

Professional preference for mental illness: The role of contact, empathy, and stigma in Spanish Social Work undergraduates

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Abstract

The treatment of the mentally ill people is a challenge across the world, and different professionals, such as doctors, social workers, psychologists, or nurses, take care of this group. Nonetheless, mental health is not a vocational sector preferred by students and professionals of many of these careers. Research has proposed that professional preference for a patient group would be positively influenced by intergroup contact (quantity and quality) and empathy (perspective-taking), and negatively associated with intergroup anxiety and social distance. However, the evidence testing this proposal was partial and mainly referring to other patient groups such as minorities or immigrants. The major aim of this cross-sectional study was to clarify two research questions referring to mentally ill persons: Do contact and empathy protect undergraduates from intergroup anxiety and social distance and promote professional preference? Do intergroup anxiety and social distance predict professional preference and mediate the influence of contact and empathy in professional preference? A convenience sample of 409 Social Work undergraduates (81% females) from three Spanish universities completed a questionnaire between February and June 2020. Concerning direct relationships, the structural equation model showed that the quantity of contact only predicted intergroup anxiety negatively; quality of contact and empathy negatively predicted intergroup anxiety and social distance; intergroup anxiety positively predicted social distance; intergroup anxiety and social distance negatively predicted professional preference. Concerning mediated relationships, the influence of quality of contact and empathy on social distance was mediated by intergroup anxiety; social distance mediated the relationship of intergroup anxiety with professional preference; both anxiety and distance mediated the influence of quality of contact and empathy in professional preference. These results encourage interventions aimed at enhancing professional preference for mental illness by improving contact, knowledge, and empathy and reducing stigma in students and workers from diverse mental health careers.

KEYWORDS

anxiety, empathy, intention, mentally ill persons, social distance, social stigma

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1 | INTRODUCTION

Treating mental illness and improving mental health are global challenges. The World Health Organization (WHO, 2018) defined the “treated prevalence” of mental illness as the proportion of people with mental disorders (i.e., psychosis, depression, and bipolar disease) who received mental health care. This report estimates that the global number of treated prevalence per 100,000 persons is close to 308, and this proportion increases to 714 in countries with higher outcomes. To care for these persons, the WHO (2018) estimates that, per 100,000 population, the mental workforce is made up of approximately nine health care professionals at the general level, and 72 in developed countries. These professionals include medical doctors, nurses, psychologists, and social workers, among others.

However, mental health services are not among the first professional preferences of workers and students of some of these careers, such as Social Work (Gewirtz-Meydan & Even-Zohar, 2018), Nursing (Itzhaki et al., 2017) and Medicine (Eksteen et al., 2017; Harper & Roman, 2017).

Some research has analysed the role of educational preparation (Harper & Roman, 2017) and self-efficacy (Hippel et al., 2019) in professional preferences. Other authors have highlighted the importance of indicators of social stigma, such as negative feelings (Krumer-Nevo & Weiss, 2006) or prejudices (Itzhaki et al., 2017; Werner, 2012), as obstacles for professional preference for a group. Many others pointed out the important positive role of empathy (Segal et al., 2012; Stanley et al., *in press*) and contact or familiarity with a patient group (Eksteen et al., 2017; Itzhaki et al., 2017; Werner & Grayman, 2011) as protectors from stigma and facilitators of professional preference.

Since the early days of the profession, social workers have a crucial role to play in improving mental health services and outcomes of citizens in the various types of mental health facilities, from mental hospitals to social care in community-based services (Allen, 2014; Aviram, 2002; WHO, 2018). However, we found limited research examining the association of contact, empathy and stigma with professional preference for mentally ill persons, especially in Social Work.

This is the purpose of the present study: to explore, in Social Work undergraduates, the extent to which their professional preference to treat mentally ill persons in the future is favoured by intergroup contact (quantity and quality) and empathy (social perspective-taking) and hindered by two components of stigma (intergroup anxiety and social distance).

1.1 | Indicators of stigma: Anxiety and distance

Stigma is a socially constructed, reinforced process that manifests at multiple levels (Elliot et al., 2018; Fox et al., 2018). The most analysed type of stigma is social or public stigma.

Social stigma toward mental illness has been widely investigated by sociology (Pescosolido & Martin, 2015), social psychology

What is known

- The care of mentally ill people is not a main professional preference for undergraduates of Social Work, Medicine, or Nursing.
- Intergroup contact and perspective-taking positively predicted professional preference and protected students from intergroup anxiety and social distance.
- These relationships were partially tested for other stigmatized groups, but not for mentally ill people.

