

Original Article

# Stigma against people with mental illness in occupational therapy undergraduate students and faculty<sup>1,2</sup>

*Estigma hacia personas con enfermedad mental en estudiantes y profesores de terapia ocupacional*

*Estigma contra pessoas com doença mental em alunos de graduação e em professores de graduação em terapia ocupacional*

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## Abstract

**Introduction:** People with mental illness experience stigmatizing attitudes from the general population, including health professionals and students. International studies have estimated the stigma in occupational therapy students towards people with mental illness as moderate. **Objective:** To describe stigma against people with mental illness in occupational therapy undergraduate students and professors at one university in Chile. **Method:** This is a descriptive cross-sectional study including 1<sup>st</sup> and 4<sup>th</sup>-year occupational therapy students and professors at one university in Santiago, Chile, 2020. An adapted version of the Opening Minds Stigma Scale for Health Care Providers (WHO-HC) was used to assess stigmatizing attitudes, and sociodemographic data were also collected. Average scores for WHO-HC were calculated for the 20-item questionnaire and also adjusted by its 3 dimensions with 15 items. U Mann-Whitney y t-student tests were

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used to estimate group differences. Sociodemographic data were analyzed with descriptive statistics. **Results:** Sample consisted of 87 subjects, average age 27 (18-58), 81 (93%) women, 41 (47%) 4<sup>th</sup> year students, 28 (24%) 1<sup>st</sup> year students, and 22 (25%) professors. WHO-HC average score for the sample was 42,2 (28-57) indicating moderate to low stigmatizing attitudes. The 1<sup>st</sup> year students obtained higher scores, with a non-significant difference. **Conclusion:** The results are consistent with previous literature estimating moderate to low levels of stigmatizing attitudes towards people with mental illness. Emerging differences were observed between 1<sup>st</sup> and 4<sup>th</sup>-year students, to be explored by further studies in larger samples and other contexts.

**Keywords:** Occupational Therapy, Social Stigma, Mental Health, Professional Training.

### Resumen

**Introducción:** Las personas con enfermedad mental experimentan actitudes estigmatizadoras desde la población general, incluyendo profesionales y estudiantes de la salud. Estudios internacionales han estimado el estigma en estudiantes de terapia ocupacional hacia personas con enfermedad mental como moderado.

**Objetivo:** Describir el estigma hacia personas con enfermedad mental en estudiantes y profesores de terapia ocupacional en una universidad chilena.

**Método:** Estudio descriptivo transversal con docentes y estudiantes en 1° y 4° año de terapia ocupacional en una universidad en Santiago de Chile, año 2020. Se aplicó formato online de cuestionario *Opening Minds Stigma Scale for Health Care Providers* (OMS-HC), versión adaptada a Chile, y formulario de datos sociodemográficos. Se calculó puntajes promedio para cuestionario de 20 ítems y ajustado a tres dimensiones con 15 ítems. Se usó pruebas de U Mann-Whitney y t-student para diferencias entre grupos. Los datos sociodemográficos fueron analizados mediante estadística descriptiva. **Resultados:** Muestra de 87 personas, edad promedio 27 años (18-58), 81 (93%) mujeres, 41 (47%) estudiantes de 4° año, 28 (24%) estudiantes de 1° año, y 22 (25%) docentes. Puntaje promedio OMS-HC para muestra total fue 42,2 puntos (28-57), indicando nivel moderado-bajo de actitudes estigmatizadoras. Estudiantes de 1° año obtuvieron mayores puntajes, pero diferencias no fueron significativas. **Conclusión:** Los resultados son consistentes con literatura previa refiriendo nivel moderado-bajo de actitudes estigmatizadoras hacia personas con enfermedades mentales. Las diferencias incipientes entre estudiantes de 1° y 4° año hacen pertinentes nuevos estudios con mayor tamaño muestral y en otros contextos.

