



The Role of Occupational Therapy in Addressing Occupational Injustice Among Individuals with Hand Conditions: A Scoping Review

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Abstract

This scoping review explores the role of OT in addressing occupational injustice among individuals with hand conditions. It examines how OT interventions could mitigate the psychological, social, and economic impacts of conditions such as arthritis, carpal tunnel syndrome and traumatic injuries. This review identifies themes of (clinical perspective in definition and operational parameters of occupational injustice; critical perspective of experiences of occupational injustice; critical perspective of characteristics of effective interventions; critical perspective of efficacy of occupational therapy interventions; and critical perspective of optimising occupational therapy practice). It highlights gaps in current research, particularly the need for empirical studies and standardised intervention protocols. Findings suggest that OT could enhance social inclusion and rehabilitation outcomes through individualised therapy and advocacy for systemic change. Recommendations for practice include developing integrated care models that address physical and socio-emotional needs, and embracing continuous professional development. This review underscores the importance of a dual approach in OT through combining direct patient care with efforts to influence policy and promote occupational justice.

Keywords: Occupational Therapy; Occupational Injustice; Hand Conditions; Social Inclusion; Rehabilitation Outcomes; Intervention Efficacy; Systemic Change

Abbreviations

OT: Occupational Therapy; POJF: Participatory Occupation Justice Framework

Introduction and Background

Occupational therapy (OT) is considered one of the vital healthcare segments that promote quality of life, well-being, and meaningful activity. OT has considerable contributions to people who have hand conditions, helping them recover

health and well-being and integrate into society despite their conditions [1]. For example, it helps individuals adapt to daily activities, communication, and more. Occupational injustice poses a significant challenge in workplaces, often stemming from systematic barriers. If individuals cannot fully engage in meaningful activities, this leads to occupational injustice, with exclusion from teams being a common cause [2]. Various hand conditions, such as musculoskeletal disorders, arthritis, carpal tunnel syndrome, and traumatic injuries, can limit an individual's ability to complete

daily tasks, often causing pain and reduced dexterity [3]. These side effects can restrict physical freedom, social interaction, and economic prosperity, with impacts extending beyond physical limitations to include psychological distress, social isolation, and economic hardship [3].

The concept of occupational injustice draws from social justice, emphasizing the right of every individual to engage in meaningful occupations, challenging the traditional social structures based on physical or work-related abilities. In the context of hand conditions, occupational injustice manifests as inadequate healthcare, lack of workplace accommodations, and other forms of marginalization. Addressing these injustices requires a comprehensive approach.

Occupational therapists (OTs) are uniquely positioned to tackle occupational injustice, employing a holistic approach that combines therapy with advocacy for systematic changes to foster inclusion and participation [4]. OT practitioners are expected to educate clients about their workplace rights and collaborate with other healthcare professionals and policymakers to maintain occupational justice [4]. Literature highlights the significant role of OT in addressing occupational injustices. For instance, [4] underscore the importance of understanding patients' lived experiences to effectively intervene against occupational injustice. Those with hand conditions often face invalidation, undeserved suffering, and blame, which hampers their rehabilitation [5,6].

OT interventions are critical in promoting social inclusion for individuals with hand disabilities, facilitating adaptation and responsiveness to their cultural needs. The Participatory Occupation Justice Framework (POJF), as suggested by [3], encourages customized rehabilitative strategies that cater to varying needs, particularly in cases involving nerve injuries and functional imbalances that marginalize individual rights.

Despite advancements, historical perspectives often limit occupation-based approaches, as shown in [6] empirical research, which highlights the lack of institutional support for emerging OT interventions. [7] argue that prioritizing outcome-based research is essential for disseminating best practices, particularly in environmental modifications, therapeutic exercises, and assistive splinting methods to mitigate occupational injustice.

Incorporating justice-focused methodologies, such as the Person-Environment-Occupation (PEO) model [9], enhances justice-centered practices in OT. Such approaches encourage flexible training programs that develop practical skills in dismantling systemic inequities. Additionally, including environmental context in practical strategies is foundational for successful OT interventions in cases of sensory deficits. Interdisciplinary collaboration is crucial in establishing community engagement, ultimately alleviating chronic hand conditions [1,2].

This scoping review will address the following stages: Stage 1: identifying the research question; Stage 2: identifying relevant studies; Stage 3: study selection; Stage 4: charting the data; and Stage 5: collating, summarizing, and reporting the results.

Research question

What is the major contribution of occupational therapy in addressing "occupational injustice" among individuals with hand conditions?

Research objectives

- To define and apply occupational injustice within the context of occupational therapy for individuals with hand conditions.
- To explore the consequences of occupational injustice experienced by individuals with hand conditions in daily life, communities, and workplaces.
- To examine occupational therapy interventions that reduce occupational injustice among individuals with hand conditions.
- To evaluate the benefits of occupational therapy interventions in overcoming occupational injustice faced by individuals with hand conditions.
- To recommend effective strategies for integrating occupational therapy practices to better address occupational injustice in individuals with hand conditions.

Tackling the research objectives in literature

For Objective 1, in order to define and apply occupational injustice within the context of OT for individuals with hand conditions, it is essential to explore existing literature that discusses the concept of occupational injustice. [3] emphasizes that occupational injustice occurs when systematic barriers prevent individuals

from participating in meaningful activities. These barriers may manifest as inadequate healthcare access, insufficient workplace accommodations, and societal stigmatization. By exploring these sources, researchers can build a comprehensive definition that encompasses the various dimensions of occupational injustice. Additionally, examining case studies and empirical research documenting the lived experiences of individuals with hand conditions will be useful for contextualizing how occupational injustice manifests in daily life. For instance, studies [2,4] provide insights into the systematic challenges and emotional trauma faced by these individuals. Integrating these perspectives will enable a proper application of the concept in OT practice by ensuring that interventions are tailored to address specific injustices faced by people with hand conditions.

