searches

In May of 2022, a search of databases including CINAHL Complete, Joanna Briggs Institute (Ovid), ProQuest, Taylor and Francis, Cochrane Collaboration, and PubMed was conducted (see Appendix 2).

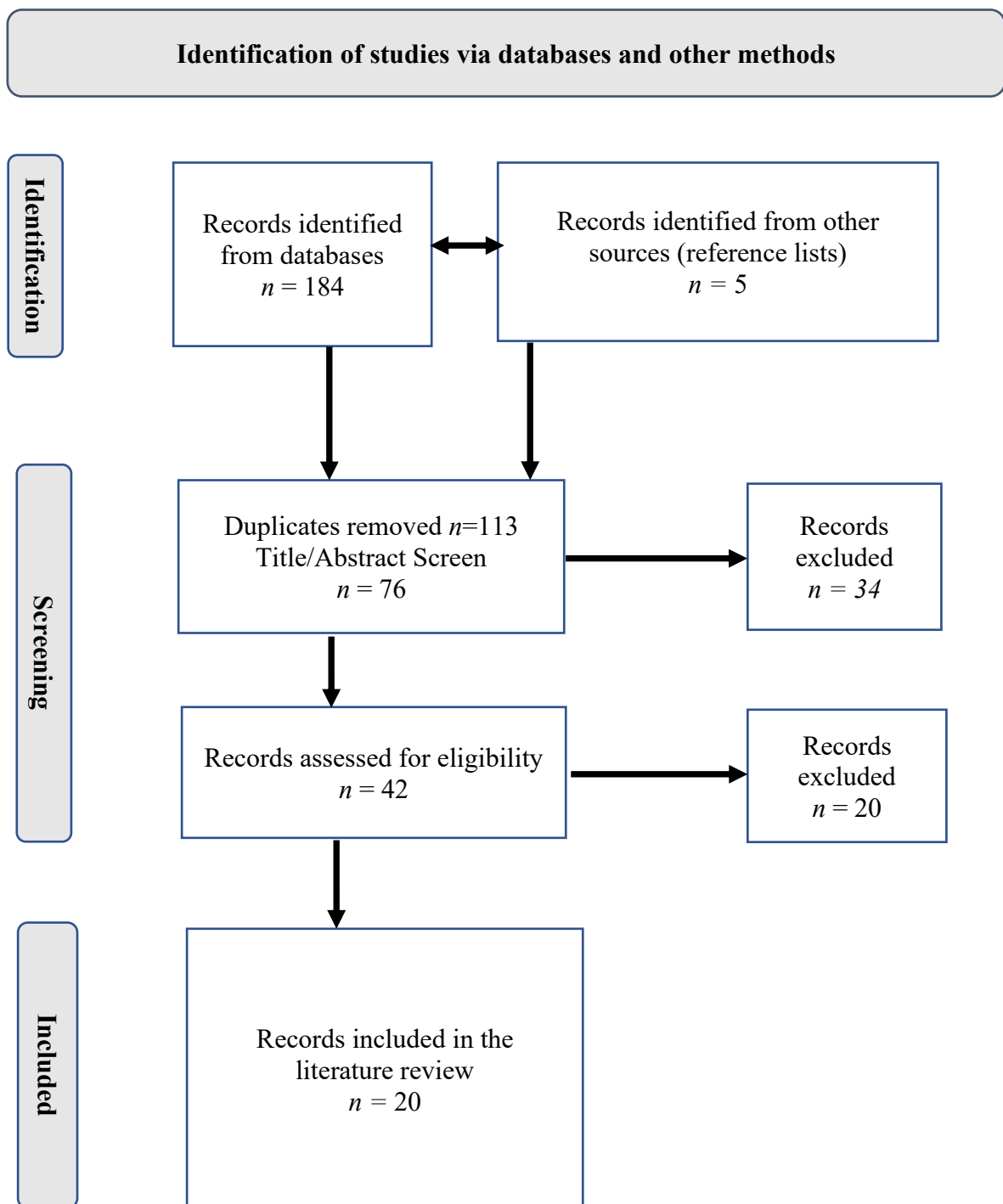
Search terms were developed from PICO and searches included the key words: occupational therapy, occupational therapist, burnout, coping strategies, emotional exhaustion, self-care, resilience, protect, work stress, mental health, physical health, support, professional identity. The Boolean operators 'OR' and 'AND' were used to conduct a search of different combinations of words, and the thesaurus/MeSH headings were used to locate articles that had been indexed by the database. The search strategy is illustrated in Appendix 2.

Screening process

The search strategy of online databases identified a significant number of papers (184) which referred to burnout and occupational therapy. The reference lists of the identified articles were screened for any further relevant sources, 5 additional articles were added. Google Scholar was also searched for additional evidence and the citation tracking system was also used, but no additional evidence was sourced and included in the study. 113 duplicates were removed, and the remaining 76 papers were then further screened by a title/abstract screen. 34 papers were removed as they were not relevant to the research question. The remaining 42 articles were read and screened against the inclusion criteria checklist for eligibility (appendix 3). The 20 selected articles for the study were not assessed for quality or critically appraised at this stage. The screening and study identification process is illustrated in Figure I, along with the numbers of articles included and excluded at each stage of the process.

Figure 1

A Simplified Version of the PRISMA Flowchart for Record Selection Adapted from Page et al. (2021)



Data extraction

A data extraction table (appendix 4) was developed for the literature review to extract key information from the articles and to develop themes for analysis. The following key information was extracted from each article on to the data extraction table, title, author, research aim, methodology, country and context, the study participants and sample size, findings, and an analysis.

Data analysis

A thematic analysis process was used to identify differences and similarities among the studies and to look for common themes (Aveyard, 2019). A six-phase process for thematic analysis was used as described by Braun and Clarke (2006) with each phase used to find repeated patterns of meaning from the data (Table 2).

Table 2

The Thematic Analysis Approach Adapted from Braun & Clarke (2006)

Step	Approach
1	Becoming familiar with the data.
2	Generating initial codes.
3	Searching for themes.
4	Reviewing the themes.
5	Defining and naming the themes.
6	Writing up a final analysis of the data.

The data extraction table provided a summary of the evidence and the writer generated initial codes onto a thematic analysis table (appendix 5). Moving through the six phases of the thematic analysis is not a linear process and the writer used a recursive approach of moving

back and forth among the phases (Braun & Clarke, 2006, 2021). On completion of the process a table of themes was developed (appendix 6).

Summary

A PICO framework was used to develop a research question and search terms, with a rationale for the methodology selection of a literature review. A systematic search of databases was conducted, followed by a screening and selection process, data extraction, and thematic analysis. The next chapter focuses on the findings of the literature review.

Chapter 3: Findings

This chapter focuses on the findings of a literature review to identify the coping strategies for prevention of burnout among occupational therapists. The objective of this review is to raise awareness and increase the knowledge base among the occupational therapy profession, healthcare organisations, and educational facilities, about coping strategies for burnout. The research question for this study is: “What coping strategies can occupational therapists use to prevent burnout?”

During May of 2022, an online search of databases was conducted. Internationally, occupational therapy research studies have examined burnout in healthcare and have provided recommendations for potential coping strategies. The screening and selection process located 20 relevant articles that met the inclusion criteria for the literature review. A thematic analysis was conducted of the selected articles and two main themes were subsequently identified. These two main themes are external and internal coping strategies. Each of these main themes has different sub-themes and these are examined individually. Firstly, the characteristics of the studies are examined.

Study characteristics

Articles across 11 countries were identified. No articles were identified from New Zealand. The articles included systematic reviews, a meta-analysis, cross-sectional design studies, qualitative studies, and educational articles. The articles mostly focused on the prevalence or causes of burnout and identified coping strategies as recommendations.

Occupational therapists were included in all the articles. Most of the articles were cross-sectional with occupational therapists in a variety of clinical settings. Table 3 provides a summary of the author, year, country, practice area, and research design of the articles.

Table 3*Articles Included in the Literature Review*

Author/Year	Country	Practice area	Research design
Abaoğlu et al (2020).	Turkey	Public sector	Cross-sectional
Bruschini et al.(2018)	Italy	Private/public sector	Cross-sectional
Costa (2018)	USA	Educational	Educational article
Derakhshanrad et al (2019)	Iran	Various settings	Cross-sectional
Devery et al (2018)	Australia	Mental health	Mixed methods
Edwards & Durette (2010).	USA	Various settings	Cross-sectional
Escudero-Escudero et al. (2020)	Spain	Various settings	Cross-sectional
Gupta et al. (2012)	Canada	Various settings	Mixed methods
Kriakous et al. (2019)	UK	Forensic mental health	Cross-sectional
Katsiana et al. (2021)	Greece	Private/public sector	Cross-sectional
Ledingham et al. (2019)	Australia	Mental health	Qualitative
Luken & Sammons (2016)	USA	Review	Systematic review
O'Connor et al. (2018)	Ireland	Mental health	Systematic review/meta-analysis

Park (2021)	Korea	Review	Meta-analysis
Popova et. al. (2020)	USA	Educational	Educational article
Poulsen et al. (2014)	Australia	Mental health	Cross-sectional
Scanlan & Hazelton (2019)	Australia	Mental health	Cross-sectional
Scanlan et al. (2013)	Australia	Mental health	Cross-sectional
Scanlan & Still (2013)	Australia	Mental health	Cross-sectional
Wagenfield et al. (2018)	USA	Correction service	Cross-sectional

Identified themes.

Two themes emerged from the thematic analysis of the articles and have been defined by the writer as external and internal coping strategies for the prevention of burnout. External coping strategies are occupational therapist's interpersonal relationships with others within the work environment, i.e., work colleagues, teams, and organisations. While internal coping strategies are intrapersonal interventions i.e., cognitive, self-care, or emotion-focused strategies.

The two themes of external and internal have sub-themes. Table 4 illustrates the themes and sub-themes for this literature review.

Table 4

Table of Themes

Theme	Sub-theme
External coping strategies	Maintaining professional identity
	Sustaining job satisfaction
	Benefiting from supportive supervision
	Support from others
	Opportunities for career development
Internal coping strategies	Work engagement
	Being in the moment
	Developing resilience
	Using problem-solving & creativity
	Spending time in nature
	Taking personal responsibility

While the two themes and related sub-themes are presented separately, it should be noted that some of the papers may explore more than one theme or sub-theme within their article. They also provide examples of potential coping strategies for burnout that overlap and fit across more than one theme or sub-theme. Each of the articles research design, research aim (if provided), population and context are described when first cited only, to avoid unnecessary duplication.

External coping strategies.

The theme of external strategies is divided into five sub-themes, including maintaining professional identity, sustaining job satisfaction, benefiting from supportive supervision, support from others, and having opportunities for career development. The findings of maintaining professional identity are presented first.

Maintaining professional identity

Professional identity emerged as a sub-theme of external strategies, For the purpose of this review, professional identity is defined as how occupational therapists perceive their role in the workplace, along with the specific beliefs, values, and attitudes associated to the occupational therapy profession (Ashby et al., 2016; Mak et al., 2022). The key articles that have examined the relationship between burnout and professional identity are reviewed in this section.

Two reviews of the literature discussed the role of professional identity. O'Connor et al. (2018) completed a systematic review and meta-analysis of the literature to determine levels of burnout in mental health professionals and to identify possible causes. This review identified 62 studies from 33 countries, with the majority being cross-sectional design ($n=57$, with data from occupational therapists within eight of the studies). The findings suggested that when interpersonal relationships at work results in role conflict or role ambiguity there is an increased risk of emotional exhaustion, a symptom of burnout. Where there is role clarity there are

increased rates of personal accomplishment. Additionally, having a sense of job control and professional autonomy appeared to be protective factors against burnout (O'Connor et al., 2018). A meta-analysis study of the literature to determine the factors associated with burnout, by Park (2021) found 17 studies which included 2430 occupational therapists and highlighted the role of professional identity as a protective factor, as identified by O'Connor et. al. 2018). Additionally feeling valued, and professional and personal identity was associated with lower burnout levels (Park, 2021).

Edwards and Dirette (2010) also conducted a study in the United States exploring the connection between professional identity and burnout. The study used a cross-sectional survey and had a randomised sample of occupational therapists (n=126) working in various settings, including physical health (32%), mental health (9.6%), nursing homes (17%), schools (32.7%), university (0.8%), and other areas (7.9%), in the state of Michigan. The study participants provided demographic information and completed two questionnaires, including the Professional Identity Questionnaire (PIQ) (Edwards & Dirette, 2010), which was developed and piloted for the study, and the Maslach Burnout Inventory (MBI) (Maslach et al., 1996). The results indicated a significant negative relationship between the scores on MBI (Maslach et al., 1996) and the scores on the PIQ (Edwards & Dirette, 2010) implying that the respondents with higher ratings on the PIQ (Edwards & Dirette, 2010), had the lowest levels of burnout on the MBI (Maslach et al., 1996). Additionally in this study, there was no relationship between demographical factors and professional identity or burnout. Indicating that occupational therapists of any age, level of experience, area of practice or number of years working in their setting, can experience issues with professional identity and burnout.

Edwards and Dirette (2010) also reported that in their study, occupational therapists with strong professional identities and lower levels of burnout felt appreciated and valued, and perceived

their role was viewed by others, including staff, patients, and funding providers, as being distinctive and important. In comparison, participants with higher levels of burnout and a lower sense of professional identity felt they were not valued or respected by their co-workers, believed the scope of occupational therapy was too wide, experienced role conflict reduced confidence in their role as an occupational therapist, and felt that they had chosen the wrong healthcare profession. As a result, although limited to one geographical area in the United States, the findings of this study provided research evidence into the relationship between professional identity and burnout.

Conversely, a smaller study conducted in Australia by Devery et al. (2018) found a different result although with a smaller sample size. This study used a mixed methods design to explore the connection between professional identity, job satisfaction and burnout. This study used the PIQ (Edwards & Durette, 2010), and semi-structured interviews, with a convenience sample of occupational therapists ($n=10$), working in eating disorder services in Australia, The findings highlighted a significant correlation between a strong sense of professional identity and an increased risk of developing symptoms of burnout, which appeared to contradict findings from Edwards and Durette (2010) who found a strong sense of professional identity reduced the risk of burnout (Devery et al., 2018). Devery et al. (2018) proposed that this contradiction may have been a consequence of their study participants feeling under pressure to fulfil generic duties, which ultimately may increase the risk of developing burnout.

