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The Effects of Age and Gender on Adolescent Mental Health Stigma. An International Study in the Iberian Peninsula

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ABSTRACT

Background: Mental health stigma is a phenomenon present in adolescents. Age or gender are important variables to provide further intervention on stigma in this population. Method: A descriptive cross-sectional study was conducted on a sample of 459 adolescents from the Iberian Peninsula (n = 230 from Spain and n = 229 from Portugal). Sociodemographic, stigmatizing attributions, and desire for social distance were assessed. Descriptive, mean differences, and mediational models were carried out. Results: Findings revealed that the relationship between stigmatizing attributions and social distance is differently moderated by age and gender. In boys, the influence of attitudes on the desire for social distance increases with age, while in girls this influence is stronger when they are younger. Conclusions: These findings can contribute to guiding policies and tailored interventions for social inclusion and stigma reduction..

Los efectos de la edad y el género en el estigma de la salud mental de los adolescentes. Un estudio internacional en la península ibérica

RESUMEN

Antecedentes: El estigma asociado a los problemas de salud mental es un fenómeno presente en la adolescencia. La edad o el género son variables importantes para intervenir sobre el estigma en esta población. *Método*: Se realizó un estudio descriptivo transversal sobre una muestra de 459 adolescentes de la península ibérica (n = 230 eran de España y n = 229 eran portugueses). Se evaluaron las características sociodemográficas, las atribuciones estigmatizantes y el deseo de distancia social. Se aplicaron modelos descriptivos, de diferencias de medias y mediacionales. *Resultados*: Se muestra que la relación entre las atribuciones estigmatizantes y la distancia social está moderada de forma diferente por la edad y el sexo. En los chicos, la influencia de las actitudes sobre el deseo de distancia social aumenta con la edad, mientras que en las chicas esta influencia es mayor cuando son más jóvenes. *Conclusiones*: Los resultados pueden ayudar a orientar políticas e intervenciones adaptadas a la inclusión social y la reducción del estigma.

In adolescents, mental health (MH) stigma has been found to contribute to concerns about being different, leading to poor quality of life (Telesia et al., 2020), distancing themselves from their peers and avoiding talking about their problems (Ferrie et al., 2020). In addition, adolescents may have stigmatizing attributions (SA) due to social pressure to behave in certain ways and appear to work well in front of their peer group (YMCA, 2016), as it is an age where social relationships play a key role.

Age is a particularly significant variable in the investigation of stigma in adolescents. Knowing when stigma appears in this population is critical, and the changes in interpersonal relationships and greater integration into culture and society that follow the development may condition mental health stigma. Adults, compared to adolescents, report fewer stigmatizing attributions, likely due to increased knowledge and contact with the mental health (Bradbury, 2020). However, the role of age throughout adolescence and its relationship to stigma is poorly understood. Another important variable is gender, as differences between boys and girls become more evident and have more impact on adolescents. In adults, research points to mixed results regarding

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gender (Zamorano et al., 2023), while some studies in adolescents suggest that girls have less stigma than boys (Calear et al., 2017; González-Sanguino et al., 2024). More research is needed to clarify this relationship. This study aims to explore the impact of age and gender on stigmatizing attributions (SA) and desire for social distance (DSD) in a sample of adolescents of the Iberian Peninsula.

Method

Participants

A total of 459 adolescents participated in the study. The mean age was 14.17 years, with a slightly higher proportion of females (50.8%). Participants' families belonged mostly to a medium socioeconomic level (49.5% vs. low 23.7% and high 26.8%), and only 13.1% of the adolescents reported having a mental health problem. Although the two samples from Spain (n = 230, 50.1%) and Portugal (n = 229, 49.9%) were equivalent in terms of size and characteristics, in Portugal, we found younger (10 and 11 years, 12.7%) and older (17 years, 11.1%) adolescents, as well as a slightly higher proportion of males (57.6% vs. 40.9% in Spain).

Instruments

Sociodemographics

Sociodemographics were evaluated using ad hoc questions answered by the parents: gender (male, females), age, socioeconomic level (average household salary, then classified as low, medium, high according to the minimum and average salary of each country).

Stigmatizing Attributions

They were evaluated by the Attributions Questionnaire, Reduced Version (AQ-R), a self-report questionnaire adapted for adolescents derived from the Attribution Questionnaire 27 version (Corrigan et al., 2003; Pinto et al., 2012). A vignette with a case study of an adolescent with different mental health problems is presented, and the participants answer eight items (Likert scale, from1 = not at all to 8 = very much) regarding eight dimensions: responsibility, pity, anger, help, exclusion, dangerousness, fear, and avoidance. Due to problems in the interpretation of the Help dimension, this item was removed for data analysis. Adequate levels of reliability were obtained: Cronbach's alpha = .74, and McDonald's omega = .74.

