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[Tiago S Jesus](#)^{*}, [Pedro C Monteiro](#), [Ritchard Ledgerd](#), [Claudia von Zweck](#)

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Article

Education of Occupational Therapists in Mental Health: A Global Survey of Educators Regarding Perceived Facilitators and Barriers

Tiago S. Jesus ^{1,*}, Pedro C Monteiro ^{1,2}, Ritchard Ledgerd ³ and Claudia von Zweck ³

¹ Division of Occupational Therapy, School of Health & Rehabilitation Sciences, College of Medicine, The Ohio State University Wexner Medical Center, Columbus, OH, USA

² School of Health, Polytechnic Institute of Porto, Portugal

³ World Federation of Occupational Therapists, Geneva, Switzerland

* Correspondence: tiago.jesus@osumc.edu; Tel.: 614-292-1706; Fax: 614-292-0210

Abstract: Background: Occupational therapists can address mental health (MH) needs and assist with meeting worldwide MH workforce shortages. Methods to advance occupational therapy education to build occupational therapist workforce capacity in MH require further investigation. **Objective:** This study aimed to identify perceived barriers and facilitators for advancing MH occupational therapy education, as rated by occupational therapy educators from across the world, stratified into groups of high-income countries (HICs) and low and middle-income countries (LMICs). **Method:** Global survey, Likert-type, created and distributed by the World Federation of Occupational Therapists. Data was subject to a secondary weighted and subgroup analysis. **Results:** A total of 155 responses were obtained from occupational therapy educators from 45 countries or territories; 69.0% of the respondents were from HICs. The weighted analysis showed that educational standards and student interest were large facilitators for both HICs and LMICs. Faculty expertise stood out as a facilitator and the lack thereof as a barrier, both across HICs and LMICs. For HICs, regulation issues, lack of recognition, of supervised/fieldwork practice and of workforce demand were frequently reported barriers, whereas lack of teaching resources and practice evidence were often perceived as barriers in LMICs. **Conclusion:** Capacity building approaches are required to advance MH occupational therapy education, with tailored approaches for HICs and LMICs.

Keywords: occupational therapy; occupational therapists; mental health; education; survey

Introduction

Data from the Global Burden of Disease Study shows that MH disorders continue to be one of the leading causes of illness worldwide [1]. In turn, the World Health Organization's mental health report of 2022 emphasizes that over one billion people worldwide live with a MH condition [2]. People with MH conditions often experience disruptions in their daily life, routines, and occupations [3]. MH involves not merely the absence of mental illness, but also includes social functioning, positive psychological attributes, and the ability to cope with, or adapt to challenges of life [3,4].

Occupational therapists are health practitioners who promote occupational performance and engagement in meaningful life activities for individuals and communities that experience, or are at risk of experiencing a MH, physical, or cognitive condition, impairment or disability [5]. Occupational therapists have a long history of working in MH contexts [6–8]. Occupational therapists promote positive MH, prevent associated occupational disruptions, and facilitate recovery from MH conditions, allowing individuals and communities to (re-)engage in meaningful life activities such as education, leisure, and work [9,10]. Evidence-wise, a recent systematic review of the effectiveness of occupational therapy for people with a diagnosis of depression found strong evidence of the effectiveness of occupational therapy for return-to-work interventions [11].

Despite the relevance of occupational therapy, occupational therapists are under-represented in MH practice in many countries [12]. Biennial data collection by the World Federation of Occupational Therapists (WFOT) indicates that MH has been consistently identified as the practice area with the highest vacancy rates for occupational therapists over the 20 year history that the WFOT has monitored the occupational therapy workforce [13]. The number of occupational therapists within the mental health workforce is clearly insufficient to meet health system demands or population needs [12,14].

Underrepresentation of occupational therapy in MH contexts occurs in countries at all income levels, including those with more occupational therapy resources [12,15–17]. For instance, in the USA, recent data identifies only 2.2% of the occupational therapist workforce is deployed in MH practice and represents 0.2% of the non-physician MH workforce [15,16]. This low level of involvement occurs within an environment of widely documented shortages of MH professionals in the USA [18].

