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ABSTRACT

Background

Despite the prevalence of mental health disorders rising worldwide, physiotherapists' perceptions of their role and ability to holistically treat people with anxiety and depression remain unclear.

Purpose

This research aimed to understand the physiotherapists' perception of their role in treating and managing people with anxiety and depression while revealing barriers and facilitators in practice.

Methods

PubMed, PsycInfo, CINAHL, EMBASE, Web of Science, and Google Scholar were searched systematically for mixed-method, quantitative or qualitative designs. Using the Joanna Briggs Institute (JBI) Methodology for Systematic Reviews, data was extracted, critically appraised, assigned quality grades, and synthesised through meta-aggregation.

Results

A total of 2991 records were initially sourced, with eleven studies included in the systematic review. The studies were published worldwide between 2016-2021, with the majority (n=8) published in 2020-2021. Participating physiotherapists most frequently had a Bachelor's degree (35.7-62.6%), followed by a Master's degree (28.4-37.4%). Meta-aggregation revealed the synthesised finding that physiotherapists perceived their role to include treating people with

anxiety and depression despite feeling underprepared. Physiotherapists perceive many barriers and facilitators, such as education, when treating people with anxiety and depression.

Conclusion

Physiotherapists have positive perceptions towards anxiety and depression, despite feeling underprepared in their ability to implement psychosocial strategies.

Keywords: Physiotherapy; mental health disorders; role; perceptions; barriers

INTRODUCTION

Physiotherapy was established as a physical, rehabilitative, manipulation-based practice in the late 1950s, and has since progressed to fulfil a broader and more holistic identity where treating a body system is only the basis of therapy (Shaik and Shemjaz, 2014). As part of a response to changing needs, physiotherapists have adapted their roles to include care towards prevention and promotion of both physical and mental health (Andrew et al, 2019; Shaik and Shemjaz, 2014; Yildirim and Balci, 2021). This concept is encompassed throughout the bio-psychosocial treatment model of the International Classification of Functioning (ICF) where the interplay of physiotherapy services in mental health and active participation are emphasized due to the individual and environmental variables that have the potential to lead to mental health challenges (International Organization of Physical Therapy in Mental Health, 2019). Contemporary physiotherapy is defined by the optimisation of physical potential and quality of life achieved through prevention, treatment, and rehabilitation (World Confederation For Physical Therapy, 2019). Moreover, physiotherapy in mental health is further defined and implemented in different health and mental health settings, psychiatry, and psychosomatic medicine (International Organization of Physical Therapy in Mental Health, 2019). The role of the physiotherapist now exists within a multidisciplinary team and is flexible, yet still starts with an assessment and progresses to treatment; especially in relation to the complexity of mental health within a supportive environment with the inclusion of the biopsychosocial model (International Organization of Physical Therapy in Mental Health, 2019; Probst et al, 2020). Using the biopsychosocial model, physiotherapists must consider how biological, psychological, and social factors in people's lives interact to shape their overall health status (Connaughton and Gibson, 2016; Driver, Oprescu, and Lovell, 2019a; Tagliaferri et al, 2020).

Mental health is recognized worldwide as an important part of one's overall health status. As defined by the World Health Organization (WHO), mental health is the state of well-being in which an individual realizes their own abilities and can cope with the normal stresses of life, work productively, and contribute to their community (World Health Organization, 2019). In recent years, the number of reports within physical therapy literature on psychological factors, including self-esteem, attitudes, negative and positive perceptions, emotions, and past traumas, have become more evident (Driver, Lovell, and Oprescu, 2020b). Despite this increase in literature, there is still a general lack of education, knowledge, and awareness of mental health in society (Driver, Lovell, and Oprescu, 2020b; International Organization of Physical Therapy in Mental Health, 2019; Probst et al, 2020). In addition, the stigmatization of mental health disorders has created a decrease in the willingness of people to seek help (Hooblaul, Cobbing, and Daniels, 2020; Yildirim and Balci, 2021). Connaughton and Gibson (2016) reported improvements in empathy and attitudes for practising physiotherapists following education on mental health, thereby demonstrating an ability to change perceptions of physiotherapists. With this solution in mind, it prompts a question as to whether physiotherapists feel they are adequately educated to recognise the signs and symptoms of mental health disorders.