Desire for Social Distance

This variable was evaluated by the Social Distance Scale developed by Link et al. (1987). The same vignette is included and then items about social distance in different degrees of closeness are included: neighbor, friendship, partner, pet caregiver and "just talk" (5-point Likert scale, 1 = do not agree at all, 5 = strongly agree). Good levels of reliability were obtained: Cronbach's alpha = .88 and McDonald's omega = .89.

Procedure

Descriptive cross-sectional study was carried out through an online survey to collect information from adolescents between 10 and 17 years. The evaluation protocol consisted of sociodemographic questions for the family, and then questions for the adolescents. In Portugal, data were part of a larger research within WeARTolerance project, collected between January 2023 and June 2024. Snowball

and convenience sampling were used to recruit participants. Data from Spain were part of the project Stigma and Discrimination in Childhood, collected during October-December 2023 by stratified random sampling for age, gender, and territorial distribution in a panel sample. An equivalent subsample to the Portuguese sample was randomly selected. The research received approval from the Ethics and Deontology Committee of the Psychology and Life Sciences of Lusófona (CEDIC-2022-17-07) University and University of Valladolid (PI 23-3245NOHCUV 27/07/2023).

As for descriptive analyses, Student's t-means difference and ANOVA analyses were carried out according to sociodemographic groups. To examine the potential moderating effects of gender and age on the relationship between attributions and desire for social distance, we employed Model 3 of the PROCESS macro for SPSS. SPSS 29.0.2.0 software was used to perform all analyses, which were carried out with a level of significance defined at p < .05. To calculate effect sizes, we used Cohen's d as the effect size index for independent samples t-tests, providing a standardized measure of the magnitude of differences between groups. For ANOVAs, we reported eta squared (η^2) to quantify the proportion of variance explained by the independent variables. In the moderation analysis, we used R^2 to represent the overall variance explained by the regression models and ΔR^2 to assess the incremental variance explained by the addition of main effects and interaction terms, providing insight into the strength of the moderation effects.

Results

Stigmatizing Attributions and Desire for Social Distance

The results show slightly lower levels of stigma below the questionnaire mean for the AQ-R and slightly higher levels for the desire for social distance, indicating the presence of stigma. Regarding desire for social distance, significant differences were found, with adolescents from Portugal presenting more, $t_{(457)} = 10.79$, p < .0.1, with a large effect size (d = 1.84). Additionally, higher desire for social distance was also found in males, $t_{(457)} = 2.89$, p = .02, with a medium effect size (d = 0.27), and older adolescents, $F_{(2.456)} = 6.37$, p = .002, with a small effect size ($\eta^2 = .30$). Table 1 presents in detail these results.

Relationship between Stigmatizing Attributions and Desire for Social Distance

The simple linear regression model, with Stigmatizing Attributions as the predictor of desire for social distance, explained 6.1% of the variance ($R^2=.061$). When the main effects of the moderators (age and gender) were added, the multiple regression model explained 9.7% of the variance ($R^2=.097$), with a significant increment of $\Delta R^2=.036$, $F_{\rm change}$ (2, 455) = 9.079, p<.001. Adding the interaction terms in the full model further increased the explained variance to 11.8% ($R^2=.118$), with a smaller but still significant increment of $\Delta R^2=.022$, $F_{\rm change}$ (4, 451) = 2.78, p=.026. The overall model was significant, F(7,451)=8.65, p<.001.

A significant three-way interaction term was found (β = -.01, t = -2.38, p = .02), showing that the effect of stigmatizing attributions on the desire for social distance is moderated by the combined influence of age and gender (Figure 1). For males, the conditional effects of stigmatizing attributions on the desire for social distance varied across different ages. At younger ages, the effect was not significant (β = .01, SE = .01, t = 1.53, p = .127). For middle ages, the effect was significant and positive (β = .02, SE = .01, t = 2.99, p = .003). At older ages, the effect remained significant and positive (β = .02, SE = .01, t = 2.98, p = .003). For females, the conditional effects of stigmatizing attributions on the desire for social distance

Table 1. General Results and Mean Differences according to Sociodemographic Characteristics of the Sample in Stigmatizing Attributions and Desire for Social Distance

	Stigmatizing Attributions					Desire for Social Distance				
	M	SD	CI	t	d	M	SD	CI	t	d
Country										
Portugal	20.24	8.88	7, 63	-1.06	-0.09	13.41	2.15	8, 20	19.79**	1.84
Spain	21.10	8.47	7, 53			8.97	2.64	4, 19		
Gender										
Male	21.04	9.04	7, 63	0.89	0.08	11.64	3.41	4, 20	2.00*	0.27
Female	20.32	8.31	7, 53			10.75	3.07	4, 19	2.89*	
				F	η^2				F	η^2
Age										
10-12	21.68	8.94	7, 53		.004	10.78	3.33	4, 19		.03
13-15	20.39	8.20	7, 63	0.95		10.86	3.33	4, 20	6.37*	
16-17	20.32	9.17	7, 63			12.00	3.00	4, 18		
Socioeconomic S	tatus									
Low	20.56	8.50	7, 43	0.59	.003	9.03	3.02	4, 17		.15
Average	20.35	7.81	7, 53			11.26	3.26	4, 19	40.05	
High	21.39	10.24	7, 63			12.73	2.83	5, 20		
Total	20.67	8.68	7, 63			11.19	3.28	4, 20		

Note. M = mean; SD = standard deviation; CI = confidence interval; t = Student's t - test; t = Cohen's t + test; t = test; $t = \text{test$

also varied across different ages. At younger ages, the effect was significant and strong (β = .04, SE = .01, t = 5.35, p < .001). For middle age, the effect remained significant and positive (β = .03, SE = .01, t = 4.34, p < .001). However, at older ages the effect was not significant (β = .01, SE = .01, t = 1.2146, p = .225).