Advancing the supply and practice of occupational therapists in MH can contribute to reducing worldwide shortages in the MH workforce [10,19–21]. In a recent global survey of 1,102 occupational therapists working in the MH field, “education/preparation for MH practice” was identified as a facilitator for occupational therapy MH practice [22]. This finding suggests the perspectives of occupational therapy educators would be helpful regarding factors that affect the education and practice of occupational therapists in MH.

WFOT advances global health and wellbeing through the development, use and practice of occupational therapy, with a vision to ensure the profession is accessible to all. WFOT engaged in a multistage research process to launch the *Global Strategy for the Occupational Therapy Workforce* [23,24] to guide collaborative work among individuals and organisations towards this vision. The *Global Strategy* emphasizes the need for occupational therapists to be equitably distributed across practice areas, including in MH [24]. The WFOT position statement regarding human resources also reinforces the need for the worldwide strengthening of the MH occupational therapy workforce [20].

Within this context, WFOT conducted a survey to explore factors that influence the education and preparation of occupational therapists for MH practice. In particular, this study aimed to identify perceived barriers and facilitators for advancing occupational therapy education, as rated by occupational therapy educators from around the world. We also aim to stratify those results by high-income countries (HICs) and low and middle-income countries (LMICs).

Method

Overview

The study involved a Likert-type global survey, created and distributed by WFOT through worldwide channels, including circulation by member organisations for wider, snowballing outreach. The survey targeted occupational therapy educators. Participants provided consent for the analysis and public use of their deidentified survey responses.

Data was subject to a secondary weighted and subgroup analysis. A data-sharing agreement was established between WFOT and the Ohio State University (ID: A2024-2516) for this analysis. After de-identification by WFOT, survey responses were shared for secondary analysis.

Survey Design

The survey was designed by WFOT, based on knowledge of international occupational therapy education and relevant research literature. The literature included studies identified in a large WFOT scoping review of occupational therapy workforce research [12,23,25]. This literature and other relevant occupational therapy MH research [26–32] were used to draft and refine the survey questions in collaboration with an external researcher (TJ).

Table 1 describes the factors rated in the survey regarding their perceived positive (facilitator) or negative (barrier) impact for the education of occupational therapy in MH. A five-point Likert-based scale was used for rating the factors, supplemented by “unknown” or “not applicable” options.

The scale defined both the direction (positive/negative) and magnitude (high/low) of the responses and therefore allowed for a weighted analysis.

Table 1. Survey questions and Likert-type of answers for the factors affecting occupational therapy education in mental health.

Introductory question:	Factors to be rated as either facilitators or barriers:	Likert rating scale:
Please rate the degree to which the following issues impact occupational therapy education for people with mental health needs	Regulation: Legislation/regulation regarding the role of occupational therapy in mental health	1) "High Negative Impact"
	Education standards: Education standards for occupational therapy (e.g. accreditation requirements)	2) "Low Negative Impact"
	Faculty expertise: Availability of faculty with required knowledge and experience in mental health	3) "No impact"
	Supervised practice: Availability of fieldwork/supervised practice opportunities for occupational therapy students for working with people with mental health needs	4) "Low Positive Impact"
	Teaching resources: Availability of required teaching resources (funding, equipment, supplies)	5) "High Positive Impact"
	Practice evidence: Availability of best practice evidence in occupational therapy mental health	OR
	Recognition: Recognition of the role of occupational therapy in working with people with mental health needs	- "Unknown"
	Workforce demand: Workforce demand for occupational therapists to work with people with mental health needs	- "Not applicable"
	Student interest: Student interest in working with people with mental health needs	

Initially developed in English, the survey was also translated to be disseminated in French, German, and Spanish. The translation process used by WFOT to translate official documents was used, a multi-step process involving use of online software to create machine-translated text that was subsequently checked and double-checked by volunteer translators who frequently perform these roles for WFOT's documents. The survey text was then loaded onto the SurveyMonkey platform for circulation to the occupational therapists via WFOT Member Organisations, WFOT e-newsletter and other social media platforms.

