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Discrimination in dating apps in the LGBT community: Construction and validation of an instrument

Discriminación en aplicaciones de citas en la comunidad LGBT: Construcción y validación de un instrumento

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ABSTRACT

This study analyzes the Discrimination Scale in LGBT dating apps in adults in Chiapas, Mexico. In this exploratory and psychometric research, 640 members of the LGBT community actively participated. A two-factor structure was validated: individual and group discrimination. When analyzing the frequency of responses for the 17 items, it was observed that items 14 to 16 predominate with responses of “Almost every day”, while for the others, the most common response was “Every day”. In addition, verifying the Cronbach's Alpha values, it is observed that the standardized coefficient is .921, the 95% confidence interval is within the range considered acceptable. These results highlight the ability of the scale to measure this phenomenon in the LGBT community, suggesting its usefulness both in Chiapas, Mexico, and possibly in other similar contexts.

Keywords: discrimination, LGBT, dating apps, psychometric properties, validation

RESUMEN

Este estudio analiza la Escala de Discriminación en aplicaciones de citas LGBT en adultos en Chiapas, México. En esta investigación exploratoria y psicométrica, participaron activamente 640 miembros de la comunidad LGBT. Se validó una estructura de dos factores: discriminación individual y discriminación grupal. Al analizar la frecuencia de respuestas para los 17 ítems, se observó que los ítems 14 a 16 predominan con respuestas de "Casi todos los días", mientras que para los demás, la respuesta más común fue "Todos los días". Además, al verificar los valores del Alfa de Cronbach, se observa que el coeficiente estandarizado es de .921, y el intervalo de confianza del 95% se encuentra dentro del rango considerado aceptable. Estos resultados resaltan la capacidad de la escala para medir este fenómeno en la comunidad LGBT, sugiriendo su utilidad tanto en Chiapas, México, como posiblemente en otros contextos similares.

Palabras clave: discriminación, LGBT, aplicaciones de citas, propiedades psicométricas, validación

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INTRODUCTION

Dating apps is one of the longest chapters in the history of media forms of matchmaking for both erotic and affective relationships. This search began with postal mail in the 19th century, then with advertisements in the print media and the emergence of matchmaking agencies in the 1960s, some of which operated internationally. In the 1990s, television dating programs became popular, such as the paradigmatic case in Argentina of “Yo me quiero casar, y usted?”, hosted by Roberto Galán. In addition, in that same decade the first dating websites emerged, with a remarkable impact, as evidenced by the fact that in 1998 5% of heterosexual cisgender couples in the United Kingdom had met online (Abad García et al., 2011; Allport, 1954).

On the other hand, information and communication technology (ICT)-mediated sociosexual experiences have become part of everyday life for both men and women who have same-gender sex in urban contexts. Both men and women value the sexual freedom and autonomy that dating apps provide, while ensuring their physical and online safety (Parra & Obando, 2019). These platforms not only facilitate contact with potential sexual partners, but also promote social interaction between people with similar sexual preferences, in a specific and relatively private environment that allows escaping heteronormative surveillance through various concealment or anonymity strategies (Blackwell et al., 2015).

For more than a decade, studies on online encounters between gay men have been conducted in English-speaking countries, mainly from behavioral and public health perspectives (Chetcuti-Osorovitz, 2016). In Latin America, research on sexuality in digital environments has gained popularity with the increase in Internet use and its influence on sociocultural processes. Beginning in the late 2000s, texts in Spanish address topics such as sexual dissidence, subversive gender manifestations, trans epistemologies, and virtual cruising, among others (Fonseca & Quinter, 2009; Limón Piris, 2017).

In addition, location-centric social networks for dating, known as Mobile Mediated Relationships (MMR), have experienced exponential growth in recent years. While these platforms have a variety of uses, much of their popularity is due to the ability to have casual encounters. Many of these face-to-face encounters, known as face-to-face (FTF), occur after initially meeting through an MMR. Although there have always been means of real-life contact (IRL) such as advertisements or phone lines, new online dating apps have radically transformed the way people look for a partner or sex. To analyze this change, focused on the gay community, using two of the most popular mobile dating apps among this group are highlighted, such as Grindr and Tinder (Ato et al., 2013).

