

Stigma toward people with mental disorders in mental healthcare in Chile

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Pamela Grandón¹, Claudio Bustos¹, Dany Fernández²,
Félix Cova¹, Gabriela Nazar¹, Gabriela Díaz-Pérez¹,
Verónica Monreal³ and Jaime Méndez¹

Abstract

Objective: This research aimed to determine the stigma toward people with mental illness among mental health personnel and identify individual, professional, and contextual predictors.

Methods: A descriptive, cross-sectional, and correlational design was used. The sample consisted of 218 mental health personnel working in Outpatient Psychiatric Units belonging to hospitals and Community Mental Health Centers in Chile. Stigma was evaluated using a scale of humanized treatment, a scale of social distance, and a scale of attitudes in health personnel. In addition, sociodemographic and professional information was collected from mental health personnel and contextual information, particularly the type of outpatient mental health center and the technical-administrative unit that groups all the health centers in a territory.

Results: It was found that mental health personnel, in general terms, present low levels of stigma expressed in behaviors of comfort and support toward users, a desire for closeness and social interaction, and reduced stigmatizing beliefs and attitudes of infantilization toward individuals with MHPs. However, intimacy and trust were lower than expected.

Only educational levels and health centers were related to stigma.

Conclusions: The low levels of stigma may be due to the evolution of this phenomenon and the country's mental health policies.

Keywords

Stigma, mental healthcare, mental illness

Introduction

People with psychiatric diagnoses suffer from stigma attached to them (Thorncroft et al., 2009). Stigma is a phenomenon of labeling based on stereotypes and prejudices, which leads to social distance and discrimination of a person who possesses an attribute evaluated negatively by the community (Link & Phelan, 2001). Recently developed eco-systemic view of the phenomenon holds that stigma is influenced by three categories of factors, namely micro-social (individual characteristics of the subjects), meso-social (interpersonal or group relationships), and macro-social (social structure and organization; Cook et al., 2014; Holder et al., 2019). As stigma has harmful consequences, reducing it is one of the public health challenges (World Health Organization, 2016).

As mental health staff has a permanent and privileged relationship with people with a mental disorder (MD), the prevalence of stigma in this population must be studied. The available literature on the stigmatization of people with mental disorders by healthcare personnel is ambiguous. In

three-quarters of the studies included in Schulze's (2007) review, mental health staff stigmatized patients, while the work of Wahl and Aroesty-Cohen (2010) found mixed results. More recent studies indicate that mental health staff have positive attitudes toward their clients (Economou et al., 2020), they exhibit less prejudice than the general population does (Bizumic et al., 2022), and psychiatrists harbor low levels of stigma compared to other health professionals (Oliveira et al., 2020). It would seem that mental health personnel stigmatizes on some dimensions but not on others. They have fewer dangerous beliefs but have

¹Department of Psychology, Faculty of Social Sciences, Universidad de Concepción, Chile

²Facultad de Psicología, Universidad del Desarrollo, Concepción, Chile

³Escuela de Psicología, Pontificia Universidad Católica de Chile, Chile

Corresponding author:

Pamela Grandón, Department of Psychology, Faculty of Social Sciences, Universidad de Concepción, Barrio Universitario s/n. Concepción 4070386, Chile.

Email: pgrandon@udec.cl

more pessimistic beliefs about the recovery of users (Valery & Prouteau 2020). They also tend to avoid patients with mental disorder along with posing obstacles for their treatment (Gunasekaran et al., 2022), present a favorable attitude to the use of coercion in treatment, and have excessive compassion and paternalistic attitudes (Valverde-Bolivar et al., 2022).

The studies on predictors of stigma among mental health personnel have largely focused on socio-demographic and professional variables, with little consideration of contextual variables (Jauch et al., 2023). These studies on the socio-demographic variables have yielded inconsistent results. The review by Valery and Prouteau (2020), for instance, shows no linear relationship between age and stigma; however, another study found no association (Arbanas et al., 2019). Discrepancies are also evident in findings about gender. While some studies reported that men stigmatize more when it comes to certain psychiatric diagnoses (Kaitz et al., 2022), others found no such relationship (Arbanas et al., 2019; Valery et al., 2023). Similarly, while some studies reported that higher educational level is related to less stereotyping and stigma (Kato et al., 2021; Valery et al., 2023; Valverde-Bolivar et al., 2022), other studies have found no differences (Henderson et al., 2014). Finally, the contact with individuals with MD has been found to reduce stigma (Bizumic et al., 2022); however, apparently, the familiarity with the individual, that is, whether the subject is a friend, spouse, or other close relative, is more important than the frequency of contact (Corrigan & Nieweglowski, 2019).

Among professional variables, the type of occupation has been studied most extensively. These studies have yielded contradictory results regarding which mental health professionals stigmatize more (Valery & Prouteau, 2020). It seems that professionals closer to the social sciences, such as psychologists and social workers, stigmatize less than professionals from the medical area, such as psychiatrists, nurses, and nursing technicians (Del Olmo-Romero et al., 2019; Economou et al., 2020). These differences could be due to factors such as the level of knowledge about recovery, educational history, and control over clinical practice, which vary according to the type of profession and are related to the training and the philosophical orientation of professions (Kato et al., 2021).