The impact of generic working on professional identity and levels of burnout has also been examined by Scanlan and Hazelton (2019). Using a cross-sectional survey design, they explored the relationships between job satisfaction, professional identity and burnout and the value of work activities for mental health occupational therapists. An online survey was completed with a convenience sample of 118 mental health occupational therapists from across Australia in a

variety of settings. The participants completed a time-use diary and 3 questionnaires, including the PIQ (Edwards & Durette, 2010). Scanlan & Hazelton's (2019) study results indicated that participants who engaged in work activities that they perceived as being valuable to themselves, experienced a stronger sense of professional identity and lower levels of burnout. Significantly, the participant's perception was that undertaking generic work activities did not negatively impact levels of professional identity, job satisfaction or burnout.

In summary, a perceived loss of professional identity has been suggested to be associated with an increased risk of experiencing burnout among occupational therapists. A systematic review of mental health professionals suggested that professional autonomy was a protective factor for burnout (O'Connor et al., 2018), and a meta-analysis of occupational therapists indicated that maintaining a sense of professional identity lowered rates of burnout. However there appears to be contradictions about the importance of maintaining a sense of professional identity and the influence of generic working on levels of burnout within the occupational therapy cross-sectional studies. Potentially due to sample size as the study by Devery et al. (2018) had a smaller sample, than the other two studies (Edwards & Durette, 2010; Scanlan & Hazelton, 2019).

Sustaining a sense of job satisfaction

The relationship between burnout and the sub-theme of job satisfaction has been examined in several of the articles (Abaoglu et al., 2020; Devery et al., 2018; O'Connor et al., 2018; Poulsen et al., 2014; Scanlan & Hazelton, 2019; Scanlan & Still, 2013). Job satisfaction has been defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p.1304).

O'Connor et al. (2018) conducted a systematic review of mental health professional's levels of burnout, and findings indicated that being fairly treated and being rewarded for work, along with manageable caseloads, were protective factors against burnout. A meta-analysis of factors associated with burnout among occupational therapists also reported that higher levels of work engagement and job satisfaction were associated with lower levels of burnout (Park, 2021).

Survey studies from Australia within mental health services, have examined the relationship between job satisfaction and burnout (Devery et al., 2018; Scanlan et al., 2013; Scanlan & Hazelton, 2019; Scanlan & Still, 2013). Scanlan and Still (2013) used a cross-sectional survey to examine the relationships between job satisfaction, turnover intention, and burnout among a convenience sample of mental health staff ($n=277$), including occupational therapists ($n=34$). Results from the survey suggested that participants generally felt high levels of job satisfaction (mean 7.21 on a 10-point scale). In addition, Scanlan and Still (2013) suggested that higher levels of job satisfaction and lower levels of burnout were associated with certain work-related factors, i.e., receiving feedback, the support of a supervisor, having opportunities to be involved in decision-making, and inclusion in research or quality improvement initiatives, were all associated with lower levels of burnout.

Scanlan and Still (2013) also found job satisfaction was increased for respondents when receiving good remuneration and recognition from managers and colleagues, having stimulating and challenging work and being in a supportive team. In comparison, their findings also suggested that job dissatisfaction may result from the following factors: stress and fatigue, having difficulties with managers, perceiving contact with clients and families was demanding, which in turn increased levels of burnout. Scanlan and Still recommended that occupational therapy educators and managers working in mental health practice use strategies with students and therapists that promote self-care, support, and increase resilience. Additionally,

organisational work is done to improve management and leadership styles to support the well-being of occupational therapists (Scanlan & Still, 2013).

There appears to be a positive correlation between having a perceived sense of meaning and control of one's work that maintains job satisfaction and lower levels of burnout. Scanlan and Hazelton (2019) in a cross-sectional study examined the meaningfulness of work activities to burnout, professional identity, and job satisfaction. They surveyed a convenience sample of mental health occupational therapists ($n=118$), throughout Australia. Participants also completed a time-use diary to periodically rate the meaningfulness of work activities throughout their work day (Scanlan & Hazelton, 2019). The results indicated that activities based on the participant's own individual preferences, strengths, and their perception of how valuable and enjoyable work was to them, resulted in a sense of increased overall job satisfaction, lower burnout levels, and a stronger perception of professional identity. Scanlan and Hazelton (2019) suggested creating individual working arrangements and allocating work activities to staff based on their individual preferences and the value of the activity, job satisfaction and well-being could be improved, and subsequently, the risk of burnout reduced.

A commonly held perception is that a work-related risk factor associated with job satisfaction and burnout is not being remunerated correctly in alignment with a person's work commitment and level of skill at work. Poulsen et al. (2014) explored work-related factors associated with burnout and work engagement. Their cross-sectional survey of state-registered occupational therapists in Australia ($n=951$) reported that low levels of income satisfaction were associated with burnout. The results suggested that occupational therapists who perceived that they were not receiving sufficient remuneration and rewards felt undervalued and disgruntled, increasing their feelings of job dissatisfaction and the risk of developing symptoms of burnout. These results were supported by research by Scanlan and Still (2013) who also highlighted the

importance of feeling sufficiently rewarded and recognised at work, they found receiving a salary acceptable to the persons position and skill level, reduced job dissatisfaction. Therefore, receiving fair pay and recognition within the workplace has been indicated to be a preventive factor for burnout.

To conclude, the results indicated that there is an association between having a sense of job satisfaction at work and lower levels of burnout and there is a link between job satisfaction and the meaningfulness of their work to occupational therapists. Consequently, maintaining job satisfaction at work may be a coping strategy for the prevention of burnout. Furthermore, studies have highlighted a wide range of strategies that can be utilised to enhance job satisfaction including individual working arrangements (Scanlan & Hazelton, 2019), having variety in their role (Scanlan & Still, 2013), maintaining an occupation focus (Devery et al., 2018), good team function (O'Connor et al., 2018) and special interest groups (Devery et al., 2018).

Benefiting from supportive supervision

The sub-theme of supportive professional supervision was identified from the thematic analysis as a preventive strategy for burnout among occupational therapists. The Occupational Therapy Board of New Zealand (OTBNZ) suggests that occupational therapists should be provided with effective professional supervision (OTBNZ,2022). The significance of the supervisory relationship in the management of stress has also been emphasised by the Royal College of Occupational Therapists (COT). COT suggests that “the nature of the supervisory relationship is key to its effectiveness. It should be supportive and enabling, building confidence and reducing stress” (COT, 2015, p.10).

In studies within mental health practice the role of supervision in burnout prevention has been highlighted. O'Connor et al. (2018) reported on causes of burnout among mental health professionals and indicated that a lack of quality supervision was associated with an increased risk of burnout in three studies from 62 in a systematic review. They recommended providing quality supervision as a preventive factor against burnout but did not indicate what constituted as quality supervision. Ledingham et al (2019) conducted a phenomenological qualitative study of mental health practitioners (n=55), including occupational therapists (n=1), in a metropolitan area in Australia, to examine their cognitive beliefs and perceptions about burnout (Ledingham et al., 019). The findings suggested that there may be a sense of feeling shame to feeling burnt out or discomfort disclosing feelings to others in the workplace. Supervisors can be an important role in the prevention of burnout, by being aware and detecting the early risks and signs of burnout, being non-judgemental, and providing ongoing support and understanding to their supervisees (Ledingham et al., 2019).

The belief that regular, and supportive supervision is a useful coping strategy was also identified in a study within an eating disorders service, Devery et al. (2018) proposed that having opportunities to receive regular supervision, was viewed as being the most influential factor in reducing challenges within the workplace for occupational therapists. Scanlan and Still (2013), in their study within a mental health service, also indicated that having support from a supervisor, reduced burnout levels and increased well-being at work.

In summary, the articles reviewed have suggested that professional supervision plays an important role to mitigate the risk of burnout. Having the opportunities for regular and supportive supervision from a supervisor, who is aware of the potential signs of burnout and acts accordingly to prevent further deterioration for their supervisee, may play an important external supportive role in the prevention of burnout.

Support from others

Having supportive colleagues at work can potentially reduce the risks of burnout among occupational therapists. In Italy, Bruschini et al.(2018) conducted a quantitative study to identify the specific demographic or work-related factors for stress and burnout in three professional groups (physiotherapists, occupational therapists, and speech therapists). A convenience sample of health professionals ($n=391$), including occupational therapists ($n=80$), working in a variety of healthcare settings were surveyed (Bruschini et al., 2018). The study findings suggested that receiving the support of colleagues was perceived as a valuable strategy for preventing burnout (Bruschini et al., 2018). Bruschini et. al., reported having supportive colleagues to collaborate with or to share a problem with, creates a sense of togetherness, ultimately promoting a positive team environment, where team members form support networks and protect each other and potentially prevent and reduce the risk of burnout (Bruschini et al., 2018). This finding was supported by Gupta et.al (2012) who conducted an earlier study in Canada.

Gupta et al. (2012) used a mixed methods approach to investigate burnout levels, practice issues, and the coping strategies used to prevent burnout, with a convenience sample of occupational therapists ($n=63$), working in a variety of settings. The study used an online questionnaire and focus group/interviews with participants ($n=7$), (Gupta et al., 2012). The findings suggested that the study participants used the support of family/friends and colleagues to alleviate work pressures and to prevent burnout. Gupta et al also recommended that a proactive approach is taken by occupational therapists and organisations in ensuring there is work environment that promotes resilience and worker engagement (Gupta et al., 2012).

Organisations and managers have also been identified as a potential preventive factor for burnout. Abaoğlu et al. (2020) examined the relationship between burnout and job satisfaction,

working conditions, and work engagement, with a sample of 50 occupational therapists working in the public sector in Turkey. The findings from this cross-sectional study suggested that 38% of the participants were at risk of developing burnout, and 26% had burnout symptoms. The study reported negative relationships between burnout, overall job satisfaction, working conditions, and dedication and vigour (Abaoğlu et al., 2020). Recommendations were that strategies are implemented at an organisational level to improve the working conditions, job satisfaction, and work engagement of occupational therapists. A range of strategies were identified, including a supportive management approach, creating orientation, guidance, and support systems to staff, educating managers and supervisors in delivering feedback, supporting personal and professional development, and providing appropriate promotions (Abaoğlu et al., 2020).

Escudero-Escudero et al. (2020) reported similar findings from a cross-sectional survey conducted in Spain among 758 occupational therapists (Escudero-Escudero et al., 2020) and found that respondents had symptoms of burnout (69.4%) and particularly emotional exhaustion (63.5%). Escudero-Escudero et al. (2020) recommended that interventions for burnout prevention are required at an individual, work, and political level.

Opportunities for career development

The importance of having opportunities for career development has been highlighted as a strategy for the prevention of burnout. Abaoğlu et al. (2020) used a cross-sectional survey to examine burnout and investigated if there was a connection between the work-related factors of job satisfaction, work engagement and working conditions, among occupational therapists. The findings of this study suggest that a workplace which promotes and encourages career development and provides in-service and external continued development programmes can prevent levels of burnout (Abaoğlu et al., 2020). Further identified studies also suggested that

having opportunities to participate in career development and in service improvement initiatives including program development (Gupta et al., 2012), and service improvement or research (Scanlan & Still, 2013), may be supportive against burnout.

Internal coping strategies

The theme of internal strategies refers to coping strategies that an individual occupational therapist may utilise to reduce the risk and prevent burnout in clinical practice. These strategies might be considered cognitive or emotion-focused and are divided into sub-themes that will be presented separately.

Work engagement

The concept of work engagement is different to job satisfaction, whereas job satisfaction is influenced by external factors within the workplace (pay, conditions, working hours), work engagement is defined as “a positive, fulfilling work-related, state of mind that is characterized by vigour, dedication and absorption”(Schaufeli et al., 2002, p.74), and is negatively associated with burnout (Bakker et al., 2014). In contrast to feeling burnout, engaged workers feel energised and view their workplace as rewarding and challenging, rather than stressful and demanding (Bakker et al., 2014).

A key component to work engagement is having sufficient job resources available to the individual, including the external coping strategies of supportive supervision, supportive colleagues, organisational support, autonomy, and career development opportunities (Bakker & Demerouti, 2007). The access of sufficient job resources stimulates intrinsic motivation, increases energy and engagement and ultimately may prevent burnout occurring (Bakker & Demerouti, 2007; Poulsen et al., 2014; Schaufeli, 2017).

Work engagement and burnout was studied by Poulsen et.al. (2014) in a cross-sectional survey with 951 occupational therapists in Australia. The findings indicated that burnout was associated with low levels of work engagement, while high levels of work engagement was associated with income satisfaction, working less than 40 hours a week, having children, postgraduate qualifications, and being able to have a laugh at work. Interestingly, a small percentage (14%) of occupational therapists from this study experienced difficulty distancing themselves from work after hours and reported symptoms of burnout although they had high levels of work engagement (Poulsen et al., 2014). These findings suggest that burnout and work engagement can be present at the same time, potentially in the form of workaholism (Poulsen et al., 2014). Poulsen et al. (2014) suggested that further longitudinal research into the health and wellbeing implications for occupational therapists of over engagement at work is warranted.

Being in the moment

Taking the opportunity to practice mindfulness techniques at work has been suggested to be potentially a strategy to reduce stress levels and prevent burnout (Costa, 2018). Mindfulness has its roots in Buddhist philosophies and spiritual beliefs (Brown & Ryan, 2003; Karl & Fischer, 2022; Tomlinson et al., 2018), and Kabat-Zinn (2003) has defined the concept of mindfulness as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p.145). The regular practice of mindfulness over time can result in the development of trait or dispositional mindfulness, where being mindful and being in the moment develops an inner state of mental awareness, that can be employed in everyday life in times of stress (Brown & Ryan, 2003; Karl & Fischer, 2022; Kriakous et al., 2019). For example, in practice during times of stress at work, taking the time to stop and be present in the moment and not spiral into a process of overthinking could reduce the level of stress.

Luken and Sammons (2016) systematically reviewed the interdisciplinary literature and identified 8 randomized control trial studies about the efficiency of mindfulness to reduce burnout among healthcare professionals and teachers. All of the studies were assessed for methodological quality, with 7 of the 8 studies being of fair to good quality (Luken & Sammons, 2016). Healthcare professionals were included in half of the studies, however, no studies included occupational therapists (Luken & Sammons, 2016). The results suggested that 6 of the 8 studies found burnout statistically significantly decreased with the implementation of mindfulness interventions (Luken & Sammons, 2016). The study suggested there appears to be substantial evidence for the effectiveness of mindfulness interventions in the prevention of burnout among healthcare professionals, however, further research studies are required to determine the value of mindfulness interventions among occupational therapists (Luken & Sammons, 2016).