It is worth noting, that in the case of Grindr®, it is an application designed to facilitate casual encounters, also known as hook ups. It could best be described as a “sociosexual” networking platform, as it highlights interpersonal communication processes between those who

are open to establishing connections of an erotic, platonic and practical nature, sometimes simultaneously. The emergence and popularity of Grindr© respond to the needs of a generally discriminated and stigmatized sector of the population, who find in this application an opportunity to socialize with other men without exposing themselves to the dangers of the everyday world (Sanz Menéndez, 2003).

In addition, we have Tinder, whose name derives from “dry and flammable material, such as wood or paper, used to light a fire”. This definition is reflected in the company's logo, a flame, which evokes the idea of a romantic spark between the two people matched, known as a “match,” which is more associated with heterosexual relationships (Aunspach, 2015). According to theorist VanderMolen, heterosexual people often prefer a traditional approach to dating, where traditional gender roles are maintained, such as the man assuming the role of initiator of verbal contact and the woman following his lead. VanderMolen's observation, as well as Aunspach's assumption of heterosexual-only romantic relationships, could be related to the name of the app (Viladrich et al., 2017).

Until now, apart from the difference in sexual preferences, another significant distinction between these two applications was that Tinder required users to select their photos and information from their Facebook account, which had a significant impact on their level of trust. Today, however, Tinder, like Grindr, has eliminated the requirement to link the account with Facebook. In addition, the process of selecting potential partners differs between the two platforms. While on Grindr you can send messages to all the profiles that appear, on Tinder a mutual acceptance of both parties is required to start a conversation. Grindr displays twelve profiles on the first screen, while on Tinder each profile is displayed individually. In terms of relationships, Grindr tends to be more immediate than Tinder. In terms of images, Tinder allows viewing in larger size and uploading up to five images, while Grindr only allows a single image (Antheunis et al., 2007).

In the same way that new gender and body identities have emerged that do not fit the traditional categories in networking sites, certain phobias have also emerged that represent a threat to many of the freedoms won by the LGBT community. This refers specifically to transphobia and plumophobia. Faced with these facts, the company responsible for Grindr has responded through the series of episodes #kindr on its Youtube channel, where it gives voice to users who feel discriminated against in the application due to sexual racism, transphobia or for not meeting current beauty standards. In this same context, the non-profit campaign #stopplumophobia has emerged in Spain, which seeks to make visible and raise awareness about the damage caused by “lgbtphobia” within the LGBT community itself (Attrill, 2012).

Therefore, in several countries around the world, the LGBT community (lesbian, gay, bisexual, transgender and other sexual orientations different from heterosexuality) faces discrimination, prejudice and social marginalization. Despite the historical advances made by

members of this community in favor of equality, society still tends to consider heterosexuality and conformity to the gender identity assigned at birth as social and cultural norms. This phenomenon, known as “heteronormativity,” contributes to stigmatization and prejudice towards LGBT people in society, generating a negative valuation based on their sexual orientation (Francia Martínez et al., 2017; Fernández Rodríguez & Squiabro, 2014).

The study of online dating has grown in academic research on LGBT and discrimination, exploring topics such as self-representation, communication, and authenticity in mobile apps (Dawson & McIntosh, 2006; Anthéunis et al., 2007; Gibbs et al., 2011). Representations of identity, gender and sexual differences in online dating have been analyzed (Morgan et al., 2010). In Spain, studies on social network analysis, new trends in networks and usefulness in collaborative learning stand out (Flores Vivar, 2009). Gender representation in location-based dating applications has also been investigated (Bostwick et al., 2014).

Scientific research confirms that discrimination, directed toward both the LGBT community and other marginalized groups, is a pervasive social phenomenon that has serious repercussions on the mental health of those affected (Burgess et al., 2007) (Woodford et al., 2015). Although the detrimental impact on psychological well-being is recognized, in Mexico there is no specific scale to assess perceived discrimination by LGBT individuals, especially as it relates to the use of dating apps. The creation and validation of such a scale would be very useful for the scientific community, not only in Mexico but worldwide, as it would provide information about the experiences of this group and facilitate the implementation of organizations, institutional programs and public policies that support the LGBT community (Bostwick et al., 2014).