During the history taking, physiotherapists may formally (using a questionnaire) or informally (observe psychological warning signs) screen for psychological factors, or 'yellow flags', noting whether a mental health disorder is a contributor to the current compliant (Connaughton and Gibson, 2016; Driver, Oprescu, and Lovell, 2019a). Interestingly, the Australian Institute of Health and Welfare reported that mental health disorders with such warning signs can occur as a result of the medical conditions the person initially presents with (Australia Institute of Health and Welfare, 2020). Although there is a noticeable connection

between musculoskeletal disorders and mental health disorder comorbidities, society does not perceive the role of physiotherapists to encompass treating people with mental health disorders (Driver, Lovell, and Oprescu, 2020a). According to Connaughton and Gibson (2016), one in four people with musculoskeletal conditions also have a comorbid mental health disorder. Additionally, 41% of physiotherapists reported seeing at least one person with a mental health disorder weekly, and 76% of physiotherapists saw someone with a mental health disorder daily (Connaughton and Gibson, 2016). Even with the high frequency of occurrence, physiotherapists are still finding uncertainty with their ability to employ strategies that address a person's comorbid mental health disorders during treatment (Driver, Oprescu, and Lovell, 2019b).

Physiotherapists commonly feel underprepared when treating people with mental health comorbidities, which can be detrimental to someone's experience with care (Brito and Carreira, 2021; Driver, Oprescu, and Lovell, 2019a). Even with the increased frequency of encountering mental disorders, physiotherapists are still unsure of their ability to use psychosocial strategies during their treatment of injuries and associated mental comorbidities (Gatchel, 2004). Therefore, this perception uncovers a need for additional preparation to allow physiotherapists to both treat holistically and foster positive perceptions toward mental health disorders (Hooblaul, Cobbing, and Daniels, 2020). As per the previous definition used by Hooblaul et al (2020), the physiotherapists' positive perception is defined as thinking of mental health disorders without stigma or prejudice, creating an overall positive outlook towards such disorders. This is essential as physiotherapists' positive perceptions of mental health disorders, such as anxiety and depression, may improve the person's experience and outcome when seeking physiotherapist treatment.

With the adaptation of the physiotherapist role towards a more biopsychosocial approach, multiple gaps in the literature exist regarding how to treat people with mental health disorders as evidence-based practitioners. The identification of barriers and facilitators in treating mental disorders, and a lack of clarity with the physiotherapists' role in working with people with anxiety and depression, create a need to better understand the perceptions that physiotherapists may have towards treating people with mental health disorders (Connaughton and Gibson, 2016; Hooblaul, Cobbing, and Daniels, 2020). This systematic review aims to 1) understand how physiotherapists perceive their ability and role in caring for people with the mental health disorders of anxiety and depression, and 2) reveal the barriers and facilitators influencing the physiotherapists' treatment and management of people with anxiety and depression. These aims intend to answer the research question: what is the physiotherapists' perception of their role in treating and managing people with anxiety and depression?

METHODS

Guidelines from the Joanna Briggs Institute (JBI) methodology for mixed-methods systematic reviews were followed throughout to answer the research question (JBI Manual For Evidence Synthesis, 2020). To determine eligibility, the Population, Intervention, Comparison, and Outcome (PICO) framework was followed to create inclusion and exclusion criteria to follow during article screening. During screening, the 2020 PRISMA flow diagram was followed to identify eligible studies (Page et al, 2021). Quantitative data was turned into a qualitative finding following the JBI methodology to better compare study findings (JBI Manual For Evidence Synthesis, 2020). Using a parallel convergent methodology, the qualitative and quantitative data were extracted in parallel and converged simultaneously during synthesis using a meta-aggregation technique. This methodology ultimately contributed to a meta-aggregation of

illustrations and findings to create synthesised findings to answer the research question. The protocol for this systematic review was registered to the Open Science Framework on November 30th, 2021 (10.17605/OSF.IO/6XAM9) (Foster and Deardorff, 2017; Tsang, Ribeiro, and Lin, 2021).