To respond to the survey, respondents selected their choice of language, consented to participation, provided basic socio-demographic data and indicated their role in occupational therapy in practice, research or education. Only respondents in educational roles were presented with the questions on Table 1, whose results are analyzed in this paper. Those who identified as having practice roles answered an alternate set of questions; findings from these study questions are available elsewhere [22].

Survey Procedures

Using the SurveyMonkey platform, WFOT circulated the survey link to the global occupational therapy community in November 2023. Notably, the survey link was sent to over 100 WFOT national

member organizations, who were asked to circulate the survey information to their individual members. WFOT also used the WFOT e-newsletter (with over 14,100 recipients), as well as social media for the survey link dissemination. Finally, the survey link was available on the WFOT website. The survey remained open for six weeks, with survey reminders included in WFOT e-newsletters twice during this period.

Analysis

The researchers used descriptive statistics and developed graphics of the Likert-based responses for each of the nine survey items. The weighted analysis involved assigning positive and negative weights to the responses: two points to “high positive impact”; one to “low positive impact”; zero to “no impact”; one negative point to “low negative impact”; and two negative points to “high negative impact”. Stacked bar charts were selected to represent the weighted results for each rated factor on a continuum between -100% (for maximum barrier) and +100% (for maximum facilitator) for easier interpretation of the direction and magnitude of the impact. Separate stacked charts of the weighted results were developed for groups stratified by country income level, as their contexts might substantially vary.

Results

Participants:

A total of 155 survey responses were obtained from occupational therapy educators, with 69.0% of the respondents ($n= 107$) from HICs. All participants reported at least some experience of working with, or educating occupational therapists for working with people with MH needs. The majority of participants (83%) had >10 years of experience in practice or education. Using World Bank regional classifications, the highest number of respondents came from Europe & Central Asia (32%); however, responses came from 45 different countries or territories of seven world regions.

Results for All Respondents

Figure 1 provides the non-weighted survey results for all respondents for each of the nine surveyed factors. The factors are ordered from the smallest to largest value for “high negative impact”. *Education standards* and *student interest* had small values for “high negative impact” and large values for “high positive impact”. Among all factors, *faculty expertise* had the largest perceived negative impact at the combined high and low level. Interestingly, this factor also had large values for “high positive impact”.

