

ORIGINAL ARTICLE

WILEY

Variables that enhance the development of resilience in young gay people affected by the COVID-19 pandemic

Souhib Lorabi¹ | David Sánchez-Teruel^{2,3} | María Auxiliadora Robles-Bello¹  | Antonio Ruiz-García⁴

¹Psychology Department, University of Jaen, Jaen, Spain

²Faculty of Psychology, University of Granada, Granada, Spain

³Member of the Spanish Society of Suicidology, Madrid, Spain

⁴Psychology Department, University of Cordoba, Cordoba, Spain

Correspondence

María Auxiliadora Robles-Bello, Campus Las Lagunillas, C5-136, 23071, Jaen, Spain.
Email: marobles@ujaen.es

Antonio Ruiz García, San Alberto Magno, 14071 Córdoba, Spain.
Email: aruiz1@uco.es

Abstract

Aims: Sexual and gender minorities are more likely to suffer from depression and anxiety caused by COVID-19. However, they also have specific variables that have been little studied but which may protect them from this adverse situation. The aim of this study was to find out whether there were differences in socio-demographic and psychosocial variables in two groups of Spanish gay young people (high and low resilience), and predictors of risk and protective factors were examined.

Methods: Nine hundred and seventy-nine young homosexuals (389; 39.73% self-reported as women) aged between 18 and 26 years old who experienced mandatory confinement due to COVID-19, completed an anonymous online questionnaire. Hope, perceived self-efficacy, reappraisal index, coping humour, anxiety, depression were assessed along with socio-demographic information. Data were collected between 15 and 26 April 2020.

Results: Socio-demographic variables that were predictive of highly resilient behaviour included being between 24 and 26 years old, living with LGBTI+ peers and living in big cities, protective psychosocial variables included reframing in reappraising the confinement situation, humour as coping, social support from significant others and self-efficacy.

Conclusion: This is one of the first studies on this subject of compulsory COVID-19 confinement on young homosexuals in Spain. Mental health professionals and organizations should also include work on psychosocial protective factors, not just risk factors, to enhance resilient outcomes in this group.

KEYWORDS

COVID-19, LGBTI+, mental health, protective factors, resilience

1 | INTRODUCTION

According to a 2018 report, almost 6% of the European population identifies as LGBTI+ (García-Cano et al., 2018), which is a significant minority (Basque Institute of Statistics, 2018; European Union, 2018).

These figures seem to have increased in recent years due to LGBTI+ immigration from non-EU countries (ILGA-Europe & TEGEU, 2019). The acronym LGBTI+ identifies different realities that straddle sexual orientation and diversity in sexual expression (De Lira & De Morais, 2018). The language used to describe this group is constantly

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2023 The Authors. *Early Intervention in Psychiatry* published by John Wiley & Sons Australia, Ltd.

changing, that is, these people present multiple identities and specific ways of describing their life stories (O'Shea et al., 2020), which leads them to experience violence, rejection, prejudice, harassment and discrimination from childhood (Díaz-Serrano & Meix-Llop, 2016) through into adulthood (Alozie et al., 2017). This has led them to suffer significant emotional disturbances, especially in youth and adolescence, and in the most serious cases has led to suicide (European Commission, 2020; Sánchez-Teruel & Robles-Bello, 2014). In fact, we found in different studies where suicide attempts in this population (lifetime) were reported by 13.6%, 45.2% had suicidal ideation in the last year (Rimes et al., 2019), in another more recent study a similar suicidal ideation was found in this population (52.9%) (Chang et al., 2022). We know that LGBTI+ stigma and discrimination experiences were significantly associated with these problems (Aguayo et al., 2016). In contrast, they also appear to have some protective factors, such as a strong sense of belonging to their community which protects them in these adverse situations (Roberts, 2019). However, compulsory home confinement due to the COVID-19 pandemic has limited their ability to gather and belong, causing intense psychosocial disorders in this group.