Years of professional practice have also been inconsistently associated with stigma, some showing a direct relationship, others inverse, and others none (Valery & Prouteau, 2020).

The most studied context variable in mental health professionals is the setting. Staff working in mental health centers that provide outpatient care exhibit more positive attitudes and behaviors toward users compared to those working in closed care centers (Del Olmo-Romero et al., 2019; Valery et al., 2023; Valverde-Bolivar et al., 2022); however, there is no information on the differences in the

types of center within the same category, such as community outpatient centers and hospital outpatient centers.

This diversity of results may be attributed to the limitations of the studies. A recent review of the subject reported that statistical analyses are erroneously applied in research and there is a lack of information on the instruments used to interpret the results; further, only a few studies control variables in the prediction of stigma, and different groups are mixed in the samples, such as professionals and students of health careers (Jauch et al., 2023). These challenges make it difficult to draw conclusions and develop a comprehensive understanding of the phenomenon.

In Latin America, a few studies on stigma among mental health personnel are available only in Brazil (Fernandes et al., 2022; Jauch et al., 2023), one of which was a multi-center study (Wagner et al., 2011). These studies show the presence of stigma. In the rest of the continent, which is mainly Spanish-speaking, no such studies have been reported. Assuming that stigma depends on the context, norms, gender roles, and culture (Fernandes et al., 2022; Yang et al., 2007), it is essential to know how it manifests in other countries.

In Chile, it has been found that primary healthcare personnel express negative attitudes toward individuals with psychiatric diagnoses (Sapag & Velasco, 2020; Vaccari et al., 2020). Therefore, it is plausible to think that a similar phenomenon occurs in mental health specialty personnel.

In Chile, mental health is ascribed to a community model of care (Ministerio de Salud, 2017). Thus, of the 151 secondary-level mental health teams, 96 are in community mental health centers and 55 in outpatient psychiatry units, depending on the hospital (Ministerio de Salud, 2018). This level of care concentrates most specialized mental health activity in the public health sector, which serves about 80% of the country's population (Ministerio de Desarrollo Social, 2018). Due to the severe consequences of stigma, its reduction is a central challenge in mental health (Ministerio de Salud, 2017). Therefore, the Ministry of Health set a goal for 2020 that at least 50% of health services implement stigma-reducing plans, which has not been met (Ministerio de Salud, 2017) due to the scarcity of research in the area.

Recognizing that gap, this study was designed as part of a larger project aimed at developing a comprehensive theoretical model on how stigma is present in mental health personnel at the secondary level of care in Chile, which includes qualitative information. This study aimed to determine the level of stigma toward people with psychiatric diagnoses among mental health personnel and identify individual, professional, and contextual predictors.

This will be the first study in a Spanish-speaking country in Latin America to assess the level of stigma in a broad spectrum of mental health professionals. The individual and professional predictors considered are the most used

and those with the most inconsistent results. The variables include the type of outpatient setting: community, and hospital, as well as the technical-administrative dependence of the territory. Importance is given to correcting the methodological shortcomings of research to elucidate the discrepancies.

Materials and methods

The study used a descriptive, cross-sectional, correlational design.

Sample. The sample was purposive and consisted of 218 mental health staff working in Outpatient Psychiatry Units belonging to hospitals and Community Mental Health Centers (COSAM). The participants came from 12 mental health centers in the Biobio region. These centers were part of the Concepción, Talcahuano, and Arauco Health Services. The health services are the technical-administrative unit that brings together all the health centers in a territory; there are 26 in the country.

The inclusion criteria were professional, technical, or administrative, with at least 22 hours of contract and 6 months of work in the mental health center. The administrative staff had to have frequent contact with the users (at least three times a week with attention to the public).

Sample size. The estimated sample size allowed us to analyze the relationship between the six main quantitative variables. These variables correspond to the factors of the scales: attitudes toward people diagnosed with MD, social distance, and humane treatment behaviors. We sought to detect relationships of at least 0.3 between the scales, with a power of 80% and a significance level of 5% for the analysis family. With these assumptions, the minimum sample size to detect effects is 219. This size allows us to detect an $R^2 = .20$ in linear mixed models, assuming an $ICC = .02$ and several people per center of 20, with 12 predictor variables for 6 linear mixed models. These calculations were performed using Cohen's (1988) formulas for correlations and regression, adjusting for Bonferroni power and significance level.

Measures. Three instruments were applied to assessing stigma, as described below. In addition, socio-demographic and professional information was collected from mental health personnel and contextual information, particularly the type of outpatient mental health center (hospital and community) and the health service to which it belongs.

The scale of attitudes of health professionals toward people with a diagnosis of Mental Disorder (EAPS-TM; Vielma-Aguilera et al., 2023) Instrument developed in Chile and based on the Mental Illness Clinicians Attitudes (MICA; Gabbidon et al., 2013). The EAPS-TM is an

18-item scale that assesses the attitudes of professionals working in health toward people with mental disorders. It has six response options in a Likert-type format ranging from strongly agree to strongly disagree. The higher the score, the lesser stigmatized the health professional's attitude. The instrument presents two factors: Stigmatizing Beliefs (12 items) and Infantilization and relational distance (6 items). In this study, the reliability for the Stigmatizing Beliefs subscale was Cronbach's $\alpha = .815$ and McDonald's $\omega = .821$, while for the Infantilization subscale, it was Cronbach's $\alpha = .762$ and McDonald's $\omega = .768$.