What this paper adds

- Undergraduates who are more empathetic and familiarized with mentally ill persons desired less social distance, mainly because they felt lower intergroup anxiety.
- Empathetic and familiarized students preferred more care for mentally ill people because they had lower intergroup anxiety and social distance.
- The findings encourage interventions to improve education, contact, and empathy.

(Hinshaw & Stier, 2008), psychiatry (Eksteen et al., 2017), nursing (Fokuo et al., 2017; Itzhaki et al., 2017) and social work (Corrigan et al., 2005; Kennedy et al., 2017) among others. According to many of these and other authors (Bahm & Forchuk, 2008; Keating & Robertson, 2004; Peterson et al., 2006), stigma toward mental illness includes labels, stereotypes, prejudice and discrimination. Labels are officially sanctioned terms applied to group members (e.g., mentally ill). Stereotypes are stable and widespread beliefs about individuals' characteristics (e.g., dangerous). Prejudice is heavily linked to stereotypes and includes emotional reactions (e.g., anxiety). Discrimination consists of unfair behaviours directed at this group (e.g., social distance). Stigma toward mental illness is common in mental-health careers, such as physicians (Eksteen et al., 2017), nurses (Fokuo et al., 2017), social workers (Rubio-Valera et al., 2018) or psychologists (Petkari, 2017). The present study measured two indicators of social stigma toward mentally ill persons: intergroup anxiety and social distance.

1.1.1 | Intergroup anxiety

Intergroup anxiety is experienced when a person imagines, anticipates or engages in intergroup interactions with a specific stigmatized group (i.e., out-group) and includes three components, cognitive, physiological and affective, the most frequently measured (Stephan, 2014).

Authors have analysed intergroup anxiety toward different out-groups, such as ethnic and racial minorities (Aberson & Haag, 2007; Jasinskaja-Lahti et al., 2011), sexual minorities (Castiglione

et al., 2013; Mereist & Poteat, 2015), immigrants (Abbott & Cameron, 2014; Dhont et al., 2011; Voci & Hewstone, 2003), homeless people (Abersosn & McVean, 2008), disabled (Keith, Bennetto, & Rogge, 2015; Vezzali & Giovannini, 2012) and mentally ill persons (Nitzan & Orkibi, 2020; West et al., 2014). In most of these studies, as a measure of intergroup anxiety, participants rated the degree to which they would experience emotional states such as feeling anxious, relaxed, comfortable, apprehensive, nervous or confident, when fictitiously interacting with persons of the out-group. None of these studies evaluated samples of Social Work students or professionals.

1.1.2 | Social distance

Social distance is the desire to establish an interactional detachment from individuals with undervalued conditions or who have a stigmatized status (Pescosolido & Martin, 2015). Concerning mental health, social distance is the lack of desire to include mentally ill persons in one's social network (Covarrubias & Han, 2011). Social distance is a component of stigma toward mental health and a manifestation of discrimination, just like avoidance, restrictions or segregation, and is derived from stereotypes (e.g., violent, unpredictable and dangerous persons) and prejudices (e.g., anxiety, anger and fear). The opposite is social acceptance (Elliot et al., 2018; Fox et al., 2018).

Social distance from persons with a mental illness has been measured by requesting participants to evaluate their level of willingness to interact with a mentally ill person in different situations, such as coworker, neighbour, child-care provider or physician (Argenmeyer & Matschinger, 2003; Angermeyer et al., 2004; Lauber et al., 2004; Modgill et al., 2014; Sapag et al., in press; Sherwood, 2019; Theriot & Lodato, 2012).

1.2 | Antecedents of stigma: Contact and empathy

According to Hinshaw and Stier (2008) or Phelan and Basow (2007), personal characteristics, such as familiarity with mentally ill persons or social empathy would protect one from mental health stigma.

1.2.1 | Intergroup contact: Quantity and quality

The contact hypothesis posits that facilitating interactions between individuals (i.e., familiarity or contact) can produce more harmonious relationships between in-group and out-group members (Hinshaw & Stier, 2008).

The literature has evaluated two related aspects of intergroup contact, quantity and quality. The quantity or amount of intergroup contact assesses a range of present and past relationships in different contexts, such as neighbours, work or university colleagues, and friends (Islam & Hewstone, 1993; Keith et al., 2015; Mereish & Poteat, 2015; Tausch et al., 2009; West et al., 2014) and

family (Alexander & Link, 2003; Covarrubias & Han, 2011; Eksteen et al., 2017). The quality of intergroup contact includes the frequency of conversations with out-group members or visits to one's home or the extent to which these relationships are experienced as intimate, pleasant or cooperative (Abersosn & Haag, 2007; Abersosn & McVean, 2008; Couture & Penn, 2003; Jasinskaja-Lahti et al., 2011; Keith et al., 2015). The two modalities of contact with disabled persons correlated positively (Keith et al., 2015).