Eligibility Criteria

Studies were included based on the PICO framework, whereby the population included physiotherapists of all ages, sexes, genders, and countries who had treated people with signs and symptoms of diagnosed or undiagnosed comorbid mental health disorders, such as depression and anxiety. Studies focusing on depression and anxiety were included as they presented as the two most common mental health disorders diagnosed worldwide, and therefore the comorbid mental health disorders physiotherapists were most likely to be exposed to within their practice (Dattani, Ritchie, and Roser, 2021). For this reason, the studies focused on these common mental health disorders were included in our review. When not specified, this study uses the term mental health disorders interchangeably with anxiety and depression disorders. The phenomena of interest was to understand the perceptions of currently practising physiotherapists treating people with mental health disorders. Further, studies that investigated the barriers, facilitators, roles, and training of physiotherapists to treat people with mental health disorders were included. Study contexts included all physiotherapy disciplines in a variety of settings. The studies were all published in peer-reviewed journals. The study designs included mixed methods, quantitative descriptive, and qualitative study designs. Publications in English from all countries, with no limitation of the publication date, were also included.

Articles were excluded if they involved other allied health professionals unless physiotherapists' data could be extracted on its own. Studies on student physiotherapists were

also excluded, due to their lack of professional work with people with mental health disorders in actual practice. This study excluded serious mental health illness, which was defined as someone over the age of 18 who has (or had within the past year) a diagnosable mental, behavioural, or emotional disorder that causes serious functional impairment that substantially interferes with or limits one or more major life activities (SMI Advisor, 2022). Based on this definition, disorders such as schizophrenia and bipolar-related disorders were excluded from the review. In addition to these neurocognitive disorders, such as dementia, were also excluded to focus the review on anxiety and depression. Studies were also excluded if they focused on the mental health of physiotherapists themselves, or if they did not focus on the physiotherapist's role in treating mental health disorders. Any theses were excluded due to an inability to extract results. Studies, where the design did not match the inclusion criteria or was completed in languages other than English, were also excluded.

Information Sources

To complete this systematic review, six databases were searched. Both peer reviewed journals and grey literature were searched for articles to include. The databases used were PubMed, PsycInfo, CINAHL, EMBASE, Web of Science, and Google Scholar. To search each of these databases, unique search strategies were created.

Search Strategy

The original search strategy was created in collaboration with the Bond University Health Science and Medicine librarian, using common key terms derived from preliminary searches. Key terms included physiotherapist, mental health disorders, psychiatry, perception, belief, barrier, and facilitator. The terms were strung together using Boolean operations and truncation

where applicable. MeSH terms such as ‘physical therapy specialty’ or ‘mental health’, or the equivalent for each database, were included to support the search. The search strategies were limited to searching title and abstract to retrieve the most applicable results from each database, but Google Scholar, because it did not support this search function.

To conduct the systematic review, the six databases were searched with a strategy translated from the original PubMed strategy using the Systematic Review Accelerator (SRA) Polyglot (Clark et al, 2020b). The final search was conducted on November 18th, 2021, with study citations inserted into a library in EndNote (20 Clarivate). The final search strategies used are listed in Appendix 1.

Study Selection

Studies were gathered from the six databases using the respective search strategies. All results from the searches were exported, with the exception of Google Scholar where the articles from the first ten pages were used (Canadian Agency for Drugs and Technologies in Health, 2019). The citations for these studies were uploaded into Microsoft EndNote initially for compilation, and then into SRA to remove duplicates and screen (Clark et al, 2020a).

Duplicates were removed using the SRA Deduplicator tool, with the remaining studies screened independently by two reviewers (Rathbone, Carter, Hoffmann, and Glasziou, 2015). Each study was initially screened by title and abstract for relevancy to the research question and aims using the SRA Screenatron tool (Clark et al, 2020a). Any discrepancies were resolved by a third reviewer using the SRA Disputatron tool, and the remaining studies were exported into EndNote for screening by full text against the inclusion and exclusion criteria (Clark et al, 2020a). Full texts were sought and retrieved for further review independently by two reviewers.