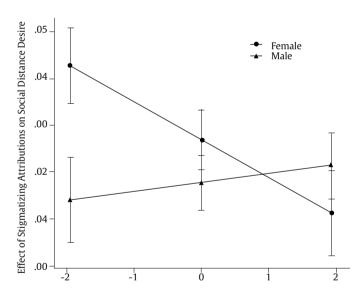


Figure 1. Moderating Effects of Gender and Age on the Relationship between Stigmatizing Attributions and Desire for Social Distance.

Discussion

The present research reveals the relationship between stigmatizing attributions and the desire for social distance among adolescents in the Iberian Peninsula, and how this relationship is moderated in a differentiated way by sociodemographic variables. The results show how stigma towards other adolescents with mental disorders is present in both countries at both cognitive and behavioral levels. This is consistent with other studies, which also revealed the existence of stigma in this population, and its presence can be justified by the limited literacy about MH, social pressure to appear well, and negative views regarding MH problems (Bradbury, 2020; YMCA, 2016). The results indicate significant stigma among Portuguese adolescents,

as reflected by higher desire-for-social-distance scores. Spain has historically been proactive in promoting mental health initiatives, such as through campaigns and policies that normalize seeking help. In Portugal, limited advocacy and funding might contribute to less normalized views of mental health among youth (Caldas-de-Almeida & Killaspy, 2011).

Gender and age also play critical roles, with males and older adolescents showing higher levels of stigma. Previous studies support that males, due to traditional gender norms, and older adolescents, exposed to more societal stereotypes, tend to exhibit greater stigma. This can also be explained by cultural and learning biases, where in general in our culture there are still many gender differences, and there is still an emphasis on girls being more polite, kind, and caring, and boys have to deal with traditional masculinities dealing with MH problems, "boys don't cry" (Vogel et al., 2011). Therefore, when faced with behavioral intentions girls seem to be more inclusive, or at least seem to have greater social desirability and respond according to "what is expected of them." However, younger females show a strong positive link between stigmatizing attributes and desire for social distance, aligning with research indicating that young people internalize societal stigma more acutely (Corrigan & Watson, 2002). This relationship weakens with age, suggesting evolving attitudes towards mental health, possibly due to maturity and greater awareness. The influence of age and gender is complex to interpret, and the existing reviews generally show mixed results (Zamorano et al., 2023). Still, the presence of poorer attributions has been also found in male adolescents (Calear et al., 2017), and the improvement of stigmatizing attributions with age has also been found in another research (Bradbury, 2020; Mackenzie et al., 2019). The implications of the moderating effects found are clear for intervention to reduce or prevent stigma: intervention would benefit from a gender and age-sensitive approach. Boys, in general, have more stigma, and awareness programs would be beneficial both in youth, to prevent the phenomenon from appearing, and as they get older, focusing on attitudes (which we know will have a greater effect on behavior with age). For girls, interventions at an early age, where the attitudebehavior connection is stronger, would be more beneficial.

Some limitations of the study are the different methods of recruiting participants, which may have led to biases in the sample, which is not representative of the adolescent population of the Iberian Peninsula. Additionally, few adolescents with mental health problems participated in the study. On the other hand, although

the instruments used were the same and have been used in previous studies in both countries, the lack of cultural validation of the instruments may also have affected some results. Finally, it is necessary to take into account the cross-sectional nature of the study and its limitations for the generalization of the results.

The findings emphasize the role of cultural factors in shaping mental health stigma among adolescents in the Iberian Peninsula. Targeted anti-stigma interventions, especially for younger individuals, should address traditional gender roles and societal expectations. Raising awareness and intervening in both countries is crucial, and the developed mediational model can help design more effective interventions. Future research should explore the impact of educational programs, social media, and the role of family and community in shaping adolescents' attitudes toward mental health.

Highlights

- This is the first comparative study in the Iberian Peninsula on mental health stigma in adolescents and reveals that stigma exists among adolescents in the Iberian Peninsula.
- Stigma toward mental health varies by age and gender. The influence of attitudes and behavior is greater in young girls, while this relationship in boys increases with age.
- The approach to stigma in awareness campaigns or intervention programs for adolescents should be age- and gender-sensitive.

Conflict of Interest

The authors of this article declare no conflict of interest.

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