Therefore, with this research we sought to develop and validate an instrument to measure perceived discrimination at the individual and group level within the LGBTQ collective within dating apps. It is intended to verify whether the psychometric properties of the instrument support its usefulness in both clinical and research contexts. In addition, we seek to determine whether the factorial structure of the instrument reflects the two proposed dimensions: individual discrimination and group discrimination. To achieve this, analyses of the psychometric properties of the instrument were carried out, with the aim of providing the scientific community with a valid and reliable tool that contributes to the study of this phenomenon in a Mexican city, the same country and Latin America.

METHODOLOGY

Design

This study adopts an instrumental research design Ato et al., (2013), focused on analyzing the psychometric properties of the Discrimination Scale in dating apps within the LGBT community, with the purpose of validating it in the city of Chiapas, Mexico.

Participants

A non-probabilistic sample composed of 640 individuals belonging to the LGBT community in the city of Chiapas, Mexico was used. The inclusion criteria established for participation in the study were: (1) being at least 21 years of age, (2) residing in the city of Chiapas, Mexico, and (3) identifying as part of the LGBT community.

RESULTS AND DISCUSSION

Instruments

A questionnaire was used to collect general data and to sociodemographically characterize the participants. We inquired about their age, sexual orientation and marital status (Table 1).

Table 1

Sociodemographic information of the sample

Variable	Category	<i>f</i>	%
Age	18-27	27	4,22
	28-37	159	24,84
	38-47	296	46,25
	48-57	148	23,23
	58 or more	10	1,56
Relationship status	Single	233	36,61
	Engagement	56	8,75
	Married	22	3,44
	Cohabitation	329	51,41
Sexual orientation	Gay	89	13,91
	Lesbian	36	5,63
	Bisexual	313	48,91
	Transgender	146	22,81
	Other	56	8,75

Note. N:640

The LGBT Dating Discrimination Scale was designed by researchers to assess discrimination experienced by individuals who identify as part of the LGBT community. The instrument consists of 30 statements are distributed in seven dimensions: General context (7 items, not included in the validation) Discrimination outside the app (4 items, 3 included in the validation), Interactions within the app (5 items, 4 included in the validation), Sexual racism in the app (3 items, all included in the validation), Discrimination based on physical appearance (3 items, all included in the validation), Motivations and actions within the application (4 items, 3

included in the validation), and Results of the use of the application (3 items, all included in the validation). The 17 items subject to validation use a five-point Likert scale, ranging from 1 (Never) to 5 (Every day).

Procedures

Data collection was conducted through questionnaires on the Google Forms platform, using dating apps (Grindr, Tinder, Wapa, Manhunt, and Every) to recruit participants. An informed consent form was implemented that included (a) the purpose of the study, (b) the voluntary nature of participation, (c) potential risks and benefits, (d) the participant's right to withdraw, (e) institutional affiliation, and (f) the researchers' contact details. Subsequently, the collected data were analyzed using R version 4.3.3, performing descriptive analysis, exploratory factor analysis, item discrimination analysis, reliability analysis, comparative analysis and correlation analysis between factors.

For the exploratory factor analysis, the principal axis extraction method with orthogonal rotation was used to identify the latent variables underlying the items. This approach was selected for two main reasons: first, the principal axis extraction method does not require assumptions of normality Fabrigar et al., (1999), and second, orthogonal rotation is suitable for this purpose. To determine the number of factors, two criteria were used: the sedimentation plot (Scree Test) and the amount of variance explained by the extracted factors. The sedimentation plot seeks to identify the factors whose associated values are large enough to be considered. The inflection point on the graph indicates the number of factors to be extracted. Regarding the second criterion, Hatcher (1994) suggests considering factors that explain at least 5% of the variance. In this study, two factors met these criteria. As an acceptance criterion, items with a factor loading greater than .50 on a single factor were considered.

To evaluate the discriminatory capacity of the factor items, the item-total correlation index (rbis) was calculated. Those items whose values were within the range of .30 to .70 were considered appropriate (Field, 2013). To determine the reliability of the factors, Cronbach's alpha coefficient and the Spearman-Brown split-half were calculated. DeVellis & Thorpe, (2017) states that indices above .70 are acceptable, while those between .80 and .90 are considered good. However, he suggests that if the alphas are greater than .90, consideration should be given to revising the scale and reducing its length. On the other hand, Campo-Arias & Oviedo, (2008), point out that indices above .90 may indicate redundancy or duplication of items, which implies that at least a couple of items measure the same aspect of the construct and one of them should be eliminated.