A study by Kriakous et al. (2019) conducted within a forensic mental health service in Wales, examined the impact of coping and dispositional mindfulness on stress and burnout levels, among a sample of forensic health care professionals. A total of 630 research packs, containing questionnaires, were posted to participants in 5 forensic secure hospitals, and 151 research packs were returned, a response rate of 24%, which included a sample of occupational therapists (7%), (Kriakous et al., 2019). The results from this study suggested that there was a significant correlation between the participants who used higher levels of dispositional mindfulness and lower levels of stress and burnout (Kriakous et al., 2019).

Developing resilience

Developing skills in being resilient at work has the potential to be a strategy occupational therapists can utilise to protect against burnout (Popova et al., 2020). Being resilient can be defined as “the ability of an individual to bounce back from adversity, persevere through

difficult times, and return to a state of internal equilibrium or a state of healthy being” (Edward, 2005, p.142). Occupational therapy research studies have been conducted into the association between resilience and burnout.

Katsiana et al. (2021) used a cross-sectional survey to investigate whether psychosocial resilience had an impact on burnout levels among occupational therapists ($n=345$), in Greece and Cyprus. A sample was divided between the private sector ($n=258/74.8\%$) and the public sector ($n=87/25.2\%$), with 60% being managers, and 40% employees (Katsiana et al., 2021). The study found that approximately half of the sample (50%) had high levels of burnout and low skills in psychological resilience (Katsiana et al., 2021). Further analysis of the results, incorporating demographic factors, found no sizable relationship between having the ability to be resilient and levels of burnout (Katsiana et al., 2021). Significantly, demographic factors did influence resilience levels, as participants with children, in management positions, and with good associations with colleagues, had higher levels of resilience, than those without these demographic characteristics (Katsiana et al., 2021). Although there was no relationship found between burnout and resilience, the study recommended that occupational therapists should have core training in developing psychosocial resilience as part of their core curriculum (Katsiana et al., 2021).

A continuing educational article from the USA proposed using an occupational therapy evidence-based theoretical framework to develop resilience against burnout and manage interpersonal stressors in practice, at an individual, team, and organisational level. Popova et al. (2020) suggested a therapeutic use of self process from clinical practice, normally used to understand the interpersonal dynamics of the occupational therapist-patient relationship, the Intentional Relationship Model (IRM; Taylor, 2020). The IRM (Taylor, 2020) recognises that each individual has unique personality traits and interpersonal characteristics, competencies

and preferences, and during interpersonal interactions the therapist uses critical self-awareness to develop a therapeutic relationship and occupational engagement with the patient (Taylor, 2020). Popova et al. (2020) proposed using the IRM in an active coping process to self-manage the interpersonal stressors at work that may arise by applying the six-step interpersonal reasoning process of the IRM (Taylor, 2020) model to the stressful situation, i.e., anticipating the interpersonal stressor before it occurs, identifying and coping with what is happening and pausing before responding with emotion, deciding if the current mode is effective or a switch in mode is required, choosing a response mode or sequence, using interpersonal skills associated with the mode, and gather feedback and evaluation.

Using problem-solving and creativity

A cognitive strategy that has been claimed to help with reducing the levels of burnout and job demands for occupational therapists, is using the interpersonal strategy of problem-solving and creativity (Derakhshanrad et al., 2019).

Derakhshanrad et al. (2019) reported findings of a cross-sectional study in Iran investigating the relationship between burnout and the cognitive resources of problem-solving and creativity. A convenience sample of occupational therapists ($n=50$), from one regional area within Iran, within a variety of practice areas, including physical and mental health settings, were surveyed (Derakhshanrad et al., 2019). The findings from the study reported that having higher levels of creativity and problem-solving was associated with lower levels of burnout. Additionally, the number of years working in practice appeared to increase the creativity levels among occupational therapists (Derakhshanrad et al., 2019).

Spending time in nature

Being in nature potentially may be coping strategies for the prevention of burnout. A qualitative descriptive study by Wagenfeld et al. (2018) reported on the findings from an earlier survey conducted within the correctional system in the United States, investigating the relationships between the staff's experiences of stress and their use of time in nature as a therapeutic intervention to combat stress. A convenience sample of 1,198 staff from 10 prisons participated in the survey and taking the opportunity at work to participate in physical exercise and being outdoors in nature can potentially reduce workplace stress levels and ultimately protect against burnout (Wagenfeld et al., 2018).

Taking personal responsibility

A sub-theme that appeared in the papers was for occupational therapists to take a proactive approach to their own prevention of burnout within the workplace. The theme of developing skills in taking personal responsibility for the prevention of burnout has been suggested in the identified articles.

In an educational article, prevention of burnout has been suggested to involve taking personal responsibility and being proactive to identify the specific individual areas where life changes can be made, either at a personal, professional, or organisational level (Costa, 2018). Luken and Sammons (2016) also indicated that occupational therapists need to be conscious of their own risks and susceptibility to burnout.

Two identified studies used a mixed-methods research design which included surveys and interviews with occupational therapists that identified external and internal strategies to manage burnout (Devery et al., 2018; Gupta, 2012). The findings from these interviews may provide valuable insight from occupational therapists to supplement questionnaire findings into their

perceptions about managing burnout and a deeper understanding of occupational therapists' use of external and internal coping strategies to prevent burnout.

Devery et. al (2018) interviewed occupational therapists within an eating disorder service, thematic analysis of semi-structured interviews identified that regular supervision was essential, along with maintaining a work-life balance to mitigate challenges at work. Gupta et al. (2012) reported that occupational therapists used external coping strategies (e.g., maintaining a work-life balance) and internal coping strategies (e.g., maintain a sense control, a sense of humour, self-awareness and self-monitoring) to prevent burnout. However, with a small size in both studies and no follow up studies with the participants, the findings may not be generalisable to the whole occupational therapy population.

Gupta et al. (2012) conducted focus group interviews with occupational therapists ($n=7$) to identify the coping strategies used to prevent burnout. A participant from this study, stated “ I think it’s up to each of us to figure out what our limits are and then try to defend them a little bit and try to communicate that to other people and also try to communicate it to ourselves, so we are not feeling guilty about how much we can’t do” (Gupta et al. 2012, p.92). Study participants reported using internal coping strategies to mitigate burnout including, time management techniques, taking a sense of control over one's work responsibilities, establishing and maintaining boundaries, maintaining a work/life balance, taking regular breaks, using self-monitoring and self-awareness, and sustaining a sense of humour (Gupta et al., 2012).

Similarly, in a cross-sectional survey in Australia by Poulsen et al. (2014), which explored the demographic and work-related psychosocial factors associated with burnout and work engagement among Queensland state registered occupational therapists ($n=951$). The findings suggested that a perception of having an overwhelming workload was a risk factor for burnout,

along with the inability to say “no”, and not having opportunities for taking the time to have a good laugh at work.

Summary of findings

The findings of this literature review have indicated two themes of external and internal coping strategies for the prevention of burnout. Table 5 illustrates the identified two themes of external and internal coping strategies. Together these themes identify the workplace factors that prevent the risk of burnout and protect occupational therapists in the workplace. Further insight from these findings is considered in the discussion chapter.

Table 5

Summary of Coping Strategies

External Strategies	Internal strategies
Having role clarity and role identity at work	Developing resilience
Professional autonomy	Being self-aware of risks to burnout
Organisations who are proactive in burnout prevention	Using mindfulness interventions
Support of managers who are aware of the potential risks of burnout and can respond appropriately to assist with prevention	Taking care of oneself with physical exercise and self-care interventions
Working with colleagues who are cooperative and supportive	Being proactive about burnout prevention
Receiving regular effective supervision by a supervisor who is trained or aware	Feeling satisfied and engaged at work

in recognising the signs and symptoms
of burnout

Opportunities for personal and professional development, and promotion
Seeking out support in times of overwhelming stress to reduce the risk of burnout

Organisations that promote a positive and supportive working environment
Maintaining a work/life balance

Being rewarded and recognised, and treated fairly at work
Sustaining a sense of humour

Support from friends and family
Having a sense of control over one's work

Chapter 4: Discussion

This chapter discusses the findings of this literature review which aimed to identify the coping strategies for the prevention of burnout among occupational therapists. The findings are discussed in relation to the current occupational therapy literature, while comparing these findings to the wider body of evidence within the healthcare literature. Finally, limitations of this literature review and recommendations for future research and practice are presented.

The key findings of this literature review found two themes for the prevention of burnout among occupational therapists, which are related to how an individual occupational therapist manages and prevents burnout. These have presented in the findings as external coping strategies, and internal coping strategies, with each containing several subthemes.

A definition of coping strategies for burnout was not identified among the occupational therapy literature since 2010. Therefore, within the psychology literature, the transactional model of stress and coping (Lazarus & Folkman, 1984) provided a definition of coping strategies. Coping has been defined as “constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p.141). This model is a person-environment model that categorises coping strategies for stress into two types of individual responses which are dependent on individual characteristics, as being problem focused or emotionally focused strategies (Lazarus & Folkman, 1984).

The external strategies identified in this review are similar to the transactional model’s strategy of problem-focused coping (Lazarus & Folkman, 1984). This refers to practical efforts by the individual to solve the specific problem or stressor that is causing the increased stress (Lazarus & Folkman, 1984). Several sub-themes of external coping strategies were identified to be

consistent with the concept of problem focused strategies, including maintaining professional identity, having a sense of job satisfaction, benefiting from supportive supervision, receiving organisational support and support from colleagues, and career development opportunities.

In comparison, internal coping strategies are cognitive or intrinsic and are comparable to the transactional models of emotion-focused coping (Lazarus & Folkman, 1984), which is internal to the occupational therapist and involves utilising individual cognitive coping strategies to regulate emotional responses to the stressor, support disengagement from the stressor (Lazarus & Folkman, 1984). Internal coping strategies identified, included the sub-themes of taking personal responsibility, developing skills in resilience, using cognitive strategies, mindfulness techniques, and ultimately feeling engaged at work.

These external and internal coping strategies have been found to be used individually and in combination by occupational therapists to prevent burnout in this review. Both strategies are proactive approaches to burnout prevention.

Statement of findings

This literature review found that in the period from 2010 to 2021 the occupational therapy literature has identified potential coping strategies for the prevention of burnout among occupational therapists. Additionally, the findings of the review suggests that the prevention of burnout may require the occupational therapist to use both external and internal coping strategies individually or in combination.

Discussion of findings

The findings of this literature review confirm that the occupational therapy literature has primarily examined the relationship between burnout and several work-related variables, with the majority using cross-sectional design studies with a sample of occupational therapists at a specific point in time. These studies have been conducted with occupational therapists who are working in a variety of clinical settings and includes studies which have examined the relationship between burnout and the work-related variables of professional identity, job satisfaction, work engagement, mindfulness, meaningfulness of work activities and resilience.

This literature review found that most of the previous occupational therapy studies identified used a survey research design with self-questionnaires. The challenge of this type of research design is that although they may provide a picture of what is happening at that moment in time, cause and effect cannot be established (Ellis, 2014). Additionally, surveys are susceptible to bias as burnout is a sensitive issue and survey participants may not provide accurate information or may not want to disclose information at that time (Ellis, 2014). The reported findings of these survey studies also suggest that no follow up studies were conducted with any study participants to determine the overall long-term effectiveness of the identified coping strategies.

The occupational therapy literature indicates that key external factors within the workplace play a role in the prevention of burnout among occupational therapists. The findings of this review indicate that occupational therapists who have a strong sense of professional identity within their workplace may be less susceptible to burnout (Edwards & Durette, 2010). Several other external key factors have been identified within the workplace and involves the support of others. These include having regular supportive clinical supervision (Abaoğlu et al., 2020; Devery et al., 2018; Ledingham et al., 2019; O'Connor et al., 2018; Scanlan & Still, 2013; J. Shin et al., 2022), managerial support (Abaoğlu et al., 2020; Bruschini et al., 2018; O'Connor

et al., 2018; Park, 2021; Poulsen et al., 2014), and the support of work colleagues (Bruschini et al., 2018; Gupta et al., 2012).

However, in practical terms, utilizing the support of others may prove to be a significant challenge for occupational therapists who are experiencing signs and symptoms of burnout, or reluctant to seek help. For example, utilising this external coping strategy, requires the occupational therapist to use the internal strategy of being pro-active in seeking support and taking personal responsibility for their own prevention of burnout.

A further external factor that is suggested to be important for occupational therapists as a coping strategy for burnout, is the perception of having job satisfaction. The findings indicate that occupational therapists who feel personally satisfied within their workplace and with the work they are doing, may be less susceptible to burnout, therefore the findings suggests that job satisfaction has an important role in the prevention of burnout.

However, the findings indicate that job satisfaction has been measured in cross-sectional design studies by self-questionnaires at a particular point of time, therefore it is difficult to determine the long-term effectiveness of job satisfaction on the prevention of burnout. There is a lack of qualitative research exploring how job satisfaction is achieved, maintained, and improved, in occupational therapy. A recent systematic review of quantitative studies of job satisfaction among occupational therapists identified 14 studies, with the majority being cross-sectional design, recommended that further longitudinal or interventional studies be conducted to determine the efficiency of interventions that support job satisfaction or whether job satisfaction changes over time (Mertala et al., 2022).

In clinical practice, occupational therapists support others through the nature of their role, however, prevention of burnout is not just the sole responsibility of the occupational therapist as also they require the support of their employer or organisation to prevent burnout. Employers or organisations can support occupational therapists by offering ongoing support and being proactive in their approach to burnout prevention at work. For example, to achieve this, employers or organisations should ensure that regular effective preventive supervision is provided by managers or supervisors who are skilled in the recognition of signs or potential symptoms of burnout. Additionally, managers and supervisors may require further educational and appropriate training into burnout prevention and recognising the early warnings risk signs.

Organisations can also provide their staff meaningful work where they feel they are recognised and rewarded, and opportunities for career development. Occupational therapists can utilise the identified external and internal coping strategies to prevent burnout, but unless they receive the ongoing support of their employer or organisation, their risk of burnout increases. In the 1980's a "burnup check-up" a twice-yearly meeting with a staff development specialist, external to direct supervisors or managers, was identified (Brollier et al., 1986; Hocking, 1988), and may still have relevance today.

