Attitudes towards transgender people in the university community

Actitudes hacia las personas transexuales en la comunidad universitaria

David Martin-Castillo ⓘD | david.martin@um.es
University of Murcia, Spain

José Joaquín García-Arenas ⓘD | jjgarcia2@ucam.edu | Correspondence author
Catholic University of San Antonio de Murcia, Spain

María del Mar Pastor-Bravo ⓘD | marpastorbravo@um.es
University of Murcia, Spain

María Sánchez-Muñoz ⓘD | maria.sanchez10@um.es
Murcia Health Service, Spain

José Antonio Jiménez-Barbero ⓘD | joseantonio.jimenez1@um.es
University of Murcia, Spain

Abstract

Several studies have indicated the existence of transphobic attitudes in the education system. This extends to the university community, which has negative psychosocial consequences in trans people. The objective of this study is to analyze the attitude of university students towards trans people. A cross-sectional correlational design was used with a sample of 1701 university students aged between 18 and 68 years. The results show the presence of negative attitudes towards trans people in the university community. It also shows the existence of a relationship between these attitudes and other variables, such as empathy, self-esteem, and parental styles. Our results indicate that university students' negative attitudes towards trans people could be related to psychological and social variables such as empathy, self-esteem, and parental styles, which points to a probable relationship between parental styles and empathy in children. Among the implications for practice, the importance of promoting inclusive attitudes and acceptance of diversity in school and university education is suggested, with programs focused on the development of empathy and self-esteem.

Keywords: transphobia, transgender, attitudes, parental styles, empathy, self-esteem.

Resumen

Varios estudios han indicado la existencia de actitudes transfóbicas en el sistema educativo. Esto se extiende a la comunidad universitaria, lo que tiene consecuencias psicosociales negativas en las personas trans. Objetivos: El objetivo de este estudio es analizar la actitud de los estudiantes universitarios hacia las personas trans. Se utilizó un diseño correlacional transversal con una muestra de 1701 estudiantes universitarios con edades entre 18 y 68 años. Los resultados muestran la presencia de actitudes negativas hacia las personas trans en la comunidad universitaria. También muestra la existencia de una relación entre estas actitudes y otras variables, como la empatía, la autoestima y los estilos parentales. Nuestros resultados indican que las actitudes negativas de los estudiantes universitarios hacia las personas trans podrían estar relacionadas con variables psicológicas y sociales como la empatía, la autoestima y los estilos parentales, lo que apunta a una probable relación entre los estilos parentales y la empatía en los hijos. Dentro de las implicaciones para la práctica se sugiere la importancia de fomentar actitudes inclusivas y de aceptación de la diversidad en la formación escolar y universitaria, con programas centrados en el desarrollo de empatía y autoestima.

Palabras clave: *transfobia, transexualidad, actitudes, estilos parentales, empatía, autoestima.*

Summary

1. Introduction I 2. The present study I 3. Method I 3.1. Participants I 3.2. Procedure and Design I 3.3. Measures I 3.4. Data analysis I 4. Results I 5. Discussion I 6. Limitations of the study I 7. Implications for Practice I 8. Conclusions I References.

How to cite this work

1. Introduction

The figures for discrimination against transgender people worldwide are currently alarming. According to the survey conducted by the European Union Agency for Fundamental Rights in 2014, 54% of trans respondents reported discrimination and harassment. Moreover, 2,115 murders of trans people were reported worldwide between 2008 and 2016 (Transgender Europe, 2016).

The young transgender population is considered particularly vulnerable due to marginalization, stigma, and normative pressure against gender minorities (Wahlen *et al.,* 2020). Trans youth face personal and interpersonal challenges associated with the process of communicating their sexual identity, so many phases are experienced as difficult. Unlike other minorities, sometimes, these people do not have the support of their parents or other relatives and are therefore particularly fragile (Kcomt, 2019). To this is added that they suffer different forms of violence, among which predominate physical and verbal violence, leading to a greater frequency and intensity of internalizing psychological problems such as depression, anxiety, body image disorders, and eating disorders (Valentine & Shipherd, 2018).

Furthermore, trans people have been found to have a higher risk of suicide compared to cisgender people (Wolford-Clevenger *et al.*, 2017). Expectations of rejection and discrimination coupled with intense psychological pain, such as internalized transphobia, can foster severe suicidal ideation (Testa *et al.* 2017). Likewise, associated environmental correlates, such as social rejection, stigma, and disengagement, support the theory that social connection would buffer suicidal ideation (Wolford-Clevenger *et al.*, 2017). In this sense, different authors have considered that the minority stress model (Meyer, 2003), originally developed as a conceptual framework to explain prejudice, social stress, and mental health among lesbian, gay and bisexual populations, can also be applied to transgender and non-gender-conforming populations (Hendricks & Testa, 2012). The model's adaptation to transgender populations, described by Hendricks and Testa (2012), applies the original concepts designed to interpret the stress and discrimination experienced by people from sexual minorities to the transphobic experiences and attitudes suffered by the trans community.

Transphobic attitudes are particularly worrisome in the educational field, where some authors have reported that the trans collective suffers more victimization from bullying than other students (Martin-Castillo *et al.*, 2020). In this regard, a study carried out in Austria found that 29% of trans university students claimed to have felt discriminated against at the university in the past year (Kajaerum, 2014). Transphobic attitudes at the university level become particularly relevant when considering that future professionals must carry out their work in a social environment where diverse gender identities coexist (Pichardo & Puche-Cabezas, 2019).