Objective 2 will be achieved by conducting a thorough literature review to identify the multifaceted impacts of such injustices. Occupational injustice generally triggers physical limitations, psychological distress, alienation, social isolation, and economic hardship [3]. These consequences are interrelated and may exacerbate the overall well-being of individuals. Research [4,5] highlights that emotional trauma and systematic barriers significantly hinder the rehabilitation process. By compiling qualitative and quantitative data from these studies, researchers can obtain a holistic view of how occupational injustice affects individuals. This includes documenting physical and psychological outcomes as well as understanding broader social and economic implications. For example, the literature should examine how reduced dexterity and chronic pain affect job performance and economic stability.

Achieving Objective 3 will involve reviewing intervention models and frameworks documented in the literature. The Participatory Occupation Justice Framework (POJF) proposed by [3] serves as a valuable starting point. This framework emphasizes customizable rehabilitative approaches tailored to individual needs, which are essential for addressing the diverse challenges faced by people with hand conditions. Additionally, examining the effectiveness of various OT interventions (e.g., environmental modifications, therapeutic exercises, and assistive splinting methods) could provide insights into best practices. [6,7] offer empirical evidence on the success of these interventions in promoting occupational justice. Researchers should analyze these studies to extract key

characteristics that contribute to successful outcomes, such as client-centered approaches, adaptability, and interdisciplinary collaboration.

Regarding Objective 4, evaluating the benefits of OT interventions requires a systematic review of outcomes reported in the literature. References [1,8] highlight the positive impacts of justice-focused OT interventions on individuals with hand conditions. These benefits include improved physical function, enhanced psychological well-being, and increased social participation. To conduct a thorough evaluation, researchers should compile data from multiple sources, comparing different intervention strategies and their outcomes. Such literature reviews could be instrumental in synthesizing this information. By identifying patterns and commonalities in successful interventions, researchers could establish evidence-based recommendations for OT practices that effectively address occupational injustice.

For Objective 5, the literature should guide the development of strategies that are adaptable, inclusive, and client-centered. For instance, integrating the Person-Environment-Occupation (PEO) model, as suggested by [8,9], would provide a framework for creating flexible and responsive OT interventions. Furthermore, supporting interdisciplinary collaborations and community engagement, as indicated by [2], would enhance the effectiveness of OT practices. By promoting policies that support workplace accommodations and advocating for systemic changes, occupational therapists can mitigate occupational injustice. These strategies should be backed by empirical evidence and tailored to the unique needs of individuals with hand conditions to underline a holistic approach to occupational justice.

Materials and Methods

A comprehensive scoping review will be conducted following the Arksey and O'Malley framework. Databases including the Exeter University Library, SCOPUS, Google Scholar, PsycINFO, Web of Science, and PubMed will be searched. Inclusion criteria will focus on peer-reviewed studies published between 2014 and 2024. Data will be charted and thematically analyzed to identify trends, gaps, and implications for practice.

Participants (types of participants)

The review will include studies involving individuals with hand conditions such as arthritis, carpal tunnel syndrome, and

traumatic hand injuries. Participants should have experienced occupational injustice or received OT interventions aimed at mitigating such injustice. The studies will encompass diverse demographics, including age, gender, socioeconomic status, and cultural backgrounds to provide a comprehensive understanding of the issue.

Study selection

Studies will be selected based on their relevance to the research questions and inclusion criteria. Titles and abstracts will be screened for eligibility, followed by a full-text review of selected articles. Inclusion criteria are studies published between 2014 and 2024, peer-reviewed, and focused on OT interventions or outcomes related to occupational injustice in individuals with hand conditions. Exclusion criteria include non-peer-reviewed sources and studies not directly addressing the role of OT in this context.

For conducting a scoping review on the role of occupational therapy in addressing occupational injustice among individuals with hand conditions, there is a need to establish clear criteria for study selection. These criteria ensure the identification of relevant and high-quality evidence.

In terms of database, databases of Exeter university Library, SCOPUS, Google Scholar, PsycINFO, Web of Science, and PubMed are used to identify the included studies (table 1).

Inclusion criteria

- **Date of Publication:** Studies published between 2014 and 2024 will be considered to ensure the relevance and currency of the findings.
- **Peer-Reviewed Studies:** This research will include peer-reviewed articles, conference papers and book chapters to ensure the credibility and quality of the evidence.
- **Focus:** Studies that specifically address occupational therapy interventions, conceptualisations of occupational injustice or outcomes related to occupational injustice in individuals with hand conditions.

Exclusion criteria

- **Grey Literature:** Exclude non-peer-reviewed sources such as Wikipedia, social media platforms, blogs and non-academic websites due to concerns over reliability and validity.

- Irrelevant topics are those studies that do not align with the direct role played by the occupational therapist in ameliorating the injustice done due to the lack of functionality and alignment with the unique hand conditions of the individuals.

Concept

The review focuses on occupational injustice, which can be defined as obstacles and unfairness concerning people's opportunities to participate in activities because of hand conditions. This entails identifying how OT interventions can assist in discovering as well as overcoming such barriers to promote occupational justice. Consequently, the review pays attention to definitions, the characteristics of the intervention, and the outcomes to say how OT can mitigate the consequences of occupational injustice.

Context

The context presents various situations which highlight the cases of people with hand conditions and their grievances of being discriminated against at work, at home and the society. To ensure that the review is broad and covers all aspects of the experiences and interventions, studies from various countries and healthcare settings are included in the review. To achieve the objectives of the review, the problems that are likely to be found in the given contexts are explored, together with the possible solutions that could be provided to promote the occupational justice of people with hand impairments.

Searching

Keywords/Terms

For the efficient database search, a synthesis of keywords will be used that will be checked for associative capabilities with the review's main themes. Example keywords like "Occupational Therapy," "Hand conditions," will be used.