The occupational therapy profession and educational facilities have an important role to play in the prevention of burnout. The findings indicate that providing opportunities for students or therapists to develop skills in resilience for burnout prevention is limited (Katsiana et al., 2021). Burnout is not a new phenomenon in the workplace and within the profession, but it appears to be an increasing risk for occupational therapists, as two recent studies have indicated (Abaoğlu et al., 2020; Escudero-Escudero et al., 2020). Occupational therapy educational facilities, managers, and supervisors can take a pro-active approach to burnout prevention, by preparing

students and practitioners in burnout prevention by offering training in work environment challenges, the signs and symptoms of burnout, and preventive coping strategies.

To gain a deeper understanding of coping strategies for prevention of burnout among occupational therapists, other healthcare disciplines literature was also reviewed.

Comparing the findings with other healthcare disciplines

The findings of this literature review are supported by several studies from other healthcare disciplines. A systematic review of coping strategies that healthcare professionals use to prevent burnout identified similar external and internal coping strategies (Maresca et al., 2022). Coping strategies associated with a reduction of burnout include organisational support, physical exercise, maintaining a work/life balance, and developing individual skills in resilience (Maresca et al., 2022).

Similarly, a literature review from the nursing literature identified a number of coping strategies for the prevention of burnout in nurses (Fearon & Nicol, 2011). In line with the findings of this review, individual coping strategies, of problem-focused and emotion focused coping, self-awareness, lifestyle and coping skills, and clinical supervision were identified (Fearon & Nicol, 2011).

In support of the external factors identified in this review, two studies from New Zealand also suggested the need for organisational support in burnout prevention. Tabakakis et al., (2020) identified workplace factors associated with burnout. This cross-sectional survey of 480 registered nurses, recommended that healthcare organisations and nurse leaders have a responsibility to provide a safe and healthy workplace for their nursing staff, including

providing simulated training to prepare students for difficult work environments, reducing high workloads, provision of job flexibility and autonomy, and enabling the self-development of coping strategies. Similarly, Haar and Mowat (2021) suggested that human resources practices within the workplace are positively related to the prevention of burnout, by providing meaningful work, and opportunities for work-life balance.

Similar findings have been identified in the discipline of psychiatry (Kumar, 2016) and in psychology (Shin et al., 2014). Kumar, 2016 identified external and internal coping strategies and suggested intervention strategies for burnout among doctors such as workplace changes, promoting a positive work environment through adapting organisational structures and work processes, providing professional development opportunities to improve the fit between the individual doctor and the organisation, and promoting individual coping strategies to reduce stress (Kumar, 2016). Improving work engagement, work/life balance, and building resilience may potentially prevent burnout among doctors (Kumar, 2016). Shin et al. (2014) conducted a meta-analysis and suggested that burnout is negatively related to the external problem-focused coping strategies (e.g., seeking the support of others), while internal emotion-focused coping strategies (e.g., acceptance, denial, self-blame) was positively related to burnout.

The predominance of cross-sectional surveys and need for more qualitative studies has been noted above. On such study conducted in United States, involving 20 nurses and physicians in a children's hospital, also identified external and internal coping strategies for the prevention of burnout (Wei et al., 2020). Six self-care strategies were identified to replenish, recharge, and invigorate staff, maintaining resilience and the prevention of burnout (Wei et al., 2020). Key strategies included finding meaning in work (e.g., remembering one's initial sense of purpose), making connections with an energy source (e.g., using support systems and seeking help), nurturing interpersonal relationships (e.g., giving and receiving support from others in the

workplace), having a positive attitude, implementing emotional hygiene (e.g., mindfulness, work/life balance, exercise, healthy lifestyle), and self-awareness (e.g., recognition of own uniqueness, strengths and capabilities) (Wei et al., 2020).

In summary, external, and internal coping strategies for burnout have been identified and supported by the literature in other health professions. However, there is a lack of qualitative and intervention studies to demonstrate how an individual can enhance internal coping strategies, or the effectiveness of external strategies, once they find themselves in a stressful working environment, and experiencing the first signs of burnout.

Limitations of this study

There are limitations to this literature review that require acknowledgement. Firstly, the researcher is a novice researcher, and this may have impacted on the quality of the literature review. A systematic approach was used to conduct this literature review which followed a structured process (Aveyard, 2019; Aveyard et al., 2021). However, this study was not a systematic review of all the available literature, although literature prior to 2010 was identified and data extracted, but not included in the findings.

The researcher has also experienced burnout personally, and a risk of selection bias of the included articles exists and acknowledged. This literature review is also a 60-point research project within a master's programme which has dictated the inclusion and exclusion criteria for this study.

Additionally, although the researcher conducted a comprehensive search of the occupational therapy and other healthcare disciplines into the topic of coping strategies for burnout, there is the possibility that further literature may be present and not identified.

Recommendations for further research and practice

This literature review identified that most of the occupational therapy studies conducted previously into burnout have used a cross-sectional research design. Further qualitative, intervention studies, and longitudinal research is recommended into the effectiveness of the identified external and internal coping strategies for the prevention of burnout.

A recommendation of this review is that occupational therapists receive core training in developing resilience in the workplace, preparing for work challenges, and are educated about the risks for burnout and preventive strategies. Further research is also recommended into the effectiveness of mindfulness interventions for the prevention of burnout among occupational therapists.

Occupational therapists can also assist themselves to prevent burnout, by taking a sense of control and personal responsibility to mitigate the risks. Increasing self-awareness of individual risks to burnout and actively proactively to manage the situation, may be an effective strategy. Burnout is risk factor for occupational therapists and requires acknowledgement within the profession. The time has come that occupational therapists need to take the risk seriously and be proactive in their approach to burnout.

The support of employers or organisations is also recommended, who adopt a proactive approach to burnout prevention. The prevention of burnout requires early interventions, that are supportive and beneficial to the individual. The provision of education and training to staff about the signs and symptoms of burnout may be beneficial. Supervisors and managers also have an important role, and it is recommended that they are skilled and trained in identifying the early warning signs and risks of burnout, and the provision of preventive strategies.

Conclusion

A personal experience of burnout initiated this project to identify the coping strategies for burnout. Two themes emerged from a literature review of the occupational therapy literature for the prevention of burnout among occupational therapists. These have been identified as external and internal coping strategies. The external strategies identified include maintaining professional identity, job satisfaction, supportive supervision, support from others, and career development opportunities. Internal strategies identified included, work engagement, mindfulness, resilience, and taking personal responsibility.

The prevention of burnout requires a proactive approach to manage symptoms that requires combined interventions at an individual and organisational level and is not just the sole responsibility of the individual. Furthermore, the recent recognition of workplace burnout by the World Health Organisation (WHO, 2019), has also shifted the emphasis on managing burnout away from being an individual problem to an organisational and leadership responsibility, requiring recognition, management, and strategic planning by organisations (Moss, 2019).

By identifying coping strategies for burnout, this project could expand current clinical knowledge and assist employers and organisations to identify protective factors and support for their staff in the workplace. Furthermore, positive benefits may be seen in the workplace with improvement in staff practices and staff retention.

References

- Abaoğlu, H., Demirok, T., & Kayihan, H. (2020). Burnout and its relationship with work-related factors among occupational therapists working in public sector in Turkey. *Scandinavian Journal of Occupational Therapy*, 1–10. <https://doi.org/10.1080/11038128.2020.1735513>
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology: Theory and Practice*, 8(1), 19–32. <https://doi.org/10.1080/1364557032000119616>
- Ashby, S. E., Adler, J., & Herbert, L. (2016). An exploratory international study into occupational therapy students' perceptions of professional identity. *Australian Occupational Therapy Journal*, 63(4), 233–243. <https://doi.org/10.1111/1440-1630.12271>
- Aveyard, H. (2019). *Doing a literature review in health and social care: a practical guide* (4th ed.). Open University Press.
- Aveyard, H., Payne, S., & Preston, N. (2021). *A post-graduates guide to doing a literature review in health and social care* (2nd ed.). Open University Press.
- Bährer-Kohler, S. (2013). Introduction. In S. Bährer-Kohler (Ed.), *Burnout for experts: Prevention in the context of living and working*. (pp. 1–13). Springer.
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and Work Engagement: The JDR Approach. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 389–411. <https://doi.org/10.1146/annurev-orgpsych-031413-091235>
- Balogun, J. A., Titiloye, V., Balogun, A., Oyeyemi, A., & Katz, J. (2002). Prevalence and determinants of burnout among physical and occupational therapists. *Journal of Allied Health*, 31(3), 131–139.
- Bassett, H., & Lloyd, C. (2001). Occupational Therapy in Mental Health: Managing Stress and Burnout. *British Journal of Occupational Therapy*, 64(8), 406–411. <https://doi.org/https://doi.org/10.1177/030802260106400807>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Braun, V., & Clarke, V. (2021). One size fits all? What counts as quality practice in (reflexive) thematic analysis? *Qualitative Research in Psychology*, 18(3), 328–352. <https://doi.org/10.1080/14780887.2020.1769238>
- Brice, H. E. (2001). Working with adults with enduring mental illness: Emotional demands experienced by occupational therapists and the coping strategies they employ. *British Journal of Occupational Therapy*, 64(4), 175–183. <https://doi.org/10.1177/030802260106400404>
- Brollier, C., Cyranowski, J., Bender, D., & Velletri, C. (1986). Managing occupational therapy burnout. *Occupational Therapy in Health Care*, 3(2), 129–143. https://doi.org/10.1080/J003v03n02_11
- Brown, C. A., Schell, J., & Pashniak, L. M. (2017). Occupational therapists' experience of

- workplace fatigue: Issues and action. *Work*, 57(4), 517–527. <https://doi.org/10.3233/WOR-172576>
- Brown, G. T., & Pranger, T. (1992). Predictors of Burnout for Psychiatric Occupational Therapy Personnel. *Canadian Journal of Occupational Therapy*, 59(5), 258–267. <https://doi.org/10.1177/000841749205900507>
- Brown, K. W., & Ryan, R. M. (2003). The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being. *Journal of Personality and Social Psychology*, 84(4), 822–848. <https://doi.org/10.1037/0022-3514.84.4.822>
- Bruschini, M., Carli, A., & Burla, F. (2018). Burnout and work-related stress in Italian rehabilitation professionals: A comparison of physiotherapists, speech therapists and occupational therapists. *Work*, 59(1), 121–129. <https://doi.org/10.3233/WOR-172657>
- Bullock, G., Kraft, L., Amsden, K., Gore, W., Prengle, B., Wimsatt, J., Ledbetter, L., Covington, K., & Goode, A. (2017). The prevalence and effect of burnout on graduate healthcare students. *Canadian Medical Education Journal*, 8(3), 90–108. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5661741/pdf/cmej-08-90.pdf>
- Chambers, C. N. L., & Frampton, C. M. A. (2022). Burnout, stress and intentions to leave work in New Zealand psychiatrists; a mixed methods cross sectional study. *BMC Psychiatry*, 22(1), 1–12. <https://doi.org/10.1186/s12888-022-03980-6>
- College of Occupational Therapists. (2015). *Supervision : guidance for occupational therapists and their managers* (p. 32). College of Occupational Therapists. <https://www.rcot.co.uk/sites/default/files/Supervision.pdf>
- Cooke, A., Smith, D., & Booth, A. (2012). Beyond PICO: The SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research*, 22(10), 1435–1443. <https://doi.org/10.1177/1049732312452938>
- Costa, D. (2018). Better Days at Work: Identifying, Preventing Burnout in Occupational Therapy Practice. *OT Practice*, 23(April), 10–15. <https://doi.org/https://doi.org/10.7138/otp.2018.2306.fl>
- Cox, C. (1988). Practical aspects of stress management. *British Journal of Occupational Therapy*, 51(2), 44–47.
- Craik, C. (1988). Stress in Occupational Therapy: How to Cope. *British Journal of Occupational Therapy*, 51(2), 40–43. <https://doi.org/10.1177/030802268805100203>
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, quantitative & mixed methods approaches* (5th ed.). SAGE Publications Ltd.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative Inquiry & Research Design: Choosing among five approaches* (4th ed.). SAGE Publications Ltd.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands-Resources Model of Burnout. *Journal of Applied Psychology*, 86(3), 499–512.
- Derakhshanrad, S. A., Piven, E., & Zeynalzadeh Ghoochani, B. (2019). The Relationships between Problem-Solving, Creativity, and Job Burnout in Iranian Occupational Therapists. *Occupational Therapy in Health Care*, 33(4), 365–380. <https://doi.org/10.1080/07380577.2019.1639098>
- Devery, H., Scanlan, J. N., & Ross, J. (2018). Factors associated with professional identity, job satisfaction and burnout for occupational therapists working in eating disorders: A mixed

- methods study. *Australian Occupational Therapy Journal*, 65(6), 523–532. <https://doi.org/10.1111/1440-1630.12503>
- Du Plessis, T., Visagie, S., & Mji, G. (2014). The prevalence of burnout amongst therapists working in private physical rehabilitation centers in South Africa: a descriptive study. *South African Journal of Occupational Therapy*, 44(2), 11–16.
- Edward, K. L. (2005). The phenomenon of resilience in crisis care mental health clinicians. *International Journal of Mental Health Nursing*, 14(2), 142–148. <https://doi.org/10.1111/j.1440-0979.2005.00371.x>
- Edwards, D., & Burnard, P. (2003). A systematic review of the effects of stress and coping strategies used by occupational therapists working in mental health settings. *British Journal of Occupational Therapy*, 66(8), 345–355. <https://doi.org/10.1177/030802260306600803>
- Edwards, H., & Durette, D. (2010). The relationship between professional identity and burnout among occupational therapists. *Occupational Therapy in Health Care*, 24(2), 119–129. <https://doi.org/10.3109/07380570903329610>
- Ellis, P. (2014a). The language of research (Part 1): research paradigms. *Wounds UK*, 10(2), 118–119. <https://doi.org/https://www.wounds-uk.com/journals/issue/38/article-details/the-language-of-research-part-1-research-paradigms>
- Ellis, P. (2014b). The Language of Research (part 2): methodologies and methods. *Wounds (UK)*, 10(3), 100–101. <https://doi.org/10.1080/00098655.1969.11478381>
- Escudero-Escudero, A. C., Segura-Fragoso, A., & Cantero-Garlito, P. A. (2020). Burnout syndrome in occupational therapists in Spain: Prevalence and risk factors. *International Journal of Environmental Research and Public Health*, 17(9), 1–8. <https://doi.org/10.3390/ijerph17093164>
- Freudenberger, H. . (1974). Staff Burnout. *Journal of Social Issues*, 30(1), 159–165. <https://doi.org/https://doi.org/10.1111/j.1540-4560.1974.tb00706.x>
- Freudenberger, H. . (1986). The Issues of Staff Burnout in Therapeutic Communities. *Journal of Psychoactive Drugs*, 18(3), 247–251. <https://doi.org/10.1080/02791072.1986.10472354>
- Garrosa, E., & Moreno-Jiménez. (2013). Burnout and active coping with emotional resilience. In S. Bährer-Kohler (Ed.), *Burnout for experts: Prevention in the context of living and working*. (pp. 201–222). Springer.
- Gellis, Z. D. (2002). Coping with occupational stress in healthcare: A comparison of social workers and nurses. *Administration in Social Work*, 26(3), 37–52. https://doi.org/10.1300/J147v26n03_03
- Gemine, R., Davies, G. R., Tarrant, S., Davies, R. M., James, M., & Lewis, K. (2021). Factors associated with work-related burnout in NHS staff during COVID-19: A cross-sectional mixed methods study. *BMJ Open*, 11(1), 1–8. <https://doi.org/10.1136/bmjopen-2020-042591>
- Gregory, A. T., & Denniss, A. R. (2018). An Introduction to Writing Narrative and Systematic Reviews — Tasks, Tips and Traps for Aspiring Authors. *Heart Lung and Circulation*, 27(7), 893–898. <https://doi.org/10.1016/j.hlc.2018.03.027>
- Gross, R. (2015). *Psychology: The Science of Mind and Behaviour*. Hodder Education.