At present, different factors influence university students' attitudes towards trans people, including lack of formation in this issue in the school setting, the lack of resources to promote the integration of trans people in school, education by the parents, and the families' socioeconomic level (Martin-Castillo *et al.*, 2020). In this sense, studies such as that of Bukhary *et al.* (2016) refute that there are gender differences in students' attitudes towards this group, that is, that one gender shows greater transphobic attitudes than the other. Their results, however, contradict other authors such as Nagoshi *et al.* (2008) or Jami (2012), who pointed to increased transphobia among males. Bukhary *et al.* (2016), on the contrary, states that other factors, such as religiosity or frequent interaction with trans people, could underlie transphobic attitudes among young people.

2. The present study

The literature review informs us that little research has been performed to date on university students' attitudes towards transgender people. Moreover, most of these studies have focused on health science students (Wahlen *et al.* 2020). The reviewed authors agree about the need to include the gender diversity approach in universities' curricula, with special emphasis on knowledge and understanding of trans people (Goldman & McCutchen, 2012).

In Spain, Ozamiz-Etxebarria *et al.* (2020) analyzed students' discrimination towards trans people at the University of the Basque Country. Their findings confirm that students possess a very limited understanding of transgender identity. For their part, Pichardo and Puche-Cabezas (2019) analyzed the context of the Lesbian, Gay, Bisexual Trans (LGBT) population in Spanish universities, concluding that more studies are needed to discover the university reality of the trans community.

In this line, the literature highlights the need to investigate attitudes towards trans people to ensure a society free of prejudice and educated in the field of gender identity (Scandurra *et al.*, 2017). The few studies that have focused on this issue (Ozamiz-Etxebarria *et al.*, 2020; Worthen, 2012) provide diverse and interesting approaches to students' attitudes towards trans people. Worthen (2012), for example, who included the entire LGBT community in his study and not just trans people, pointed to sexual orientation and beliefs about sexuality as universal predictors of attitudes toward these groups. The aforementioned study of Ozamiz-Etxebarria *et al.* is based exclusively on the use of a transphobia scale, the Genderism Transphobia Scale (GTS), and some social variables, reaching encouraging conclusions: generally positive attitudes towards trans people despite observing little knowledge about them among college students. These authors present gender as a modulating factor, with greater transphobia among males, which contrasts with the results of Bukhary *et al.* (2016).

The variables used during the statistical analysis are those that have been considered as determinants in the possible development of transphobic attitudes.

The concept of empathy has gone through a period of continuous construction. Lamm *et al.* (2019) suggested that empathy is a personality type or stable trait of feeling and understanding the emotions of others, including affective and cognitive factors. Affective empathy refers to emotional exchange in terms of other people's situations, while cognitive empathy means emotional recognition and understanding. However, empathic behavior, such as prosocial behavior due to affective or cognitive empathy, is also believed to be a component of empathy.

Along with empathy, it is worth noting the role that self-esteem plays in the psychological well-being of people. The different models and theories that address this variable underline its influence on the social dimension of the individual. We are psychosocial creatures, and our self-esteem is based on pleasant social experiences. Through socialization, the family and groups strongly influence the lifestyle of the individual, the set of beliefs, values, etc., which will serve as the basis for the development of self-esteem (García *et al.*, 2019).

Both variables would be related to the educational styles received in childhood and adolescence, due to their influence on the child's educational process and their social development. Parenting styles are very important as the first focus in which a person is placed, constituting one of the factors that influence the formation of a person's character and mental health. Likewise, the family environment is the first and most enduring factor that affects the development of the human personality. In general, the attitude and behavior of parents in the educational process can facilitate or hinder the growth and development of the child. Parents are the founders of an important part of the destiny of children and play an important role in determining the future lifestyle, morale, health and performance of the individual in the future. On the other hand, they can negatively affect you through methods such as constant affection, excessive domination, excessive protection, and excessive compassion (Wagers & Kiel, 2019).

The present study completes the above-mentioned results, combining two instruments to evaluate attitudes towards transgender people, the GTS and the "Escala de Actitudes Negativas hacia Personas Trans" (EANT, [Trans Negative Attitudes Scale]), to analyze their correlation, considering gender as a modulating variable. In addition, other variables that are related to transphobic attitudes and bullying, such as self-esteem, parental styles, and empathy, are measured (Jiménez-Barbero *et al.*, 2016; Martin-Castillo *et al.*, 2020). Therefore, we believe that our study shows a more complete analysis of students' attitudes towards trans people, as well as the different variables that influence them.

The main objective of our work was to study university students' transphobic attitudes as a function of gender. Some secondary objectives were also proposed: (a) to examine the relationship between personality variables (empathy and self-esteem) and negative attitudes towards trans people in the university population and (b) to review the influence of parental styles on such attitudes.

3. Method

3.1. Participants

The study population was made up of students from different Spanish universities. A sample size estimate was made, considering a reference population of 1,633,358 university students registered in Spain (Instituto

Nacional de Estadística [INE], 2020), and for a 99% confidence level and absolute accuracy of 2%, resulting in an estimated sample size of 1,143 students. The final sample of our study was 1701 students from different university areas, both undergraduate and postgraduate, so it exceeded the initial estimate. Of these, 1261 were female (71.1%), 463 were male (27.1%), and 22 people defined themselves as non-binary (1.3%). The age of the sample ranged from 18 to 68 years *(M* = 24.40, *SD* = 6.38). The gender bias obtained was due to the greater participation of girls in the study, as well as the fact that there was a greater presence of female students in the faculties surveyed. These gender differences have been taken into account in the choice of statistical analysis methods. Table 1 shows that most students came from two-parent families and most of the parents of the participants had university studies.

Table 1. Sociodemographic characteristics

Variables	Attributes	*n*	%
Gender	Male	463	27.1
	Female	1261	71.1
	Non-binary gender	22	1.3
Age	<30	1479	86.9
	30-50	202	11.8
	>50	20	1.1
Type of university studies	Degree	1268	74.1
	Postgraduate	433	25.5
Branch of knowledge	Art and Humanities	336	19.6
	Sciences	248	14.5
	Health Sciences	471	27.5
	Social and Legal Sciences	524	30.6
	Engineering and Architecture	82	4.8
	Programming official studies	40	2.3

Source. Own elaboration.