To carry out the confirmatory factor analysis, the R statistical program was used. The maximum likelihood estimation method was employed together with the corrections of Satorra and Bentler (Fingerhut et al., 2010). To evaluate the model fit, several goodness-of-fit indices were used, such as the chi-square (χ^2), the root mean squared error of approximation (RMSEA),

the Tucker-Lewis index (TLI) and the comparative fit index (CFI). For the model to be considered acceptable, CFI and TLI values were required to be $\geq .90$, and RMSEA values were required to be $\leq .08$ (Byrne, 2010) (Hu & Bentler, 1999). In addition, it was established that the regression coefficients of each item in its respective factor should exceed .50 (Hair, 2006).

Validation of the discrimination scale in dating apps in the LGBT community

Exploratory data analysis

In order to be able to understand the relationships between the values obtained during the application of the instrument, an exploratory data analysis was performed, for which a frequency distribution of all items was constructed, as well as the main statistical measures were calculated.

Table 2 contains the frequency distribution for the 17 items of the instrument that will be analyzed with the psychometric tools. It is observed that, for items 14 to 16, the predominant category is Almost every day, with absolute frequencies ranging from 282 (item 15 - 44.06% of the sample) to 299 (item 16 - 46.72% of the sample) cases; while, for the other items, the modal class is Every day, with frequencies ranging from 291 cases (item 23 - 45.47% of the sample) to 386 cases (item 27 - 60.31% of the sample).

Table 2
Frequency distribution by item

	1		2		3		4		5	
	fa	%	fa	%	fa	%	fa	%	Fa	%
It14	11	1.72	73	11.41	130	20.31	285	44.53	141	22.03
It15	15	2.34	37	5.78	121	18.91	282	44.06	185	28.91
It16	11	1.72	55	8.59	125	19.53	299	46.72	150	23.44
It17	5	0.78	29	4.53	86	13.44	179	27.97	341	53.28
It18	5	0.78	30	4.69	94	14.69	171	26.72	340	53.13
It19	10	1.56	17	2.66	54	8.44	179	27.97	380	59.38
It20	2	0.31	3	0.47	71	11.09	215	33.59	349	54.53
It21	6	0.94	49	7.66	100	15.63	157	24.53	328	51.25
It22	3	0.47	19	2.97	84	13.13	205	32.03	329	51.41
It23	7	1.09	39	6.09	117	18.28	186	29.06	291	45.47
It24	8	1.25	14	2.19	75	11.72	169	26.41	374	58.44
It25	4	0.63	30	4.69	85	13.28	179	27.97	342	53.44
It26	7	1.09	27	4.22	95	14.84	173	27.03	338	52.81
It27	8	1.25	19	2.97	55	8.59	172	26.88	386	60.31

It28	3	0.47	4	0.63	72	11.25	212	33.13	349	54.53
It29	7	1.09	49	7.66	100	15.63	160	25.00	324	50.63
It30	4	0.63	20	3.13	84	13.13	205	32.03	327	51.09

Table 3 shows the summary statistics of the items analyzed. It is reported that the highest average corresponds to item 27, with a value of 4.42, while the lowest average is item 14 with a value of 3.74. Analyzing the dispersion of the data (measured through the standard deviation), it is reported that this value ranges from 0.73 (item 20) to 1.02 (item 29). All the reported skewness coefficients (measuring the asymmetry of the data) are negative, indicating that the general tendency of the data is to accumulate on the right side of the spectrum, that is, on the higher values of the scale; thus, all the reported averages have values higher than the central value of the scale.

To determine the shape of the curve of the data, the kurtosis was checked; only item 14 reports a negative kurtosis, which means that the data present a lower proportion of outliers compared to a normal distribution; while the rest of the items have positive values, which means that these items present a sharper frequency distribution (i.e., with a greater tendency to report more extreme outliers than a normal distribution). All the items analyzed report a positive item-total correlation, which indicates that all the items that make up the data set analyzed grow or decrease in the same direction, the range of values reported is within the acceptable range (Ato et al., 2013; Campo-Arias & Oviedo, 2008).