**Palabras-clave:** Terapia Ocupacional, Estigma Social, Salud Mental, Formación Profesional.

### Resumo

**Introdução:** As pessoas com doenças mentais vivenciam atitudes estigmatizantes da população em geral, incluindo profissionais de saúde e estudantes. Estudos internacionais estimam o estigma em estudantes de terapia ocupacional em relação a pessoas com doença mental como moderado. **Objetivo:** Descrever o estigma em relação às pessoas com doença mental em estudantes e professores de graduação em terapia ocupacional. **Método:** Estudo transversal e descritivo, com professores e

alunos do 1º e 4º anos de terapia ocupacional em uma universidade de Santiago, Chile. Foi utilizado um formulário *online* (*Opening Minds Stigma Scale for Health Care Providers* [OMS-HC]) e um formulário de dados sociodemográficos. Os escores médios foram calculados para um questionário com 20 itens e ajustado para três dimensões com 15 itens. Foram utilizados os testes UMann-Whitney e t-Student para calcular as diferenças entre os grupos. Os dados sociodemográficos foram analisados por meio de estatística descritiva. **Resultados:** Amostra de 87 pessoas, idade média 27 anos (18-58), 81 (93%) mulheres, 41 (47%) alunos do 4º ano, 28 (24%) alunos do 1º ano e 22 (25%) professores. A pontuação média do OMS-HC para a amostra total foi 42,2 pontos (28-57), indicando nível moderado-baixo de atitudes estigmatizantes. Os alunos do 1º ano obtiveram pontuações mais altas, mas as diferenças não foram significativas. **Conclusão:** Os resultados são consistentes com a literatura anterior, referindo-se a um nível moderado-baixo de estigma em relação às pessoas com doenças mentais. As diferenças incipientes entre alunos do 1º e 4º anos sugerem ser relevantes novos estudos com uma amostra maior em outros contextos.

**Palavras-chave:** Terapia Ocupacional, Estigma Social, Saúde Mental, Capacitação Profissional.

## Introduction

People diagnosed with a mental illness (PwMI) experience stigmatization by the general population (Corrigan, 2016). A mental illness is defined as certain medical conditions such as schizophrenia, bipolar disorder, or major depression, which cause a detriment in the social and occupational functioning of people (Goldman & Grob, 2006). In Latin America, mental illnesses are highly prevalent and constitute a significant burden for those living with these diagnoses (Minoletti et al., 2012).

Goffman (1963) defines stigma as a set of attributes of an individual that discredit and devalue them by the rest of society, and that often leads to that individual being classified by others based on stereotypes of low social desirability. From Goffman's approach, the concept of stigma has been developed through various theoretical proposals. Link et al. (1989) propose the Modified Labeling Theory, based on Goffman's approaches on the attribution of negative characteristics to subjects under certain conditions. From a perspective focused on cognitive psychology, Thornicroft et al. (2007) propose that stigma occurs at three sequential levels: ignorance, prejudice, and discrimination. With a social cognition perspective, Corrigan et al. (2005) introduce the relationship of the social sphere in the generation of meanings by the individual and proposes that stigma is a phenomenon that occurs at least two levels of construction: public stigma and self-stigma. Public stigma corresponds to the perception in others about an individual that for them is socially unacceptable. This public stigma is also present in health and specifically mental health professionals, with growing evidence of their stigmatizing attitudes towards PwMI, which also means that professionals consider the possibility of working with PwMI unattractive or unnecessary (Wahl, 1999). Based on labeling, health professionals may perceive that PwMI do not have any other type of needs beyond their mental health diagnosis, which prevents them to access to comprehensive support (McCabe et al.,

2002). Patients that use the mental health care centers frequently refer that health professionals are a source of stigmatization since in many cases they present attitudes of rejection, reduced encouraging advice, and derogatory comments towards PwMI (Wahl, 1999). Studies report that, although the attitudes of health professionals towards mental illness are more positive than those of the general public, paternalistic or negative behaviors are also frequent, especially in the prognosis and possibility of recovery of PwMI (Kingdon et al., 2004). These stigmatizing attitudes have consequences for PwMI, such as reduced self-esteem, shame, fear, and social avoidance, and experiences of discrimination and social distance from the general population (Corrigan & Fong, 2014).