Social Distance Scale (SD; Grandón et al., 2015). It assesses the social distance people present toward subjects with severe mental disorders. The scale is adapted for use in Chile and consists of a brief vignette followed by seven items in a Likert-type response format with five response alternatives. The higher the score, the lesser the stigma. The instrument is composed of two factors: 'Closeness and social interaction' (three items) and 'Intimacy and trust' (two items). In this research, the internal consistency reached values of Cronbach's $\alpha = .668$ and McDonald's $\omega = .682$ for factor 1, and Cronbach's $\alpha = .683$ and McDonald's $\omega = .684$ for factor 2.

The scale of humanized treatment behaviors in health personnel (ECTH-PS; Vielma-Aguilera et al., 2022). Its purpose is to evaluate inclusive and supportive behaviors that health personnel present toward people diagnosed with mental disorders. It is a self-report of humanized treatment behaviors, usually presented by health personnel. The scale comprises 16 items with 4 response options (1=Strongly disagree, 2=Disagree, 3=Agree, and 4=Strongly agree) in the Likert format. The higher the score, the less stigma. It has two factors: supportive behaviors (12 items) and comfort (4 items). In this study, the reliability for the first factor was Cronbach's $\alpha = .929$ and McDonald's $\omega = .930$, and for the second factor Cronbach's $\alpha = .712$ and McDonald's $\omega = .714$.

Further, a socio-demographic and professional information sheet was applied. This collects relevant information on each participant: age, gender, marital status, educational level, profession, work experience in mental health, contact, and frequency of contact with people diagnosed with a mental disorder according to whether they are acquaintances, friends, or relatives.

Procedure. Once approval for the study had been obtained from the ethics committees, the managers of the mental health centers were contacted and invited to participate. Subsequently, a meeting was arranged with the health personnel of each center. At this meeting, the research was presented. Those who agreed to participate signed the informed consent form and completed the instruments in a self-applied manner. A researcher from the team, who was not related to the participants, was present at all times to

Table 1. Sample characteristics.

	<i>n</i>	Percentage	<i>M</i>	<i>SD</i>	Min	Max
Arauco health service	34	15.6				
COSAM Lebu	12	5.5				
COSAM Arauco	9	4.1				
COSAM Curanilahue	13	6				
Concepcion health service	80	36.7				
COSAM Leonor Mascayano	41	18.8				
COSAM Lota	14	6.4				
COSAM Concepcion	19	8.7				
COSAM San Pedro	6	2.8				
Talcahuano health service	104	47.7				
Psychiatry Service – Tome Hospital	20	9.2				
Psychiatry Service – Penco-Lirquen Hospital	14	6.4				
COSAM Hualpen	19	8.7				
COSAM Los Cerros	23	10.6				
Psychiatry Service – The Higuera Hospital	28	12.8				

Note. COSAM = Community Mental Health Center.

resolve any doubts that might arise. Data were collected between July and December 2022.

Data analysis. The data were entered independently by two people from outside the research team, who were trained and contracted to do this task only. The differences were manually corrected, resulting in a single database used for the analyses.

Means and standard deviations were established for the variables: stigmatizing beliefs, infantilization and relational distance, closeness and social interaction, intimacy and trust, supportive behaviors, and comfort. This made it possible to determine the levels of stigma. Then, the effects of health services and mental health centers on the level of stigma were studied by analyzing their η^2 (R^2) and controlling for intraclass correlation. Finally, the influence of socio-demographic and professional variables on stigma levels was analyzed using a linear mixed model.

We used R software (version 4.2) for statistical analysis, with the packages *mice*, *lme4*, *performance*, and *mitml*.

Ethical aspects. The project was approved by the Bioethics and Biosafety Ethics Committee of the Vice-Rectorate of Research and Development of the University of Concepción (VRID; CEBB 1087-2022) and by the Ethics Committees of the Health Services of Concepción (CEC-SSC: 22-04-15) and Talcahuano (Act 45 of May 30, 2022).

The protocols were designed considering the rights of the participants, as established in the Declaration of Helsinki. All participants voluntarily agreed to participate in the study by signing an informed consent that ensured confidentiality for the subsequent use of the information.

Results

Sample description

A total of 218 people agreed to participate in the study: 34 (15.6%) from the Arauco Health Service, 80 (36.7%) from the Concepción Health Service, and 104 (47.7%) from the Talcahuano Health Service (Table 1). Of these, 66 (30.3%) were men, 151 (69.3%) were women, and 1 (0.5%) chose another classification. Regarding marital status, most of the participants lived with their partner ($n=110$, 50.5%). One hundred seventy-six people had a professional degree (80.7%), and the remaining 42 (19.3%) obtained a primary/middle school/technical education. Most of the sample consisted of psychologists ($n=52$, 23.9%) and psychiatrists ($n=45$, 20.6%), and they worked a 44-hour working day (66.5%). Further, 51.8% of the participants ($n=113$) reported contact with individuals with MHPs outside of work, most of whom were family members ($n=95$, 43.6%), and the frequency of contact was practically split 50/50 between frequent and infrequent. Finally, the mean age of the participants was 38.69 ($SD=7.679$) years, with an average of 142.5 ($SD=83.74$) months practicing their profession, 113.7 months ($SD=71.66$) working in mental health, and 81.05 ($SD=66.8$) working in their current health center.