1.2.2 | Empathy: Perspective-taking

The assertion that high empathy is an essential attribute for an effective provider–consumer relationship in Social Work practice (as in other health careers) is commonly accepted (Gair, 2017; Thieleman & Cacciatore, 2019; Wagaman et al., 2015; Zaleski et al., 2016). Nevertheless, there is no generally agreed definition of empathy.

According to Davis (2018), empathy includes two main components, the capacity to put oneself in the place of another person (cognitive component) and to feel sympathy and concern for others (emotional component) (see also Abersosn & Haag, 2007; Phelan & Basow, 2007). Segal et al. (2013) differentiated multiple factors of empathy. Of these, one of the most studied is “social perspective-taking” (Gerdes & Segal, 2009; Gerdes et al., 2010), a construct similar to mental flexibility, characterized as the cognitive ability to learn about different circumstances affecting others, to mentally represent the experience of the world from the perspective of other persons accurately and to adopt the subjective point of view of another person. Social perspective-taking has been extensively measured among social workers (Gerdes et al., 2010, 2012; Stanley et al., in press; Thieleman & Cacciatore, 2019; Wagaman, 2016).

Quantity and (especially) quality of contact have been shown to protect people from intergroup anxiety and negative attitudes (e.g., social distance). Furthermore, intergroup anxiety has been observed to positively predict negative attitudes and to mediate the influence of contact in attitudes. This mediational role of intergroup anxiety has been verified for immigrants (Voci & Hewstone, 2003), homeless people (Abersosn & McVean, 2008), persons with disabilities (Keith et al., 2016), sexual minorities (Mereish & Poteat, 2015) and ethnic minorities (Jasinskaja-Lahti et al., 2011), but we know of no research examining these relationships in mentally ill persons.

Also, empathy has been reported to protect people from intergroup anxiety toward immigrants (Abbott & Cameron, 2014) and racial minorities (Abersosn & Haag, 2007). Intergroup contact has been shown to reduce social workers' social distance from mentally ill people (Covarrubias & Han, 2011).

1.3 | Outcome of stigma: Professional preference

Mereish and Poteat (2015), Pescosolido (2013) and Stephan (2014) asserted that some behavioural consequences of stigma are the avoidance of out-group members and the unwillingness to help them. The

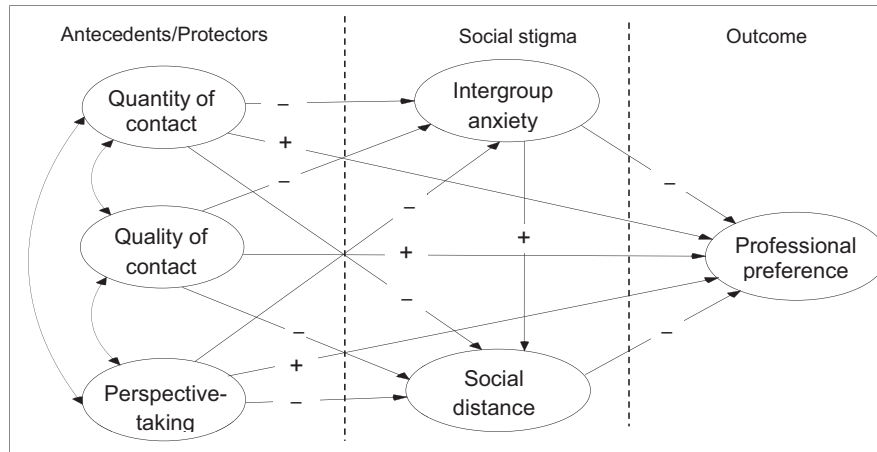


FIGURE 1 Hypothesized relations between variables, referring to mentally ill persons

intention to work in the future with a concrete patient group has been mainly operationalized as professional preference or behavioural intentions. Professional preference assesses the level of interest, lack of interest or relative interest in working with different populations, the wish to engage in professional practice with different groups and populations, or the personal priority for working with one patient group over others (Gewirtz-Meydan & Even-Zohar, 2018; Krumer-Nevo & Weiss, 2006; Weiss, 2005; Weiss et al., 2002, 2004; Woodcock & Dixon, 2005). Within the framework of the theory of planned behaviour, few authors have examined the behavioural intention to treat (in the future) or to work with persons of a concrete patient group (Itzhaki et al., 2017; Werner, 2012; Werner & Grayzman, 2011).

Positive attitudes significantly predicted behavioural intentions to work with persons with mental disabilities or dual diagnosis (Werner, 2012) in Social Work students and other career professions (Werner & Grayzman, 2011). Furthermore, interest in working with a patient group (e.g., disabled, unemployed, addicted or poor people) was greater when familiarity with the specific group was high and negative feelings toward the group were low (Krumer-Nevo & Weiss, 2006).