3.2. Procedure and design

The study was carried out during the 2019-2020 academic year. A cross-sectional design was used with a sample of university students from the following universities: University of Murcia (95.67%), Polytechnic University of Cartagena (0.05%), University of Castilla La Mancha (1.05%), Nebrija University (0.05%), University of Malaga (0.05%), University of Oviedo (0.05%), University of Zaragoza (0.99%), Pablo de Olavide University (0.05%), University of Valencia (0.05%), and Miguel Hernández University of Alicante (1.87%).

The protocol used includes a 148-item questionnaire, which was completed by the students in about 20 minutes in most cases. This instrument collected sociodemographic variables as well as the study variables. The questionnaire was completed online, through tools provided by the University of Murcia, in which the anonymity of the respondent was guaranteed through the automatic assignment of numerical codes. The initial welcome page of the questionnaire included the cover letter of the study and the informed consent, in which it was specified that participation was anonymous and voluntary. Acceptance of informed consent was an essential requirement to access the questionnaire.

The entire study took into account the Organic Law 15/99 of 13 December on the Protection of Personal Data, as well as the principles of the Helsinki Declaration of the World Medical Association. This research was also approved by the Ethics Committee of the University of Murcia.

3.3. Measures

Sociodemographic variables. These included age, gender, parents' educational level, type and branch of university studies, average grade last trimester, country of origin, and the people they lived with. Age was

classified into three groups: I (under 30 years), II (30-50 years), and III (over 50). The item "people you live with" was divided into four categories: (a) I live with my father and my mother, (b) I live with my mother, (c) I live with my father, (d) roommates, and (e) I live alone. The parents' educational level was classified as: (a) primary studies, (b) secondary studies, (c) high school, and (d) university studies. The Cronbach's α presented corresponds to our study sample.

Genderism. The Genderism and Transphobia Scale (GTS; Hill & Willoughby, 2005) was used to analyze negative attitudes towards trans people. It evaluates the cognitive (gender), affective (transphobia), and behavioral (gender bashing) components of negative attitudes. However, the final dimensionality of the scale consists of two factors: Transphobia, which includes 25 items (Cronbach α = .89); (*i.e., "Children should be encouraged to explore their masculinity and femininity"*), and Gender Bashing, which has 7 items (Cronbach α = .82); (*i.e., "I have behaved violently with a woman because she was too masculine"*). The items are rated on a Likert scale, ranging from 1 (*totally agree*) to 7 (*strongly disagree*). All items except for Items 5, 8, 23, and 26 have a direct score. This scale has been translated and validated in various cultures (Ozamiz-Etxebarria *et al.*, 2020).

Negative attitudes. We used the "Escala de Actitudes Negativas hacia las personas Trans" (EANT [Trans Negative Attitudes Scale]; Francia Martínez *et al.*, 2017). This one-dimensional instrument includes 18 items (Cronbach's α = .93); (*i.e., "Trans people are a threat to the family and society"*). It is rated on a Likert-like scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Empathy. The Interpersonal Reactivity Index (IRI; Keaton, 2017) was used for this study, in the version validated in Spanish (Mestre *et al.*, 2004). This instrument is composed of 28 items and has 4 dimensions, which showed an adequate level of reliability in the sample used: Perspective-taking (7 items, Cronbach's α = .765; i.e., *"Before criticizing somebody, I try to imagine how I would feel if I were in their place"*), Fantasy (7 items, Cronbach's α = .786; i.e., *"I really get involved with the feelings of the characters in a novel"*), Empathetic Concern (7 items, Cronbach's α = .735; i.e., *"When I see someone being taken advantage of, I feel kind of protective toward them"*), and Personal Distress (7 items, Cronbach's α = .759; i.e., *"When I see someone get hurt, I tend to remain calm"*). The items are rated on a Likert scale, ranging from 1 (*it does not describe me well*) to 5 (*it describes me very well*). Items 3, 4, 7, 12, 13, 14, 15, 18, and 19 are reverse scored.

Parental styles. The Parental Bonding Instrument (PBI; Parker *et al.*, 1979) was used to analyze this variable. This instrument presents 50 items, divided into two subscales, Paternal Styles and Maternal Styles, with 25 items each. It has 4 dimensions; Maternal Care (12 items, Cronbach's α = .934; i.e., *"spoke to me in a warm and friendly voice"*), Parental Care (12 items, Cronbach's α = .925; i.e., *"did not help me as much as I needed"*), Maternal Overprotection (13 items, Cronbach's α = .826; i.e., *"did not want me to grow up"*), and Paternal Overprotection (13 items, Cronbach's α = .864; i.e., *"let me do those things I liked doing"*). The items are rated on a Likert-like scale, ranging from 1 (*never happened*) to 4 (*always happened*). Some items are reverse scored.

Self-esteem. The Rosenberg Self-Esteem Scale (Rosenberg, 1965) questionnaire was used. For this study, the validated Spanish version (García *et al.*, 2019) was used, which was considered appropriate because it is brief (only 10 items, Cronbach α = .896; i.e., *"I am convinced that I have good qualities"*), simple, and easy to understand. The items are rated on a Likert-like scale, Items from 1 to 5 ranging from 1 (*strongly disagree*) to 4 (*strongly agree*); Items from 6 to 10 ranging from 1 (*strongly agree*) to 4 (*strongly disagree*). A higher score indicates higher self-esteem.