Humanized treatment, social distance, and attitudes of mental health professionals toward people with psychiatric diagnosis at the secondary level

As shown in Table 2, the mean for the comfort factor of the humanized treatment scale is 3.42, higher than the theoretical midpoint of 2.5, so it could be said that mental

Table 2. Description of the variables.

Scales	<i>n</i>	<i>M</i>	<i>SD</i>	Minimum	Maximum
ECTH – Comfortability	217	3.424	0.53	1	4
ECTH – Supportive behaviors	217	3.64	0.48	1	4
DS – Closeness and social interaction	218	4.11	0.60	2.33	5
DS – Intimacy and confidence	218	2.36	0.84	1	5
EAPS-TM – Stigmatizing beliefs	218	3.93	0.82	1.66	6
EAPS-TM – Infantilization and relational distance	218	4.92	0.81	2	6

Note. ECTH=Scale of humanized treatment behaviors in health personnel, the higher the score, the less stigma; SD=Social distance scale, the higher the score, the less stigma; EAPS-TM=Scale of attitudes of health professionals toward persons with a diagnosis of mental disorder, the higher the score, the less stigma.

health personnel has high comfort behaviors toward people with psychiatric diagnoses, that is, they feel comfortable attending to them. As for the supportive behaviors of this same scale, the mean is 3.64, higher than the theoretical midpoint of 2.5, which evidences high supportive behaviors; the mental health personnel performs actions that promote a humanized and empathetic treatment toward the users.

For social distance, specifically closeness and social interaction, the mean is 4.12, higher than the theoretical midpoint of 3, which shows that mental health personnel is willing to establish a relationship with a person with a MD on a gradient from greater closeness (friendship) to less closeness (conversing with someone). Concerning intimacy and confidence, the mean is 2.37, lower than the theoretical midpoint of 3, which indicates a low desire to establish an intimate relationship, such as having a partner, or trust, such as leaving the care of their children to a person with MD.

Finally, for stigmatizing beliefs, the mean is 3.94, higher than the theoretical midpoint of 3.5, showing that mental health personnel harbor few stigmatizing beliefs toward individuals with MDs, such as that they are dependent, dangerous, and unpredictable. Finally, for infantilization and relational distance, the mean is 4.93, well above the theoretical midpoint of 3.5, which reflects a low level of the variable, that is, health personnel do not see individuals with MDs as infantile, dependent, and in need of adult control and have no qualms about interacting with them.

The influence of health services and mental health facilities on the stigma levels of mental health personnel

Regarding the influence of the health services, if we analyze their η^2 (R^2), these range from .003 to .028, which in terms of interpretation would range from insignificant (ECTH and EAPS-TM) to small (SD), that is, the health service to which the mental health center belongs does not influence the level of the stigma of the mental health personnel.

Regarding mental health centers, when analyzing the intraclass correlation (ICC) and the η^2 of the variables, it can be affirmed that, for stigmatizing beliefs, there is a moderate role of these ($\eta^2=.11$), which implies that the mental health center in which the personnel work influences the presence of false beliefs toward individuals with MD. For comfortability ($\eta^2=.03$), supportive behaviors ($\eta^2=.04$), closeness and social interaction ($\eta^2=.07$), intimacy and confidence ($\eta^2=.08$), and attitudes of infantilization and relational distance ($\eta^2=.07$), the values of η^2 are small. As a preliminary conclusion, it can be noted that health centers have more weight than health services in the stigma levels of mental health personnel.

On the other hand, when separating the mental health centers according to their typology (all provide outpatient care, but some are hospital-based and others community-based), that is, those that are psychiatric services (hospital-based) or COSAM (community-based), and analyzing the influence of each on the stigma levels of the health personnel, it was identified that the values of η^2 (R^2) range from .0003 to .027. In terms of interpretation, it would be from insignificant (ECTH and DS) to small (EAPS-TM), indicating that the type of health center does not influence the level of staff stigma.

Relationship between socio-demographic and professional variables and the level of stigma in mental health personnel

First, a linear mixed model that considered all predictor variables was tested for each criterion variable. This model was statistically significant only for two variables, EAPS-TM – Stigmatizing beliefs: $F(27, 224223)=5.022$, $p < .001$, $R^2=.38$ and EAPS-TM – Infantilization and relational distance: $F(27, 174166)=3.176$, $p < .001$, $R^2=.30$. The result was insignificant for the remaining variables (ECTH – Comfortability and Supportive behaviors, SD – Closeness and social interaction, and Intimacy and trust; Table 3).

For the two EAPS variables (stigmatizing beliefs and infantilization and relational distance), the most relevant

Table 3. Linear mixed model. .