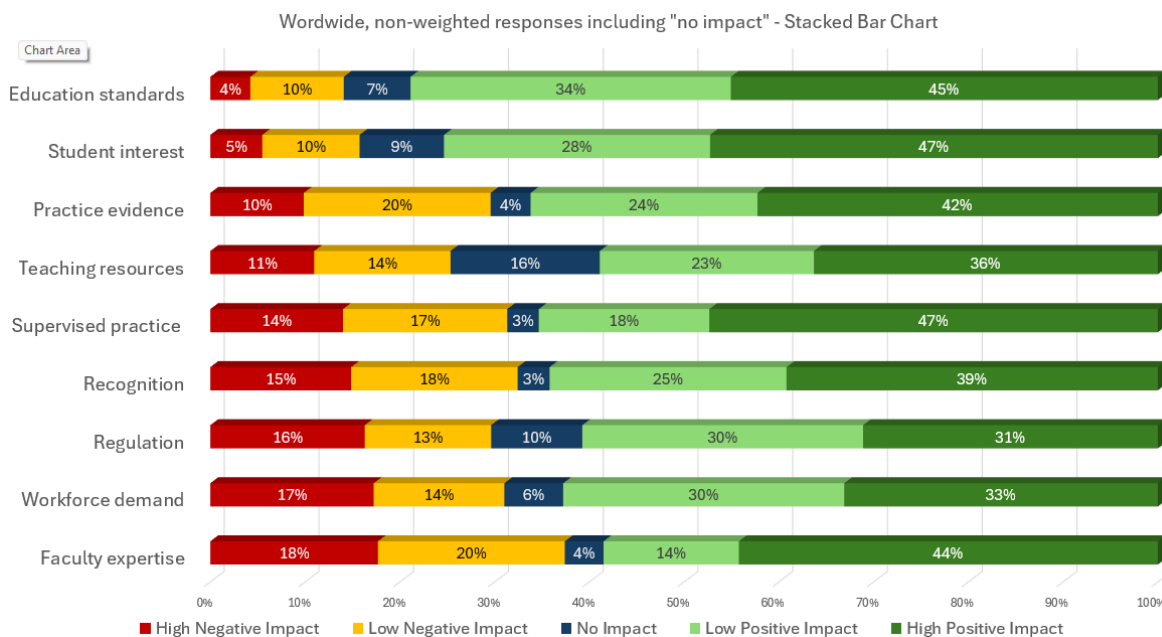


Figure 1. Non-weighted, worldwide results, including “no impact” answers, of the factors positively or negatively impacting the education of occupational therapists for the practice in mental health.

Figure 2 shows the results for the weighted findings as transformed into a two-sided stacked bar chart, after removing the “no impact” answers and assigning a weight for the magnitude. With the data transformation, “high impact” scores have double the value of “low impact” answers in either the positive or negative direction. Figure 2 indicates the results remain similar, with the ranked order of factors the same as in the previous figure.

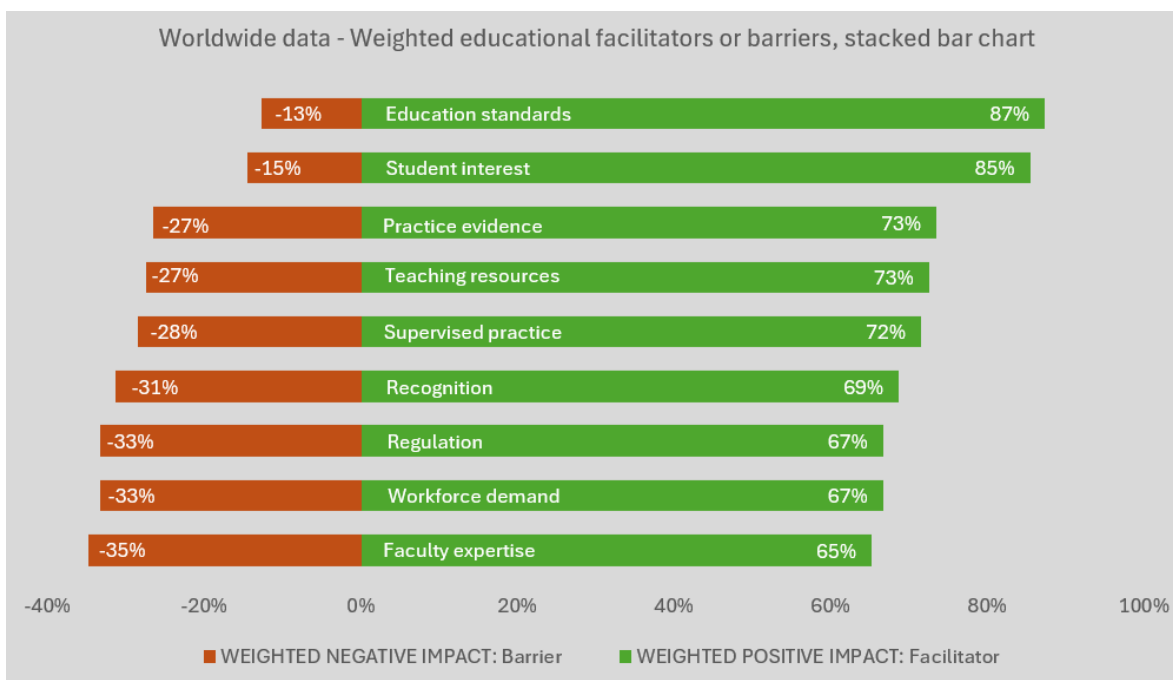


Figure 2. Worldwide results of the weighted barriers or facilitators for the education of occupational therapists in mental health. **Legend:** Factors were weighted, ranked, and then translated into 100% stacked bars. The values reflect a differential weight for the magnitude of the response direction (i.e., high negative impact answers count double the value of ‘low negative’ responses for the red bar; ‘high positive’ impact count double the value of ‘low positive’ responses for the green bar). The weighted results were then ranked, from the most positive to the most negative influence. The weighted, ranked

results were translated into 100%-stack bars (i.e. sum of the red and green bar for the same item = 100%). The full description is available on Table 1.