It has been suggested that the training of professionals in healthcare can be highly technical or focused on the disease, focusing less on the person (Wagner et al., 2011). Also, students entering health careers may share public stigma towards PwMI as a reflection of their sociocultural system (Lien et al., 2021), which may increase the possibility of stigmatizing attitudes in their professional future. Therefore, it becomes necessary to evaluate the stigma in students and professors, considering professors as key elements in professional training.

Regarding the stigma towards PwMI in students of occupational therapy or the field of mental health, there is incipient literature on the subject. Larkings & Brown (2012) examined factors that predict stigma in a non-probability sample of 182 psychology students in Canberra, Australia (83% female), using the Social Distance Scale and the Community Attitudes Questionnaire. In the sample, they found a low-moderate level of stigma. Regarding the predictors of stigma, the analysis indicated that having previous quality contact with people with mental illness had a negative association with stigma. Similarly, stigma was greater in those students who had biological causal explanations for mental illness, while those students who related mental illness with psychological and environmental causes presented less stigma.

Querido et al. (2016) evaluated stigma in first-year students of healthcare programs, through a non-probabilistic convenience sample of 573 participants (81.5% female) including nursing, physiotherapy, dietetics, speech-language therapy, and occupational therapy. The occupational therapy subsample consisted of 24 participants. To assess stigma, we used the version translated into Portuguese of the Attribution Questionnaire Version (AQ-27). In the total sample, we found the presence of low to moderate stigma, with occupational therapy students having the lowest scores. Similarly, Masedo et al. (2021) carried out a comparative and cross-sectional study evaluating 927 final year students of university programs in nursing, medicine, psychology, and occupational therapy, in two Spanish universities and four Chilean universities, with a sample of 29 occupational therapy students. Comparatively, occupational therapy and psychology students reported lower levels of stigma towards PwMI than medical and nursing students.

A study by Beltran et al. (2006) investigated how a mentored internship program in mental health and psychiatric settings influenced the attitudes of 19 first-year occupational therapy students in Australia. Through secondary databases of the course, they found that the students made significantly more positive statements after the internship, as a reflection of attitudinal change in dimensions of normalizing contact, losing fear, and changing the deficit approach towards people with mental illness.

Ozelie et al. (2018), through a pretest-posttest study evaluated if the simulation of hearing distressing voices affects attitudes towards people with auditory hallucinations in occupational therapy students. They used the Attitudes towards Mental Illness Questionnaire (AMIQ) to assess students before and after listening to the auditory hallucination simulation. The significant increase in AMIQ scores indicated greater empathy towards people with mental illness after the simulation,  $t(27) = -2.92$ ,  $p = .039$ .

Ma & Hsieh (2020) evaluated the influence of an anti-stigma course for occupational therapy students in Taiwan using a pre-experimental design. A total of 16 students completed the course and stigma was measured with the Social Distance Scale. In those who took the course, a significant reduction in stigmatizing attitudes towards mental illness was found, which was maintained even one year later.

As noted, the literature shows the potential influence that professional training can have on attitudes towards people with mental illness by occupational therapy students.

Regarding the stigma towards people with mental illness in the occupational therapy area in Latin America, the literature is scarce, consistent with the local and regional scenario of the limited description of the stigma and strategies for its approach. Thus, we need further research that allows us characterize the phenomenon in different groups and develop interventions that are socioculturally relevant to the diversity of the region, including professional education (Mascayano et al., 2015; Ran et al., 2021). In the educational field, the assessment of stigma is necessary since it allows to identify and learn the magnitude of the problem for later interventions aiming to reduce stigma. This study sought to describe the stigma towards PwMI in students and professors of occupational therapy at a Chilean university, contributing with an exploration of the phenomenon from a South American context.

## **Method**

### **Design**

This is a cross-sectional and descriptive study with a sample of volunteer professors and students in the 1<sup>st</sup> and 4<sup>th</sup> years of the occupational therapy career in 2020 at a university located in Santiago, Chile.