Scales	F	df1	df2	p	RIV	R ²
ECTH – Comfortability	1.29	27	97,372	.14	0.07	.15
ECTH – Supportive behaviors	1.13	27	205,790	.29	0.05	.13
DS – Closeness and social interaction	1.40	27	166,417	.07	0.05	.16
DS – Intimacy and confidence	1.01	27	189,285	.44	0.05	.12
EAPS-TM – Stigmatizing beliefs	5.02	27	224,223	0	0.05	.37
EAPS-TM – Infantilization and relational distance	3.17	27	174,166	0	0.05	.29

Note. ECTH=Scale of humanized treatment behaviors in health personnel; SD=Social distance scale; EAPS-TM=Scale of attitudes of health professionals toward persons with a diagnosis of mental disorder.

difference is found in educational level upon controlling for the rest of the variables (Table 4).

Health personnel with professional training and those with postgraduate studies displayed fewer stigmatizing beliefs than the baseline level, corresponding to people with primary/middle/technical education. Within the differences that result from educational level, significant differences are only observed between health personnel with postgraduate studies and those with primary/middle/technical education: $D=0.911$, $t(184)=2.930$, $p=.0106$, which means that the former has fewer stigmatizing beliefs than the latter. On the other hand, there are no significant differences between health personnel with primary/middle/technical education and those with university studies: $D=0.676$, $t(184)=2.251$, $p=.0655$, nor for those with university studies and those with postgraduate studies: $D=0.235$, $t(185)=1.956$, $p=.1262$.

For the case of EAPS-TM – Infantilization and relational distance, only health personnel with postgraduate studies have fewer infantilization attitudes and desire for relational distance than the baseline level (corresponding to people with primary/middle/technical education levels). Considering the comparisons, a significant difference is only observed between health personnel with postgraduate studies and those with primary/middle/technical education ($D=0.855$, $t(187)=2.510$, $p=0.0343$). It is not observed for health personnel with primary/middle/technical education and those with university studies: $D=0.549$, $t(187)=1.686$, $p=.2134$, nor for those with university studies and those with postgraduate studies: $D=0.306$, $t(189)=2.273$, $p=.0621$.

Discussion

This study sought to determine the levels of stigma toward people with psychiatric diagnoses among mental health personnel and to identify socio-demographic, professional, and contextual predictors in Chile.

The results indicate that mental health personnel has low levels of stigma expressed in a humanized treatment through behaviors of comfort and support toward patients, a desire for closeness and social interaction, and reduced

stigmatizing beliefs and infantilizing attitudes toward individuals with MD. This result is in line with what has been found in other studies showing that mental health personnel have favorable attitudes toward users (Bizumic et al., 2022; Economou et al., 2020). In the case of Chile, according to the multicenter study by Wagner et al. (2011), users of mental health services indicated that they were not listened to by the staff, that the healthcare thought they could not assume responsibilities or participate in their treatment, a result that contrasts with ours. This discrepancy can perhaps be explained by the evolution of stigma over time. Studies indicate that the stigma has changed over time, and its explicit expressions have been reduced (Lyons et al., 2009). The National Mental Health Plan in force in the country has among its lines of work the reduction of stigma (Ministerio de Salud, 2017), which has conducted awareness-promoting programs on the subject among mental health personnel, which may have contributed to the decrease of stigma level.

Notwithstanding the above, intimacy and trust toward users, expressed in the intention to have a relationship with someone who has an MD or leave the care of children to these people, were observed to be low. It seems that mental health personnel maintains a distrust toward users on a more interpersonal level, which may be related to Neyman's bias (Streiner & Norman, 2009). As mental health personnel focuses their attention on users who remain in frequent contact with the health system, that is, those who have more difficulties integrating socially, their vision of the skills they possess to establish relationships with others is tinged by these experiences, which in turn affects their perception of the recovery of these people. It would be necessary to be able to validate this hypothesis in future research.

Regarding the variables related to stigma, it was found that, in general terms, the health center wherein the mental health personnel work has no impact on stigma, except for stigmatizing beliefs (such as thinking that users are unpredictable, dependent, or dangerous), which are influenced by stigma. Organizational culture, that is, the set of norms and behaviors expected in an organization (Glisson & James, 2002), would be related to attitudes and task

Table 4. Testing the effect of predictor variables on stigmatizing beliefs, infantilization, and relational distance.

Variables	<i>F</i>	<i>df1</i>	<i>df2</i>	<i>p</i>	RIV
EAPS-TM – Stigmatizing beliefs					
Contact	0.33	4	199,425	0.85	0.01
Marital status	0.70	2	64,513	0.49	0.02
Workday	0.67	2	173,895	0.51	0.01
Educational level	5.03	2	11,885	0.00	0.05
Profession	0.90	7	84,992	0.50	0.03
Service	0.53	2	4,082,923	0.58	0.00
Type of service	0.24	1	780,838	0.61	0.00
Age	0.37	2	430.2	0.68	0.37
Gender	2.72	2	257,573	0.06	0.01
Time	1.36	3	1,551	0.25	0.21
EAPS-TM – Infantilization and relational distance					
Contact	0.32	4	377,818	0.86	0.01
Marital status	0.47	2	8,874	0.62	0.06
Workday	0.28	2	125,570	0.75	0.01
Educational level	4.52	2	27,059	0.01	0.03
Profession	0.57	7	272,434	0.77	0.02
Service	0.14	2	356,857	0.86	0.00
Type of service	0.10	1	211,687	0.74	0.00
Age	0.22	2	1,089	0.80	0.20
Gender	2.33	2	655,704	0.09	0.00
Time	0.50	3	734.4	0.68	0.35

performance in mental health personnel (Glisson et al., 2008). Culture is related to favorable attitudes toward recovery in users (Clossey & Rheinheimer, 2014). Therefore, it could be hypothesized that certain organizational cultures could influence some attitudes of health personnel toward users, which ought to be explored in future research.