Table 3

Summary statistics by item

	Media	Desv Est	Sesgo	Curtosis	CIT
It14	3.74	0.98	-0.61	-0.17	0.69
It15	3.91	0.96	-0.87	0.61	0.64
It16	3.82	0.95	-0.73	0.22	0.66
It17	4.28	0.92	-1.19	0.79	0.67
It18	4.27	0.93	-1.14	0.58	0.68
It19	4.41	0.87	-1.71	2.99	0.63
It20	4.42	0.73	-1.09	0.94	0.65
It21	4.18	1.02	-1.01	0.03	0.71
It22	4.31	0.84	-1.12	0.80	0.67
It23	4.12	0.98	-0.90	0.03	0.70
It24	4.39	0.87	-1.50	2.10	0.64
It25	4.29	0.91	-1.18	0.70	0.68
It26	4.26	0.94	-1.18	0.78	0.68
It27	4.42	0.86	-1.67	2.74	0.64

It28	4.41	0.75	-1.18	1.35	0.63
It29	4.16	1.02	-1.01	0.07	0.71
It30	4.30	0.86	-1.15	0.93	0.64

Reliability Analysis

To verify the reliability of the model, the Cronbach's Alpha, the two halves and omega models were used, the results are shown in Table 4. Verifying the Cronbach's Alpha values, it is observed that the standardized coefficient is .921, the 95% confidence interval is within the range considered acceptable. Through the method of the two halves, values between .846 and .964 are reported with an average of 0.918, being similar to those obtained with Cronbach's Alpha. Analyzing the value of the omega coefficient, it is reported that the model is able to explain 96.70% of the variability, the analysis of the hierarchical omega reveals that 84.4% of the variability is attributable to the general factor of each model; all the values mentioned are within the range considered acceptable as stated by both (Viladrich et al., 2017) and (Campo-Arias & Oviedo, 2008).

Table 4

Summary of reliability measures

Method	Indicator	Value
Alfa Cronbach	non-standardized	.921
	standardized (λ_3)	.921
	lower	.912
	IC 95% Media	.921
	Superior	.930
two halves	Maximum (λ_4)	.964
	Media	.918
	Mínimum (β)	.846
	Quantiles 2.5%	.881
	Quantiles 50.0%	.918
Omega	Quantiles 97.5%	.955
	hierarchical (ω_h)	.844
	Total (ω_t)	.967

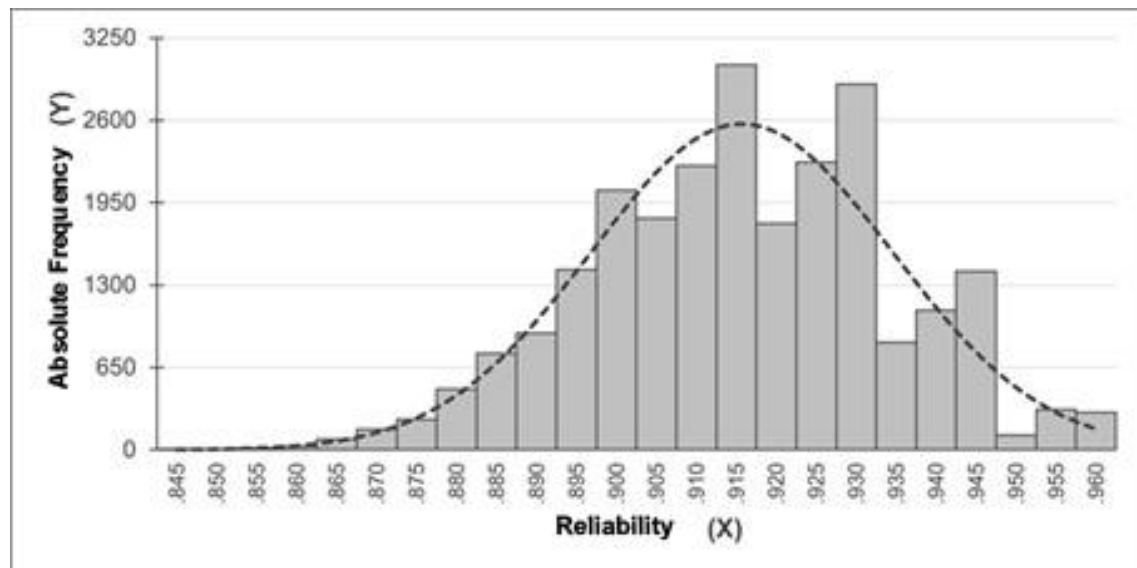
Figure 1 represents the histogram of the 24310 reliability values obtained through the two halves method. It can be seen that the group with the highest absolute frequency is the one between 0.915 and 0.920, with 3036 cases, representing 12.49% of the sample; followed by the group of

0.930-0.935, with 2886 cases reported, equivalent to 11.87% of the values obtained by the method.