1.4 | Model of relationships and hypotheses

This study measured the relationships between three antecedents of—and protectors from—social stigma toward mental illness (quantity and quality of contact and perspective-taking), two indicators of social stigma (intergroup anxiety and social distance) and an outcome of all these variables (professional preference for treating mentally ill persons) in a sample of Social Work undergraduates.

Previous research has proposed theoretical models of associations between some of these constructs. Referring broadly to social stigma, Segal et al. (2012) contended that perspective-taking is the key to reduce stereotypes and prejudices. Also, Stephan (2014) suggested that familiarity and empathy would protect persons from intergroup anxiety and facilitate behavioural intentions toward the out-group. More precisely, Phelan and Basow (2007) and Hinshaw

and Stier (2008) proposed that empathy and familiarity with mentally ill persons are negative predictors of stigma toward this patient group.

Based on this theoretical framework and on partial empirical results with other out-groups (such as ethnic or sexual minorities, immigrants, disabled or homeless people), the hypotheses are summarized in Figure 1.

1.4.1 | Direct relationships

H H 1 Quantity of contact (H1a), quality of contact (H1b) and perspective-taking (H1c) will negatively predict intergroup anxiety and social distance and positively predict professional preference.

H H 2 Intergroup anxiety will positively predict social distance and negatively predict professional preference.

H H 3 Social distance will negatively predict professional preference.

1.4.2 | Mediated relationships

H H 4 Intergroup anxiety will mediate the relationship of quantity of contact (H4a), quality of contact (H4b) and perspective-taking (H4c) with social distance.

H H 5 Social distance will mediate the relationship between intergroup anxiety and professional preference.

H H Intergroup anxiety and social distance will mediate the relationship of quantity of contact (H6a), quality of contact (H6b) and perspective-taking (H6c) with professional preference.

2 | METHODS

2.1 | Participants and procedure

Participants, aged 18 years or older (Mean = 21.76, *SD* = 3.55, range = 18–56 years), were 409 Social Work undergraduates from

four Spanish universities. The participants were 80.9% female ($n = 331$) and 17.6% male ($n = 72$). Fifteen of them (1.5%) did not answer this question. These ratios are consistent with the gender profile of Social Work students and social workers in Spain and other European countries. The undergraduates were studying the first ($n = 85$; 20.8%), second ($n = 124$; 30.3%), third ($n = 100$; 24.4%) and fourth year ($n = 96$; 23.5%) of their Bachelor degree in Social Work; four participants (1%) did not answer this question. Students were informed about the aims of the research and completed the questionnaire in the classroom or via Google Drive, from 7 to 11 min, between February and June 2020. All students freely volunteered to participate in the study and they could leave some items unanswered or finally not hand in the completed questionnaire.

The procedure used in this work respects the internationally proposed ethical guidelines, such as the 1964 Helsinki Declaration and its amendments, and was approved by the Ethical Committee of the Doctoral Program of Educational and Behavioural Sciences of the authors' university. No identifying information was requested.

Participants were informed about the objectives of the investigation and the ethical requirements, they voluntarily consented to participate in the project and were informed that they could leave some item unanswered or withdraw from the investigation at any time without any consequences for them.

Two sample criteria were taken into account to establish the sample size: it must be representative of the population and sufficient for the analyses to be carried out (SEM).

2.2 | Measures

The present is a cross-sectional study in which all the subjects answered the same questions, and there were no different conditions between groups or any other experimental manipulation in the collection of the data. The survey instrument was a self-reported questionnaire in Spanish with 25 items measuring six variables (Table S1). The following are all the scales applied in this work. In addition, the usual sociodemographic data (age, sex, grade, etc.) were collected.

2.2.1 | Contact: Quantity and quality

To assess contact, we adapted the instrument of Islam and Hewstone (1993). Quantity of contact with mentally ill persons was measured with four items asking the participants how much contact they had had in the past or the present in different situations (e.g., as neighbours), rating each item from 1 (*none at all*) to 7 (*a great deal*). Quality of contact also was assessed with four items. Two items asked about the frequency of participants' conversations with and visits to the home of mentally ill persons, both rated from 1 (*not at all*) to 7 (*very often*); two items rated the general tone of these interactions with mentally ill persons (i.e., superficial or pleasant), ranging from 1 (*not at all*) to 7 (*very much*).

2.2.2 | Perspective taking

To measure this main component of empathy, we applied the Social Perspective-Taking subscale included in the Interpersonal and Social Empathy Index Scale (Segal et al., 2013), with five items. The undergraduates were asked to rate how closely each item expressed their feelings or beliefs, on a 6-point scale ranging from 1 (*never*) to 6 (*always*). Example: "I believe that people who face discrimination have added stress that negatively impacts their lives".