3.4. Data analysis

We used the SPSS statistical package. Relative and absolute frequency analyses were used for the sociodemographic study. Pearson correlation analysis was conducted to examine, one by one, the association of psychosocial variables with the variable Genderism. Analysis of variance (ANOVA) was used to examine genderism as a function of the students' gender (male, female, non-binary). Given the heterogeneity observed in all three categories, the Brown-Forsythe (*B-F*) test was used, and Hochberg's GT2 post-hoc test was also

performed. Finally, stepwise multiple linear regression analysis was performed with the variables previously identified as relevant to study their association with genderism. The significance level was defined at $p < .05$.

4. Results

Table 2 shows significant differences depending on the university students' gender. Gender differences were obtained in genderism, with higher transphobia in males (B-F = 49.589, p = .000). Also, a higher relationship was observed between gender bashing and the male gender than the female gender (B-F = 39.346, p = .000).

Results also revealed a greater negative attitude towards trans people in males than in the other comparison groups (B-F = 10.142, p = .000).

Concerning empathy, a higher degree of Perspective-taking was observed in females and non-binary persons (B-F = 3.536, p = .008). Also, a higher score in the dimensions of Fantasy (B-F = 15.819, p = .000), and Personal Distress (B-F = 8.096, p = .001) was observed in non-binary people.

Table 2. Descriptive statistics and ANOVA of transphobia and attack, Negative Attitudes Towards Trans People and Empathy

		n	M	SD	Brown Forsythe	Post hoc
Transphobia						
Transphobia	A. Male	463	37.538	17.306		
	B. Female	1216	29.366	10.797	49.589***	CA-B
	C. Non binary gender	22	26.327	14.677		
Gender bashing	A. Male	463	10.142	6.046		
	B. Female	1216	8.095	2.913	18.117***	CA-B
	C. Non binary gender	22	8.495	7.014		
Negative Attitudes Towards Trans People						
	A. Male	463	34.594	15.679		
	B. Female	1216	31.101	13.832	15.409***	A-BC
	C. Non binary gender	22	28.681	6.986		
Empathy						
Perspective	A. Male	463	23.168	3.415		
	B. Female	1216	23.730	3.241	3.536*	CB-A
	C. Non binary gender	22	23.636	4.326		
Empathetic concern	A. Male	463	20.069	3.230		
	B. Female	1216	20.315	2.931	1.544	CBA
	C. Non binary gender	22	20.727	2.549		
Fantasy	A. Male	463	21.457	4.276		
	B. Female	1216	22.645	4.009	15.819***	B-AC
	C. Non binary gender	22	22.227	3.491		
Personal damage	A. Male	463	18.265	3.230		
	B. Female	1216	18.833	2.931	8.096**	C-B-A
	C. Non binary gender	22	20.863	2.549		

Post hoc analysis among the diverse units: *p < .05.   **p < .01.***p < .001.
N = sample size; M= mean; SD= standard deviation; Brown Forsythe= results of Brown Forsythe test; Post hoc= results of post hoc analysis.

Source. Own elaboration.

With regard to parental styles, we found higher values in the dimensions Paternal (*B-F* = 14.613, *p* = .000) and Maternal Care (*B-F* = 3.764, *p* = .004) in females than in men and non-binary people, as well as higher Maternal Overprotection in non-binary people than in the male and female genders (*B-F* = 7.649, *p* = .000). These results are shown in Table 3.

Table 3. Descriptive statistics and ANOVA of Parental Bonding and Self-Esteem by sex

		n	*M*	*SD*	*Brown Forsythe*	*Post hoc*
Parental Bonding						
Parental Care	A. Male	463	31.295	8.343	14.613***	BC-A
	B. Female	1216	33.912	8.383		
	C. Non binary gender	22	32.636	9.379		
Maternal Care	A. Male	463	37.062	6.639	3.764*	BA-C
	B. Female	1216	37.951	6.980		
	C. Non binary gender	22	34.272	9.677		
Paternal Overprotection	A. Male	463	24.753	6.585	1.059	ABC
	B. Female	1216	24.280	6.954		
	C. Non binary gender	22	23.500	6.574		
Maternal Overprotection	A. Male	463	27.360	7.705	7.649**	CA-B
	B. Female	1216	25.673	7.801		
	C. Non binary gender	22	27.772	8.530		
Self-Esteem						
Self-Esteem	A. Male	463	28.851	7.835	7.334**	B-A-C
	B. Female	1216	30.107	7.157		
	C. Non binary gender	22	26.045	7.384		

Post hoc analysis among the diverse units: *p < .05.   **p < .01.***p < .001.
N = sample size; M= mean; SD= standard deviation; Brown Forsythe= results of Brown Forsythe test; Post hoc= results of post hoc analysis.

Source. Own elaboration.

Finally, females' higher self-esteem and non-binary people's lower self-esteem were also observed (*B-F* = 7.334, *p* = .000).

As for the association between variables, as shown in Table 4, the correlation analysis yielded a negative correlation of Gender Bashing with Perspective-taking (*r* = -.122, *p* = .000). On another hand, Transphobia correlated negatively with the variables Fantasy (*r* = -.113, *p* = .000), Empathetic Concern (*r* = -.096, *p* = .000), and Maternal Care (*r* = -.057, *p* = .019). Also, the variable Negative Attitudes towards trans people (measured with the EANT) correlated negatively with the variables Perspective-taking (*r* = -.071, *p* = .004), Fantasy (*r* = -.119, *p* = .000), and Maternal Care (*r* = -.062, *p* = .010), and positively with the variable Paternal Care (*r* = .452, *p* = .000). Although we expected significant correlations between the Negative Attitudes scale (EANT) and the dimensions of Transphobia and Gender Bashing (GTS), the correlations were weaker than expected (*r* = .151 and *r* = .106, respectively).