- Gupta, S., Paterson, M. L., Lysaght, R. M., & Von Zweck, C. M. (2012). Experiences of burnout and coping strategies utilized by occupational therapists. *Canadian Journal of Occupational Therapy, 79*(2), 86–95. <https://doi.org/10.2182/cjot.2012.79.2.4>
- Haar, J. (2022). Burnt to a crisp? Understanding drivers of burnout amongst New Zealand workers. *Evidence-Based HRM, 10*(2), 174–188. <https://doi.org/10.1108/EBHRM-07-2021-0132>
- Haar, J., & O’Kane, C. (2022). A post-lockdown study of burnout risk amongst New Zealand essential workers. *Social Science and Medicine, 306*(May), 115157. <https://doi.org/10.1016/j.socscimed.2022.115157>
- Jahrami, H. (2009). A survey of burnout of the mental health occupational therapy staff in the Psychiatric Hospital, Bahrain. *British Journal of Occupational Therapy, 72*(10), 458–464.
- Janus, E., Gawalkiewicz, P., & Bac, A. (2018). Professional burnout in occupational therapists. *Advances in Rehabilitation, 32*(2), 49–56. <https://doi.org/10.5114/AREH.2018.77937>
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice, 10*(2), 144–156. <https://doi.org/10.1093/clipsy/bpg016>
- Kaminski, B. K. (2020). *Exploring Compassion Fatigue and Burnout in Healthcare Professionals : A Scoping Review. 7, 1–9.*
- Karl, J. A., & Fischer, R. (2022). The State of Dispositional Mindfulness Research. *Mindfulness, 13*, 1357–1372. <https://doi.org/10.1007/s12671-022-01853-3>
- Katsiana, A., Galanakis, M., Saprikis, V., Tsiमितros, D., & Stalikas, A. (2021). Psychological Resilience and Burnout Levels in Occupational Therapists in Greece. An Epidemiological Nationwide Research. *Psychology, 12*(01), 84–106. <https://doi.org/10.4236/psych.2021.121006>
- Kraft, U. (2006). Burned out. *Scientific American Mind, 17*(3), 28–33. <https://doi.org/http://jbschnittstelle.de/wp-content/uploads/2014/08/Burned-Out.pdf>
- Kravits, K., McAllister-Black, R., Grant, M., & Kirk, C. (2010). Self-care strategies for nurses: A psycho-educational intervention for stress reduction and the prevention of burnout. *Applied Nursing Research, 23*(3), 130–138. <https://doi.org/10.1016/j.apnr.2008.08.002>
- Kriakous, S. A., Elliott, K. A., & Owen, R. (2019). Coping, Mindfulness, Stress, and Burnout among Forensic Health Care Professionals. *Journal of Forensic Psychology Research and Practice, 19*(2), 128–146. <https://doi.org/10.1080/24732850.2018.1556545>
- Kumar, S. (2016). Burnout and Doctors: Prevalence, Prevention and Intervention. *Healthcare, 4*(3), 37. <https://doi.org/10.3390/healthcare4030037>
- Kumar, S., Sinha, P., & Dutu, G. (2013). Being satisfied at work does affect burnout among psychiatrists: A national follow-up study from New Zealand. *International Journal of Social Psychiatry, 59*(5), 460–467. <https://doi.org/10.1177/0020764012440675>
- Lazarus, R. S. (1990). Theory-Based Stress Measurement. *Psychological Inquiry, 1*(1), 3–13. https://doi.org/10.1207/s15327965pli0101_1
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing Company.
- Ledingham, M. D., Standen, P., Skinner, C., & Busch, R. (2019). “I should have known”. The perceptual barriers faced by mental health practitioners in recognising and responding to

- their own burnout symptoms. *Asia Pacific Journal of Counselling and Psychotherapy*, 10(2), 125–145. <https://doi.org/10.1080/21507686.2019.1634600>
- Leonard, C., & Corr, S. (1998). Sources of Stress and Coping Strategies in Basic Grade Occupational Therapists. *British Journal of Occupational Therapy*, 61(6), 257–262. <https://doi.org/10.1177/030802269806100605>
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: advancing the methodology. *Implementation Science*, 5(69), 1–9. <https://doi.org/10.1017/cbo9780511814563.003>
- Lloyd, C. ;, & King, R. (2001). Work-related stress and occupational therapy. *Occupational Therapy International*, 8(4), 227–243. <https://doi.org/10.1002/oti.148>
- Lloyd, C., McWha, L., & King, R. (2003). An investigation of occupational therapy practice in New Zealand mental health services. *New Zealand Journal of Occupational Therapy*, 50(2), 9–16.
- Locke, E. (1976). The nature and causes of job satisfaction. In M. D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297–1349). Rand McNally College Publishing Company.
- Luken, M., & Sammons, A. (2016). Systematic Review of Mindfulness Practice for Reducing Job Burnout. *The American Journal of Occupational Therapy*, 70(2), 1–10. <https://doi.org/10.5014/ajot.2016.016956>
- Mak, S., Hunt, M., Boruff, J., Zaccagnini, M., & Thomas, A. (2022). Exploring professional identity in rehabilitation professions: a scoping review. *Advances in Health Sciences Education*, 27(3), 793–815. <https://doi.org/10.1007/s10459-022-10103-z>
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). The Maslach Burnout Inventory Manual. *The Maslach Burnout Inventory*, 191–218. <https://www.researchgate.net/publication/277816643>
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: Recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103–111. <https://doi.org/10.1002/wps.20311>
- McAlpine, S. (2021). *Beyond Burnout: A New Zealand Guide*. Random House New Zealand.
- Muheim, F. (2013). Burnout: History of a phenomenon. In S. Bährer-Kohler (Ed.), *Burnout for experts: Prevention in the context of living and working*. (pp. 37–46). Springer. https://doi.org/https://doi.org/10.1007/978-1-4614-4391-9_8
- Munn, Z., Peters, M. D. J., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology*, 18(1), 1–7. <https://doi.org/10.1186/s12874-018-0611-x>
- Ntoumanis, N., Edmunds, J., & Duda, J. L. (2009). Understanding the coping process from a self-determination theory perspective. *British Journal of Health Psychology*, 14(2), 249–260. <https://doi.org/10.1348/135910708X349352>
- O'Connor, K., Muller Neff, D., & Pitman, S. (2018). Burnout in mental health professionals: A systematic review and meta-analysis of prevalence and determinants. *European Psychiatry*, 53(June), 74–99. <https://doi.org/10.1016/j.eurpsy.2018.06.003>
- Obbarius, N., Fischer, F., Liegl, G., Obbarius, A., & Rose, M. (2021). A Modified Version of

the Transactional Stress Concept According to Lazarus and Folkman Was Confirmed in a Psychosomatic Inpatient Sample. *Frontiers in Psychology*, 12(March), 1–12. <https://doi.org/10.3389/fpsyg.2021.584333>

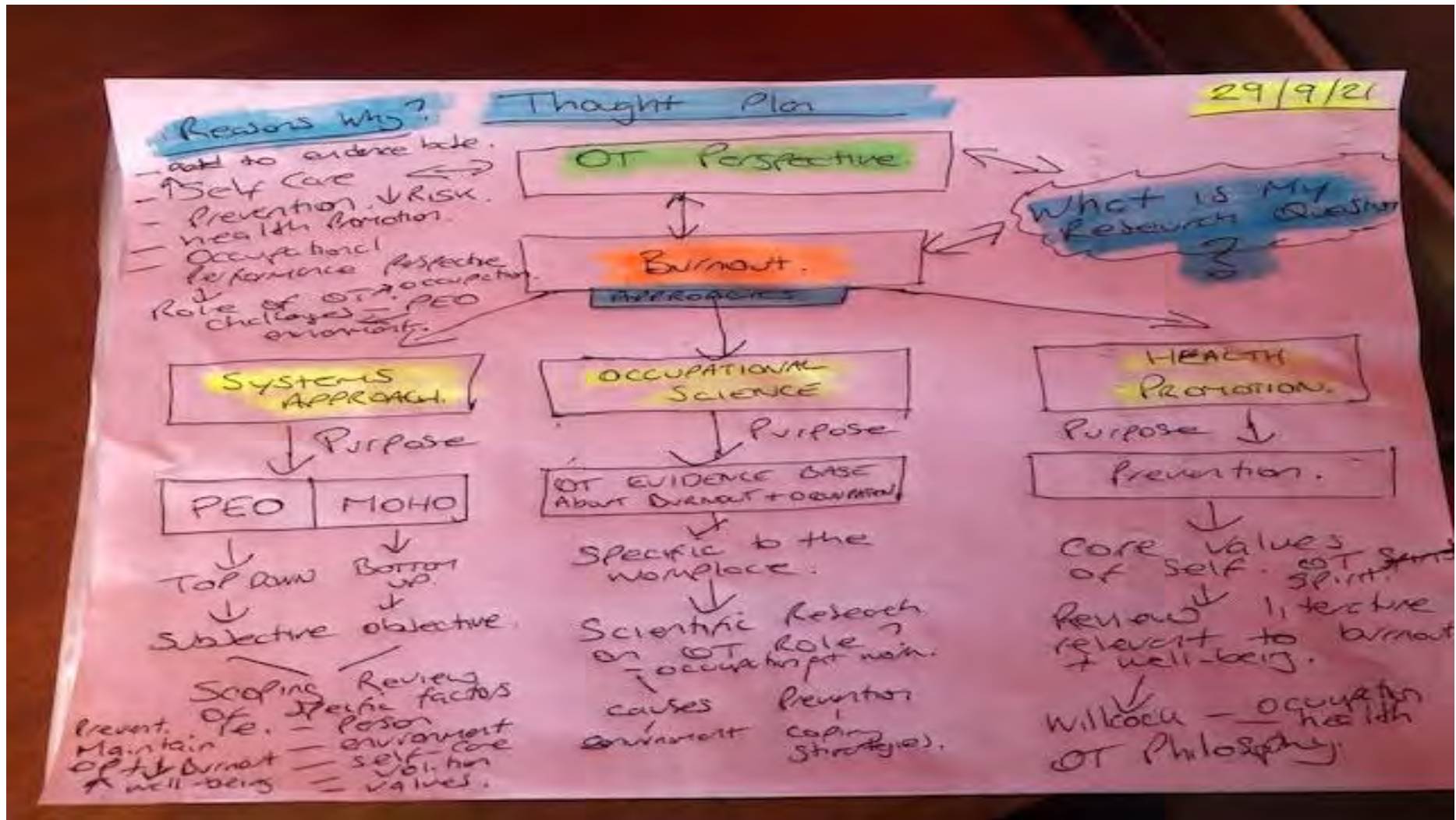
- Occupational Therapy Board of New Zealand. (2022). Code of Ethics for Occupational Therapists. In *Auth.* <https://doi.org/10.1111/j.1440-1630.1975.tb01860.x>
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Shamseer, L., Tetzlaff, J. M., Akl, E. A., Brennan, S. E., Chou, R., Glanville, J., Grimshaw, J. M., Hróbjartsson, A., Lalu, M. M., Li, T., Loder, E. W., Mayo-Wilson, E., McDonald, S., ... Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ* (OPEN ACCESS). <https://doi.org/http://dx.doi.org/10.1136/bmj.n160>
- Painter, J., Akroyd, D., Elliot, S., & Adams, R. D. (2003). Burnout Among Occupational Therapists. *Occupational Therapy In Health Care*, 17(1), 63–78. https://doi.org/10.1080/j003v17n01_06
- Park, E. Y. (2021). Meta-Analysis of Factors Associated with Occupational Therapist Burnout. *Occupational Therapy International*, 2021, 1–10. <https://doi.org/10.1155/2021/1226841>
- Peters, M., Godfrey, C., McInerney, P., Munn, Z., Trico, A., & Khalil, H. (2020). Chapter 11: Scoping Reviews. In E. Aromataris & Z. Munn (Eds.), *JBIManual for Evidence Synthesis*. JBI. <https://doi.org/10.46658/jbimes-20-12>
- Peters, M., Marnie, C., Tricco, A. C., Pollock, D., Munn, Z., Alexander, L., McInerney, P., Godfrey, C. M., & Khalil, H. (2020). Updated methodological guidance for the conduct of scoping reviews. *JBIM Evidence Synthesis*, 18(10), 2119–2126. <https://doi.org/10.11124/JBIES-20-00167>
- Pollock, D., Davies, E. L., Peters, M. D. J., Tricco, A. C., Alexander, L., McInerney, P., Godfrey, C. M., Khalil, H., & Munn, Z. (2021). Undertaking a scoping review: A practical guide for nursing and midwifery students, clinicians, researchers, and academics. *Journal of Advanced Nursing*, 77(4), 2102–2113. <https://doi.org/10.1111/jan.14743>
- Popova, E. S., Janusezewski, C., & Hahn, B. (2020). Building Resilience and Preventing Burnout : Applying the Intentional Relationship Model to Promote Self-Care. *American Occupational Therapy Association*, September, 1–11. <https://doi.org/https://www.aota.org/Education-Careers/Continuing-Education/AOTACE/CE-Articles/preventing-burnout.aspx>
- Poulsen, A. A., Meredith, P., Khan, A., Henderson, J., Castrisos, V., & Khan, S. R. (2014). Burnout and work engagement in occupational therapists. *British Journal of Occupational Therapy*, 77(3), 156–164. <https://doi.org/10.4276/030802214X13941036266621>
- Rees, D. W., & Smith, S. D. (1991). Work Stress in Occupational Therapists Assessed by the Occupational Stress Indicator. *British Journal of Occupational Therapy*, 54(8), 289–294. <https://doi.org/10.1177/030802269105400805>
- Reis, H. I. S., Vale, C., Camacho, C., Estrela, C., & Dixe, M. dos A. (2018). Burnout among Occupational Therapists in Portugal: A Study of Specific Factors. *Occupational Therapy in Health Care*, 32(3), 275–289. <https://doi.org/10.1080/07380577.2018.1497244>
- Rogers, J. . J. C., & Dodson, S. . S. C. (1988). Burnout in Occupational Therapists. *The American Journal of Occupational Therapy*, 42(12), 787–792. <https://doi.org/10.5014/ajot.42.12.787>