2.2.3 | Intergroup anxiety scale

To assess the emotional component of anxiety, we applied the Intergroup Anxiety Scale (Stephan & Stephan, 1985). The undergraduates were asked to "Imagine that you are interacting alone with a group of people with mental illness. How would you feel in this situation, compared to occasions when you are interacting with people who did not have a mental illness"? Each item was rated from 1 (*not at all*) to 7 (*very*). Two of the four responses to assess anxiety were "nervous" or "relaxed" (reverse-coded).

2.2.4 | Social distance

We applied the subscale of Social Distance, from the Opening Minds Scale for Health Care providers (OMS-HC; Modgill et al., 2014). An example item is "I would not mind it if a person with a mental illness lived next door to me" (reverse-coded). Participants selected a response ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

2.2.5 | Professional preference

Previous research with social care providers has measured professional preference asking about: (a) "interest in working with" (Gewirtz-Meydan & Even-Zohar, 2018); (b) "a preference to work with" (Weiss et al., 2004); or (c) "the intention to treat people with" (Werner, 2012) referring to different patient groups, such as older people, mentally ill persons, prisoners or people with a dual diagnosis. In this study, we applied these three statements to measure professional preference for mentally ill persons. Participants rated each item from 1 (*strongly disagree*) to 7 (*strongly agree*).

2.3 | Statistical analysis

The analyses involved three stages. Firstly, confirmatory factor analysis (CFA), using the AMOS-24 software, was performed to test the adequacy of each measuring instrument, and subsequently, descriptive statistics, alphas and Pearson correlations were calculated using the SPSS-22. Secondly, structural equation models (SEM) were conducted to verify the suggested model of associations summarized

in Figure 1, testing the fit of the measurement and structural models (Byrne, 2016). Lastly, mediation was examined (Preacher & Hayes, 2008).

Mediation analysis seeks to identify an intermediary process (mediator) between an antecedent and an outcome (Wu & Zumbo, 2008). As an example from Figure 1, quality of contact (antecedent) is hypothesized to positively influence professional preference (outcome) by lowering intergroup anxiety (mediator). Mediation may be partial or full: in partial mediation, both the direct and the indirect effects between two variables are statistically significant; full mediation occurs when the indirect effect is statistically significant and the direct effect is nonsignificant.

3 | RESULTS

No cases of any experimental group or condition were excluded from the results presented; no outliers or questionnaires with random responses or high missing responses were detected, so the results include all the students who completed the questionnaires.

3.1 | Preliminary analyses

The CFA revealed that the expected models had acceptable fit to data for all the applied instruments (Byrne, 2016). All items obtained appropriate factor loadings, skewness and kurtosis (Table S2).

Except for quantity of contact, all reliability indices (alpha, composite reliability [CR] and average variance extracted [AVE]) were adequate (Table 1).

Regarding correlations, two groups of constructs could be differentiated: the first set included quantity and quality of contact, perspective-taking and professional preference; the second, intergroup anxiety and social distance. The variables correlated positively within their group and negatively between groups.

3.2 | Measurement model

We applied a two-step approach to confirm the proposed model of Figure 1. The first step tested the measurement model through a CFA. To reduce the number of indicators per latent variable, following the suggestions of Byrne (2016), the items of all the scales (except for professional preference) were parcelled to create two parcels for each scale. Thus, the measurement and the structural models included six latent variables and 13 indicators: three items for professional preference and two parcels for the other variables. All indicators showed adequate skewness and kurtosis (Table S3 and Figure S1). The measurement model, establishing covariances between all the latent variables, fit the data satisfactorily, $\chi^2/df = 2.87$, CFI = 0.969, TLI = 0.952, RMSEA = 0.068. The factor loadings (i.e., the correlations of indicators and variables) ranged from 0.36 to 0.97 ($p < 0.01$). All covariances between variables were significant ($p < 0.001$).