To study the relationship of the variables Negative Attitude, Perspective-taking, Fantasy, Empathetic Concern, and Maternal Care with Transphobia and Gender Bashing, a multiple linear regression analysis was performed that included the relevant correlations resulting from the previous correlational analyses. The regression model provided the following results for each of the Genderism dimensions, adjusted by gender. The fit of the regression model for the male and female genders was inadequate, although it was adequate for the non-binary-gender. Specifically, for people who self-identified as non-binary-gender, Gender Bashing was associated with the variable Negative Attitudes (β = .650, p = .001), with adequate goodness of fit of the model (R2 = .393, p = .001), whereas the Genderism variable was related to Negative Attitudes (β = .619, p = .002; adjusted R2 = .352, p = .002).

Table 4. Correlations between the scores of the variables measured[a]

	Mean	SD	Rank	1	2	3	4	5	6	7	8	9	10	11	12
1. Genderism GTS	31.55	26.248	21-125.14	α.89											
2. Gender bashing GTS	8.65	10.198	7-48.65	.672**	α.82										
3. Scale of negative attitudes towards trans people	32.020	14.376	18-90	.151**	.106**	α.938									
4. Perspective IRI	23.576	3.311	13-35	-.127**	-.122**	-.071**	α.765								
5. Fantasy IRI	22.316	4.108	9-34	-.113**	-.046	-.119**	.393**	α.786							
6. Empathetic concern IRI	20.254	3.011	10-32	-.096**	-.057	-.024	.357**	.434**	α.735						
7. Personal damage IRI	18.705	3.792	8-32	-.008	-.003	-.004	.236**	.380**	.437**	α.759					
8. Parental care PBI	33.183	8.459	11-44	-.020	-.041	.452**	-.001	-.79**	-.070	-.73**	α.854				
9. Maternal Care PBI	37.662	6.946	11-44	-.057*	-.043	-.062**	.044	-.044	-044	-.084**	.0351**	α.919			
10. Paternal overprotection	24.399	6.850	13-49	.020	.053	.047	.038	.005	078**	.115**	-.423**	.246**	α.854		
11. Maternal overprotection	7.817	7.817	13-52	.035	.061	.044	.028	.099**	-.044	.129**	-.282**	-.464*	.515**	α.696	
12. Rosenberg Self-Esteem Scale	7.378	7.378	10-40	.-011	.021	.021	.027	-.093**	-.140**	-.213**	-.155**	-.016**	-.117**	-.156**	α.896

[a] By the Gender and Transphobia Scale, Scale of Negative Attitudes Towards Trans People, Interpersonal Reactivity Index, Parental Bonding Instrument and Rosenberg Self-Esteem Scale in University of Murcia, Miguel Hernandez University and Technical University of Cartagena, Nebrija University, University of Castilla La Mancha, University of Malaga, University of Oviedo, University of Zaragoza, Pablo de Olavide University, University of Valencia.
* $p < .05$. ** $p < .01$

Source. Own elaboration.

5. Discussion

This study examined the attitudes of university students towards trans people. As had been shown in previous studies (Lee *et al.*, 2020), transphobic attitudes at the university level are related to problems of depression, absenteeism, drop-out, low grades, suicide ideation, and substance use. Our results have shown that university students' negative attitudes towards trans people could be related to psychological and social variables such as empathy, self-esteem, and parental styles. Some authors have previously analyzed this relationship, such as Sa *et al.* (2019), who established an association between self-esteem, empathy, and emotional intelligence. Likewise, other authors have proposed a direct relationship between parental styles and children's empathy, indicating that, depending on the parental styles, the children will develop a greater or lesser degree of empathy (Wagers & Kiel, 2019). We will now analyze each of these dimensions separately:

Parental styles

Our study shows that parental styles influence children's attitude, from the way they approach problems and the development of their personality to managing interpersonal relationships, as previously shown by Amodeo *et al.* (2017), who highlighted the relationship of parental styles with the development of trans children's gender identity. Moreover, other authors, such as Jiménez-Barbero *et al.* (2016) and Ruiz-Hernández *et al.* (2019), associated parental styles with negative attitudes, transphobia, and lack of empathy. Studies

such as that of Martin-Castillo *et al.* (2020) have noted the influence of parents as a protective element against trans children's school victimization, so, as reflected in our results, negative attitudes, transphobia, and lack of empathy, could be decisive in university students' attitudes towards trans people.

For our study, we used the "Parental Bonding Instrument," which analyzes two dimensions: care and overprotection in both parents. In this regard, our study noted a greater influence of the dimensions Parental and Maternal Care in the female gender than in men and non-binary people, from which it could be inferred that an optimal parental style favors a greater degree of empathy and more open attitudes. This argument is observed in the conclusions of other authors, who indicated the relationship between less assertive parental styles and disruptive behaviors (Pinquart, 2017).

Empathy

This study indicates lower transphobic attitudes in women and non-binary-gender people than in men, which was expected, based on previous studies (Gorrotxategi *et al.*, 2020). Moreover, these results reveal a higher score in empathy in these two groups than in men, showing that empathy is negatively associated with transphobia. We remind readers that empathy is a concept that consists of sharing the affective state of another person, which can be provoked by direct observation, but also by the mere imagination of another person's emotions (Lamm *et al.*, 2019).

Empathy is essential to social behavior and attitudes towards others and, therefore, a fundamental value in the different areas of students' lives. Greater empathy towards trans students in the university environment will favor their inclusion and development, both personally and in the academic setting (Neumann *et al.*, 2011).

Transphobia

In our study, we obtained lower means in the GTS scale, unlike those shown by Willoughby *et al.* (2010). This may be due to the heterogeneity of the study population and the effect of social desirability, that is, an individual's conscious and unconscious tendency to respond in a way that will be considered favorable by others. Our study also obtained a low correlation between the GTS and the EANT, contrary to the study of Fernández-Hawrylak *et al.* (2020). This low correlation may be due to the dimensional differences between the scales, that is, the one-dimensionality of the EANT versus the multidimensionality of the GTS.