In summary, all the methods used reported values higher than the minimum recommended by the specialized literature (DeVellis & Thorpe, 2017). Which allows affirming that the instrument has the properties of stability, reproducibility and consistency, so it can be used in the measurement of perceived discrimination in dating apps by the LGBT community. On the other hand, the values of the correlations of each item with respect to the total score report good internal consistency, which indicates that the items of the instrument are able to distinguish subjects with different levels of perceived discrimination (Herrero-Jiménez & Caballero-Gálvez, 2017; González-Rivera & Pabellón-Lebrón, 2018).

Figure 1

Frequency distribution of reliability - two halves method



To measure the adequacy of the data through sampling adequacy, a KMO test is developed, the average value is 0.867, with values ranging from 0.804 (item 17) to 0.985 (item 23); based on the figures obtained, it is concluded that the analyzed data set has a degree of common variance that can be considered meritorious and therefore a principal component analysis (PCA) can be performed (Keith, 2015).

Principal Component Analysis

Table 5 shows the result of the Principal Component Analysis for the analyzed variable; it is reported that the first five components report factor loadings higher than 1, so it is decided to use that amount of components to develop a model; however, given the value close to 1 of the sixth component, a second model with that amount of components will be tested; for the first case (5 components), the model is able to explain 71.06% of the variability, while the 6-component model manages to agglutinate 76.90% of the natural dispersion of the data; both values are considered acceptable according to the literature consulted (Fabrigar et al., 1999; Wu et al., 2007).

Table 5
Principal Component Analysis

Component	Principal Component Analysis		
	factorial loading	explained variance	cumulative variance
PC01	7.54	44.34	44.34
PC02	1.26	7.39	51.72
PC03	1.19	6.99	58.72
PC04	1.08	6.37	65.08
PC05	1.02	5.98	71.06
PC06	0.99	5.84	76.90
PC07	0.79	4.67	81.57
PC08	0.62	3.66	85.24
PC09	0.55	3.21	88.45
PC10	0.53	3.09	91.54
PC11	0.48	2.81	94.35
PC12	0.22	1.28	95.63
PC13	0.20	1.15	96.78
PC14	0.18	1.04	97.82
PC15	0.16	0.93	98.75
PC16	0.12	0.68	99.42
PC17	0.10	0.58	100.00

An orthogonal rotation with the varimax method was used to minimize the number of variables within each factor (Field, 2013; Byrne, 2010); the result is shown in Tables 6 (5-component model) and 7 (6-component model). For the case of the 5-component model, the model coefficients range from 0.262 (RC5) to 0.335 (RC1), while, for the 6-component model, the range is from 0.235 (RC6) to 0.297 (RC1).

Table 6
Orthogonal Rotation Results - 5-Dimensional Model

	Media	Desv Est	Minimum	Maximum
RC1	0.335	0.232	0.154	0.796
RC2	0.303	0.239	0.062	0.873
RC3	0.295	0.239	0.121	0.885
RC4	0.288	0.240	0.078	0.877
RC5	0.262	0.242	0.103	0.892

Table 7
Orthogonal Rotation Results - 6-Dimensional Model

	Media	Desv Est	Minimum	Maximum
RC1	0.297	0.238	0.134	0.886
RC2	0.292	0.239	0.123	0.881
RC3	0.281	0.241	0.116	0.892
RC4	0.259	0.242	0.099	0.892
RC5	0.261	0.240	0.110	0.884
RC6	0.235	0.241	0.111	0.875

Analysis of the models

Finally, to evaluate the quality of the developed models, some goodness-of-fit indexes are calculated, whose values are reported in Table 8. It is reported that, for both models, all the calculated parameters are within the ranges recommended by the specialized literature (Abad García et al., 2011; Hu & Bentler, 1999; Li, 2016): considered as normal or regular, so it is stated that the developed models have a consistent or valid structure; however, the 6-component model reports better values than the 5-component model, which is why the first one is selected.