TABLE 1 Bivariate Pearson's correlations, descriptive statistics and reliability indices

	1	2	3	4	5	6
1. Quantity of contact	–					
2. Quality of contact	0.587	–				
3. Perspective taking	0.170	0.220	–			
4. Intergroup anxiety	–0.396	–0.455	–0.287	–		
5. Social distance	–0.263	0.374	–0.292	0.357	–	
6. Professional preference	0.369	0.438	0.261	0.503	–0.423	–
Mean	2.98	3.94	5.40	3.44	1.53	4.28
SD	1.31	1.82	0.60	1.31	0.64	1.72
Number of items (Item range)	4 (1–7)	4 (1–7)	5 (1–6)	4 (1–7)	5 (1–5)	3 (1–7)
Cronbach's alpha	0.62	0.90	0.70	0.75	0.81	0.94
Composite reliability (CR)	0.64	0.90	0.68	0.74	0.80	0.94
Average variance extracted (AVE)	0.34	0.69	0.55	0.62	0.69	0.92

Note: All correlations were significant ($p < 0.05$). The interpretation of CR is analogous to that of Cronbach's alpha; a CR ≥ 0.70 was considered appropriate. AVE indicates the percentage of variance of the factor captured by the items, compared with the error variance; an AVE close to or higher than 0.50 is considered an excellent value.

3.3 | Structural model

Then, using *SEM*, we tested the hypothesized associations between the variables proposed in [Figure 1](#). The model fit the data quite well. [Figure 2](#) shows the direct paths between constructs.

Regarding direct relationships, quantity of contact (H1a) negatively predicted intergroup anxiety; quality of contact (H1b) and perspective-taking (H1c) negatively predicted intergroup anxiety and social distance; the rest of associations proposed in Hypothesis 1 were nonsignificant. Intergroup anxiety positively predicted social distance and negatively predicted professional preference (Hypothesis 2). Social distance negatively predicted professional preference (Hypothesis 3). The proportions of explained variance were 37% for intergroup anxiety, 30% for social distance and 39% for professional preference.

3.4 | Mediation analyses

Next, the AMOS-24 software calculated the indirect effects between constructs, and the significance of each effect was established by the bootstrapping confidence interval (Preacher & Hayes, 2008). The results are summarized in [Table 2](#).

Regarding full mediation, intergroup anxiety mediated the relationship of quality of contact and social distance (H4a); intergroup anxiety and social distance mediated the association of quality of contact (H6b) and perspective-taking (H6c) with professional preference. In terms of partial mediation, intergroup anxiety mediated the influence of quality of contact (H4b) and perspective-taking (H4c) in social distance; social distance mediated the relation between intergroup anxiety and professional preference (H5). Finally, the mediational role of intergroup anxiety and social distance between quantity of contact and professional preference (H6a) was nonsignificant.

[Table 2](#) also includes the values of the squared semipartial correlations (sr^2). This coefficient indicates how much variance of a dependent variable (e.g., professional preference) is uniquely explained by an independent variable (e.g., quality of contact).

To conclude the analyses, we tested an alternative model to the proposed Model 1. Model 2, assuming full mediation between variables, obtained poorer fit indexes than those of the Model 1 ([Figure S2](#) and [Table S4](#)).

4 | DISCUSSION

Different authors have proposed theoretical frameworks linking professional preference with contact, empathy and social stigma. Some of these relationships were tested with patient groups different from mentally ill people, and never with samples of Social Work students or professionals. The present study analysed this model, referring to mentally ill persons, in a sample of Social Work undergraduates. Preliminary analyses verified the adequate psychometric properties of the applied scales.

4.1 | Main findings

First, the expected direct relationships of Hypothesis 1 were only partially confirmed. Social Work undergraduates with higher quantity and, especially, quality of contact with mentally ill persons and more empathy experienced less anxiety toward imagined contacts with these patients. Furthermore, undergraduates with higher quality contact and more empathy expressed less desire to maintain social distance from mentally ill persons. These findings support Stephan's (2014) assertion that individuals with low empathy are more predisposed to experience intergroup anxiety and negative attitudes toward out-groups because lower levels of empathy make it more difficult to understand and predict out-group members' behaviour. The results also confirm previous theoretical proposals and partial empirical findings referring to immigrants, ethnic and sexual minorities or homeless people. Cobarrubias and Han (2011), West et al., (2014) and Nitzan and Orkibi (2020) reported similar relationships with reference to mentally ill people.

Second, concerning stigma, undergraduates who experienced more anticipated anxiety when interacting with mentally ill persons also felt less desire to include these people in their social network and showed less intention to care for these patients in the future (Hypothesis 2). Analogously, students who were less willing to interact with mentally ill people also declared less preference for this group as a future vocational option (Hypothesis 3). These findings partially confirm previous research with different samples of other stigmatized groups. In Social Work, less negative attitudes toward poor people were associated with increased interest to work with this group (Weiss, 2006), whereas positive attitudes were facilitators of intentions to treat disabled (Werner & Grayzman, 2011) or mentally ill people (Werner, 2012).