Similarly, the regression model did not fit adequately, so we would have to examine other variables than those used in our study. In this sense, we consider it interesting for future research to take into account the sociocultural environment, religiosity, and political position as independent variables related to attitudes towards trans people (Kanamori, Cornelius-White *et al.*, 2017).

Self-esteem

We observed higher self-esteem in girls. Considering that, in our study, the girls presented lower scores in transphobic attitudes, it could be indirectly deduced that a low level of self-esteem is associated with a higher frequency of transphobic attitudes. This aspect has been developed in previous studies on bullying, revealing a bully profile with low self-esteem (Olweus, 2013).

6. Limitations of the study

To our knowledge, this study is one of the first works that has analyzed attitudes towards transgender people in Spanish universities. However, the design used has some methodological limitations that must be considered when interpreting the results. Firstly, probabilistic sampling could not be carried out, which could lead to a risk of selection bias. Secondly, as it is a cross-sectional study, it does not allow causal inferences to be drawn from the results. Also, the questionnaires were sent to the recipients by email. This method of data collection often presents methodological drawbacks, such as responses influenced by social desirability or the lack of certainty about the respondent's identity. Finally, it should be noted that the lack of studies on this subject in the university population has made it difficult to discuss the results, which could not be adequately contrasted with previous studies.

7. Implications for practice

Our study suggests the desirability of intervening in this area through the development of strategies that promote the inclusion of trans people and that involve a measure of prevention and eradication of negative attitudes towards them. A safer academic environment should be fostered, ensuring that trans people can fully develop in the different areas of their lives. Finally, the need for greater activism and research in this area is also highlighted.

In turn, the results obtained from this study show the importance of promoting inclusive attitudes and values and acceptance of diversity in school and university education through educational programs focused on the development of empathy and self-esteem among students.

8. Conclusions

The results of our study allow us to draw the following conclusions, in accordance with the proposed objectives:

First, our study has reported that different elements (parental styles, empathy, and self-esteem) are associated styles, and empathy, are measured (Jiménez-Barbero *et al.*, 2016; Martin-Castillo *et al.*, 2020). Therefore, we believe indicate a greater transphobic attitude in males than in females and non-binary people.

On the other hand, an inverse relationship of transphobia was found with self-esteem and empathy. In this regard, it could be inferred that people who reject or have negative attitudes toward trans persons have deficiencies in self-esteem and empathy.

As a general conclusion, our study has reported that there are different variables (self-esteem, empathy, and parenting styles) that influence the development of transphobic attitudes in the university community.

On the other hand, this study points to the need for intervention in the areas mentioned above (self-esteem, empathy and parental styles) from the beginning of the educational process to the end of it in order to reduce transphobic attitudes and contribute to creating a free society. of prejudices, thus facilitating the integration of trans people in the university community.

Finally, a significant relationship of genderism was established with parental styles, highlighting lower transphobia in students who received greater care from both parents.

References

Amodeo, A. L., Vitelli, R., Scandurra, C., Picariello, S., & Valerio, P. (2017). HHS Public Access. *Physiology & Behavior*, *176*(3), 139-148. https://doi.org/10.1080/15532739.2015.1022680

Bukhari, S., Mushtaq, H., & Aurangzaib, S. (2016). Attitudes towards Transgender: A Study of Gender and Influencing Factors. *Journal of Gender & Social Issues*, *15*(2).

Fernández-Hawrylak, M., Tristán Muñoz, G., & Heras Sevilla, D. (2020). Actitudes hacia la transgeneridad y la transexualidad en el ámbito universitario. Un estudio preliminar [Attitudes towards transgenderness and trans-sexuality at the university level. A preliminary study]. *Revista INFAD de Psicología. International Journal of Developmental and Educational Psychology*, *1*(1), 393-404. https://doi.org/10.17060/ijodaep.2020.n1.v1.1796

Francia-Martínez, M., Esteban, C., & Lespier, Z. (2017). Actitudes, conocimiento y distancia social de psicoterapeutas con la comunidad transgénero y transexual [Attitudes, knowledge and social distance of psychotherapists toward the transgender and trans-sexual community]. *Revista Puertorriqueña de Psicología*, *28*(1), 98-113.

García, J. A., & Olmos, F. C., Matheu, M. L., & Carreño, T. P. (2019). Self-esteem levels vs global scores on the Rosenberg Self-Esteem Scale. *Heliyon*, *5*(3). https://doi.org/10.1016/j.heliyon.2019.e01378

Goldman, J.D.G. & McCutchen, L. E. (2012). Teenagers' web questions compared with a sexuality curriculum: an exploration. *Research papers in Education*, *54* (4), 357-373. https://doi.org/10.1080/00131881.2012.734722

Gorrotxategi, M. P., Ozamiz-Etxebarria, N., Jiménez-Etxebarria, E., & Cornelius-White, J. H. D. (2020). Improvement in gender and transgender knowledge in university students through the creative factory methodology. *Frontiers in Psychology*, *11*(March). https://doi.org/10.3389/fpsyg.2020.00367

Hendricks, M. L., & Testa, R. J. (2012). A conceptual framework for clinical work with transgender and gender nonconforming clients: An adaptation of the Minority Stress Model. *Professional Psychology: Research and Practice*, *43*(5), 460.

Hill, D. B., & Willoughby, B. L. B. (2005). The development and validation of the Genderism and Transphobia Scale. *Sex Roles*, *53*(7-8), 531–544. https://doi.org/10.1007/s11199-005-7140-x

Instituto Nacional de Estadística [INE]. (2020). *Estadística de Estudiantes Universitarios*. https://bit.ly/3Llsja8

Jami, H. (2012). Attitude towards hijras and their reciprocal perceptions (Unpublished Doctoral Dissertation). National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.