Table 8
Goodness-of-fit indices for the models developed

Indicator		n=5	n=6
CFI		0.841	0.912
TLI		0.797	0.885
Media		0.127	0.097
RMSEA	IC90-low	0.120	0.091
	IC90-upper	0.134	0.104
SRMR		0.126	0.125

Once the number and composition of the dimensions of the instrument were obtained, we proceeded to verify the behavior patterns of each of the dimensions. Comparing the means, it is reported that Dimension 02 has the highest average of the group, with a value of 4.48, while Dimension 05 reports the lowest average, with a value of 4.26. All dimensions, as well as the total score, report bias coefficient with negative values, which indicates that the general tendency is the predominance of high values, that is, the data are positioned in such a way that the average is higher than the median. Verifying the kurtosis values, it is reported that Dimension 04 reports a negative value, which indicates that the general tendency of the data is to have a more flattened

or flattened structure than the normal distribution, while the rest of the dimensions present a distribution of data with a greater concentration of values around the mean (Table 9).

Table 9
Summary statistics by dimension

	Dim01	Dim02	Dim03	Dim04	Dim05	Dim06	Total
Media	4.30	4.48	4.31	4.42	4.26	4.27	4.44
Desv Est	0.91	0.79	0.81	0.70	0.96	0.90	0.71
Sesgo	-1.22	-1.78	-1.00	-0.81	-1.08	-1.06	-0.98
Curtosis	0.90	3.60	0.35	-0.46	0.25	0.35	0.03
CIT	0.75	0.70	0.63	0.62	0.74	0.68	---

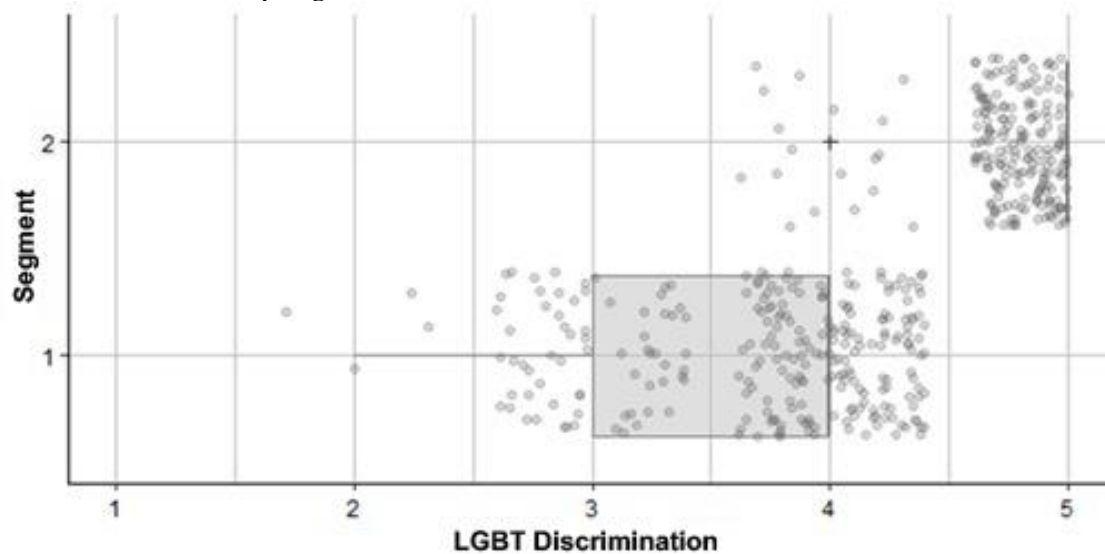
Segmentation analysis

In order to detect possible behavioral patterns, a segmentation analysis was developed, determining that the optimal number of segments is 2, Table 10 shows the summary statistics. It is observed that segment 1 reports a mean of 3.706 and a standard deviation of 0.489, while segment 2 has a higher mean (4.952) and a lower standard deviation (0.213) compared to segment 1. Figure 2 shows the differences in data density for both segments, a test of difference of means reveals the existence of a significant difference ($t = -38.788$, $p < 0.05$) in the levels of discrimination for both segments. For this reason, individuals belonging to segment 2 can be referred to as “individuals with a high level of perceived discrimination” in the sense that they report very high levels of discrimination, either towards themselves or towards other people they know. This higher level of perception group is often characterized by higher levels of anxiety and stress, as well as other psychophysical manifestations (Stacey & Forbes, 2022; Wu & Trottier, 2022).