Among European countries, Spain has been one of the most affected by the COVID-19 pandemic. (López-Bravo et al., 2020) and confined the entire population to their homes from 15 March to 21 June 2020 (Boletín Oficial del Estado-BOE, 2020). This global pandemic has put new pressures on the most vulnerable groups (Litam & Hipolito-Delgado, 2021), and LGBTI+ people are no exception (Salerno et al., 2020). Preventive measures such as confinement have locked many LGBTI+ people into hostile environments where they may be at risk of violence, invisibility, lack of social support, or increased levels of anxiety or depression (Gato et al., 2021; Green et al., 2020). Specifically, people belonging to sexual and gender minorities were found to have more physical symptoms, depression and anxiety related to COVID-19 (Gato et al., 2021; Moore et al., 2021). In addition, these same groups scored higher on depression and anxiety, reaching clinical levels on these problems (Moore et al., 2021). Consequently, the psychosocial support needs of LGBTI+ populations need to be investigated in more depth during the pandemic (Döring, 2020). However, there is no known analysis in the Spanish population of which protective factors would predict a resilient outcome in LGBTI+ people, and more specifically in the gay population subjected to mandatory home confinement that the government instituted as a preventive measure against COVID-19.

Self-efficacy has been found to be a very significant study variable for this group (Rhoten et al., 2021). Hope has only been studied in relation to suicidal ideation in HIV-infected patients (Siegel & Meyer, 1999), interestingly, hopelessness has been addressed in the scientific literature (Langhinrichsen-Rohling et al., 2010). Social support is one of the most commonly-studied variables in this group, with results indicating that it promotes resilient behaviours in different nationalities (Moore et al., 2021), including the Spanish homosexual population (Domínguez-Fuentes et al., 2012). Therefore, more research is needed on which protective factors favour higher levels of resilience in LGTBI+ people (Suen et al., 2020). Studying the

relationship resilience in general and resilience in this group is important because connection to the LGBTI+ community has been shown to be an important resilience resource for people who are in a sexual minority group (Suen et al., 2020). Thus, belonging to LGTBI+ community groups can provide them with an affirming and supportive social network, which is associated with less psychological distress. (McConnell et al., 2018) and improved well-being (Frost & Meyer, 2012). However, due to the restrictions of social distancing, these persons belonging to sexual minorities may find their contacts with the support network difficult, causing a negative effect on their mental health (Snapp et al., 2015). Humour appears to be a protective factor for mental health that promotes resilient coping with stressors (Caird & Martin, 2014), and it is also interesting to observe how this variable operates in this minority (Katz et al., 2021). Humour has recently been related to reappraisal (Fritz, 2020) such that greater reappraisal reduces the level of stress in conflictive situations. It would be interesting to see what happens with this group in this respect.

In view of the above, this study has the following objectives: to find out the possible differences in socio-demographic and psychosocial variables in two groups of young Spanish homosexuals (high and low resilience) in compulsory confinement during COVID-19, to assess which socio-demographic and psychosocial variables can predict resilience in the subgroup with higher resilience; test whether there are differences between the two groups of youth on protective and risk variables, and which social support, self-efficacy, reappraisal, mood and hope will be predictors of resilience in this group of gay youth who have been more resilient to mandatory confinement during COVID-19.

2 | METHOD

2.1 | Participants and procedure

A total of 1014 people participated in this cross-sectional study. The following were used as inclusion criteria: (1) the age range included is between 18 and 26 years old; (2) having Spanish nationality; (3) having self-reported a homosexual orientation; (4) having read and accepted the study information and the study's informed consent. After the application of the criteria, the final total sample of participants was 979, of whom 389 (39.73%) self-reported being female and 590 (60.27%) self-reported being male. The age range of the sample was between 18 and 26 years ($M = 22.10$; $SD = 8.62$). Socio-demographic data can be found in table one (Table 1).

Recruitment occurred via five LGBTI+ organizations from four Spanish regions in Spain. The sample was recruited by non-probabilistic snowball sampling. The study was sent as a link by email to each of the organizations who agreed to participate and those organizations sent it by email and social networks to each of their members and supporters. The questionnaires were anonymously completed online. No remuneration or incentive was offered for participation in the study.