Full-text studies that did not meet eligibility criteria were excluded with a reason provided. Any further discrepancies were resolved through discussion with a third reviewer. The study selection process was documented using the 2020 PRISMA flow diagram for systematic reviews (Page et al, 2021). Data analysis performed included an analysis of agreement level for the screening process using SRA. Kappa coefficients were interpreted using the agreement scores of slight (0.0-0.2), fair (0.21-0.4), moderate (0.41-0.60), substantial (0.61-0.80), and almost perfect (0.81-1.00), adapted from Landis and Koch (1977).

Critical Appraisal

Critical appraisal of all articles was completed using the Mixed Method Appraisal Tool (MMAT) as it is inclusive to quantitative, qualitative, and mixed-method designs (Hong et al, 2018). As the MMAT can be used for all study designs included in this systematic review, its homogeneity allowed for simple analysis of the level of agreement between the reviewers (Hong et al, 2018). Two reviewers independently completed a critical appraisal for the included studies; a third reviewer helped resolve disputes. Data analysis was performed using a crosstabs analysis to calculate a Kappa coefficient for the level of agreement, and was interpreted using the agreement scores as described previously (Landis and Koch, 1977). A scoring system was applied to the questions with a score of one for 'yes', and a score of zero for 'no' and 'can't tell'. Agreed overall scores were documented into a critical appraisal table in Microsoft Excel. A quality grade was applied to the articles using the quality grading criteria of poor (<45.4%), fair (45.4-61%), or good (>61%), adapted from Handler et al. (2011).

Statistical analysis in IBM SPSS Statistics version 28.0.0.0 (190) was performed to understand the level of agreement between the critical appraisal scores of the two reviewers. A Cohen's kappa coefficient was calculated using crosstabs to analyse inter-rater reliability and

level of agreement in the process of critical appraisal. This Kappa coefficient was also interpreted using the levels of agreement adapted from Landis and Koch (Landis and Koch, 1977). To analyse the level of evidence for the included studies, a rank was assigned using the Joanna Briggs Institute (JBI) levels of evidence for meaningfulness (JBI Levels of Evidence, 2013).

Data Extraction

Data was sought to support the two study aims regarding the physiotherapists' perceptions of their role and ability, and the barriers and facilitators in treating people with mental health disorders, in particular anxiety and depression. Study characteristics and study results such as findings and illustrations were collected from the included studies. Study characteristics included the following: authors, year of publication, research question and aims, study design, population, sample size and characteristics, outcomes assessed, physiotherapy setting and disciplines, mental health disorders, and levels of evidence. Study results collected were perceptions found throughout the main findings and illustrations, common themes, and the results of relevant outcomes assessed.

A template table in Microsoft Excel was used to collect and track data extracted from each of the included studies. A secondary table was used to collect findings and illustrations for each study's main results. A piloting process using the template occurred on November 28th, 2021 with the three lead authors, and an additional author. Three authors extracted data from the included articles, with the additional author revising the extraction to ensure no data was missing. The process of data extraction of both qualitative and quantitative data followed a parallel convergent methodology. For this study, the assumption was made that the terminology of mental illness was synonymous with mental health disorders to assist in extraction and

synthesis. No further assumptions or simplifications were made with the extracted data. All extracted data were kept in raw form in the Microsoft Excel templates.

Data Synthesis and Analysis

To synthesise quantitative data, a parallel convergent methodology approach was used following the JBI methodology for systematic reviews (JBI Manual For Evidence Synthesis, 2020). The data was extracted in parallel and summarized convergently in both tables and figures with accompanying narrative summaries. The quantitative data was converted into qualitative data for the synthesised findings to better integrate and support the qualitative findings. Overall, emphasis was placed on qualitative data in the synthesised findings.