Interestingly, the type of outpatient mental health center (hospital vs. community) is not related to stigma. This implies that mental health care provided in hospitals would not differ in staff attitudes from that provided in community centers. Mental health in Chile has been ascribed to a community model for more than a decade (Ministerio de Salud, 2017). This has meant that secondary-level teams, regardless of their type, are trained in this model, emphasizing close and respectful treatment of users, which could influence this result.

The health service, that is, the technical and administrative unit, which brings together a group of health centers in a territory, did not influence stigma. This result suggests that the local culture of the health centers is relatively independent of that of the services, with the former having greater impact on the stigma of mental health personnel.

None of the professional variables (i.e. type of profession and years of practice) were related to stigma, which has also been reported in other studies (Reavley, 2014).

Of the socio-demographic variables, only educational level influenced stigma. Notably, it was found that personnel with postgraduate studies presented

fewer stigmatizing beliefs and infantilizing attitudes than those with primary, secondary, or technical education. This result is consistent with the findings of other studies (Stuber et al., 2014; Valverde-Bolivar et al., 2022). Education has been found to reduce stereotypes and prejudices toward individuals with MDs (Stuart et al., 2012). In addition, it would provide tools for handling difficult situations. Health personnel sometimes stigmatize because they do not know how to behave with more complex users, which generates frustration and influences their attitudes toward patients (van Nieuwenhuizen et al., 2013).

The major limitation of this study was that the sample was by convenience, which introduces a bias since those who participated could have been the members of the health teams with more favorable attitudes toward consultants. Besides, using self-report instruments has the disadvantage of generating social desirability in the participants, leading to an underestimation of the prevalent levels of stigma.

In future research, it would be interesting to consider the influence of more contextual factors on stigma. An examination of specific ways of working, health center culture, and climate could open the door to a better understanding of stigma and the relationship of these factors with sociodemographic and professional variables.

In conclusion, mental health personnel have a low level of stigma toward the users they serve. Stigma is fundamentally related to the educational level of the personnel.

Within the contextual factors, the health center influences the stigmatizing beliefs of the mental health personnel toward the users.

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ORCID iDs

Pamela Grandón  <https://orcid.org/0000-0002-3952-1888>

Dany Fernández  <https://orcid.org/0000-0002-1847-7996>

Data availability

Access to the data supporting the article is available by contacting the corresponding author.

Supplemental material

Supplemental material for this article is available online.