Stratification by HICs and LMICs

Figures 3 and 4 provide the results for the respondents from LMICs and HICs, respectively. In the figures, we used the rank order of the non-stratified group (Figure 2) to facilitate score comparisons. For LMICs, *teaching resources* and *practice evidence* were appraised more often as barrier, in addition to *faculty expertise*. In turn, for HICs, issues such as *regulation*, and lack of *recognition*, of *supervised practice*, of *workforce demand* and of *faculty expertise* were the factors more often reported as barriers. *Education standards* such as accreditation processes and *student interest* in working with people with MH needs were largely rated as facilitators, both for HICs and LMICs.

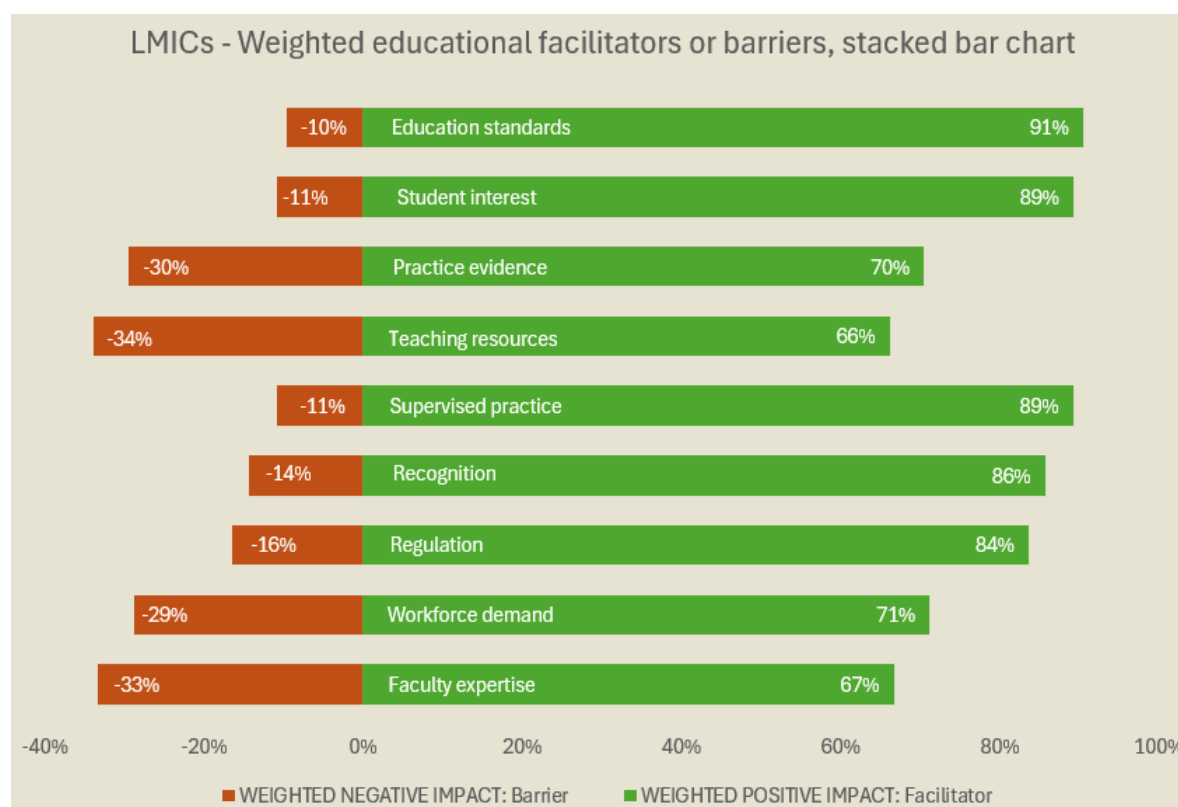


Figure 3. Low and Middle-Income Countries' (LMICs) weighted barriers and facilitators for the education of occupational therapists in mental health. **Legend:** The weighted values reflect a differential weight for the magnitude of the response direction (i.e., high negative impact answers count double the value of 'low negative' responses for the red bar; 'high positive' impact count double the value of 'low positive' responses for the green bar). The weighted results were ranked in the same order of the non-stratified results, for comparative purposes among countries of varied income level. The weighted results were translated into 100%-stack bars (i.e. sum of the red and green bar for the same item = 100%) for easier interpretation. The full description is available on Table 1.