Boolean method

The Boolean search strategy employs 'AND' and 'OR' to obtain refinement in search results and generate a higher focus. For example, ("Occupational Therapy" AND "Occupational Injustice") AND ("Hand Conditions" OR "Hand Injuries"), ("Occupational Therapy" AND "Occupational Participation") AND ("Hand Conditions" NOT "Grey Literature"), "Rehabilitation" AND "Therapeutic Interventions" AND "Hand Conditions".

This strategy allows for the inclusion of studies that precisely match the research scope while excluding those that do not meet the criteria.

Search strategy

- **Database-specific Adjustments:** There will be adaption the search strategy to the specific features and syntax of each database (Exeter university Library, SCOPUS, Google Scholar, PsycINFO, Web of Science, and PubMed). This may involve using database-specific filters such as publication date, document type, and subject areas.
- **Piloting Searches:** Conduct pilot searches to refine the keywords and Boolean operators to ensure the search strategy effectively captures relevant literature.

- **Documentation:** This research will keep detailed records of search strategies, including dates, keywords, and the number of records identified, to ensure transparency and reproducibility. This will be included in the form of some screen shots in the appendix.

Identifying relevant studies

“Hand Conditions” OR “Hand Injuries” OR “Hand dysfunction” or “hand impairment” and “Occupational Therapy” or “occupational rehabilitation” or “occupational intervention” and “Occupational Injustice” or “occupational imbalance” or “occupational marginalization”.

PubMed	“Hand Conditions” OR “Hand Injuries” OR “Hand dysfunction” or “hand impairment” and “Occupational Therapy” or “occupational rehabilitation” or “occupational intervention”	132
	“Occupational Injustice” or “occupational imbalance” or “occupational marginalization”	39
Google Scholar	“Hand Conditions” OR “Hand Injuries” OR “Hand dysfunction” or “hand impairment”	257
	“Occupational Injustice” or “occupational imbalance” or “occupational marginalization”	91
Exeter University Library	“Hand Conditions” OR “Hand Injuries” OR “Hand dysfunction” or “hand impairment” and “Occupational Injustice” or “occupational imbalance” or “occupational marginalisation” and “Occupational Therapy” or “occupational rehabilitation” or “occupational intervention”	2000
SCOPUS	(TITLE-ABS-KEY (“Hand Conditions” OR “Hand Injuries” OR “Hand dysfunction” OR “hand impairment”) AND TITLE-ABS-KEY (“Occupational Therapy” OR “occupational rehabilitation” OR “occupational intervention”))	92
	TITLE-ABS-KEY (“Occupational Injustice” OR “occupational imbalance” OR “occupational marginalization”)	137
Web of Science	“Hand Conditions” OR “Hand Injuries” OR “Hand dysfunction” or “hand impairment” and “Occupational Injustice” or “occupational imbalance” or “occupational marginalisation” and “Occupational Therapy” or “occupational rehabilitation” or “occupational intervention”	1,927
PsycINFO	((“Hand Conditions” or “Hand Injuries” or “Hand dysfunction” or “hand impairment”) and (“Occupational Therapy” or “occupational rehabilitation” or “occupational intervention”)).af.	85
	(“Occupational Injustice” or “occupational imbalance” or “occupational marginalization”).af.	113

Number of articles 4873

Number of duplicates 1345

Number of articles after removing duplicates 3528

Table 1: Key words/terms and Database.

Keywords/terms

Prisma

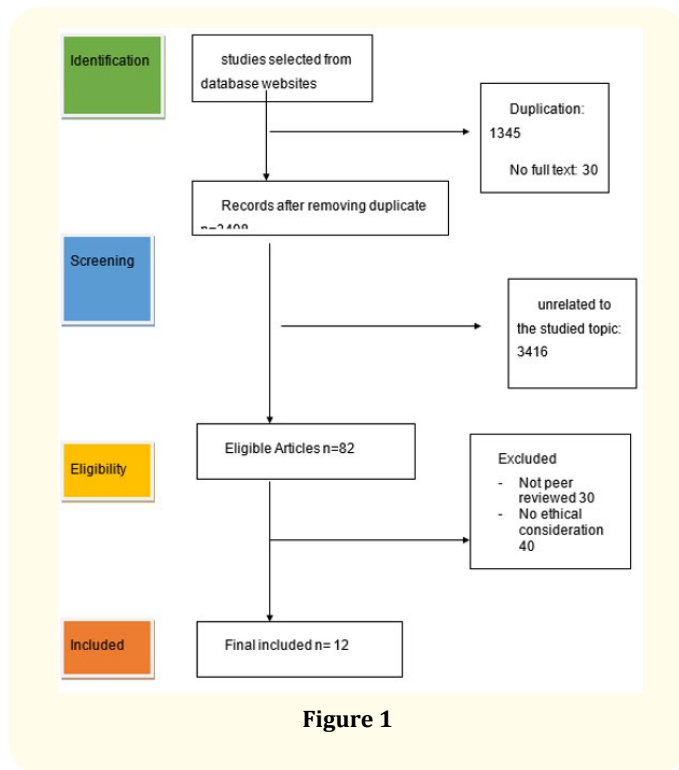


Figure 1

Findings

Description of the studies

The review was carried out to establish how far occupational therapy has gone in the prevention or management of occupational injustice among those with hand conditions. Table 2 illustrates findings from the chosen studies that reveal an explicit perspective of the understanding of occupational injustice, its perception, and how occupational therapy with a focus on hand rehabilitation addresses the issue.