A meta-aggregation technique was used to form categories and synthesized findings to summarise the qualitative and quantitative extracted data. The process of meta-aggregation follows the JBI methodology and was performed by all authors on January 25th, 2022 (JBI Manual For Evidence Synthesis, 2020). Each finding extracted from the included studies was assigned a JBI level of credibility (unequivocal, credible, not supported) based on the reviewers' discussion towards the quality of supporting data and illustration provided by each article (JBI Manual For Evidence Synthesis, 2020). Findings were assigned unequivocal if it was accompanied by an illustration that is beyond reasonable doubt, credible if they were accompanied by an illustration lacking clear association, and not supported if the findings were not supported with data (JBI Manual For Evidence Synthesis, 2020). Findings that were not supported were excluded from the meta-aggregation as there was much challenge to their credibility, whereas credible and unequivocal findings were included as they had little to no challenge to their credibility (JBI Manual For Evidence Synthesis, 2020). Levels of credibility were assigned by three reviewers through group discussion, and any disagreements were

resolved by a majority vote of all authors (minimum 2/3 reviewers in agreement). Findings were then grouped into categories based on similar themes and were further combined to develop synthesised findings that addressed each of the study's aims.

RESULTS

Study Selection

A total of 2991 articles were retrieved from the literature search within the six databases. After screening, eleven articles met the eligibility criteria and were included in this systematic review. The 2020 PRISMA flow diagram detailing the literature search and screening process is outlined in Figure 1 (Page et al, 2021). Inter-rater reliability was determined within the SRA Disputatron tool, producing a level of agreement of 96.15% and Cohen's kappa coefficient of 0.453, yielding a "moderate agreement" between the two reviewers (Appendix 2, Table 2a) (Landis and Koch, 1977; Rathbone, Carter, Hoffmann, and Glasziou, 2015).

Study Characteristics

The sample size of the participants in each study ranged from 9 to 320 physiotherapists. The included studies were published from 2016 to 2021, with the majority published in 2020-2021 (n=8) (Table 1). The studies gathered the perceptions of physiotherapists from a variety of context settings, such as private practice, public and private hospitals, community, and aged care facilities (Table 1). Within these settings, the physiotherapists practised in a variety of disciplines such as musculoskeletal, neurology, paediatrics, orthopaedics, and cardiorespiratory (Table 1). Additionally, the studies took place worldwide, with half the studies focusing on physiotherapists from Australia (n=5) (Table 1).

The physiotherapists in the included studies all recorded a variety of years of experience (Table 1). When education level was reported, practising physiotherapists were found most frequently to have a Bachelor's degree (35.7-62.6% of participants), followed by a Master's degree in Physiotherapy (28.4-37.4% of participants) (Table 1). Additionally, most physiotherapists were females averaging between 30-39 years old (Table 1).

In the majority of the included studies, the physiotherapists were recruited through voluntary response (n=9) and snowball sampling (n=5) and were asked to partake in online surveys (n=8), interviews (n=3), questionnaires (n=2), or focus groups (n=1) (Appendix 2, Table 2b). Each study asked the physiotherapists to provide their perceptions or beliefs to a variety of questions regarding their practice and mental health disorders (Appendix 2, Table 2b). Outcomes assessed were most commonly questionnaires unique to the study, however standardised outcome measures such as the ATP-30 (Appendix 2, Table 2b) and Beliefs Towards Mental Illness (BMI) Scale (n = 1) were also used (Appendix 2, Table 2b).

Critical Appraisal

To determine the quality of the included articles, eleven articles were analysed by two reviewers using the MMAT critical appraisal checklist (Appendix 2, Table 2c) (Hong et al, 2018; Landis and Koch, 1977). A significant level of agreement was determined, generating a Kappa coefficient of 0.937 between two reviewers and was interpreted as an 'almost perfect agreement' ($p<0.001$) (Appendix 2, Table 2d) (Hong et al, 2018; Landis and Koch, 1977).