Data were collected using an online survey (Google Forms). Before completing the questionnaire, participants had to read the

TABLE 1 Description of socio-demographic data for both groups

	HRG (%)	LRG (%)	χ^2	df	Phi
Age range					
18–20	142 (35.4)	202 (37.1)	8.46 ^{ns}	2	.71
21–23	130 (32.4)	186 (34.1)			
24–26	129 (32.2)	157 (28.8)			
Level of completed education					
None	17 (4.3)	24 (4.4)	6.47*	3	.18
Primary education	128 (31.9)	133 (24.4)			
VET/HNC/high school diploma	112 (27.9)	121 (22.2)			
University degree	144 (35.9)	267 (49.0)			
Stressful situation (last year)					
Yes	189 (47.1)	269 (49.4)	5.22 ^{ns}	1	.79
No	212 (52.9)	276 (50.6)			
Who did you live with during confinement?					
Alone	43 (10.7)	98 (18.0)	9.12*	4	.63
Partner	97 (24.2)	74 (13.6)			
Parents/siblings or relatives	85 (21.2)	162 (29.7)			
Peers (non-LGBTI+)	64 (16.0)	114 (20.9)			
Peers (LGBTI+)	112 (27.9)	97 (17.8)			
Number of inhabitants in place of residence					
<5.000	21 (5.2)	38 (7.0)	8.22 ^{ns}	4	.76
5.000–24.999	83 (20.7)	102 (18.7)			
25.000–49.999	94 (23.4)	116 (21.3)			
50.000–100.000	98 (24.5)	153 (28.1)			
>100.000	105 (26.2)	136 (24.9)			
Type of dwelling					
Flat, smaller than 59 m ²	187 (46.6)	228 (41.8)	28.65*	3	.91
Flat, 60–99 m ²	179 (44.7)	216 (39.6)			
Flat, larger than 100 m ²	12 (3.0)	36 (6.6)			
House	23 (5.7)	65 (12.0)			
Alpha for Resilience Scale-14 (RS)	.89	.91			
Total	401	545			

Abbreviations: *df*, degrees of freedom; HNC, certificate of higher education; HRG, high resilience group; LRG, low resilience group; ns, no significant; Phi, effect size; VET, vocational education and training; α_{RS-14} , Cronbach Alpha for the Resilience Scale-14 (RS); χ^2 , chi-squared.

* $p < .05$.

information and give informed consent to participate. The study followed the ethical principles of the Spanish Society of Psychology and the Declaration of Helsinki, and approval was obtained from the ethics committee of the University of Jaen (Spain) (code: ABR.20/4. PRY). Data were collected between 15 and 26 April 2020 (first period of time that the Spanish people were confined to their homes).

Participants were divided into two groups according to their level of resilience, as assessed by Wagnild's (2009) resilience scale, the RS-14, which assesses resilience to adverse situations. The criterion used was ± 3 SD from the mean of the scale (this scale has no cut-off points). This scale was adapted to the Spanish population by Sánchez-Teruel and Robles-Bello (2015) (RS-14), and measures the level of resilience to adverse situations. The Spanish version had adequate

internal consistency measured through Cronbach's alpha (.79) and good criterion validity calculated with other resilience measures (CD-RISC by Connor & Davidson, 2003) ($r = .87$; $p < .001$). In addition, the Spanish adaptation also demonstrated suitable inverse correlation with depression ($r = -.81$, $p < .001$) and trait-anxiety ($r = -.69$, $p < .001$). Cronbach's alpha was .96.

2.2 | Instruments

Socio-Demographic data: An ad hoc questionnaire was developed to collect personal and socio-demographic information from the participants (Table 1).

Herth Hope Index (HHI) (Herth, 1992; adapted version and translation of Sánchez-Teruel, Robles-Bello, and Camacho-Conde, 2021). This instrument assesses hope through two subscales: future and positive hope, yielding an $\alpha = .97$ in the Spanish clinical population; it also shows adequate divergent validity with hopelessness ($-.82$). In a more recent study in the Spanish general population (Robles-Bello et al., 2020) during COVID-19 restrictions the instrument obtained an $\alpha = .69$. The internal consistency via alpha in the full sample of this study was .88.