Defining and operationalising occupational injustice

As argued in [1], it is still possible to define and operationalize occupational injustice in the context of occupational therapy if one considers how people’s experiences are connected to structural entities. This is because studies have broadly defined occupational injustice to capture different facets of this phenomenon. In the study on patients with hand injuries, [2] aims to capture the

context of the participants’ accounts, wherein the participants felt marginalized, suffered unnecessarily, and were blamed. These themes represent the psychological and social mechanisms of occupational injustice. For instance, there are invalidation occurrences when patients are not believed or when their pain and limitations are not recognized by employers, healthcare providers, or even friends and family. This lack of recognition hampers their rehabilitation process and aggravates feelings of victimization as they try to return to work and reintegrate into their lives. Participants in the study by [2] reported feeling that they were treated unfairly and were frustrated by their persistent pain and the extent to which it affected their lives, given what they perceived as inadequate social and healthcare mechanisms. In this regard, [3] expands the discourse on occupational injustice by associating it with other socio-political dimensions of justice through the concept of occupational deprivation. This theoretical discourse implies that occupational injustice should be understood as both a personal and structural phenomenon rooted in inequities in resource allocation and opportunities for occupation. According to [3], occupational deprivation—a state where people are deprived of essential activities—worsens social exclusion and inequality, thereby sustaining the cycle of injustice. Therapists face the dual task of treating the physical disabilities resulting from hand conditions while also advocating for societal changes to improve access to healthcare and employment for people with hand disabilities. Therefore, to tackle these injustices, occupational therapy should take a two-faceted approach: working with affected individuals while lobbying for change. This may encompass direct interventions, such as targeted rehabilitation strategies designed to meet individuals’ unique needs, underscoring that therapy involves more than merely restoring physical functions but also restoring affected individuals’ roles within personal, social, and occupational spheres. In this regard, occupational therapists could play a crucial advocacy role by ensuring that policymakers understand the need for policies that promote occupational justice for individuals with hand conditions.

Experiences of occupational injustice

The exploration of occupational justice among individuals with hand conditions has a strong component of personal experiential tendencies. The study conducted by [4] highlights how assistive devices serve as tools for social inclusion, thus elevating resource-

limited settings. Additionally, the influence of self-care delivery through therapeutic modalities is a key area, with interactions between these modalities and environmental factors. However, according to [5], the inexperience of some occupational therapists can diverge in reducing the inequity permeating the socio-economic context. Seasoned practitioners can manage motor issues such as tendinitis and neural damage in hand injury individuals, as evidenced in research by [2], where themes of invalidation emerged due to the lack of transferability of study findings. Additionally, undeserved suffering intensifies barriers to optimal participation, which negatively impacts service delivery and reduces the quality of a holistic approach to occupational justice [6]. This calls for effective evaluations of individuals with hand disabilities, such as those with carpal tunnel syndrome and rheumatoid arthritis, to convey symptoms accurately and reduce occupational alienation arising from certain unjust practices followed by occupational therapists.

While these themes provide a detailed account of the personal dimensions of occupational injustice, the study's timing during the COVID-19 pandemic is a significant variable that could have affected the accessibility and nature of healthcare services, thereby influencing participants' experiences. Comparatively, communities facing social exclusion unrelated to hand injuries experience further occupational alienation due to the lack of enforceability of the POJF frameworks [3].

Findings suggest that tailored approaches addressing specific community and individual needs could enhance social inclusion and mitigate feelings of occupational injustice. However, the study's reliance on descriptive case narratives limits its generalizability, highlighting the need for further empirical evidence to validate the effectiveness of the POJF across diverse populations. Similarly, [7] contributes to the discussion by critiquing the dominance of physiotherapy-like treatments in hand therapy, advocating for a greater integration of occupation-based interventions. They highlight a gap in research on occupation-based outcomes, suggesting that these interventions might better address elements of occupational injustice identified in other studies. Nevertheless, evidence suggests there has been suboptimal exploration of various occupational deprivation factors concerning the future of occupational therapy. Some studies overemphasize cultural and intersectional factors rather than incorporating social determinants of health in studies using quantitative methods [8].

Characteristics of effective interventions

Effective occupational therapy interventions hinge upon creating a client-centered approach suitable for increased commercial aspects. However, as noted in [1], the cultural context of stigma related to hand injuries, such as malformation and tumors, has a non-distributive effect on equity parameters as outlined by the POJF system. Social inclusion has become a buzzword rather than a holistic rehabilitation mechanism serving specific community needs. The study in [3] suggests that a sense of agency must permeate the psychosocial recovery models used in the learning frameworks of occupational therapists. Additionally, the sensory integration of hand injury individuals enhances the quality of descriptive case studies by promoting consciousness and scientific rigor among therapists. However, as indicated in [4], the POJF framework has not optimally addressed the diverse needs of different settings, especially in clarifying the role of vocational rehabilitation according to client requirements. Outcomes-based research should focus on biomechanical interventions to identify community reintegration aspects.

In contrast, the study in [5] presented the view that health management offers a systematic review of bias incidences in cognitive rehabilitative aspects of hand injury individuals. The splinting and management of hand numbness should correlate with individuals' ability to coordinate. Emotional protocols offer a client-centered approach, and according to [6], there is insufficient research on the quality of recommended practices. This involves levels of disconnect integrated unconsciously in understanding the increased frequency of hand laterality absence and hand prosthetic use. Challenges in the OT sphere highlighted in [7] suggest that hand therapy needs biomechanical treatments to empower patients. The resilience shown through occupational therapy needs to be evidenced by integrating traditional physiotherapy sectors [8]. However, occupational justice principles encounter challenges in intervention efficacy, with criticisms of the POJF frameworks suggesting limited success in alleviating injustices for individuals with hand injuries [9]. This critique highlights the need for extensive research into occupation-based approaches. Additionally, patient continuity of care would enhance the effectiveness of interventions for individuals with hand injuries. Research into Independence frameworks in activities of daily living (ADLs) has been suggested as an essential factor creating a unifying resonance with the role of occupational therapists [10]. This study suggests a

disconnect between theoretical frameworks like the POJF and their practical application, indicating a need for more explicit strategies to integrate justice into everyday clinical practice. It could be deduced that these studies collectively reveal a landscape where effective occupational therapy interventions are characterized by adaptability and client engagement but are generally limited by insufficient empirical support and inconsistencies in practice. An integrated research approach combining quantitative and qualitative methods could provide a clearer understanding of how best to design interventions that adhere to occupational justice principles and are demonstrably effective across diverse clinical and cultural settings. This critical analysis underscores the necessity for ongoing research to bridge the gap between theory and practice in occupational therapy.