Table 10
Frequency distribution by segment

	Segment 1	Segment 2
1	0	0
2	4	0
3	69	0
4	189	18
5	0	360
Total	262	378
Media	3.706	4.952
Desv Est	0.489	0.213
Sesgo	-1.301	-4.265
Curtosis	0.566	16.280

Figure 2
Discrimination Level by Segment

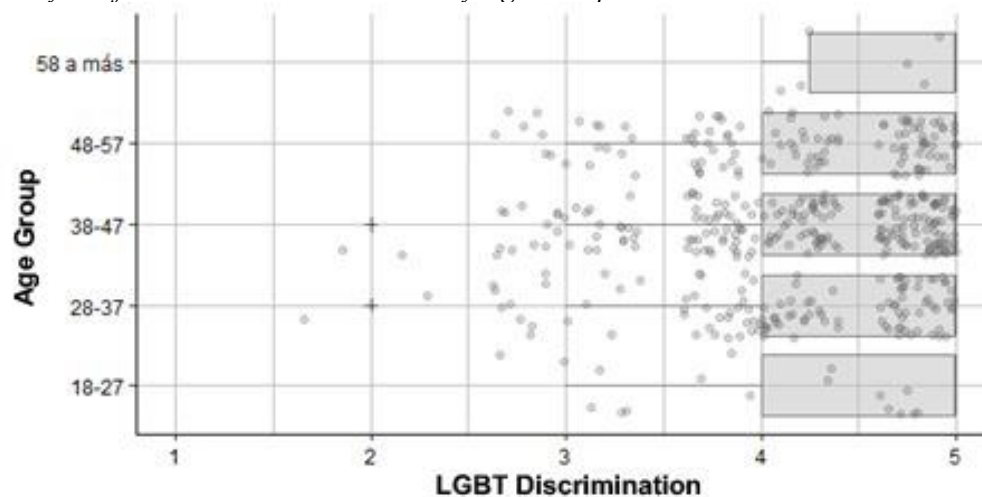


To verify whether the age range is a predictor of the level of discrimination, an analysis of variance was performed, the results of which are shown in Table 11 and Figure 3; the analyses show that there are no significant differences ($F=0.568$, $p>0.05$) between age groups for discrimination, i.e., the age group is not a determinant of the level of discrimination experienced in social networks, which is consistent with that reported by works such as (Luiggi-Hernández et al., 2015) or (Lauckner et al., 2019).

Table 11
Analysis of Variance - Age Discrimination

	degrees freedom	Sum squares	square Medium	F	p-valor
Age	4	1.1	.2853	.568	0.686
Residual	635	318.7	.5019		

Figure 3
Analysis of Variance - Discrimination by Age Group



In practical terms, it could be demonstrated that the scale of discrimination in dating applications in the LGBT community (EDDAC-LGBT) can be used for the execution of new works in this area; which constitutes an advance considering the scarce instruments developed for the Latin American area. Although the phenomenon of LGBT discrimination and its repercussions on the physical and mental health of individuals have been investigated since the 1950s with works such as Lewin, (1952) and Allport, (1954), the literature consulted does not report a specific instrument to measure the level of discrimination, however, all the literature consulted reports the impact that discrimination has on aspects such as psychological well-being, personal dissatisfaction and self-rejection, altering levels of stress, anxiety and depression (Bostwick et al., 2014; González-Rivera & Pabellón-Lebrón, 2018).

CONCLUSIONS

Around the world, the LGBT community has been a constant victim of prejudice and rejection in the social, occupational, academic and clinical spheres; despite this, there is no specific instrument for the measurement of discrimination towards the LGBT community. By virtue of meeting this need, this article presents the scale of discrimination in dating apps in the LGBT community (EDDAC-LGBT), which reports psychometric properties suitable for its use in the study sample, since it has been shown to have both validity and reliability. Although it was possible to demonstrate through inferential statistics that the EDDAC-LGBT model is invariant among the age groups considered, it is recommended that an analysis be made relating the values obtained with the different sociodemographic variables. It is recommended that further studies be conducted in other sample groups in order to corroborate the findings of this research and determine their applicability in other regions of Mexico.

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