Third, concerning mediated relationships, Social Work undergraduates with higher-quality contact with mental illness and more empathy showed less desire to maintain social distance from these patients (partially) because they experienced less anxiety about possible interactions with these persons (H4b and H4c). Instead, although the indirect effect of the quantity of contact on social distance was significant (H4a), the total effect was nonsignificant. The mediational role of intergroup anxiety between intergroup contact (especially for quality) and social distance has been broadly established for different stigmatized groups, such as racial and sexual minorities, immigrants, homeless and disabled people. However, Social Work students or professionals did not participate in any of these studies; furthermore, we know of no research evaluating the relationships between these variables referring to mentally ill persons.

Additionally, the students who expressed more anxiety imagining interactions with mentally ill persons were less interested in working with this group (partially) because they preferred more social distance from these persons (Hypothesis 5). Finally, the undergraduates with more empathy and quality of contact with mentally ill persons showed more future professional preference for this patient group because they experienced less anxiety when imagining interactions with these patients and they expressed less desire to

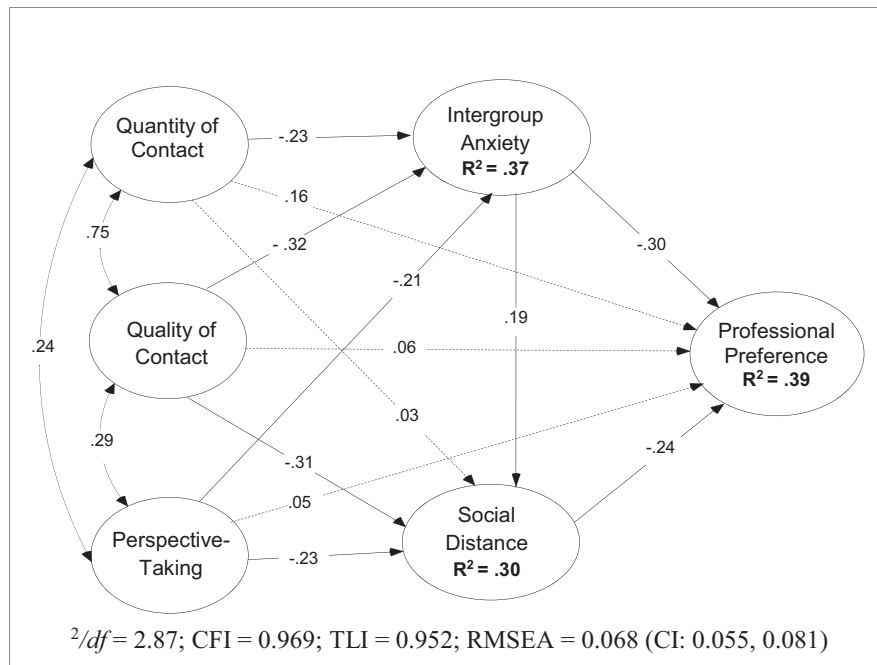


FIGURE 2 Standardized values of the structural equation model of relations (Model 1). Dashed lines represent no significant paths ($p > 0.05$)

maintain social distance from them (H6b, H6c). These findings support the theoretical model of associations between these constructs suggested by Segal et al. (2012) and Stephan (2014). We have found no empirical research testing this model with these variables. Once again, the role of anxiety and distance mediating the relationship between quantity of contact and professional preference was non-significant (H6a).

4.2 | Limitations and future research

Nonetheless, these results should be considered with caution, given some shortcomings. First, as the examined data were obtained through self-report questionnaires (like most of the reviewed empirical research), the associations between constructs may be affected by common variance bias. Second, the cross-sectional design of this study does not allow for the establishment of causality between constructs. Third, this study explained only 38% of the variance of professional preference; future research could analyse other predictors of preference, such as educational preparation or self-efficacy, to explain a higher proportion of the variance of this decisive vocational outcome. Fourth, only quantitative data were obtained in this study. Future qualitative work could complement these results and allow us to achieve greater and more detailed understanding of the subtle emotional components of the participants' perspectives related to stigma toward and preference for mentally ill persons. Finally, the present study analysed the measured variables referring to mental health in a convenience sample of Spanish Social Work undergraduates. Nevertheless, the results might be extrapolated to other stigmatized groups and health careers for two reasons:

previous research taken as the basis of the present work involved many patient groups other than mentally ill people; furthermore, in many investigations, participants were students and professionals from diverse health careers, such as nurses, doctors or psychologists. Future investigations might try to verify these results referring to different stigmatized groups and evaluating samples from diverse mental health careers.

4.3 | Practical implications

In concordance with previous research, these findings encourage actions aimed at reducing intergroup anxiety and social distance from mentally ill persons. The Mental Health Action Plan 2013–2020 (WHO, 2013) also proposed universal and targeted interventions to combat and reduce stigmatization and discrimination. These actions include protest strategies or social activism, contact and education (Gronholm et al., 2017; Maunder & White, 2019). The last two were the most frequent among healthcare professionals.