### **Data collection**

Data were collected between August and September 2020, through a digital form created in Google forms, with an estimated time of 10 minutes to be answered. The sample universe consisted of 192 students (67 first-year and 125 fourth-year) and 22 professors of the occupational therapy program. The sample was a non-probabilistic type, with recruitment by volunteers. Inclusion criteria for students were: to be 18 years old or older, to be a regular student of the 1<sup>st</sup> or 4<sup>th</sup> year of the occupational therapy program (being enrolled in at least one course of the actual level). Inclusion criteria for professors were: being a regular permanent or honorary professor, to lecture for the occupational therapy program during, at least, 1 year. The literature on occupational therapy and stigma includes mostly studies that evaluate educational interventions to reduce stigma towards people with mental illness in students, and cross-sectional,

descriptive, or analytical studies that describe and/or compare stigma between different careers in the health area, including occupational therapy. For this study, 1<sup>st</sup> and 4<sup>th</sup>-year students were selected to compare stigma in both groups, allowing questions to be raised about the possible factors influencing stigma, such as specific professional training.

## **Instruments**

We used the Opening Minds Stigma Scale for Health Care Providers (WHO-HC) questionnaire (Kassam et al., 2012; Modgill et al., 2014) in its translated version and validated for its content in Chile (Sapag et al., 2019; Gajardo et al., 2021). This questionnaire assesses attitudes and intentions towards people with mental health conditions. The questionnaire was sent to the institutional emails of the professors and students of the occupational therapy career in a Chilean university, inviting them to respond voluntarily. A sociodemographic questionnaire was included to collect sociodemographic data of sample (gender, age, and presence of someone close with a mental illness).

## **Data Analysis**

The WHO-HC questionnaire consists of 20 questions with a Likert-type response with scores from 1 to 5 respectively representing: completely disagree; disagree; neither agree nor disagree; agree; completely agree. A higher global score suggests greater stigmatizing attitudes (a score of 20 points is interpreted as a minimum stigmatizing attitude, and 100 points as a maximum stigmatizing attitude). Questions 3, 8, 9, 10, 11, 15, and 19 are coded inversely, assigning a lower score to disagree (Kassam et al., 2012). In addition to the average scores, it has been suggested to interpret the WHO-HC with 15 items divided into its three core dimensions “Attitudes towards people with mental health illnesses” (maximum score: 30 points), “Outreach and help-seeking” (maximum score: 20 points), and “Social distancing” (maximum score: 25 points) (Modgill et al., 2014).

We calculated the average scores considering the total of 20 items, and then, by separate according to the three dimensions for 15 items, by status (professor or student) and by student level (first or fourth year). Statistical tests of UMann-Whitney and t-student (according to variables) were applied to explore differences between groups. Sociodemographic data were analyzed using descriptive statistics. The survey was anonymous and randomized identifiers were used for analysis.

## **Ethical considerations**

This study meant no risk or harm for the participants. Informed consent was required prior to the main questionnaire. The databases will be eliminated after 24 months from their collection. Ethical approval for the project (CP201805) was granted by the Scientific Research Ethics Committee of Universidad Central de Chile, on December 14, 2018, following the Declaration of Helsinki, CIOMS standards, and Law 20,120 that regulates scientific research in Chile.

## Results

The sample consisted of 87 people, with an average age of 27 years (18-58). According to status, a total of 65 students responded to the survey (41 fourth-year students, 28 first-year students), which represents 34% of the sample universe; 22 professors were included, representing 100% of the universe. The student class (n=65) had an average age of 22 years (18-34). The faculty staff had an average age of 41.5 years (34-58). Table 1 describes the sociodemographic characteristics of the total sample. Table 2 specifies the characteristics of the sample according to student or professor status. We want to highlight that 70% of the total sample reported having someone close to them with a mental illness.