General Self-Efficacy Scale-GSE (Schwarzer & Jerusalem, 1995; translate into Spanish by Sanjuán et al., 2000). Internal consistency in the Spanish population was $\alpha = .88$. In the present study, for the complete sample, $\alpha = .88$ was obtained.

The Multidimensional Scale of Perceived Social Support (MSPSS, Zimet et al., 1988 adaptation by Landeta & Calvete, 2002). The original study in samples of university students had a reliability of $\alpha = .85$, and in subsequent studies, also with university students, McDonald's omega (McDonald, 1999) was .93 (Osman et al., 2014). Reliability in the sample in this study was $\alpha = .88$.

Reappraisal Index (RI), (Fritz, 2020). This instrument measures the ability to cognitively reappraise negative events, changing one's perspective towards a more positive or less negative perception of them. Cronbach's alpha in the original longitudinal study was adequate (.71; .80), and in the present study it was .89.

Coping Humour Scale (CHS) (Lefcourt & Martin, 1986). This measures the intentional use of humour as a coping strategy in difficult situations. The original English version has seven items, but later cross-cultural psychometric studies evaluated the use of a six-item version (Chen & Martin, 2007), which was the version used in this study. Each item has four response options, where 1 is strongly disagree and 4 is strongly agree. All items are rated positively and the score ranges from 6 to 24 points. This unidimensional scale in the original six-item English version has a Cronbach's alpha of .70, and adequate significant correlation with Self-enhancing humour (.78; Kuiper et al., 2004). In the present study with gay youth, Cronbach's alpha was .97.

State-Trait Anxiety Inventory (STAI) (Spielberger et al., 1970). It assesses anxiety as a state and as a trait. It has obtained an $\alpha = .93$ in the Spanish population, with a sample of young people aged 17 and 33 (Fonseca et al., 2012). In this study, an alpha of .76 was obtained.

Beck Depression Inventory (BDI-II) (Beck et al., 1996; translation and Spanish adaptation by Sanz et al., 2005). The reliability of the Spanish version with psychiatric disorders is $\alpha = .89$, considered to have adequate internal consistency. In this study, the reliability was also adequate, $\alpha = .83$.

2.3 | Data analysis

Missing data were less than 1% for all variables, and the multiple imputation method (SPSS) was used to impute missing values (Graham, 2012). The parametric student-t test was used to test for differences between the variables assessed. Then, correlations between the psychological variables and resilience were performed. Finally, a

hierarchical analysis was performed including as independent variables the socio-demographic, protective (hope, self-efficacy and social support), and risk variables (anxiety and depression); resilience was used as the dependent variable. Goodness of fit was previously calculated (Kleinbaum et al., 1988; Yoo et al., 2014). Statistical power and effect size were also calculated. The level set was $p < .05$. SPSS version 22.0 (IBM Corporation, 2013) was used for the analyses and power and effect size were determined using G*Power 3.1.9.7 (Faul et al., 2009).

3 | RESULTS

The descriptive results showed notable differences between the two groups (high resilience and low resilience) in all psychosocial variables (Table 2). In addition, the effect size of the differences between the groups was large (.63 to .96).

All bivariate relationships were significant. There was a negative correlation between resilience and the risk variables (state-anxiety and depression), and a positive correlation between resilience and protective psychosocial variables (hope, self-efficacy, social support, reappraisal, and coping humour) in the two subsamples (Table 3). More specifically, in the high resilience subgroup the strongest positive correlation was between resilience and reappraisal ($r = .97$; $p < .01$), coping humour ($r = .92$; $p < .01$), and self-efficacy ($r = .91$; $p < .01$) and the strongest negative correlation was between resilience and depression ($r = -.93$; $p < .01$). Results in the low-resilience group were similar (resilience and reappraisal $r = .96$; $p < .01$ and resilience and self-efficacy $r = .90$; $p < .01$; resilience and depression $r = -.89$; $p < .01$).