- Saxena, R. P., International Society for the Prevention of Stress, & I. S. for the P. of S. (1980). *Hans Selye, Text Book of Stress*. International Society for the Prevention of Stress.
- Scanlan, J. N., & Hazelton, T. (2019). Relationships between job satisfaction, burnout, professional identity and meaningfulness of work activities for occupational therapists working in mental health. *Australian Occupational Therapy Journal*, *66*(5), 581–590. <https://doi.org/10.1111/1440-1630.12596>
- Scanlan, J. N., Meredith, P., & Poulsen, A. A. (2013). Enhancing retention of occupational therapists working in mental health: Relationships between wellbeing at work and turnover intention. *Australian Occupational Therapy Journal*, *60*(6), 395–403. <https://doi.org/10.1111/1440-1630.12074>
- Scanlan, J. N., & Still, M. (2013). Job satisfaction, burnout and turnover intention in occupational therapists working in mental health. *Australian Occupational Therapy Journal*, *60*(5), 310–318. <https://doi.org/10.1111/1440-1630.12067>
- Schaufeli, W. B. (2017). Applying the Job Demands-Resources model: A ‘how to’ guide to measuring and tackling work engagement and burnout. *Organizational Dynamics*, *46*(2), 120–132. <https://doi.org/10.1016/j.orgdyn.2017.04.008>
- Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: a two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, *3*, 71–92.
- Schlenz, K. C., Guthrie, M. R., & Dudgeon, B. (1995). Burnout in occupational therapists and physical therapists working in head injury rehabilitation. *The American Journal of Occupational Therapy. : Official Publication of the American Occupational Therapy Association*, *49*(10), 986–993. <https://doi.org/10.5014/ajot.49.10.986>
- Selye H. (1936). A syndrome produced by diverse nocuous agents. *Nature*, *138*(I), 32.
- Selye, H. (1978). *The Stress of Life* (revised ed). McGraw-Hill Book Company.
- Silva e Silva, V., Hornby, L., Almost, J., Lotherington, K., Appleby, A., & Dhanani, S. (2020). Burnout and compassion fatigue among organ donation coordinators: A scoping review protocol. *JBI Evidence Synthesis*, *18*(11), 2435–2442. <https://doi.org/10.11124/JBISRIR-D-19-00256>
- Smith, J., & Noble, H. (2014). Bias in research. *Evidence-Based Nursing*, *17*(4), 100–101. <https://doi.org/10.1136/eb-2014-101946>
- Stewart, L., & Gardner, D. (2015). Developing Mahi Oranga: A culturally responsive measure of Maori occupational stress and wellbeing. *New Zealand Journal of Psychology*, *44*(2), 79–88. https://doi.org/https://www.psychology.org.nz/journal-archive/72176-NZJP-Vol-44-No-2_Sept-2015-Final-version.pdf#page=79
- Sturgess, J., & Poulsen, A. (1983). The prevalence of burnout in occupational therapists. *Occupational Therapy in Mental Health*, *3*(4), 47–60. https://doi.org/10.1300/J004v03n04_05
- Sweeney, G. M., Nicholls, K. A., & Kline, P. (1991). Factors Contributing to Work-Related Stress in Occupational Therapists: Results from a Pilot Study. *British Journal of Occupational Therapy*, *54*(8), 284–288. <https://doi.org/10.1177/030802269105400803>
- Sweeney, G. M., Nichols, K. A., & Cormack, M. (1993). Job Stress in Occupational Therapy: Coping Strategies, Stress Management Techniques and Recommendations for Change. *British Journal of Occupational Therapy*, *56*(4), 140–145.

<https://doi.org/10.1177/030802269305600409>

- Tabakakis, C., McAllister, M., & Bradshaw, J. (2020). Burnout in New Zealand Registered Nurses: the Role of Workplace Factors. *Kai Tiaki Nursing Research*, 11(1), 9–16. <https://proxy.library.mcgill.ca/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=rzh&AN=147742485&site=ehost-live>
- Tan, S. Y., & Yip, A. (2018). Hans Selye (1907-1982): Founder of the stress theory. *Singapore Medical Journal*, 59(4), 170–171. <https://doi.org/10.11622/smedj.2018043>
- Taylor, R. R. (2020a). *The intentional relationship: Occupational therapy and use of self*. (2nd ed.). F.A. Davis Co.
- Taylor, R. R. (2020b). *The Intentional Relationship: Occupational therapy and use of self* (2nd Editio). F.A. Davis Co.
- Tomlinson, E. R., Yousaf, O., Vittersø, A. D., & Jones, L. (2018). Dispositional Mindfulness and Psychological Health: a Systematic Review. *Mindfulness*, 9(1), 23–43. <https://doi.org/10.1007/s12671-017-0762-6>
- Wagenfeld, A., Stevens, J., Toews, B., Jarzembowski, S., Ladjahasan, N., Stewart, J., & Raddatz, C. (2018). Addressing Correctional Staff Stress through Interaction with Nature: A New Role for Occupational Therapy. *Occupational Therapy in Mental Health*, 34(3), 285–304. <https://doi.org/10.1080/0164212X.2017.1385435>
- WHO. (2019). *Burn-out an “occupational phenomenon”*: *International Classification of Diseases*. <https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases>

Appendix 1: Screenshot of mind map for research question



Appendix 2: Record of search strategy

Search Strategy Log			
Database	Search Terms	Results	Findings
CINAL Complete	Burnout [TI] [TI] AND occupational therapy [TI], Burnout [AB] AND occupational therapy [AB], Burnout [TX] AND occupational therapy [TX], Burnout [TX] OR work stress [TX] AND occupational therapy [TX], Burnout [TI] AND occupational therapy [TI], Burnout [TI] AND occupational therapy [TI] AND coping strategies [TI], Burnout [AB] AND occupational therapy [AB] AND coping strategies [AB], occupational therapy [TX], coping strategies [TX] AND burnout [TX], Burnout [TI] AND occupational therapy [TI] AND coping strategies [TI], Burnout [AB] AND occupational therapy [AB] AND self- care [AB], Mental health [TX] AND Burnout [TX] AND occupational therapy [TX], Burnout [TX] AND occupational therapy [TX] AND resilience [TX], Support TX] AND burnout [TX] AND occupational therapy [TX], occupational therapy [TX] AND emotional exhaustion [TX],	105 articles identified relevant.	64 duplicates removed. 41 initially screened. 15 retained after articles read and inclusion criteria checked.

	Occupational therapy [TX] AND professional identity [TX], Burnout [TX] AND allied health professionals TX], Burnout TX] AND management [TX] AND mental health [TX], Occupational therapy [TX] AND work stress [TX] AND coping strategies [TX], Burnout [TX] AND professional identity [TX], Occupational therapy [TX] AND burnout [TX] AND support [TX], Burnout [TX] AND occupational therapy [TX] AND physical health [TX]		
Joanna Briggs Institute (Ovid)	'Burnout' "occupational therapy" "work stress" 'Coping strategies ' Limit: 2010-current	2 articles relevant.	2 screened. None selected after abstracts read and inclusion criteria checked.
ProQuest	burnout AND (occupational therapy) Limits-Date after 01 January 2010; Language: English, ti (burnout) AND ti (occupational therapy) Limits-Date after 01 January 2010; Language: English, ab (Burnout) AND ab (coping strategies) AND ab (occupational therapy),	26 articles identified relevant.	18 duplicates removed. 8 screened. 3 retained after articles read and inclusion criteria checked.

	<p>ti (Burnout) AND ti (coping strategies), ab (Burnout) AND ab (coping strategies) limits: After 2010; Language: English, ab (burnout) AND ab (coping strategies) Limits-Date after 01 January 2010; Language: English, ti (work stress) OR ti (emotional exhaustion) AND ti (occupational therapy) limits: After 2010; Language: English.</p>		
Taylor and Francis	<p>[All] Burnout AND [All] occupational therapy Date from 01/01/2010-12/31/2022, [All] occupational therapy AND [All] burnout AND [All] coping strategies Date from 01/01/2010-12/31/2022, [Abstract] work stress AND [Abstract] occupational therapy, [Abstract] emotional exhaustion AND [Abstract] occupational therapy Date from 01/01/2010-12/31/2022.</p>	<p>22 articles identified relevant.</p>	<p>15 duplicates removed. 7 screened. 1 retained after articles read and inclusion criteria checked.</p>

Cochrane Collaboration	Search combinations of [Title] [Abstract] [Keyword] 'burnout' 'occupational therapy' 'emotional exhaustion' 'resilience' 'work stress'	1 article identified relevant.	1 screened. Nil identified after article read and inclusion criteria checked.
PubMed	('Burnout, professional' [MeSH Terms] 'burn*' [Title/Abstract] AND 'coping strategies' [Title/Abstract] OR 'prevention' [Title/Abstract]) OR 'burnout'[Title/Abstract] AND 'coping strategies'[Title/Abstract]) AND 'occupational therapy'[Title/Abstract]) ('coping strategies'[Title/Abstract] OR 'prevention'[Title/Abstract] OR ('burn*'[Title/Abstract] OR 'compassion'[Title/Abstract] OR 'adaptation, psychological' [MeSH Terms]) AND 'burnout, professional' [MeSH Terms])).	28 articles identified relevant.	16 duplicates removed. 8 screened. 2 retained after articles read and inclusion criteria checked.
The Māori Health Review	burnout or work stress	0 relevant results.	Nil identified.

New Zealand Ministry of Health publications	burnout or work stress	Nil relevant results.	Nil identified.
NZresearch.org.nz	'burnout' 'occupational therapy'	Nil relevant results.	Nil identified.
Index New Zealand (INNZO)	'burnout' 'occupational therapy'	Nil relevant results.	Nil identified.

Appendix 3: Inclusion criteria checklist

Article	Relevant to occupational therapy/burnout (<i>n</i>)	Coping strategies identified	2010 onwards	Included (<i>n</i>)
Abaoğlu et al. (2020)	✓	✓	✓	✓
Balogun et al. (2002)	✓	✓		
Bassett & Lloyd (2001)	✓	✓		
Brollier et al. (1986)	✓	✓		
Brice (2001)	✓	✓		
Bruschini et al. (2018)	✓	✓	✓	✓
Costa (2018)	✓	✓	✓	✓
Cox (1988)	✓	✓		
Craik (1988)	✓	✓		
Derakhshanrad et al.(2019)	✓	✓	✓	✓
Devery et al. (2018)	✓	✓	✓	✓
Du Plessis et al. (2014)	✓		✓	
Edwards & Burnard (2003)	✓	✓		
Edwards & Durette (2010)	✓	✓	✓	✓
Escudero-Escudero et al. (2020)	✓	✓	✓	✓

Gupta et al.(2012)	✓	✓	✓	✓
Hocking (1988)	✓	✓		
Jahrami (2009)	✓			
Janus et al. (2018)	✓		✓	
Katsiana et al. (2021)	✓	✓	✓	✓
Kim et al. (2020)	✓		✓	
Kriakous et al.(2019)	✓	✓	✓	✓
Ledingham et al. (2019)	✓	✓	✓	✓
Leonard & Corr (1998)	✓	✓		
Lloyd & King (2001)	✓	✓		
Luken & Sammons (2016)	✓	✓	✓	✓
O'Connor et al.(2018)	✓	✓	✓	✓
Painter et al.(2003)	✓	✓		
Park (2021)	✓	✓	✓	✓
Popova et al. (2020)	✓	✓	✓	✓
Poulsen et al. (2014)	✓	✓	✓	✓
Reis et al.(2018)	✓		✓	
Rees & Smith (1991)	✓	✓		
Rogers & Dodson (1988)	✓	✓		
Scanlan & Hazelton (2019)	✓	✓	✓	✓
Scanlan et al. (2013)	✓	✓	✓	✓

Scanlan & Still (2013)	✓	✓	✓	✓
Schlenz et al. (1995)	✓	✓		
Sturgess & Poulsen (1983)	✓	✓		
Sweeney et al. (1991)	✓	✓		
Sweeney et al.(1993)	✓	✓		
Wagenfeld et al. (2018)	✓	✓	✓	✓
		TOTALS		
	<i>n= 42</i>			<i>n= 20</i>

Appendix 4: Data extraction table

Author/ Year/ Country/ Context	Aim	Study design	Population/Sample	Key Findings/ Recommendations	Analysis
Abaoğlu, H., Demirok, T., & Kayıhan, H. (2020) Turkey Public sector	To examine the relationship between burnout, job satisfaction, work engagement, and working conditions in occupational therapists.	Cross-sectional survey	Occupational therapists (OT) (<i>n</i> =50)	26% of participants had symptoms of burnout and 38% were at risk of developing burnout. Recommended employers focus on improving working conditions and developing strategies for prevention of burnout.	Response rate (<i>n</i> =68%). Authors were professional members of a Turkish university. Study limitations noted. Small sample size. Relationships between demographics and burnout were not analysed.