References

- Arbanas, G., Rožman, J., & Bagarić, Š. (2019). The attitudes of medical doctors, nurses, and lay people towards schizophrenia, depression, and PTSD. *Psychiatria Danubina*, *31*(Suppl. 1), 84–91.
- Bizumic, B., Gunningham, B., & Christensen, B. K. (2022). Prejudice towards people with mental illness, schizophrenia, and depression among mental health professionals and the general population. *Psychiatry Research*, *317*, 114817. <https://doi.org/10.1016/j.psychres.2022.114817>.
- Clossey, L., & Rheinheimer, D. (2014). Exploring the effect of organizational culture on consumer perceptions of agency support for mental health recovery. *Community Mental Health Journal*, *50*(4), 427–434. <https://doi.org/10.1007/s10597-013-9681-8>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum.
- Cook, J. E., Purdie-Vaughns, V., Meyer, I. H., & Busch, J. T. A. (2014). Intervening within and across levels: A multi-level approach to stigma and public health. *Social Science & Medicine*, *103*, 101–109. <https://doi.org/10.1016/j.socscimed.2013.09.023>
- Corrigan, P. W., & Nieweglowski, K. (2019). How does familiarity impact the stigma of mental illness? *Clinical Psychology Review*, *70*, 40–50. <https://doi.org/10.1016/j.cpr.2019.02.001>
- Del Olmo-Romero, F., Gonzalez-Blanco, M., Sarro, S., Gracio, J., Martin-Carrasco, M., Martinez-Cabezón, A. C., Perna, G., Pomarol-Clotet, E., Varandas, P., Ballesteros-Rodríguez, J., & Grp, I. N. (2019). Mental health professionals' attitudes towards mental illness: Professional and cultural factors in the INTER NOS study. *European Archives of Psychiatry and Clinical Neuroscience*, *269*(3), 325–339. doi: 10.1007/s00406-018-0867-5
- Economou, M., Peppou, L. E., Kontoangelos, K., Palli, A., Tsaliagkou, I., Legaki, E. M., Gournellis, R., & Papageorgiou, C. (2020). Mental health professionals' attitudes to severe mental illness and its correlates in psychiatric hospitals of Attica: The role of workers' empathy. *Community Mental Health Journal*, *56*(4), 614–625. <https://doi.org/10.1007/s10597-019-00521-6>.
- Fernandes, R. H. H., Carrara, B. S., Vidigal, B. A. A., Martins, A. L. B., Bobbili, S. J., & Ventura, C. A. A. (2022). Stigma experienced by people with mental illness in South America: An integrative review. *Revista Cuidarte*, *13*(2), e5. <https://doi.org/10.15649/cuidarte.2014>
- Gabbidon, J., Clement, S., van Nieuwenhuizen, A., Kassam, A., Brohan, E., Norman, I., & Thornicroft, G. (2013). Mental Illness: Clinicians' Attitudes (MICA) scale-psychometric properties of a version for healthcare students and professionals. *Psychiatry Research*, *206*(1), 81–87. <https://doi.org/10.1016/j.psychres.2012.09.028>
- Glisson, C., & James, L. R. (2002). The cross-level effects of culture and climate in human service teams. *The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *23*(6), 767–794. <https://doi.org/10.1002/job.162>
- Glisson, C., Landsverk, J., Schoenwald, S., Kelleher, K., Hoagwood, K. E., Mayberg, S., & Green, P., & Research Network on Youth Mental Health. (2008). Assessing the organizational social context (OSC) of mental health services: Implications for research and practice. *Administration and Policy in Mental Health*, *35*(1–2), 98–113. <https://doi.org/10.1007/s10488-007-0148-5>
- Grandón, P., Cova, F., Saldivia, S., & Bustos, C. (2015). Análisis psicométrico y adaptación de la Escala de Distancia Social (DS) en una muestra chilena. *Salud Mental*, *38*(2), 117–122.
- Gunasekaran, S., Tan, G. T. H., Shahwan, S., Goh, C. M. J., Ong, W. J., & Subramaniam, M. (2022). The perspectives of healthcare professionals in mental health settings on stigma and recovery – A qualitative inquiry. *BMC Health Services Research*, *22*(1), 888. <https://doi.org/10.1186/s12913-022-08248-z>
- Henderson, C., Noblett, J., Parke, H., Clement, S., Caffrey, A., Gale-Grant, O., Schulze, B., Druss, B., & Thornicroft, G. (2014). Mental health-related stigma in health care and mental health-care settings. *Lancet Psychiatry*, *1*(6), 467–482
- Holder, S. M., Peterson, E. R., Stephens, R., & Crandall, L. A. (2019). Stigma in mental health at the macro and micro levels: Implications for mental health consumers and professionals. *Community Mental Health Journal*, *55*(3), 369–374. <https://doi.org/10.1007/s10597-018-0308>
- Jauch, M., Occhipinti, S., & O'Donovan, A. (2023). The stigmatization of mental illness by mental health professionals: Scoping review and bibliometric analysis. *PLoS ONE*, *18*(1), e0280739. <https://doi.org/10.1371/journal.pone.0280739>
- Kaitz, J. E., Steinhilber, K. M., & Harris, J. I. (2022). Influence of Provider Gender on Mental Health Stigma. *Community Mental Health Journal*, *58*(3), 536–540. <https://doi.org/10.1007/s10597-021-00849-y>