Efficacy of occupational therapy interventions

The efficacy of occupational therapy interventions presents a diverse context of findings and recommendations reflecting varied approaches within the field. [5] highlights a critical gap in the literature regarding detailed evaluations of occupation-based interventions, despite acknowledging the benefits of traditional treatments like early motion protocols and splinting. This gap suggests a lack of prioritization between critical components of occupational therapy. According to [11], the advocacy of expanded justice parameters within biomechanical frameworks for individuals with hand injuries should be studied. The occupational needs of patients should align with empowerment clauses in therapy practices, and this discourse, as suggested in [12], could encourage transparency in clinical applications of the POJF frameworks. [13] suggests that physical rehabilitation through OT cannot substitute the integration of critical psychological patient narratives. However, [14] indicates that hand scars and tremors may signal underlying neurological conditions that require consideration of socio-cultural factors among therapy professionals. Additionally, as noted in [15], systematic practice challenges should address the theoretical estrangement of hand injury parameters, such as tendinitis, palsy, and neural path divergences. Occupation-based outcomes should lead to individualized treatment plans that incorporate patients' lived experiences. As suggested in [5], health policy should coordinate with standardized occupational justice terminology, enabling legal enforceability for victims of unintended harm by OTs.

Furthermore, studies focused on policy and practical implications of occupational therapy practices through rigorous protocols for community-specific interventions [16]. Cultural beliefs in hand therapy practices require fuller exploration, particularly concerning treatment adherence within clinical frameworks [17]. Resilience and behavioral interventions should accompany OT practices for ethnic and religious minorities lacking adequate support systems. [18] proposes the creation of safe spaces where hand therapy practices could conduct comprehensive functional capability evaluations.

Optimising occupational therapy practice

The effective redressal of occupational therapy (OT) practices needs to be optimized through a profound integration of modern patient empowerment practices. According to [8], there needs to be an adaptive philosophical stance that encompasses a system of empathetic support for individuals in industries with hand injuries, especially those suffering from hand tremors and neuropathic damage. Reference [19] suggests that synthesizing historical and theoretical dimensions will have a profound effect on creating justice-focused methodologies, thereby enhancing the balance and professional attitudes of occupational therapists (OTs). As proposed in [8], there should be a just paradigm for inclusion in diverse clinical settings to ensure adequate psychosocial support for addressing the needs of hand injury victims.

However, the feasibility of behavioral modifications must be interwoven with the ground realities of the specific methodologies being deployed. In contrast, the OT profession faces inefficiencies in collaboration, especially in establishing the final connections necessary for ethical considerations [27]. While there is a need for experimental holistic care, occupational justice concepts have fallen short of adhering to the defined frameworks necessary for protocol compliance in clinical practices.

[7] has shown how better alignment of hand conditions can be achieved through the introduction of neural links into brain pathways, producing a concomitant effect in increasing the levels of occupational therapy. While practical applications remain challenging in terms of achieving occupational justice in cross-sectional studies, as highlighted in [23], this calls for the incorporation of activity adaptations that propel functioning

toward cognitive-behavioral approaches to ameliorate the harsh realities of hand conditions. Future efforts should focus on designing actionable strategies that dismantle the hindering factors in cross-sectional studies, such as limited time and resources, and create a practical OT framework that delivers justice to individuals with hand injuries. Moreover, educational institutions should collaborate closely with clinical settings to ensure that the theoretical knowledge imparted to occupational therapy students is both relevant and readily applicable in their future professional practices.

This critical examination suggests that a multi-faceted approach involving educational reform, systemic change, and continuous professional development is essential for truly optimizing occupational therapy practices to address occupational injustice effectively.

Author (Year)	Aim	Methodology	Results	Limitations
[4]	To explore individuals' perspectives on factors, situations, or events contributing to their perceptions of injustice following occupational injury.	Interviews with 30 participants with elevated perceived injustice scores, identified through a time-loss claim for work-related musculoskeletal injury. Thematic analysis conducted to identify broad classes of perceived injustices.	Identified three dominant themes: (1) Invalidation as participants felt their distress and disability were not understood or were questioned; (2) Undeserved Suffering where ongoing pain and life interference seen as unfair; (3) Blame towards employers, healthcare professionals and insurers for negligence.	The context may affect generalisability. Conducted within three months of injury during COVID-19. This might influence access to treatment and return-to-work potential. Influence of interview process on participants' appraisals acknowledged.
[5]	To explore experiences of novice occupational therapists delivering hand rehabilitation in underserved South African contexts, identify support and development needs, and propose interventions.	Qualitative instrumental case study design with nine novice occupational therapists in an online community of practice. Employed photo elicitation, facilitated reflection activities, and case discussion. Reflective thematic analysis used, with trustworthiness ensured through reflexivity, prolonged engagement, and data triangulation.	Revealed three main themes: overwhelming challenge of working in poverty and resource-limited settings, journey from inadequacy to some confidence, and dynamics between surviving and thriving. Proposed specific interventions for support.	There is limitation in terms of limited description of participants and contexts. This in turn does affect transferability of findings. Study's strengths in identifying support strategies for novice therapists in resource-limited settings.
[3]	To explore the effectiveness of the Participatory Occupational Justice Framework (POJF) as a tool for facilitating social inclusion and addressing occupational injustices.	Qualitative approach with three contrasting case narratives illustrating POJF application in interventions with Muslim women in Sydney, newly arrived refugees in Queensland, and patients in a forensic hospital in New South Wales, Australia. Examined key outcomes and reflective insights.	Showcased the adaptability of the POJF in promoting social inclusion and occupational participation, with outcomes like enhanced community engagement, skill development, and a focus on human rights.	Contextual specificity of each case narrative may affect generalisability. Outcomes largely descriptive; further quantitative research may be needed to systematically measure the effectiveness of the POJF interventions.