Jiménez-Barbero, J. A., Ruiz-Hernández, J. A., Llor-Esteban, B., & Waschgler, K. (2016). Influence of attitudes, impulsivity, and parental styles in adolescents' externalizing behavior. *Journal of Health Psychology*, *21*(1), 122-131. https://doi.org/10.1177/1359105314523303

Kajaerum, M. (2014). Being trans in the European Union. *European Union Agency for Fundamental Rights, 38*(3). https://doi.org/10.2811/92683

Kanamori, Y., Pegors, T. K., Hulgus, J. F., & Cornelius-White, J. H. D. (2017). A comparison between self-identified evangelical Christians' and nonreligious persons' attitudes toward transgender persons. *Psychology of Sexual Orientation and Gender Diversity*, *4*(1), 75-86. https://doi.org/10.1037/sgd0000166

Kcomt, L. (2019). Profound health-care discrimination experienced by transgender people: rapid systematic review. *Social work in health care*, *58*(2), 201-219.

Keaton, S. A. (2017). Interpersonal Reactivity Index (IRI). *The Sourcebook of Listening Research*, *August*, 340-347. https://doi.org/10.1002/9781119102991.ch34

Lamm, C., Rütgen, M., & Wagner, I. C. (2019). Imaging empathy and prosocial emotions. *Neuroscience Letters*, *693*, 49-53. https://doi.org/10.1016/j.neulet.2017.06.054

Lee, H., Tomita, K. K., Habarth, J. M., Operario, D., Yi, H., Choo, S., & Kim, S.-S. (2020). Internalized transphobia and mental health among transgender adults: A nationwide cross-sectional survey in South Korea. *International Journal of Transgender Health*, *21*(2), 182–193. https://doi.org/10.1080/26895269.2020.1745113

Martin-Castillo, D., Jiménez Barbero, J. A., Pastor Bravo, M. M., Sánchez Muñoz, M., Fernández Espín, M. E., & García Arenas, J. J. (2020). School victimization in transgender people: A systematic review. *Children and Youth Services Review*, *119*(September), 105480. https://doi.org/10.1016/j.childyouth.2020.105480

Mestre, V., Frias, M. D., & Samper, P. (2004). La medida de la empatia:Análisis del Interpersonal Reactivity Index [The measure of empathy: Analysis of the Interpersonal Reactivity Index]. *Psicotherma*, *16*, 225-260.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: conceptual issues and research evidence. *Psychological bulletin*, *129*(5), 674.

Nagoshi, J. L., Adams, K. A., Terrell, H. K., Hill, E. D., Brzuzy, S., & Nagoshi, C. T. (2008). Gender differences in correlates of homophobia and transphobia. Sex Roles, 59(7-8), 521–531

Neumann, M., Edelhäuser, F., Tauschel, D., Fischer, M. R., Wirtz, M., Woopen, C., Haramati, A., & Scheffer, C. (2011). Empathy decline and its reasons: A systematic review of studies with medical students and residents. *Academic Medicine*, *86*(8), 996-1009. https://doi.org/10.1097/ACM.0b013e318221e615

Olweus, D. (2013). School bullying: Development and some important challenges. *Annual Review of Clinical Psychology*, *9*(February), 751–780. https://doi.org/10.1146/annurev-clinpsy-050212-185516

Ozamiz-Etxebarria, N., Picaza, M., Jiménez-Etxebarria, E., & Cornelius-White, J.H.D. (2020). Measuring discrimination against transgender people at the university of the Basque country and in a non-university sample in Spain. *International Journal of Environmental Research and Public Health*, *17*(7). https://doi.org/10.3390/ijerph17072374

Parker, G., Tupling, H., & Brown, L. B. (1979). Parental Bonding Instrument (PBI) Scale and instructions. *British Journal of Medical Psychology*, *52*(1) 22-5.

Pichardo, J. I., & Puche-Cabezas, L. (2019). Universidad y diversidad sexogenérica: barreras, innovaciones y retos de futuro [University and sex-gender diversity: barriers, innovations and future challenges]. *methaodos.revista de ciencias sociales*, *7*(1), 10-26. https://doi.org/10.17502/m.rcs.v7i1.287

Pinquart, M. (2017). Associations of parenting dimensions and styles with externalizing problems of children and adolescents: An updated meta-analysis. In *Developmental Psychology*, *53*(5), 873-932) American Psychological Association. https://doi.org/10.1037/dev0000295

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press.

Ruiz-Hernández, J. A., Moral-Zafra, E., Llor-Esteban, B., & Jiménez-Barbero, J. A. (2019). Influence of parental styles and other psychosocial variables on the development of externalizing behaviors in adolescents: A systematic review. *European Journal of Psychology Applied to Legal Context*, *11*(1), 9-21. https://doi.org/10.5093/ejpalc2018a11

Sa, B., Ojeh, N., Majumder, M. A. A., Nunes, P., Williams, S., Rao, S. R., & Youssef, F. F. (2019). The relationship between self-esteem, emotional intelligence, and empathy among students from six health professional programs. *Teaching and Learning in Medicine*, *31*(5), 536–543. https://doi.org/10.1080/10401334.2019.1607741

Scandurra, C., Amodeo, A. L., Bochicchio, V., Valerio, P., & Frost, D. M. (2017). Psychometric characteristics of the Transgender Identity Survey in an Italian sample: A measure to assess positive and negative feelings towards transgender identity. *International Journal of Transgenderism*, *18*(1), 53-65.