Contact or familiarity interventions involve exposure to mentally ill persons and are intended to reduce prejudice and anxiety, increasing empathy (Morgan et al., 2018), and they should include direct and indirect contact (Maunder & White, 2019). Direct or face-to-face contact is the most habitual type. The indirect contact refers to vicarious contact, imagined contact, contact via video and e-contact. These interventions were effective to enhance empathy and reduce stigma toward mental illness in people with low or medium familiarity with this group (Corrigan & Nieweglowski, 2019), in the general population (Maunder & White, 2019; Morgan et al., 2018) and healthcare professionals (Gronholm et al., 2017).www

TABLE 2 Direct, indirect, and total effects between variables (standardized values)

Predictor → criterion	Direct effects			Sum (p) ^a	Indirect effect		Total effect (p)
	β (p)	CI	sr ²		CI		
Full mediation							
Quantity of contact → Social distance (H4a)	0.031 (ns)	-0.157, 0.234	0.0001	-0.043 (0.042)	-0.099, -0.006	-0.012 (ns)	
Quality of contact → Professional preference (H6b)	0.064 (ns)	-0.148, 0.264	0.0132	0.186 (0.001)	0.109, 0.265	0.250 (0.025)	
Perspective-taking → Professional preference (H6c)	0.046 (ns)	-0.63, 0.150	0.0032	0.127 (0.001)	0.072, 0.186	0.173 (0.004)	
Partial mediation							
Quantity of contact → Social distance (H4b)	-0.310 (0.003)	-0.494, -0.110	0.0334	-0.061 (0.025)	-0.122, -0.014	-0.370 (0.001)	
Perspective-taking → Social distance (H4c)	-0.229 (0.005)	-0.382, -0.070	0.0299	-0.039 (0.019)	-0.072, -0.010	-0.268 (0.001)	
Intergroup anxiety → Professional preference (H5)	-0.310 (0.003)	-0.419, -0.163	0.0650	-0.061 (0.025)	-0.122, -0.014	-0.370 (0.001)	
No mediation							
Quantity of contact → Professional preference (H6a)	0.158 (0.109)	-0.046, 0.359	0.0054	0.072 (0.060)	0.009, 0.140	0.229 (0.023)	

Abbreviations: CI, confidence interval; ns, no significant path ($p > 0.05$); sr², squared partial correlation.

^aThe probability associated with each standardized indirect effect was calculated through the two-sided bias-corrected confidence interval (CI) bootstrap test of AMOS-24, with a 95% CI and 5,000 samples.

Educational interventions have focused on dispelling stereotypes and reducing stigma by providing factual information that contradicts inaccurate stereotypes and prejudices (Gronholm et al., 2017; Morgan et al., 2018). These interventions highlight the prevalence of serious mental health diseases, the manifestations of stigma, exclusion and discrimination, and the adverse effects of stigma on the lives of mentally ill persons (Rubio-Valera et al., 2018; Strassle, 2018). Furthermore, education emphasizes the importance of positive attitudes toward mentally ill people and the expectations of recovery, and provide the necessary skills to support and interact with these persons.

A synthesis of both modalities is “contact-based education” (Gronholm et al., 2017; Maunder & White, 2019), in line with the recommendations of other authors (Corrigan & Nieweglowski, 2019; Morgan et al., 2018). These actions provide participants with educational information about mental illness, tailored to a target group, either during contact with mentally ill persons or before or after such contact. Contact-based education was effective to reduce mental illness stigma of Social Work (Rubio-Valera et al., 2018), Psychology (Petkari, 2017; Strassle, 2018), Nursing (Fokuo et al., 2017; Itzhaki et al., 2017) and Medicine undergraduates (Eksteen et al., 2017).

5 | CONCLUSION

This study revealed that Social Work undergraduates' professional preference for mentally ill persons was negatively predicted by intergroup anxiety and social distance, and (adding direct and indirect effects) was positively predicted by quantity and quality of contact and by perspective-taking. As a main finding, the study revealed that empathy and quality of contact with mentally ill people make future professional preference for this patient group more likely, mainly by lowering the intensity of intergroup anxiety and social distance (i.e., social stigma) toward these patients, two powerful hindrances for this intention of care. Compared with quality of contact, the relevance of quantity of contact was weaker.


AUTHOR CONTRIBUTIONS

All authors have made substantial contributions to the study, designing, drafting or reviewing the different versions of the manuscript for intellectual content. All authors have approved the final version of the manuscript. All authors agree to be accountable for all aspects of the manuscript.

DATA AVAILABILITY STATEMENT

Data supporting the findings of the present study are available from the corresponding author upon request.

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