A quality grade was adapted from Handler et al. (2011) and was applied to the MMAT score of each article; ten of the included articles achieved a quality grade of good (> 61%) and one article was assigned a quality grade of poor (<45.4%) (Appendix 2, Table 2e) (Hong et al, 2018). Using the JBI levels of evidence for meaningfulness, the eleven articles were assigned

levels from one to five (Appendix 2, Table 2e) (JBI Levels of Evidence, 2013). The mixed-methods articles were assigned a level of evidence of two, while the quantitative descriptive and qualitative studies were given a level of evidence of three (Appendix 2, Table 2e).

Meta-Aggregation

Seven synthesised findings were developed during meta-aggregation to address the research aims. The findings are collated in flow diagram figures to demonstrate the progression of the meta-aggregation to the development of synthesised findings. The extracted findings and their corresponding authors summarized into the categories that created all synthesised findings can be found in Appendix 4.

Aim One: Physiotherapists' Perceptions of Their Role and Ability.

Three synthesised findings emerged regarding physiotherapists' perceived role and ability to treat people with mental health disorders. Figure 2 presents the first synthesised finding representing the generally positive perceptions held by physiotherapists towards mental health, and those perceiving their role to include treating people with mental health disorders. A further synthesised finding identifies why physiotherapists have negative perceptions towards mental health disorders to be lack of education and psychology-related barriers (Appendix 3, Figure 3a). Additionally, the synthesised finding in Figure 3 addresses physiotherapists' perceptions of being under-prepared in their ability to treat people with mental health disorders.

Aim Two, Part One: Perceived Facilitators for Physiotherapists.

Two synthesised findings for facilitators that physiotherapists perceived to aid their practice were developed. The first identified the facilitators to be directly influenced by the amount of exposure to mental health disorders through personal and professional experiences (Appendix 3, Figure 3b. Overall, these experiential factors facilitated more positive perceptions

towards people with mental health disorders. Another synthesised finding identified the most common facilitator reported by physiotherapists to be improved training (Appendix 3, Figure 3c).

Aim Two, Part Two: Perceived Barriers for Physiotherapists.

Two prominent themes from the second aim were derived based on both psychiatry-related contextual and experiential barriers. The first synthesised finding incorporates contextual factors such as time and resource availability, and unclear role definitions that act as barriers for physiotherapists to treat a person with mental health disorders (Appendix 3, Figure 3d). Additionally, barriers were also derived from experiences or perceptions of experiences with mental health disorders in both practice and everyday life (Appendix 3, Figure 3e).

Aim Two, Part Three: Education as a Perceived Barrier and Facilitator.

Education became a synthesised finding on its own, as it presented as both a facilitator and barrier. Depending on the level and quantity of education, physiotherapists' perceptions of their role in treating people with mental health disorders were altered – higher amounts and levels of education facilitated more positive perceptions, while a lack of specific education on mental health disorders was reported to be a barrier to treating people with mental health disorders (Appendix 3, Figure 3f).

DISCUSSION

This systematic review was one of the first to examine the physiotherapists' perceptions of their role and ability in treating people with mental health disorders like anxiety and depression, while also considering the barriers and facilitators influencing this part of their practice. This review discovered that physiotherapists perceived their role as inclusive of treating people with anxiety and depression with generally positive perceptions towards mental health

and their ability to treat people with mental health disorders. Within this, barriers and facilitators to physiotherapists' positive perceptions were also identified and further explored.

This study included physiotherapists from a variety of disciplines and experience levels allowing for an all-encompassing view of perspectives to be included in the analysis, increasing relevance to today's physiotherapists and the spectrum of workplace settings they may work in. Additionally, the recency of publishing dates (2016-2021) of the included studies highlights the novelty of the research in many countries and the increasing importance of mental health disorders in the physiotherapy profession.

Aim One: Physiotherapists' Perceptions of Their Role and Ability.