[10]	To articulate the concept of occupational justice within the context of social justice to emphasise the importance of including occupational perspectives in discussions about social injustices.	Theoretical approach, drawing upon literature across various disciplines to explore the link between occupational engagement and social justice.	Highlighted the impact of occupational deprivation on individuals and communities, including reduced well-being, social exclusion, and inequality. Proposed a framework for integrating occupational justice into social justice efforts.	The theoretical nature may limit direct application to specific contexts without further empirical research.
[9]	To examine how concepts related to occupational justice have been presented and applied in peer-reviewed literature, identifying discord between the profession's values, history and current practice as well as contextual factors affecting social exclusion and injustices.	A mapping review of peer-reviewed articles published between 1980 and 2014, focusing on the presentation and application of justice-related concepts within occupational therapy.	Revealed inconsistencies in the profession's approach to occupational justice and highlighted the need for practice models to enable OJ application.	Despite the findings might be trustworthiness, focusing exclusively on peer-reviewed journal publications as well as excluding seminal articles and book chapters which may limit the comprehensiveness of the review. Moreover, the researchers would dismiss some database which means that they could miss relevant studies.
[23]	This study aimed to explore the ethical tensions related to systemic constraints experienced by occupational therapists in various settings in Southwestern Ontario, Canada.	Employing a collective case study methodology, the research delved into how these tensions impact therapists' practice and client care.	Through interviews with seven occupational therapists, the study identified four themes of systemic constraints (i.e. imposed practices, ineffective processes, resource limitations, and lack of services). These constraints commonly forced therapists to compromise on client-centered care which would lead to ethical dilemmas and tensions. The findings highlighted the implications of neoliberal health care agendas on occupational therapy practice through emphasising issues of occupational justice and alienation.	The study's limitations include its small sample size and geographic scope. This might limit the generalisability of the findings. Additionally, the focus on negative impacts of systemic constraints might have overshadowed the positive aspects of occupational therapy practice.
[7]	To highlight the importance of incorporating an occupational perspective in hand therapy practices.	Critical review of current hand therapy practice, identifying reliance on physiotherapy-like treatments.	Emphasised the need for integrating occupation-based interventions that balance biomechanical principles with the value of occupation as a therapeutic mechanism.	Lack of extensive research investigating the effectiveness of occupation-based interventions in hand therapy.
[17]	To investigate if occupational justice concepts inform occupational therapists' actions and the ways in which they relate to Brazilian social occupational therapy.	Secondary analysis of a scoping review using descriptive and categorical analyses on articles with occupational justice and related concepts.	Found that occupational justice concepts informed individual approaches and could be connected with social occupational therapy in Brazil.	Focus on published articles might not capture the full spectrum of occupational therapy practices influenced by occupational justice concepts.

[8]	To critique the focus on efficacy and effectiveness in occupational therapy education research through arguing for a balance with philosophy, history and theory-building.	Advocated for systematic philosophical, historical and theoretical inquiry in all research stages.	Emphasised the necessity of an integrative approach for advancing occupational therapy education research.	Challenge in operationalising and integrating diverse types of inquiry from various perspectives philosophical, historical, theoretical into empirical, outcomes-focused research.
[6]	To assess the effectiveness of occupational therapy interventions for adults with musculoskeletal disorders of the forearm, wrist and hand.	Systematic review of 59 articles published between 2006 and July 2014, assessing risk of bias and evidence levels.	<ul style="list-style-type: none"> - Supported postsurgical early active motion protocols and splinting - few studies on occupation-based interventions. 	<ul style="list-style-type: none"> - Broad scope limited detailed study comparison - significant heterogeneity across studies - noted gap in research on occupation-based interventions and outcomes.
[22]	To address social determinants of health through a focus on occupational equity and rights, and highlight global disparities in occupational therapy scholarship and practice.	Critical analysis of literature on occupational justice and the dominance of Anglophone, Global North perspectives.	Identification of biased perspectives dominating the field, which do not adequately reflect diverse global contexts.	Reliance on existing literature and theoretical critique. This would mean lacking new empirical data and not reflecting all diverse global perspectives.
[11]	The paper aims to explore how Canadian occupational therapists could respond to global and national calls for action on human rights, and challenge occupational injustice in their practices.	The methodology included interactive exercises, structured discussions, and a stimulus panel during a pre-conference workshop at the CAOT 2015 Conference. These activities aimed to build consciousness and ideas for action regarding human rights among occupational therapists.	The workshop generated awareness of the necessity to address human rights injustices to enable meaningful and enriching participation in occupations. It identified structural inequities and practical settings where occupational therapists can actively advocate for and implement human rights.	The study's limitations include its format as a single workshop, which might not provide comprehensive data or represent all perspectives within the field. The ideas generated are preliminary and may require further empirical testing and development for broader application.

Table 2: The Included Studies.