**Table 1.** Sociodemographic characteristics of the sample.

Variables	Total	
	N (87)	%
Gender		
Female	81	93
Male	6	7
Marital status		
Single	68	78
Married	15	17
Common-law marriage	2	2
Divorced	1	1
They prefer not to answer	1	1
They have someone close with a mental health problem or illness		
Yes	61	70
No	23	26
They prefer not to answer	3	3

**Table 2.** Sociodemographic characteristics of the sample according to status

Variables	Students		Professors	
	N (65)	%	N (22)	%
Gender				
Female	63	97	18	82
Male	2	3	4	18
Marital status				
Single	65	100	2	9
Married	0	0	16	73
Common-law marriage	0	0	2	9
Divorced	0	0	1	4.5
They prefer not to answer	0	0	1	4.5
They have someone close with a mental health problem or illness				
Yes	40	61.5	21	95.5
No	22	33.8	1	4.5
They prefer not to answer	3	4.6	0	0

The average WHO-HC score for the total sample (N=87) was 42.2 points, with a minimum of 28 and a maximum of 57. It is interpreted as a moderate-low level of stigmatizing attitudes towards PwMI. Figure 1 shows scores obtained in the three groups evaluated. Although the median scores are similar between the three different groups, greater variability can be observed in first-year students.

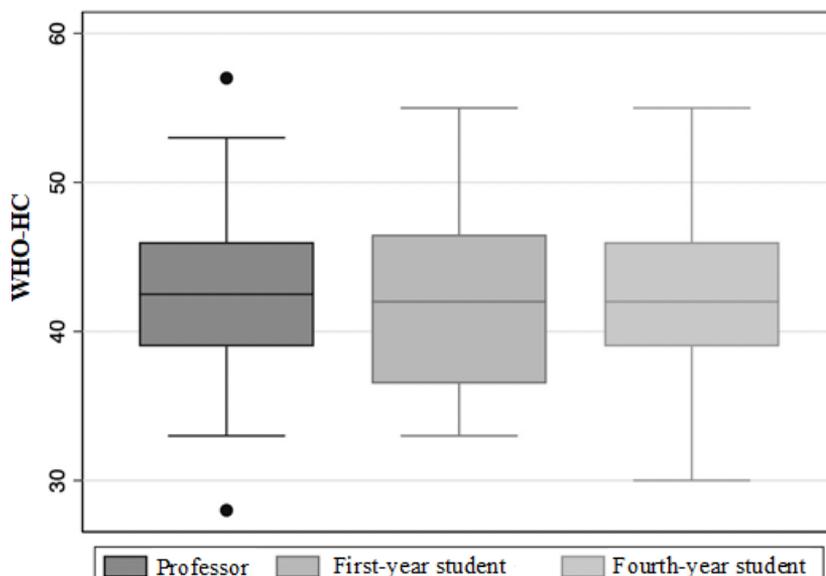


Figure 1. WHO-HC total scores by group (n=87)

In the average scores according to dimension in the total sample, a moderate level of stigmatizing attitudes is observed for the three dimensions (Table 3).

Table 3. Average WHO-HC score, according to subdimensions, in the total sample (N=87).

WHO-HC Dimension	Total WHO-HC dimension (15 items)
Attitudes towards people with mental health conditions <sup>a</sup>	11.6 (6-18)
Outreach and Help-Seeking <sup>b</sup>	12.2 (5-18)
Social distancing <sup>c</sup>	8.63 (5-17)

<sup>a</sup> questions 1, 12, 13, 14, 18 and 20, Maximum score 30 points. <sup>b</sup> questions 4, 6, 7, 10. Maximum score: 20 points. <sup>c</sup> questions 3, 8, 9, 17, 19. Maximum score: 25 points.

Regarding the differences in scores in the groups of students, the average WHO-HC score (of 20 items) for first-year students was 42.2 (33-55), and for fourth-year students was 41.9 (30-55), representing for both groups a moderate level of stigmatizing attitudes towards people with mental illness, with difference not statistically significant (p=0.87). Table 4 details the average scores for first- and fourth-year students according to the WHO-HC dimension (15 items), with differences not statistically significant.