Increasingly positive perceptions towards mental health, in general, were correlated to higher levels of exposure and experience with mental health disorders as physiotherapists as gathered in this review's synthesised findings. By contrast, negative physiotherapist perceptions were present as well. These perceptions could be explained through specific education and training, or lack thereof, acting as a major reason for physiotherapists' perception of feeling under-prepared to work with people with these mental health disorders such as anxiety and depression. This finding was not exclusive to physiotherapists', as Wahl and Aroesty-Cohen (2010) failed to find consistently positive perceptions of psychiatrists and nurses towards people with mental health disorders as well. Overall, the lack of experience with psychosocial strategies seen in aim one's synthesised findings led physiotherapists to develop their own new methods to manage the unique challenges of managing people with anxiety and depression (Tessem, Møyner, and Feiring, 2021). When combined with the perceived benefit of increased training, incorporating psychosocial strategy education could increase confidence and further improve physiotherapists' perception of their role and ability in treating people with mental health

disorders (Dandridge, Stubbs, Roskell, and Soundy, 2014; Tessem, Møyner, and Feiring, 2021). This finding may also parallel the relationship between the lack of education and perceptions of under-preparedness, as it is possible that education serves as a substitute for personal exposure to anxiety and depression and thus, lacking in either education or prior personal exposure leads to under-preparedness in the workplace. Physiotherapists also feel a moderate level of impostor syndrome at some point in their careers, as evidenced by findings derived from research on physiotherapists using the Clarence Impostor Phenomenon Scale (Kansara, Kumar, and Pabla, 2021). The feeling of not being prepared or having the ability to treat mental health disorders can ultimately alter and create both positive and negative perceptions depending on the type of experience.

Aim Two, Part One: Perceived Facilitators for Physiotherapists.

Experiences that included but were not limited to exposures in the workplace, education curriculum, and personal experiences with self, family or friends with anxiety or depression were among the most prominent facilitators to treating mental health disorders followed by training (Probst and Peuskens, 2010; Yildirim and Balci, 2021). This finding supports the surging use of the biopsychosocial model in practice. Prioritising the psychological, social and people-centred approaches of care supports allied health professionals with the right strategies to manage people more holistically and towards improved outcomes (Mari, Gro Killi, and Hedda, 2021). A study on the biopsychosocial model determined proper implementation of the model would lead to improved healthcare outcomes, which with education can allow for the social aspect of the model to be better incorporated in practice (Wade and Halligan, 2017). As physiotherapists may experience less common mental health disorders in practice, such as psychotic disorders,

investigations around the perceptions of such disorders and their impact on practice would be an important area of future study.

Aim Two, Part Two: Perceived Barriers for Physiotherapists.

Physiotherapists separated prominent barriers into two classifications: contextual barriers and experiential barriers. For example, contextual barriers were identified as consisting of a lack of training, unclear definition of their role, and time and resource availability, whereas experiential barriers consisted of negative experiences managing an individual with a mental health disorder and the perception of their role excluding the use of psychosocial strategies in practice (Tessem, Møyner, and Feiring, 2021). One of the main barriers identified was a lack of education in managing mental health disorders, leading to difficulties for physiotherapists in identifying the appropriate strategy for the person. This aim's synthesised findings also noted that society's perception of physiotherapists only being capable of rehabilitating physical injury created a stigma, acting as a barrier for physiotherapists. Even though previous studies have identified clear opportunities for intervention in educational structure, it appears not enough has been done to improve the physiotherapist experience in this area (Tessem, Møyner, and Feiring, 2021). In combination with the outdated societal perception of physiotherapists, it could be hypothesised that physiotherapists themselves feel limited to a role that society and their education have constrained them to, rather than empowered to take on a greater role in managing anxiety and depression. Survey results of various allied health professionals from Clancy et al. (2019) reflect a similar message, stating that physiotherapists perceive general practitioners and mental health nurses to have the greatest role legitimacy in delivering physical interventions for people with mental health disorders, even though this would typically fall under a physiotherapist's role. This issue with perceived roles may be overcome through training and

furthering education courses on topics of mental health training and the role that physiotherapists play in this area. With a brief search of accredited organizations (World Physio, Australian Physiotherapy Association, Canadian Physiotherapy Association), currently, there are limited courses available and of those courses, there are minimal practical application components. Without the education to empower physiotherapists to use psychosocial strategies in practice, physiotherapy will not expand as a profession and society will continue to be unaware of the benefits their physiotherapists could have for their mental health and physical comorbidities.