Testa, R. J., Michaels, M. S., Bliss, W., Rogers, M. L., Balsam, K. F., & Joiner, T. (2017). Suicidal ideation in transgender people: Gender minority stress and interpersonal theory factors. *Journal of abnormal psychology*, *126*(1), 125.

Transgender Europe. (2016). *Actualización TMM IDAHOT 2016 2115 casos registrados de personas trans y de género diverso asesinadas entre enero de 2008 y abril de 2016 Regiones del Mundo / Países África América del Sur y Central*. 1–6 [IDAHOT TMM Update 2016 2115 registered cases of trans and gender diverse people murdered between January 2008 and April 2016. World Regions/Countries South and Central Africa].

Valentine, S. E., & Shipherd, J. C. (2018). A systematic review of social stress and mental health among transgender and gender non-conforming people in the United States. *Clinical Psychology Review*, *66*, 24-38.

Wagers, K. B., & Kiel, E. J. (2019). The influence of parenting and temperament on empathy development in toddlers. *Journal of Family Psychology*, *33*(4), 391-400. https://doi.org/10.1037/fam0000505

Wahlen, R., Bize, R., Wang, J., Merglen, A., & Ambresin, A. E. (2020). Medical students' knowledge of and attitudes towards LGBT people and their health care needs: Impact of a lecture on LGBT health. *PloS one*, *15*(7), e0234743.

Willoughby, B. L. B., Hill, D. B., Gonzalez, C. A., Lacorazza, A., Macapagal, R. A., Barton, M. E., & Doty, N. D. (2010). Who hates gender outlaws? A multisite and multinational evaluation of the Genderism and Transphobia Scale. *International Journal of Transgenderism*, *12*(4), 254–271. https://doi.org/10.1080/15532739.2010.550821

Wolford-Clevenger, C., Cannon, C. J., Flores, L. Y., Smith, P. N., & Stuart, G. L. (2017). Suicide risk among transgender people: a prevalent problem in critical need of empirical and theoretical research. *Violence and gender*, *4*(3), 69-72.

Worthen, M. G. (2012). Understanding college student attitudes toward LGBT individuals. *Sociological Focus*, *45*(4), 285-305.

Brief CV of the authors

David Martin-Castillo is Professor of Psychosocial Sciences applied to Nursing at the University of Murcia. PhD in Health Sciences from the University of Murcia. Nurse in the Murcian Health Service. Investigator profile: Participation as a researcher in the Social Psychology Research Group of the University of Murcia from 2019 to the present.

José Joaquín García-Arenas is PhD Assistant Professor at the Faculty of Health Sciences in Occupational Therapy and Nursing at the Catholic University of San Antonio since 2015. PhD from the Migue Hernández University of Elche since 2015 Occupational therapist working in a mental health center since 2006 in the Murcian health service. Investigator profile: Principal investigator of the line "Clinical research in occupational therapy" since 2017.

María del Mar Pastor-Bravo is PhD from the University of Murcia. Master in Health, Women and Care and Master in Gender Equality. She has a positive evaluation as a doctoral assistant professor since April 2016 and a positive evaluation as a contracted doctoral professor since September 2018. Recognized: 1 five-year teaching period and 1 section of research experience (six-year period). Professor of the Nursing Degree in Cartagena and the Master of Health, Women and Care. Quality Coordinator (since 2018) and mobility coordinator (since 2020) of the Cartagena University School of Nursing, a center attached to the University of Murcia and Director of the Master's Degree in Health, Women and Care since 2021. She participates, among others, in the Research Group "Cuidados Enfermeros Avanzados" of the Murcian Institute for Biosanitary Research, IMIB, and the research group "prevention of gender violence" in Quito, Ecuador. She has more than forty-five published scientific articles, of which 20 are indexed in JCR, placing 9 of them in the first quartile (Q1). She has been PI of the Regional research project "TransSalud: Participatory action research project for the promotion of care for trans people in the Region of Murcia".

María Sánchez Muñoz develops her care and teaching activity as a Clinical Psychologist at the Mental Health Center (Murcia Health Service) since 2006. Psychologist specialized in Clinical Psychology (via PIR) since 2006. PhD in Psychology from the University of Murcia since 2017. Researcher profile: Participation as a researcher in the Social Psychology research group of the University of Murcia from 2012 to the present.

José Antonio Jiménez-Barbero, PhD, is Professor contracted with a permanent doctorate since 2021 at the Faculty of Nursing from the University of Murcia. Recognized 1 five-year teaching period and 1 section of experience. Researcher (six-year term), alive until 2024. Doctor from the University of Murcia since 2013. Nurse specialist in Mental Health since 2009 through residency (EIR). Investigator profile: Participation as a researcher in the Social Psychology Research Group of the University of Murcia from 05/09/2012 to the present and Participation as a Researcher in the Research Group "Nursing Care Advanced" from the Murcian Institute for Biosanitary Research, IMIB.

CrediT author statement

Conceptualization: D.M.C., J.J.G.A., M.M.P.B., M.S.M. J.A.J.B.; Methodology: D.M.C., J.J.G.A., M.M.P.B., M.S.M. J.A.J.B.; Software: D.M.C., J.A.J.B.; Validation: D.M.C.; Formal Analyis: D.M.C., J.A.J.B.; Investigation: D.M.C., Resources: D.M.C., Data Curation: D.M.C., J.A.J.B. Writing (original draft): D.M.C., J.A.J.B. Writing (review & editing): D.M.C., J.A.J.B. Visualization: D.M.C., J.J.G.A., M.M.P.B., M.S.M. J.A.J.B.; Supervision: D.M.C., J.J.G.A., M.M.P.B., M.S.M. J.A.J.B.; Project Administración D.M.C., J.J.G.A., M.M.P.B., M.S.M. J.A.J.B.

Conflicts of interest

The authors declare the inexistence of conflict of interest.