**Table 4.** Average scores for first- and fourth-year students according to the dimension of WHO-HC (n=65).

<b>WHO-HC Dimension</b>	<b>First-year</b>	<b>Fourth-year</b>	<b>p-value</b>
Attitudes towards people with mental health conditions <sup>a</sup>	12 (6-16)	11 (6-18)	0.16
Outreach and Help-Seeking <sup>b</sup>	8.9 (4-13)	8.8 (5-13)	0.97
Social distancing <sup>c</sup>	7.9 (5-11)	8.8 (5-15)	0.22

<sup>a</sup> questions 1, 12, 13, 14, 18 and 20, Maximum score 30 points. <sup>b</sup> questions 4, 6, 7, 10. Maximum score: 20 points. <sup>c</sup> questions 3, 8, 9, 17, 19. Maximum score: 25 points.

## Discussion

This study aimed to explore stigma towards people with mental illness in a sample of first- and fourth-year occupational therapy professors and students at a Chilean university. The results show moderate-low levels of stigmatizing attitudes in the sample, with no high scores that indicate high stigmatization. This information is consistent with previous studies, which have reported moderate and low levels of stigmatizing attitudes in occupational therapy students and others in the mental health area, along with representing a group with less stigma compared to nursing and medical students, for example. Therefore, the possibility of studies that allow investigating the modulating factors of stigma towards PwMI in occupational therapy students arises. For example, previous studies in psychology students have revealed the relationship between personality factors and beliefs about the causes of mental illness as mediators of stigmatizing attitudes (Larkings & Brown, 2012).

A distinctive contribution of this study is to have explored differences between students according to their year of professional training, identifying that, both in the dimensions of attitudes towards PwMI, and dissemination and search for help, the first-year students presented higher scores than those of the fourth year. Although these differences were not statistically significant, they could indicate a trend to evaluate in subsequent studies using larger or representative samples. Also, there could be a modulating effect of specific occupational therapy training, to be addressed by future analytical studies.

One strength of this study is its sample of 65 students, considering previous studies with samples not larger than 29 occupational therapy students (Querido et al., 2016; Masedo et al., 2021). However, despite this comparative advantage, a limitation of this study is its voluntary non-probabilistic sample that may favor the recruitment of participants with interest on the topic. Therefore, results might underestimate the level of stigmatizing attitudes. In this study, we observed that the majority of the sample reported having someone close living with a mental illness, which was not possible to contrast. This information might be biased because criteria to define mental illness were not specified in the form. However, previous literature has referred that significant contact represents a protective factor in the development of stigmatizing attitudes (Corrigan & Fong, 2014).

Another strength of this study is the use of a questionnaire previously validated and adapted in Chile (Sapag et al., 2019; Gajardo et al., 2021). Only one similar study addressing stigma in Chilean occupational therapy students was found and it did not utilize a previously validated or adapted questionnaire (Masedo et al., 2021).

Considering the state of the art, both globally and locally, further studies describing stigma in larger samples are needed, as well as studies designing and testing interventions to reduce stigma towards PwMI. A recent systematic review of actions to reduce stigma towards PwMI in health professions students reported that educational strategies, together with social contact with PwMI are the most effective anti-stigma intervention evaluated to date (Lien et al., 2021).

## Conclusion

The results of this study are consistent with the limited previous literature describing moderate-low levels of stigmatizing attitudes towards people with mental illness in occupational therapy students and professors. The emerging differences between 1<sup>st</sup> and 4<sup>th</sup>-year students raise the need of further studies using larger sample sizes in various contexts. In Latin America, more research is needed to describe stigma and evaluate interventions to reduce it in occupational therapy education.

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### Author's Contributions

Jean Gajardo contributed to the study design, data analysis, writing, and manuscript review. Francisca Espinosa contributed to the study design, data collection, writing, and manuscript review. Rodrigo Goycolea contributed to the study design, data collection, writing, and manuscript review. Mónica Oyarzún contributed to the study design, data collection, and manuscript review. Irene Muñoz contributed to the study design, data collection, and

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