<p>Bruschini, M., Carli, A., & Burla, F. (2018)</p> <p>Italy</p> <p>Various hospitals and private healthcare clinics</p>	<p>To explore whether any demographic and work-related factors were associated with an increased risk of developing burnout.</p>	<p>Cross-sectional survey</p>	<p>Health Professionals ($n=391$)</p> <p>Physiotherapists, Speech therapists, Occupational therapists ($n=80$)</p>	<p>14% of participants were at significant risk of burnout.</p> <p>No differences were found in levels of burnout between professional groups.</p> <p>Prevention, monitoring, and psychological interventions could decrease the risk of work-related stress.</p> <p>Managers to take a proactive approach in identifying early warning signs of burnout and</p>	<p>Nil limitations noted.</p> <p>Connivence sample. Response rate unclear. Unclear if any participants declined participation in the study.</p>
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				implementing support strategies for staff.	
Costa, D. (2018) USA	Review of history of burnout and occupational therapy and prevention strategies discussed.	Educational article	Article published in OT Practice	Maintaining professional identity. Professional self-care, pro-active lifestyle changes, mindfulness.	Evidence based on previous research and literature.
Derakhshanrad et al (2019) Iran	To investigate the relationship between burnout and the cognitive resources of	Cross-sectional survey.	Occupational therapists (n=50)	Having higher levels of creativity and problem-solving was associated with lower levels of burnout. The number of	Connivence sample. Limitations noted regarding sampling, methodology, and statistical analysis. Response rate (n=42%). Authors noted

Various settings	problem solving and creativity.			years in practice increased creativity levels. Further quantitative research required. Findings suggested that using individual cognitive resources may reduce job demands and burnout levels.	that the small sample size made them choose a safer statistical analysis procedure. Findings based on 3 questionnaires and individual perceptions.
Devery, H., Scanlan, J. N., & Ross, J. (2018) Australia	To explore the challenges faced by occupational therapists working in eating disorders, and	Mixed methods. Online survey and semi-structured interviews.	Occupational therapists (n=10)	Five subthemes to deal with burnout: professional satisfaction, maintaining an occupation focus, supervision, special	Response rate of 50% of the population reportedly working in this area of practice in Australia. Small sample size and views expressed may not be

Eating Disorder Service	their sense of professional identity, levels of burnout, and job satisfaction.			interest group and work–life balance, and professional boundaries.	an accurate representation of the entire population.
Edwards, H., & Dirette, D. (2010) USA	The purpose of this study was to explore the relationship between a lack of professional identity in the field of occupational therapy and levels of burnout	Random selection survey.	Occupational therapists (n=126)	The results of this study suggest that a loss of professional identity plays a major role in the experience of burnout. Recommended promoting professional identity within the profession.	Random sample. Response rate of 42%. Responses limited and may not represent the views of occupational therapists worldwide. Variance, in the answers given on both the MBI and the PIQ. The self-report questionnaire, the PIQ, was subjected to expert review and piloted on a small sample, it

					does not have established validity and reliability.
Escudero- Escudero, A. C., Segura- Fragoso, A., & Cantero- Garlito, P. A. (2020) Spain Majority working with older adults	To assess the potential levels of burnout syndrome in occupational therapists in Spain, as well as the risk factors involved in its prevalence.	Cross-sectional survey.	Occupational therapists (n=758)	Occupational therapists in Spain present with high levels of burnout. To implement measures (individual, work and political) both for the prevention of burnout in occupational therapists. Recommend further studies into strategies for prevention.	Large sample size. Unclear how many participants were invited to participate in the study. Response rate unclear.

and in mental health					
Gupta, S., Paterson, M. L., Lysaght, R. M., & Von Zweck, C. M. (2012) Canada Members of the Ontario Society of Occupational	The purpose was to ascertain levels of stress for occupational therapist in everyday practice and to discuss the coping strategies they used.	Mixed methods. Online survey, focus group/Interview in the hermeneutics tradition	Occupational therapists in Online survey (<i>n</i> =63) Focus group/Interview (<i>n</i> =7)	Setting boundaries and balancing needs of home and work, utilizing time management strategies to maximize productivity, seeking support from formal and informal social networks, setting goals and priorities, physical self-care, and turning down tasks.	Convenience sample. Small sample size. Low response rate. Survey invitation sent to 2,587 occupational therapists with 63 completing a survey. A cause-and-effect conclusion cannot be drawn. Participants may have been experiencing burnout symptoms.

Therapists (OSOT)					
Katsiana, A., Galanakis, M., Saprikis, V., Tsiamitros, D., & Stalikas, A. (2021) Greece/Cyprus Private and public sector	To examine psychological resilience and burnout in occupational therapists and to establish whether psychological resilience affects the levels of occupational burnout.	Cross-sectional survey	Occupational therapists (<i>n</i> =345)	The results showed that 50% of the participants had no psychological resilience while 50% showed high levels of burnout. Recognition of burnout symptoms and coping strategies to be included in the core curriculum along with strategies for strengthening psychological resilience.	Response rate of 50%.

Kriakous et al., (2019) UK Forensic mental health services	To examine the role of coping and dispositional mindfulness on stress and burnout	Cross-sectional survey.	Forensic mental health professionals (<i>n</i> =151), 7% were occupational therapists	Results indicated that higher levels of dispositional mindfulness were significantly associated with lower maladaptive coping, lower stress, and lower burnout levels. Acting with higher levels of awareness may assist with reducing the burnout symptoms of emotional exhaustion and depersonalisation.	Response rate of 24%. Small percentage of occupational therapists included.

Ledingham, M. D., Standen, P., Skinner, C., & Busch, R. (2019) Australia Mental health	To understand the perceptual processes of mental health workers' attributions of themselves and their work in relation to burnout	Qualitative. phenomenological approach. open-ended, qualitative questionnaire followed by interview.	Mental health practitioners (n=55) Occupational therapists (n=1)	Mental health practitioners must also have realistic perceptions of what they can deliver, self-compassion for their limitations, and recognition of the importance of self-care activities to mental health and general wellbeing.	Response rate of 26%. Small representation of occupational therapists.
Luken, M., & Sammons, A. (2016).	To evaluate the evidence for practicing mindfulness to	Systematic review.	8 studies met inclusion criteria.	Occupational therapists to be aware of their own risk factors and predisposition to developing burnout and	Limitations noted. Inclusion criteria-RCT only. None of the selected studies included occupational therapists.

USA	treat job burnout and to explore implications for occupational therapists			consider practicing mindfulness to mitigate job burnout.	Future research recommended.
O'Connor, K., Muller Neff, D., & Pitman, S. (2018). Ireland Mental health	To estimate levels of burnout in mental health professionals and to determine the possible causes.	Systematic review/Meta-analysis.	62 studies from 33 countries	Fairness in how staff feel they are treated, and a sense of being rewarded for work. important in protecting against burnout. Promotion of professional autonomy, manageable caseloads, good team function and quality clinical supervision.	Data from occupational therapists among 8 studies.

<p>Park, E. Y. (2021). Korea</p>	<p>To identify the factors that influence burnout among occupational therapists through a meta-analysis.</p>	<p>Meta-analysis.</p>	<p>17 articles included in analysis</p>	<p>Higher job challenges, work addition, and turnover intention were found to be associated with high level of burnout, while higher levels of engagement, job satisfaction, personal and professional identity, and feeling valued associated with low levels of burnout.</p>	<p>First meta-analysis. Inclusion criteria focused on occupational therapists as study participants. 8 articles were of high quality (47.1%), while 9 were of medium quality (52.9%).</p>
<p>Popova, E. S., Janusezewski, C., & Hahn, B. (2020).</p>	<p>To investigate the intrapersonal and interpersonal traits of burnout</p>	<p>Continuing Education Article</p>	<p>Article published by the American Occupational Therapy Association</p>	<p>Article suggests that applying the intentional Relationship Model and using a six-step</p>	<p>Evidence based on an occupational therapy model that has been primarily used in mental health practice to</p>

USA	and suggest strategies for building resilience using the Intentional Relationship Model			interpersonal reasoning process, occupational therapists can develop skills in resilience on a personal, team and organisational level	understand the client-patient relationships.
Poulsen, A. A., Meredith, P., Khan, A., Henderson, J., Castrisos, V., & Khan, S. R. (2014). Australia	To explore factors associated with burnout and work engagement with occupational therapists	Cross-sectional survey	Occupational therapists ($n = 2349$) 951 surveys were returned.	Organisational cultures that are supportive of their staff members represent an important resource for worker health and wellbeing. Education of self-care is necessary.	Response rate =40.5%. Reported as first investigation of work-related self-perceptions of both burnout and work engagement in occupational therapists

Scanlan, J. N., & Hazelton, T. (2019). Australia Diverse mental health practice settings throughout Australia	To explore the relationships between job satisfaction, burnout, professional identity and meaningfulness of work activities for occupational therapists working in mental health.	Cross sectional survey.	Occupational therapists (<i>n</i> =118)	Results from this study demonstrate that for this group of participants, meaningfulness of work activities, especially work activities that are personally valued, was related to positive experiences of work-wellbeing.	The survey was distributed to individuals in leadership positions within mental health services with whom the authors had existing relationships as well as via a network of occupational therapy mental health academics.
Scanlan, J. N., Meredith, P.,	To examine the factors linked to	Cross-sectional survey.	All occupational therapists registered	Results suggest directions to enhance the retention of	Response rate of 40.5%. Convenience sample. Data

<p>& Poulsen, A. A. (2013). Australia Occupational therapists working in variety of mental health settings in Queensland</p>	<p>wellbeing at work and staff turnover in a sample of mental health occupational therapists</p>		<p>in Queensland ($n = 2349$) were invited ($n = 951$).</p>	<p>occupational therapists in the mental health workforce. These include improving recognition of individual and of the profession as a whole, supporting satisfactory work/life balance</p>	<p>taken from a survey conducted in 2010 of 951 which 103 worked in mental health.</p>
<p>Scanlan, J. N., & Still, M. (2013).</p>	<p>To examine factors related to job satisfaction, turnover</p>	<p>Cross-sectional survey</p>	<p>Occupational therapists ($n=34$)</p>	<p>Receiving good remuneration and recognition and being challenged by one's work</p>	<p>Convenience sample. A total of 277 clinical and management staff completed the survey (response rate approximately</p>

<p>Australia</p> <p>Study analysed results from occupational therapists (in a mental health service in Sydney) who participated in a larger survey.</p>	<p>intention, and burnout in a group of occupational therapists in mental health.</p>			<p>was associated with higher job satisfaction.</p> <p>experiencing difficulties with their manager reported lower job satisfaction.</p> <p>feeling stressed or fatigued were associated with both higher turnover intention and higher levels of burnout.</p>	<p>25%), of which, 34 were occupational therapists (response rate approximately 60% of the total occupational therapists employed in the service).</p>
<p>Wagenfeld et al. (2018)</p>	<p>To examine the relationship between</p>	<p>A descriptive study from findings from a</p>	<p>Staff within the corrections system ($n=1135$)</p>	<p>5 ways for coping with stress identified, talking with friends/family,</p>	<p>Response rate of 46%</p> <p>Convenience sample. Unclear of number of occupational</p>

<p>Corrections services USA</p>	<p>interacting with nature and stress levels.</p>	<p>previous survey.</p>		<p>participating in hobbies, exercising, sleeping, spending time outside. 84% indicated that spending time in nature reduced stress levels.</p>	<p>therapists who participated in the survey</p>
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Appendix 5: Thematic analysis table

Author & year	Extracts	Codes
<p>Abaoğlu, H., Demirok, T., & Kayıhan, H. (2020).</p>	<p>Results suggest items of work conditions, which include opportunities to improve skills, support of supervisor_and the importance given to occupational therapy, facilitative management structure, in-service and outside trainings were related to the burnout level (Abaoğlu et al., 2020, p.7). Organizations should be encouraged to focus on improving working conditions and strengthening dedication. Implementing a facilitating management approach, creating an atmosphere that enables personal development, establishing orientation, guidance and mentoring mechanisms, educating managers and supervisors in providing feedback, providing sufficient promotions and leaves and increasing in- and out-service training programmes can be considered as preventive and intervention programmes for burnout at an organizational level (Abaoğlu et al., 2020, p.8).</p>	<p>Opportunities to improve skills (Abaoğlu et al., 2020). Supervision support (Abaoğlu et al., 2020). Importance given to occupational therapy in workplace (Abaoğlu et al., 2020). Supportive management structure (Abaoğlu et al., 2020). Professional and personal development (Abaoğlu et al., 2020).</p>

<p>Bruschini, M., Carli, A., & Burla, F. (2018).</p>	<p>With regards to the Colleagues Support dimension, we noted that rehabilitation involves interaction between various professional categories, including those at the centre of this study. The daily work towards the same goal can create both a strong collaborative spirit and team cohesion between these health care providers. A spirit of cooperation creates a positive professional environment for the achievement of the common goal and may act as a protective factor against work- related psychological stress (Bruschini et al., 2018, p.127). In our sample, those participants at greater risk of burnout seemed to have little choice in their place of work while also being subjected to several difficulties on the job, including a lack of influence on work conditions, such as the management of breaks, lack of feedback, difficulties accessing the resources necessary for their work, and a shortage of policies and procedures designed to support employees (Bruschini et al., 2018, p.127). Team collaboration and a joint involvement in decision-making can be a</p>	<p>Colleagues support (Bruschini et al., 2018). Interaction between various professional categories (Bruschini et al., 2018). Strong collaborative spirit and team cohesion (Bruschini et al., 2018). Spirit of cooperation is a protective factor (Bruschini et al., 2018). Team collaboration and a joint involvement in decision-making (Bruschini et al., 2018).</p>
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	<p>good tool for the prevention of work-related stress and burnout (Bruschini et al., 2018, p.128).</p>	
Costa, D. (2018).	<p>Once you have identified your level of burnout and/ or compassion fatigue, the next step is to be proactive and develop a plan for professional self-care. That means first identifying practices that are detrimental to self-care (Costa, 2018, p.13). Avoiding burnout means being proactive and identifying areas in your life where you could make some changes (Costa, 2018, p.14). One additional strategy that is being addressed widely and frequently in the literature on burnout is the use of mindfulness (Costa, 2018, p.14). Self-care strategies and setting time aside for mindfulness practices may assist occupational therapy practitioners, educators, and students to learn adaptive coping skills that will enable us to better balance professional demands with our personal lives. It will allow us to have more attentive interpersonal encounters and may lead to greater satisfaction with our daily pursuits (Costa, 2018, p.15).</p>	<p>Developing a self-care plan (Costa, 2018). Being proactive with life changes (Costa, 2018). Mindfulness (Costa, 2018). Self-care strategies (Costa, 2018).</p>

Derakhshanrad et al (2019)	This study suggested a relationship between occupational therapists' burnout and their cognitive resources of problem-solving and creativity (Derakhshanrad et al., 2019, p.373) . Multiple regression analysis revealed that higher degrees of creativity and problem-solving were associated with lower levels of burnout. The findings of this study have shown that problem-solving and creativity require attention because it is likely that strengthening these competencies may buffer the negative influence of job demands on occupational therapists, enabling them to avoid suffering from job burnout. Yet, experimental investigations are needed to determine the effectiveness of such strengthening programs (Derakhshanrad et al., 2019, p.376).	Using creativity and problem solving (Derakhshanrad et al., 2019). Further investigation required into problem solving and creativity for burnout required (Derakhshanrad et al., 2019).
Devery, H., Scanlan, J. N., & Ross, J. (2018).	Efforts should be made to enhance the evidence base and to provide access to supervision and professional networking opportunities (Devery et al., 2018, p.531).	Access to supervision and professional networking (Devery et al., 2018).