Discussion

Clinical perspective in the definition and operational parameters of occupational injustice

Multifaceted dimensions exist in terms of psychology and sociology for creating patterns towards addressing the overarching queries regarding occupational deprivation. Systematic issues have been showcased in [5], where patient experiences of occupational injustice reveal new perspectives on creating frameworks that

perpetuate extreme inequality. While studies on systemic change offer thematic solutions for underserved suffering, the blame does not entirely fall on the lack of professional attributes among occupational therapists [17]. The integration of sociological drivers for effectively combating injustice must be proportional to the frequency of hand injuries, such as neuroplasticity, hand tremors, and severe cognitive strain. The development of strategies for collating empirical research should be applied in real-world

settings that address the identified drivers of policy advocacy. [5,6] indicate how resource limitations have invalidated personal narratives, taking an emotional toll on individuals with hand injuries. Addressing systemic constraints requires addressing the ethical tensions suggested in [22], supported by trained therapists to overcome challenges related to non-adaptive activity tendencies.

Critical perspective on experiences of occupational injustice

While the specific context of studies limits generalization, research in [6] further suggests how personal narratives contribute to the broad experiential spectrum of social health determinants for hand injuries and their treatment profiles. This approach leads to the deployment of socio-economic factors that enhance the understanding of systematic reviews in creating community-based interventions for OT rehabilitative outcomes. [22] contributes to this discussion through an analysis of ethical tensions that demand community-specific interventions based on justice perspectives. Their research highlights how institutional demands are pressuring OT experts to instill additional professional values through educational reforms. The shift towards justice-oriented OT concepts should be contingent upon the impact of cultural beliefs and the diffusion of modern medicolegal practices into the biomechanical treatment capabilities [5]. However, the alignment between professional values and actual practice remains a key focus in peer-reviewed literature, where gaps and inconsistencies need to be addressed within current pain management operationalization parameters. Further research in [24] assesses the conditions and experiences of disabled mothers, focusing on the ways caregiving duties are affected by negligence and lack of support within the occupational structure. This increases the level of injustice and impacts the well-being of individuals across different demographics. Summing up the findings in [25], socio-cultural factors significantly influence levels of occupational injustice. Accessibility to certain occupations is also impacted by cultural values and practices, as highlighted in this research. Considering all factors evaluated thus far, it is evident that occupational injustice extends beyond economic and physical constraints, being deeply rooted in socio-cultural disparities [17]. This context is further expanded by data from [26], which indicates that occupational injustice is more frequently experienced by older adults, especially in terms of access to community resources and healthcare facilities. Findings suggest that age-inclusive practices and policies are essential to minimize occupational injustice faced by elderly individuals.

These discussions collectively support the view that occupational injustice can be adapted and applied in different settings and populations. However, the current research assessment lacks a structured model that encapsulates all identified opinions, which affects the applicability of a comprehensive evaluation. It is necessary for future studies to adopt a holistic approach, including participants from varied socio-economic statuses, demographic groups, and cultural backgrounds. Such diversity is crucial for understanding occupational injustice in depth [17]. This understanding is essential for developing strategies that foster inclusivity and employ strategic interventions to address diverse needs across populations. Longitudinal research is expected to provide more comprehensive data on the evolution of occupational discrimination over time. Evaluating the long-term effectiveness of current interventions could broaden the research scope and provide more effective, equitable interventions to combat injustice within the occupational structure.

Critical perspective of characteristics of effective interventions

There is a need for prioritizing client-based practices and facilities, while occupation-dependent interventions must be supported by empirical practices, as suggested in [3,7]. These are highly influential OT interventions, and further affirmations in [3] indicate that social inclusivity and equitable participation in the occupational structure can be enhanced through the POJF (Participatory Occupational Justice Framework) and its adaptability. Following this context, it is critically examined in [29] that both wider systemic issues and individual needs must be considered within the intervention structure for occupational management. Findings discussed in the last paragraph are closely integrated with data retrieved from the work in [29]. It is essential to involve individuals in the rehabilitation process, as this fosters a sense of participation and agency. Occupational interventions are not strongly supported by critical empirical data. Future research must integrate rigorous methods to explore more effective interventions, which may better manage diversity within clinical structures. It is necessary to evaluate the effectiveness of occupation-oriented interventions systematically, using standardized measures. Standardization facilitates comparability across different studies, producing focused outcomes from analyses that support significant practices. Additionally, prioritizing contextual and environmental aspects is crucial for managing intervention efficacy. Based on

findings in [30], successful implementations help to manage the physical and social conditions of individuals, though this is often overlooked in monitored trials. Expanding research in these areas will foster a deeper understanding of intervention impacts.

Occupational interventions can be better understood using the MOHO (Model of Human Occupation) framework, which assists in addressing complexities, as identified in [31]. This framework systematically identifies variables such as performance ability, volition, environment, and habituation, which leads to positive evaluation outcomes. Given its validation in empirical studies, the MOHO framework is highly beneficial within clinical structures. Interventions are also beneficial for managing mental health outcomes, as noted in [32]. This approach enhances mental health conditions while supporting engagement. However, findings from the same source indicate variations in intervention application, highlighting the need for more standardized guidelines and protocols to ensure comparability and consistency. Thus, the perspectives presented in [33] emphasize that client preferences and interests should be managed through creative occupational interventions. Qualitative evaluations support the notion that client engagement and satisfaction can be optimized through focused interventions. However, quantitative data should be further explored to substantiate broader claims made in current findings.

Critical perspective of efficacy of occupational therapy interventions

Research studies in [7,8] on OT interventions and their efficacy reveal certain gaps in the literature. More research is needed on occupation-based interventions and the challenges associated with integrating these into system structures. Differences in the practical applicability and theoretical evaluation of OT are highlighted in [3,14]. These sources argue critically for explicit strategies to support the application of occupational justice practices within clinical settings. Existing research prioritizes theoretical understanding around occupational justice, but there is a lack of empirical evidence to support this. Future research should include evaluations focused on outcomes, which will better assess the impact of various OT interventions and help devise strategies to address occupational injustice. The findings in [7,8] emphasize the need for standardized guidelines to ensure consistency in data evaluation.