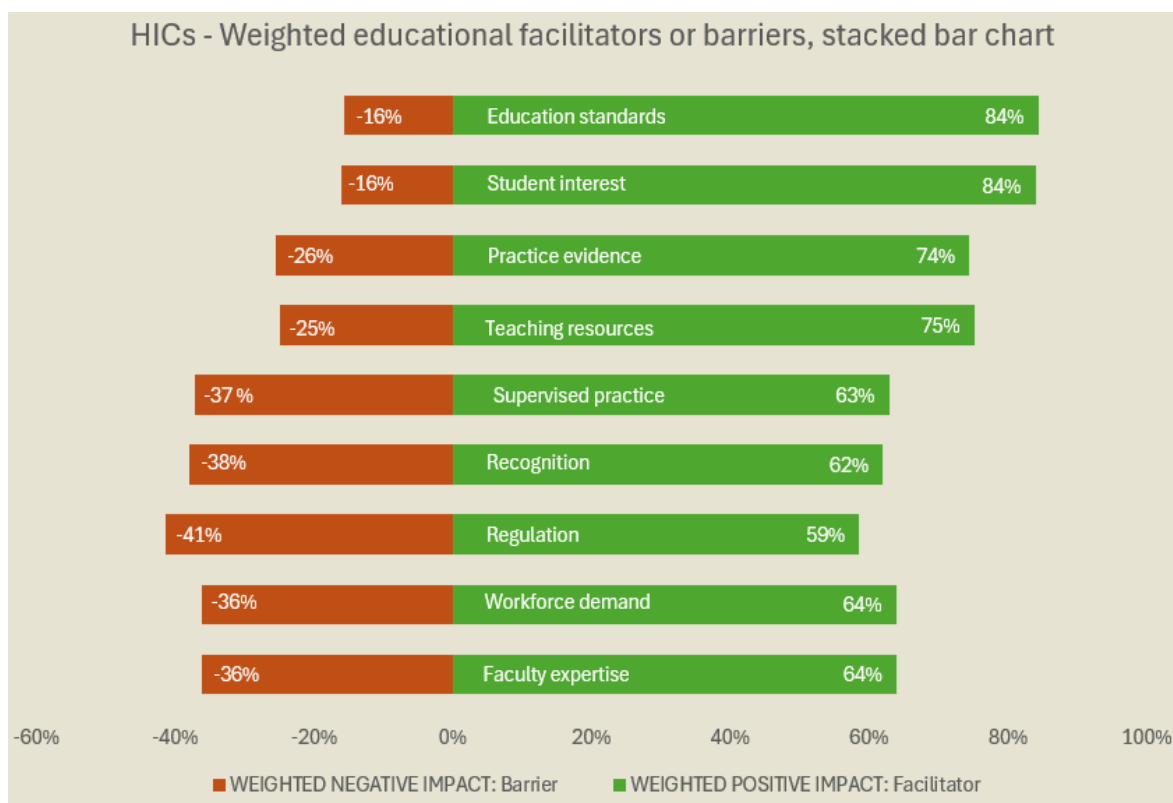


Figure 4. High-Income Countries' (HICs) weighted barriers and facilitators for the education of occupational therapists in mental health. **Legend:** The weighted values reflect a differential weight for the magnitude of the response direction (i.e., high negative impact answers count double the value of 'low negative' responses for the red bar; 'high positive' impact count double the value of 'low positive' responses for the green bar). The weighted results were ranked in the same order of the non-stratified results, for comparative purposes among countries of varied income level. The weighted results were translated into 100%-stack bars (i.e. sum of the red and green bar for the same item = 100%) for easier interpretation. The full description is available on Table 1.

Discussion

To our knowledge, this WFOT survey study is the first global assessment of the perspectives of occupational therapy educators regarding facilitators and barriers for enhancing MH occupational therapy education. Faculty expertise or lack thereof stood out as a facilitator or barrier across HICs and LMICs, whereas educational standards and student interest were largely perceived as facilitators. For HICs, regulation issues, recognition or supervised/fieldwork practice, and workforce demand were other frequently reported barriers. In LMICs, teaching resources or applicable practice evidence stood out as additional educational barriers. All these findings are worth discussing.

Faculty expertise had large values for "high positive impact" in countries of all income levels (Figure 1), but conversely also for "high negative impact". Taken together, these findings suggest that faculty expertise has a large positive impact when present, as well as a significant negative impact when not available or insufficient. Hence, the results indicate that larger benefits may arise from measures to develop capacity within occupational therapy faculty to deliver MH education. For LMICs, that need may come along with developing teaching resources and context-sensitive evidence on MH practice in low-income contexts. The direct translation of evidence from high income countries into practice can be challenging when not adapted to the availability of human, equipment, financial and other resources in LMICs and other low-resource contexts [33,34]. Capacity building projects [35,36] may enhance the supply and MH expertise of the occupational therapy educators, who in turn, can conduct context-sensitive, practice-oriented occupational therapy MH research in