- Kato, Y., Chiba, R., Yamaguchi, S., Goto, K., Umeda, M., & Miyamoto, Y. (2021). Association between Work Environments and Stigma towards People with Schizophrenia among Mental Health Professionals in Japan. *Healthcare*, *9*(2), 107. <https://doi.org/10.3390/healthcare9020107>
- Link, B. G., & Phelan, J. C. (2001). Conceptualizing stigma. *Annual Review of Sociology*, *27*, 363–385. <https://doi.org/10.1146/annurev.soc.27.1.363>
- Lyons, C., Hopley, P., & Horrocks, J. (2009). A decade of stigma and discrimination in mental health: plus ça change, plus c'est la même chose (the more things change, the more they stay the same). *Journal of Psychiatric and Mental Health Nursing*, *16*(6), 501–507. <https://doi.org/10.1111/j.1365-2850.2009.01390.x>
- Ministerio de Desarrollo Social. (2018). *Salud: Síntesis de resultados. CASEN 2017*. http://observatorio.ministeriode-sarrollosocial.gob.cl/casen-multidimensional/casen/docs/Resultados_Salud_casen_2017.pdf
- Ministerio de Salud. (2017). *Plan nacional de Salud mental 2017-2025*. Ministerio de Salud, Subsecretaría de salud pública.
- Ministerio de Salud. (2018). *Modelo de gestión. Red temática de salud mental en la red general de salud*. https://www.minsal.cl/wp-content/uploads/2015/09/2018.05.02_Modelo-de-Gesti%C3%B3n-de-la-Red-Tem%C3%A1tica-de-Salud-Mental_digital.pdf
- Oliveira, A. M., Machado, D., Fonseca, J. B., Palha, F., Silva Moreira, P., Sousa, N., Cerqueira, J. J., & Morgado, P. (2020). Stigmatizing attitudes toward patients with psychiatric disorders among medical students and professionals. *Frontiers in Psychiatry*, *11*, 326. <https://doi.org/10.3389/fpsy.2020.00326>
- Reavley, N. J., Mackinnon, A. J., Morgan, A. J., & Jorm, A. F. (2014). Stigmatising attitudes towards people with mental disorders: A comparison of Australian health professionals with the general community. *The Australian and New Zealand Journal of Psychiatry*, *48*(5), 433–441. <https://doi.org/10.1177/0004867413500351>
- Sapag, J. C., & Velasco, P. R. (2020). Estigma hacia los trastornos mentales y adicciones: estudio en la atención primaria de Chile [Stigma toward mental disorders and addictions: Study in Chilean primary care]. *Atencion Primaria*, *52*(5), 361–363. <https://doi.org/10.1016/j.aprim.2019.07.014>
- Schulze, B. (2007). Stigma and mental health professionals: A review of the evidence on an intricate relationship. *International Review of Psychiatry*, *19*(2), 137–155. <https://doi.org/10.1080/09540260701278929>
- Streiner, D., & Norman, G. (2009). *PDQ Epidemiology* (3rd ed.). People's Medical Publishing House.
- Stuart, H., Arboleda-Flórez, J., & Sartorius, N. (2012). *Paradigms lost. Fighting stigma and the lessons learned*. Oxford University Press.
- Stuber, J. P., Rocha, A., Christian, A., & Link, B. G. (2014). Conceptions of mental illness: Attitudes of mental health professionals and the general public. *Psychiatric Services*, *65*(4), 490–497. <https://doi.org/10.1176/appi.ps.201300136>
- Thornicroft, G., Brohan, E., Rose, D., Sartorius, N., & Leese, M., & INDIGO Study Group (2009). Global pattern of experienced and anticipated discrimination against people with schizophrenia: A cross-sectional survey. *Lancet*, *373*(9661), 408–415. [https://doi.org/10.1016/S0140-6736\(08\)61817-6](https://doi.org/10.1016/S0140-6736(08)61817-6)
- Vaccari, P., Ramírez-Vielma, R., Saldívia, S., Cova, F., Vielma, A., Ulloa, N., Victoriano, V., & Grandón, P. (2020). Stigma towards people with a diagnosis of severe mental disorder in primary healthcare centers: Perspectives of service users and health teams in Chile. *International Journal of Mental Health Systems*, *14*(6), 1–11. <https://doi.org/10.1186/s13033-020-0340-5>
- Valery, K. M., & Prouteau, A. (2020). Schizophrenia stigma in mental health professionals and associated factors: A systematic review. *Psychiatry Research*, *290*, 113068. <https://doi.org/10.1016/j.psychres.2020.113068>
- Valery, K. M., Violeau, L., Fournier, T., Yvon, F., Arfeuille, S., Bonilla-Guerrero, J., Caria, A., Carrier, A., Destaillets, J. M., Follenfant, A., Laberon, S., Lalbin-Wander, N., Martínez, E., Staedel, B., Touroude, R., Vigneault, L., Roux, S., & Prouteau, A. (2023). Part of the solution yet part of the problem: Factors of schizophrenia stigma in mental health professionals. *International Journal of Psychiatry in Clinical Practice*, *27*(2), 134–144. <https://doi.org/10.1080/13651501.2022.2129068>
- Valverde-Bolivar, E., García-Arenas, J. J., Pelegrin, I. L., Pérez-Gómez, L., Muñoz-López, M., & Simonelli-Muñoz, A. J. (2022). The stigma of mental health professionals towards users with a mental disorder. *Actas Españolas De Psiquiatria*, *50*(4), 178–186.
- van Nieuwenhuizen, A., Henderson, C., Kassam, A., Graham, T., Murray, J., Howard, L. M., & Thornicroft, G. (2013). Emergency department staff views and experiences on diagnostic overshadowing related to people with mental illness. *Epidemiology and Psychiatric Sciences*, *22*(3), 255–262. <https://doi.org/10.1017/S2045796012000571>
- Vielma-Aguilera, A., Bustos, C. L., Saldívia, S., & Grandón, P. (2023). Psychometric properties of the Attitudes Scale of Health Care Professionals' toward people with a diagnosis of Mental Illness (EAPS-TM). *Current Psychology*, *42*(7), 5851–5863. <https://doi.org/10.1007/s12144-021-01911-4>
- Vielma-Aguilera, A., Cova, F., Bustos, C., Ramírez-Vielma, R., Vaccari, P., Saldívia, S., Victoriano, V., & Grandón, P. (2022). Development and evaluation of psychometric properties of the humanized care behaviors in health personnel scale. *Professional Psychology: Research and Practice*, *55*(2), 169–177. <https://doi.org/10.1037/pro0000549>
- Wagner, L. C., Geidel, A. R., Torres-Gonzalez, F., & King, M. B. (2011). Mental health care: Perceptions of people with schizophrenia and their carers. *Ciencia & Saude Coletiva*, *16*(4), 2077–2087.
- Wahl, O., & Aroesty-Cohen, E. (2010). Attitudes of mental health professionals about mental illness: A review of the recent literature. *Journal of Community Psychology*, *38*(1), 49–62. <https://doi.org/10.1002/jcop.20351>
- World Health Organization. (2016). *Intervention Guide for mental, neurological and substance use disorders in non-specialized health settings-version 2.0*.
- Yang, L. H., Kleinman, A., Link, B. G., Phelan, J. C., Lee, S., & Good, B. (2007). Culture and stigma: Adding moral experience to stigma theory. *Social Science & Medicine*, *64*(7), 1524–1535. doi: 10.1016/j.socscimed.2006.11.013s