Preliminary results indicated that all of the proposed models with the high resilience group had suitable goodness of fit. Results of the Durbin-Watson (DW) test in particular indicated the independence of errors in the independent variable Resilience (RS-14) in the three steps ($DW_{step1} = 1.94$; $DW_{step2} = 1.95$; $DW_{step3} = 1.98$) (Yoo et al., 2014).

TABLE 2 Descriptive analyses for both groups in terms of the study variables

	HRG M (SD)	LRG M (SD)	t	d
Hope	33.7 (6.2)	21.9 (6.5)	16.72*	.63
Self-efficacy	38.2 (3.6)	10.9 (3.2)	13.02**	.81
Social support	72.4 (1.7)	13.3 (2.2)	24.45**	.96
Reappraisal	41.3 (2.47)	16.4 (3.7)	39.43**	.86
Coping humour	23.7 (1.12)	12.7 (4.8)	27.54**	.94
Anxiety-state	11.4 (1.8)	67.1 (1.2)	22.67**	.79
Depression	12.6 (3.5)	59.1 (3.8)	43.71**	.88

Note: Hope = Herth Hope Index (HHI); Self-Efficacy = General Self-Efficacy Scale (GSES); Social Support = Multidimensional Scale of Perceived Social Support (MSPSS); Reappraisal = Reappraisal Index (RI); Coping Humour = Coping Humour Scale (CHS); Anxiety-State = State-Trait Anxiety Inventory-State (STAI-S); Depression = Beck Depression Inventory (BDI-II); t = Student t; p = significance; d = Cohen's d; *Significant ($p \leq .05$); **Very significant ($p \leq .01$); Not significant ($p = ns$). Abbreviations: HRG, high resilience group; LRG, low resilience group; M, mean; SD, standard deviation.

TABLE 3 Correlations between protective and outcome variables in the two subsamples

High resilience group								
	Hope	Self-efficacy	Social support	Reappraisal	Coping humour	Anxiety	Depression	Resilience
Hope	1	.62*	.57*	.77*	.74*	-.71*	-.95**	.73*
Self-efficacy	.62*	1	.79*	.89*	.86*	-.68*	-.86*	.91**
Social support	.57*	.79*	1	.96**	.94**	-.82*	-.93**	.89*
Reappraisal	.77*	.89*	.96**	1	.98**	-.87*	-.84*	.97**
Coping humour	.74*	.86*	.94**	.98**	1	-.78*	-.89*	.92**
Anxiety	-.71*	-.68*	-.82*	-.70*	-.78*	1	.84*	-.74*
Depression	-.95**	-.86*	-.93**	-.81*	-.89*	.84*	1	-.93**
Resilience	.73*	.91**	.89*	.97**	.92**	-.74*	-.93**	1
Low resilience group								
	Hope	Self-efficacy	Social support	Reappraisal	Coping humour	Anxiety	Depression	Resilience
Hope	1	.69*	.55*	.52*	.48*	-.88*	-.94**	.76*
Self-efficacy	.69*	1	.73*	.66*	.69*	-.82*	-.79*	.90**
Social support	.55*	.73*	1	.71*	.69*	-.79*	-.52*	.83*
Reappraisal	.52*	.66*	.71*	1	.62*	-.86*	-.89*	.96**
Coping humour	.48*	.69*	.69*	.62*	1	-.81*	-.91**	.84*
Anxiety	-.88*	-.82*	-.79*	-.86*	-.81*	1	.71*	-.56**
Depression	-.94**	-.79*	-.52*	-.89*	-.91**	.71*	1	-.89*
Resilience	.76*	.90**	.83*	.96**	.84*	-.56*	-.89*	1

Note: *Significant ($p \leq .05$); **Very significant ($p \leq .01$).