LMIC contexts. Major initiatives with these goals have been undertaken for the overall MH field within LMICs [35–37], but we are unaware of those for occupational therapy in MH.

For HICs, larger barriers were perceived regarding the need for improved legislation and regulation, improved recognition of occupational therapy in working with people with MH needs, and improved demand for occupational therapy in MH. These findings align with HIC literature that identifies legislation and funding changes are necessary to develop or reinforce the status of occupational therapists as recognized, qualified, and reimbursed MH providers [19,38]. Such measures would likely also increase workforce demand for occupational therapy.

It should be noted that if demand increases in a context of high rates of unfilled vacancies, the few occupational therapists in practice may become overwhelmed with practice demands [39]. Increases in workforce demand must therefore be balanced with strategies to promote the attractiveness of working in MH, for example, with provision of professional development activities, particularly for early career MH occupational therapists [40–42].

HIC survey respondents identified fieldwork/supervised practice opportunities as one of the largest barriers for occupational therapy MH education. Strategies to increase MH fieldwork practice opportunities during entry-level education are therefore likely beneficial to improve the likelihood of future practice in this field [14,30,32,43]. Student interest in MH was perceived to be a large facilitator among the survey respondents, further reinforcing the value of MH fieldwork opportunities.

Education standards such as regulatory or accreditation requirements were rated as a large facilitator across HICs and LMICs. Of the 102 national/territorial occupational therapy associations that are members of WFOT, 88% report that occupational therapy is a regulated health profession in their jurisdiction [44]. As part of occupational therapy regulation, standards are maintained for entry-level education to ensure occupational therapists have the competencies needed for safe and effective delivery of all areas of occupational therapy practice. In addition, 74% of occupational therapy education programmes across the world are approved by WFOT as meeting the *Minimum Standards for the Education of Occupational Therapists* [45]. The *Minimum Standards* require preparation of graduates from approved occupational therapy education programmes to have necessary knowledge, skills and abilities for MH occupational therapy practice.