Data from further research in [34] indicates that occupational participation and performance should be measured with significant assessment tools. It is crucial to adopt a robust methodological structure and holistic procedures to improve research outcomes. Qualitative interpretations should be prioritized alongside quantitative measures. The Well Elderly study suggests that RCTs (randomized controlled trials) should be utilized to understand OT interventions' efficacy on a broader scale. Findings in [35] indicate that these interventions are crucial for enhancing the health and well-being of older adults. Similar methodological approaches could be applied to analyze interventions at an individual level. However, it is essential to note the rarity of RCTs in OT literature, which limits methodological breadth. Environmental and contextual factors must be prioritized to determine the impact of school-based OT interventions. Clients operate within diverse environments where cultural, social, and physical factors vary, as highlighted in [36]. Managing these aspects is essential for the success of OT interventions and for gaining a deeper understanding of occupational injustice. The PEO (Person-Environment-Occupation) Model is crucial, as indicated in [9], for developing a comprehensive understanding of various factors impacting performance within the occupational structure. Empirical research exploring the PEO Model should be critically assessed to identify systematic intermediaries that affect the formation of interventions and injustice within the structure.

Critical perspective of optimising occupational therapy practice

It is necessary to focus on the implication of OT practices in both clinical and educational structures. According to [8,14], there is a significant need to prioritize educational reforms to integrate theoretical, philosophical, and historical contexts. This approach helps individuals better understand justice-based methodologies. The same viewpoint is supported by the findings in [16], which emphasize integrating human rights factors within the OT structure. Following this perspective, it is crucial for therapists to receive training on managing inequalities that contribute to occupational injustice, which may improve their practices and approaches. This notion is further supported by research in [18], indicating that systematic constraints impose ethical stress on therapists.

Practical strategies for better integration of OT practices are not thoroughly evaluated in the reviewed studies. It is essential for future studies to prioritize evaluations of educational programs and interventions that operationalize equitable factors within clinical settings. An example of this need is shown in [14] and [8], which examine theoretical and philosophical dimensions in OT education but do not address the curriculum assessments required. Research in [15] suggests that occupational justice should be managed with community-oriented models, and that system inequalities should be identified through participatory or community engagement factors. Further research by [37] shows that global initiatives can help address justice factors within occupational structures. Policy changes and advocacy should be critically managed to ensure program success. This data is valuable for identifying ways therapists can engage in social activities to address systemic obligations, offering practical strategies that could improve outcomes. A review of research in [38] identifies the OJF (Occupational Justice Framework) as beneficial for improving OT outcomes. Strategic integrations that support guidelines for intervention planning, assessment tools, and addressing injustice can be facilitated through this structured model. Adaptations required to implement the OJF in diverse clinical settings are supported by empirical data. The importance of critical reflexivity within OT structures is highlighted in [39], which argues that socio-political aspects and individual practices should also be considered in evaluating occupational injustices. Practical implications foster critical reflexivity among therapists, which is beneficial for practice. Interprofessional education interventions are also valuable. Occupational justice principles should be managed by applying advanced, integrated solutions, as suggested in [40]. Training and collaborative approaches to equity management can improve individual performance in these areas.

Conclusion

It can be stated that occupational therapy is important to understanding occupational injustice experienced by people within a healthcare setting. It helps in working better on social inclusion practices while managing the well-being and health of others. Multidimensional characteristics of occupational injustice could be understood better with the help of a scoping review. It also helps to address systematic obligations and challenges faced by people. There is a high need to define and operationalise occupational injustice in the setting of OT. This is important to understand the

experiences of individuals better and integrate viable strategies as interventions.

There is a high need for adaptable, client-focused and culturally aware strategic integrations. The POJF model is beneficial to promote and manage inclusivity within the social structure better. It also helps in managing occupational engagement along with the association of other models. However, there are evident insufficiencies in existing empirical studies due to the lack of practical strategies that can help to improve integrations and outcomes further. Practical actions and educational reforms are important within the clinical structure for further development of outcomes in managing equity and just accessibility.

It is crucial to integrate standardised methodologies to manage robust evaluation. Institutional obligations, advocacy and policy applications are important for managing justice as well.

Limitations

This current study also has some limitations although it has provided a range of important information related to occupational therapy and occupational therapy injustice. As such, the considered inclusion criteria focused on only peer-reviewed studies published between 2014 and 2024 and hence, there is a chance of excluding relevant research published outside this time frame. Additionally, the review primarily relied on English and Arabic language sources, potentially overlooking significant studies in other languages. The variability in study designs, contexts, and populations also presents challenges in generalizing the findings.

The review process may have inherent biases due to the selection of databases and search strategies, despite efforts to ensure comprehensive coverage. Another limitation is the reliance on secondary data, which might not fully capture the nuances of occupational injustice experienced by individuals with hand conditions in different cultural and socio-economic contexts. The descriptive nature of many included studies limits the ability to draw definitive conclusions about the efficacy of specific interventions.

Future Recommendations

Future research could focus on several key areas of OT for better understanding and practice of OT in addressing occupational injustice. That is to say, more outcome-based studies can be

planned in the future to employ rigorous methodologies, such as randomized controlled trials (RCTs) in terms of evaluating the effectiveness of different interventions of OT. On the other hand, further studies can also be conducted to develop as well as test standardized protocols and assessment tools which can enhance the comparability of findings.

On the other hand, primary research can also be planned in the future to emphasize underrepresented regions such as Saudi Arabia. This approach can give valuable insights into the experiences of individuals with hand conditions in relation to OT and the efficacy and effectiveness of such OT interventions. In this particular context, the use of primary data related to Saudi Arabia, for example, can help to understand the real-time perspectives that secondary data might not capture.

On the other hand, future research projects can also focus on educational reforms for equipping future occupational therapists with the knowledge and skills. Thus, the occupational therapists can further recognize as well as address the concerning inequities. Moreover, continuous professional development programs focusing on these areas could support current practitioners stay updated on best practices and emerging strategies.

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