<p>Edwards, H., & Dirette, D. (2010).</p>	<p>This study has highlighted that a lack of professional identity leads to higher levels of burnout, has an effect on the individual and the establishment in which they work and ultimately the profession itself (Edwards & Dirette, 2010, p.127). The profession should address this issue through clarification of our roles and the promotion of professional identity (Edwards & Dirette, 2010, p.128).</p>	<p>Lack of professional identity increases the risk of burnout (H. Edwards & Dirette, 2010). The OT profession to promote professional identity (H. Edwards & Dirette, 2010).</p>
<p>Escudero-Escudero, A. C., Segura-Fragoso, A., & Cantero-Garlito, P. A. (2020).</p>	<p>It is necessary to take actions to address this situation. These strategies must be focused on the individual, the work context, or the interaction between these two: balancing workloads and ensuring equilibrium ; creating a healthy and safe environment by identifying the needs and the approach to problems with professional practises; decreasing the number of treated cases daily dealing with stress, spending more time with family, maintaining an equilibrium between the personal and professional spheres and keeping the limits between both; improving the control of</p>	<p>Coping strategies focusing on the individual at work (Escudero-Escudero et al., 2020).</p>

	responsibilities; and keeping a good sense of humour and self-awareness, among others. Likewise, it seems relevant to consider measures for improving the precariousness of the youngest occupational therapists (Escudero-Escudero et al., 2020, p.7).	
Gupta, S., Paterson, M. L., Lysaght, R. M., & Von Zweck, C. M. (2012).	<p>Common Themes and Sub-themes for Coping Strategies</p> <p>Maintain Boundaries</p> <ol style="list-style-type: none"> 1. Maintain work-home boundary 2. Negotiating workload /Other commitments <p>Workplace /Home community</p> <ol style="list-style-type: none"> 1. Supportive family/friends 2. Supportive colleagues <p>Monitoring self/Maintaining self-awareness</p> <ol style="list-style-type: none"> 1. Time management strategies 2. Goal setting 3. Pacing self 4. Physical self-care 	<p>Maintain work/home boundary (Gupta et al., 2012). Negotiating workload/other commitments (Gupta et al., 2012). Supportive family/friends (Gupta et al., 2012). Supportive colleagues (Gupta et al., 2012). Time management strategies (Gupta et al., 2012). Goal setting (Gupta et al., 2012). Pacing self (Gupta et al., 2012). Physical self-care (Gupta et al., 2012). Seeing clients improve (Gupta et al., 2012). Participating in programme development (Gupta et al., 2012).</p>

	<p>Focus on satisfying aspects of work</p> <ol style="list-style-type: none"> 1. Seeing clients improve 2. Participating in program development <p>(Gupta et al., 2012, p.92).</p>	
<p>Katsiana, A., Galanakis, M., Saprikis, V., Tsiमितros, D., & Stalikas, A. (2021).</p>	<p>It is suggested that recognition of burnout symptoms and coping strategies be included in the core curriculum along with strategies for strengthening psychological resilience, although it does not seem to be statistically significant to burnout, as it constitutes a psychoprophylactic factor for overall mental health and a great percentage of OTs does not have it (Katsiana et al., 2021, p.85).</p>	<p>Coping strategies in core curriculum.(Katsiana et al., 2021). Developing psychological resilience (Katsiana et al.).</p>
<p>Kriakous et al., (2019)</p>	<p>Arguably these findings could suggest that attending to one's actions mindfully or acting with awareness may improve aspects of burnout compared with other facets of mindfulness, such as observing, describing, non-judging of inner experiences, and non-reacting to inner experiences (Kriakous et al., 2019, p. 14).</p>	<p>Acting with awareness may reduce burnout (Kriakous et al., 2019)</p>

<p>Ledingham, M. D., Standen, P., Skinner, C., & Busch, R. (2019).</p>	<p>Reducing burnout requires an understanding of how individuals perceive it – a phenomenological perspective (Ledingham et al., 2019, p.139). Mental health practitioners must also have realistic perceptions of what they can deliver, self-compassion for their limitations, and recognition of the importance of self-care activities to mental health and general wellbeing (Ledingham et al., 2019, p.139). Supervisors also play a critical role as the group best able to detect burnout and should be aware of its nature and how to respond. Supervisors and management can lead by example, openly discussing burnout and self-care in meetings, development programs and performance reviews (Ledingham et al., 2019, p.140) Practitioners need help to recognise their symptoms and encouragement to seek treatment from their colleagues, supervisors and managers (Ledingham et al., 2019, p.140). Professional educators have a special responsibility to help future mental health</p>	<p>Individual perspective (Ledingham et al., 2019). Self-care activities (Ledingham et al., 2019). Supportive supervisors and management (Ledingham et al., 2019). Self-recognition of symptoms (Ledingham et al., 2019). Support from educators (Ledingham et al., 2019).</p>

	practitioners become aware of how their perceptual processes and beliefs can exacerbate stress and create burnout (Ledingham et al., 2019, p.140).	
Luken, M., & Sammons, A. (2016).	Occupational therapy practitioners should be aware of their own risk factors and predisposition to developing burnout (Luken & Sammons, 2016, p.7). Practitioners should consider practicing mindfulness to mitigate job burnout (Luken & Sammons, 2016), p.7).	Self-recognition of individual risk factors (Luken & Sammons, 2016). Mindfulness (Luken & Sammons, 2016).
O'Connor, K., Muller Neff, D., & Pitman, S. (2018).	Clinical supervision, a sense of being treated fairly and of receiving fair reward for one's work appears to be protective (O'Connor et al., 2018, p.97). A sense of autonomy and perceived capacity to influence decisions at work were associated with lower rates of burnout (O'Connor et al., 2018, p.97). Interventions to prevent and reduce burnout should focus on the promotion of professional autonomy, manageable caseloads, the development of good team	Clinical supervision (O'Connor et al., 2018). Being treated fairly (O'Connor et al., 2018). Receiving fair rewards (O'Connor et al., 2018). Professional autonomy (O'Connor et al., 2018). Manageable caseloads (O'Connor et al., 2018). Good team function (O'Connor et al., 2018).

	function and the provision of quality clinical supervision to all MHPs (O'Connor et al., 2018, p.98).	
Park, E. Y. (2021).	Age, experience, education, engagement, job satisfaction, personal identity, professional identity rewards, and values were associated with a lower level of occupational therapists' burnout (Park, 2021, p.6). Burnout in married occupational therapists was lower than in unmarried ones (Park, 2021, p.6). Higher levels of engagement, job satisfaction, personal and professional identity, and feeling valued were found to be associated with low level of burnout (Park, 2021, p.8).	Job satisfaction (Park, 2021). Personal identity (Park, 2021). Professional identity (Park, 2021). Values (Park, 2021). Marital status (Park, 2021). Feeling valued (Park, 2021).
Popova, E. S., Janusezewski, C., & Hahn, B. (2020).	This article explores the IRM application to promote practitioners' resilience and reduce burnout on personal, individual, team, and organizational levels (Popova et al., 2020, p.2).	Developing resilience using an occupational therapy therapist-client relationship model (Popova et al., 2020)

<p>Poulsen, A. A., Meredith, P., Khan, A., Henderson, J., Castrisos, V., & Khan, S. R. (2014).</p>	<p>The results of our study demonstrated the importance of perceived levels of income satisfaction, rather than income level alone, in relation to both burnout and work engagement for occupational therapists. We found that low levels of income satisfaction were associated with burnout, while high income satisfaction was linked with work engagement (Poulsen et al., 2014, p.7). In the current study, difficulty in saying ‘no’ was also associated with burnout (Poulsen et al., 2014, p.7). Organizational cultures that are supportive of their staff members represent an important resource for worker health and wellbeing (Poulsen et al., 2014, p.8).</p>	<p>Income satisfaction (Poulsen et al., 2014). Difficulty in saying ‘no’ (Poulsen et al., 2014). Supportive organisational culture (Poulsen et al., 2014).</p>
<p>Scanlan, J. N., & Hazelton, T. (2019).</p>	<p>Doing work that is personally meaningful was related to higher levels of work-wellbeing for occupational therapists in mental health (Scanlan & Hazelton, 2019, p.589). Value to self’ was the aspect of meaningfulness that was most strongly associated with work-wellbeing (Scanlan & Hazelton, 2019, p.589).</p>	<p>Personally meaningful work (Scanlan & Hazelton, 2019). Value to self (Scanlan & Hazelton, 2019).</p>

<p>Scanlan, J. N., Meredith, P., & Poulsen, A. A. (2013).</p>	<p>Results suggested that four variables: work/life balance; rewards in terms of recognition and prestige; rewards in terms of personal satisfaction and effort, were particularly important predictors of wellbeing at work (Scanlan et al., 2013, p. 401).</p>	<p>Work/life balance (Scanlan et al., 2013) Personal satisfaction at work (Scanlan et al., 2013).</p>
<p>Scanlan, J. N., & Still, M. (2013).</p>	<p>Supervisor support, feedback, participation in decision- making and being attracted to opportunities for involvement in research or quality improvement were associated with lower levels of burnout (Scanlan & Still, 2013, p. 317).</p>	<p>Supervision support (Scanlan & Still, 2013). participation in decision making and involvement in quality improvement/research (Scanlan & Still, 2013).</p>
<p>Wagenfeld et al., (2018)</p>	<p>Results showed that correctional staff experience stress and, in small numbers, use time outdoors to cope with that stress (Wagenfeld et al., 2018, p. 285)</p>	<p>Spending time outside may reduce stress levels (Wagenfeld et al., 2018)</p>

Appendix 6: Table of themes

Codes	Theme	Sub-theme
<p>Importance given to occupational therapy in workplace (Abaoğlu et al., 2020). Lack of professional identity increases the risk of burnout (Edwards & Durette, 2010). Being treated fairly (O'Connor et al., 2018). Professional identity (Park, 2021). Feeling valued (Park, 2021). Personally meaningful work (Scanlan & Hazelton, 2019).</p>	<p>External strategies</p>	<p>Professional identity</p>
<p>Receiving fair rewards (O'Connor et al., 2018). Professional autonomy (O'Connor et al., 2018). Manageable caseloads (O'Connor et al., 2018). Good team function (O'Connor et al., 2018). Personal identity (Park, 2021). Having Job satisfaction (Park, 2021).</p>	<p>External strategies</p>	<p>Job satisfaction</p>

<p>Income satisfaction (Poulsen et al., 2014).</p> <p>Personal satisfaction at work (Scanlan et al., 2013).</p>		
<p>Supervision support (Abaoğlu et al., 2020) .</p> <p>Access to supervision and professional networking (Devery et al., 2018).</p> <p>Supportive supervisors and management (Ledingham et al., 2019). Clinical supervision (O'Connor et al., 2018). Supervision support (Scanlan & Still, 2013).</p>	<p>External strategies</p>	<p>Supportive supervision</p>
<p>Supportive management structure (Abaoğlu et al., 2020). Interaction between various professional categories (Bruschini et al., 2018). Strong collaborative spirit and team cohesion (Bruschini et al., 2018). Spirit of cooperation is a protective factor (Bruschini et</p>	<p>External strategies</p>	<p>Supportive workplace</p>

<p>al., 2018). Team collaboration and a joint involvement in decision-making (Bruschini et al., 2018). Supportive colleagues (Gupta et al., 2012). Supportive organisational culture (Poulsen et al., 2014). Coping strategies focusing on the individual at work (Escudero-Escudero et al., 2020).</p>		
<p>Opportunities to improve skills at work (Abaoglu et al., 2020). Participating in programme development (Gupta et al., 2012) Participating in professional development (Abaoglu et al., 2020). Participation in decision making and involvement in quality improvement/research (Scanlan & Still, 2013). The occupational therapy profession to promote professional</p>	<p>External strategies</p>	<p>Career development</p>

<p>identity (Edwards & Dirette, 2010). Coping strategies in core curriculum for occupational therapy (Katsiana et al., 2021) Support from educators (Ledingham et al., 2019).</p>		
<p>Mindfulness programs (C. A. Brown et al., 2017). Mindfulness (Costa, 2018). Mindfulness (Luken & Sammons, 2016). Dispositional mindfulness (Kriakous et al., 2019).</p>	<p>Internal strategies</p>	<p>Mindfulness</p>
<p>Developing resilience (Popova et al., 2020). Developing psychological resilience (Katsiana et al.).</p>	<p>Internal strategies</p>	<p>Resilience</p>
<p>Developing a self-care plan (Costa, 2018). Maintain work/home boundary (Gupta et al., 2012). Supportive family/friends (Gupta et al.,</p>	<p>Internal strategies</p>	<p>Self-care strategies</p>

<p>2012). Time management strategies Gupta et al., 2012). Goal setting (Gupta et al., 2012). Pacing self (Gupta et al., 2012). Physical self-care (Gupta et al., 2012). Individual perspective (Ledingham et al., 2019). Self-care activities (Ledingham et al., 2019). Learning to say 'no' (Poulsen et al., 2014). Value to self (Scanlan & Hazelton, 2019). Work/life balance (Scanlan et al., 2013). Self-care strategies (Costa, 2018). Being proactive with life changes (Costa, 2018). Negotiating workload/other commitments (Gupta et al., 2012). Acting with awareness may reduce burnout symptoms (Kriakous et al., 2019). Self-recognition of symptoms (Ledingham et al., 2019). Self-</p>		
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recognition of individual risk factors (Luken & Sammons, 2016). Using creativity and problem solving (Derakhshanrad et al., 2019).Spending time outside may reduce stress levels (Wagenfeld et al., 2018) Values (Park, 2021). Marital status (Park, 2021)		
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