Aim Two, Part Three: Education as a Perceived Barrier and Facilitator.

Unexpectedly, education was found to be both a barrier and facilitator for physiotherapists treating mental health disorders. Our study revealed similarities with previous literature where physiotherapists who were less educated in mental health disorders felt more unprepared and yearned for further education, and physiotherapists that had furthered their training and had sought out courses on psychology, reported education to be a facilitator in their practice (Gyllensten et al, 2011). This synthesized finding could evidence an inadequacy in general physiotherapy curriculum structure or an indicator that physiotherapy practice no longer only manages only physical health, but also consists of mental health management. As many accrediting organizations for physiotherapists worldwide require further development courses for all practising physiotherapists, having courses about anxiety and depression and practical application of psychosocial strategies would be an opportune way to demonstrate the development as a profession. Continual professional development ties into a physiotherapists' code of conduct to provide best-evidenced care and physiotherapists should be taking it upon themselves to enrol and advocate for mental health training and education. Furthermore, Vancampfort, Stubbs, Probst, and Mugisha (2018) identified physiotherapy as a profession that

has been unable to keep up with the escalating prevalence of anxiety and depression, and accordingly, the general public has a perception that physiotherapists do not treat mental health disorders. Therefore, to improve physiotherapists' practice, barriers such as lack of education should be minimized, and further development opportunities to comply with accreditation guidelines and codes of conduct should be improved.

Limitations

Despite the multitude of new findings and themes extracted from the results, there were a few limitations present in this study. Firstly, finding congruence in study design and outcome measures was difficult when comparing included studies. Although many studies were either mixed methods or quantitative descriptive, few studies shared similar recruitment procedures, outcomes assessed and specific mental health disorders. Thus, the physiotherapists' role could not be properly quantified in the scope of our research aims without overgeneralising other study findings, and it could not be assumed that outcome measures of perceptions of managing one mental health disorder were applicable to another. Notably, many studies chose to use their own outcome measure rather than following a gold standard intended for physiotherapists which created even more inconsistencies. As well, some studies did not provide their definition of mental health disorders, and when they did it was not consistent and universal. This added an obstacle to the meta-aggregation procedure, and subsequently, the authors had to develop a definition that fit the study parameters, exclusion, and inclusion criteria. Use of a universal definition for mental health disorders, such as the WHO definition or DSM criteria, would have been a solution for this limitation and should be considered for future reviews to minimise this limitation (American Psychiatric Association, 2022; World Health Organization, 2019).

CONCLUSION

This systematic review found physiotherapists to have positive perceptions towards mental health disorders when treating people with anxiety and depression. Despite this, physiotherapists believe they were under-prepared to manage the unpredictability of mental health disorders and had less confidence when implementing psychosocial strategies. As gained experiences and exposure accumulated through education and practical settings to reduce barriers, physiotherapists felt increasingly more positive about treating people with mental health disorders. Together, the discussion findings highlight the upstream effect of preparedness on positive perceptions – without positive perceptions, there is no precursor for preparedness to improve upon, no matter how effective the facilitator. Thus, it is fundamentally important for physiotherapists to begin their careers with an overall positive perception towards mental health disorders, as this becomes the foundation for their role in managing people with anxiety and depression and improves with experience. Finally, understanding the interconnected relationship between resources, training and physiotherapists' perception of their role highlights the importance of emphasising mental health within the biopsychosocial model.

Even with these findings, it remains unclear what the physiotherapist's formal role in managing anxiety and depression should be. As the prevalence and significance of mental health disorders in society increase, there is a growing need for an increased understanding of how to define the role of physiotherapists in managing people living with anxiety and depression. Also, with education playing such a significant role in this study's synthesised findings, it lays a foundation for a wide variety of research opportunities on student physiotherapists' perceptions of mental health disorders and how the curriculum they take part in influences them.

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The authors report no conflict of interest.

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