The results of this global survey study, alongside the related literature [26–32] and survey results on the factors affecting the occupational therapy practice in MH [22] will be used by WFOT for consultations and stakeholder-engaged design of guidance for advancing occupational therapy in MH, in alignment with the *Global Strategy for the Occupational Therapy Workforce*. The work of WFOT, however, does not obviate the need for country-specific situational assessments and workforce planning actions, as promoted by the *Global Strategy* [12,24,46,47]. Across countries, the development of occupational therapy varies, impacting the role occupational therapists in MH, and applicable legislation and regulations [6,10,12,14,19]. Such factors can and should be considered in country-specific, regional, and local analysis and planning.

Limitations:

This survey study has a number of limitations. Although the survey was disseminated worldwide, most responses came from HICs, limiting the generalizability and analysis of results. For instance, the relatively low numbers of respondents from LMICs ($n=48$) limited further stratification of the results into separate groups of low and middle-income countries. The low LMIC response also reduced needed statistical power for conducting relevant, stratified inferential analysis of weighted descriptive comparisons. Nonetheless, it is worth mentioning that the rate of respondents from LMICs (31%) was more than double the rate observed in the recent global survey of occupational therapist practitioners in MH (15%) [22] and almost triple received for a study examining the prevalence of occupational therapy workforce research (11%) [12,48]. Lastly, responses to the survey focused on perspectives of respondents rather than objective measures of barriers or facilitators.

Results should be understood as a relative weight of factors within the context of the respondents that are compared across HICs and LMICs.

Conclusion

This paper reports on a worldwide survey of occupational therapy educators regarding factors that affect the education of occupational therapists in MH. The results identified perceived barriers and facilitators and their relative weights, stratified by the country income level of respondents (HIC and LMIC). Results indicate capacity building initiatives are required, with tailored approaches for HICs and LMICs. For instance, for LMICs, increasing the number of occupational therapy faculty with expertise in MH is likely required, along with enhancement of teaching resources and context-sensitive research. In turn, for HICs, improved legislation/regulation and recognition of the role of occupational therapy in MH may generate improved workforce demand and supplement efforts for improving faculty capacity and supervisory/fieldwork opportunities in MH. The findings of this study, in addition to other relevant research literature, will be used by WFOT to develop global guidance for strengthening the MH occupational therapy workforce.

Abbreviations

MH Mental Health

WFOT World Federation of Occupational Therapists

Supplementary Materials: The following supporting information can be downloaded at the website of this paper posted on Preprints.org.

Author Contributions: T.S.J.: Wrote the main manuscript text; conceptualized the analytical approach; supervised the analysis; co-developed the data-sharing agreement; P.C.M.: Performed the data analysis; R.L.: Conceptualized and conducted the data collection, co-developed the data-sharing agreement; C.v.Z.: Conceptualized and conducted the data collection, co-developed the data-sharing agreement; edited the manuscript. All authors: reviewed the manuscript.

Funding: No funding to declare.

Data Availability Statement: The datasets supporting the conclusions of this article are included within the article (and its additional files). The Supplementary File 1 contains a spreadsheet of the database used for the descriptive statistics.

Consent for Publication: Not applicable.

Ethics Approval and Consent to Participate: The internal data collection was run by the WFOT as part of and to inform their program development or quality improvement, not as a research activity. Nonetheless, informed consent was obtained in the following manner: all participants responded “Yes” to the following initial survey questions: “I understand that by sharing my personal data with WFOT, it will be used in accordance with the WFOT Privacy Policy: <https://www.wfot.org/privacy-cookies>”, and to “I consent to taking part in this survey and that my anonymized responses will be included in the aggregated dataset published by WFOT and publicly accessible.” Participants responded with their professional perspectives about the profession and although were ‘human’ respondents, their participation in the survey was not ‘human subjects’ research requiring ethical approval. Nonetheless, the above consent was taken, and the data was de-identified (e.g., removing email contact) before being shared with The Ohio State University. A data-sharing agreement was established, a priori, between the WFOT and the Ohio State University: Agreement ID: A2024-2516.

Conflicts of Interest: None declared

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