The Variance Inflation Factor (VIF) being below five indicated the non-multicollinearity of the independent variable in all three predictive steps (Kleinbaum et al., 1988) ($VIF_{step1} = 4.12$; $VIF_{step2} = 3.26$; $VIF_{step3} = 1.96$). The hierarchical regression shows that some socio-demographic and protective variables predicted the higher level of resilience in this subgroup. Step 3 (set of independent variables) was significant and explained 97.3% of resilience ($R^{2adj} = .973$; $F_{(1,400)} = 2521.11$; $p < .01$) (Table 4). This final model indicated that the most predictive variables (socio-demographic and protection) of a high level of resilience were being between 24 and 26 years old ($\beta = 9.23$; CI (95%) = 7.12–9.24; $p < .01$), living with LGBTI+ peers ($\beta = 8.93$; CI (95%) = 8.29–9.01; $p < .01$), Living with LGBTI+ peers during confinement ($\beta = 8.93$; CI (95%) = 8.29–9.01; $p < .01$), using reframing as a reappraisal of the confinement situation ($\beta = 8.12$; CI (95%) = 7.96–8.29; $p < .01$), using humour as a method of coping with the difficult situation ($\beta = 9.23$; CI (95%) = 9.11–9.78; $p < .01$), having a high level of self-efficacy ($\beta = 7.31$; CI (95%) = 6.18–8.12; $p < .01$), and having a high level of social support (specifically a significant other) ($\beta = 9.18$; CI (95%) = 9.01–9.89; $p < .01$). To a lesser extent, living in a big city during the confinement ($\beta = 7.23$; CI (95%) = 7.01–8.22; $p < .01$) and having a high level of hope for the future ($\beta = 5.11$; CI (95%) = 4.54–7.21; $p < .01$) were also important predictors of resilience.

4 | DISCUSSION

In this study we aimed to find out whether there were differences between socio-demographic and psychosocial variables in Spanish gay

young people (high and low resilience) during compulsory confinement during COVID-19. We also aimed to detect whether any of these variables could predict resilience in the high resilience group, and to check whether there were differences between the high and low resilience groups in relation to protective and risk variables for this group.

The sample of Spanish gay young people used has been divided into two groups (high and low resilience). The results showed statistically significant differences in the variables analysed between the groups. In addition, an inverse relationship was found to be significant between resilience and anxiety and depression, and with the protective variables assessed a direct relationship with this resilience variable. On the other hand, some socio-demographic and psychosocial variables were shown to be predictive of a high level of resilience in young Spanish homosexuals to compulsory confinement due to COVID-19. Specifically, young gay people who were older (24 and 26 years old), living with LGBTI+ peers, and living in larger cities (100 000 inhabitants or more) had higher levels of resilience during the mandatory COVID-19 confinement. It appears that these socio-demographic variables are highly predictive of developing resilience as an outcome in very adverse situations. These results have been confirmed by other studies (Parrado-González & León-Jariego, 2020; Sandín et al., 2020). Studies have found that younger people exhibited worse psychological functioning than older groups (Fenollar-Cortés et al., 2021; Huang & Zhao, 2020; Kavči et al., 2021; Kimhi et al., 2020). This may be explained by the fact that older young gay people have more coping skills in difficult situations, but also because if confinement forced them to continue living with their LGBTI+

TABLE 4 Predictive models of socio-demographic and protective variables in the subsample of young homosexuals with high resilience ($n_1 = 401$)

Models and variables	R^{2adj}	SE	F	t	β	CI (95%) (β)	
						LL	UL
Step 1	.521	2.23	83.14 ^{ns}	.12 ^{ns}			
Age (24–26)					.62	–.11	1.51
Level of education (university degree)					.54	–.07	2.16
Number of inhabitants in place of residence (100,000)					.69	–.11	1.24
Step 2	.617	1.56	316.10**	2.12*			
Age (24–26)					3.45	–.12	4.65
Level of education (university degree)					1.53	–.02	2.59
Number of inhabitants in place of residence (100,000)					1.57	.32	2.66
Hope (future)					1.61	1.35	2.91
Reappraisal (reframing)					1.72	1.63	1.86
Coping humour					1.68	1.63	1.98
Step 3	.973	1.87	2521.11***	53.39***			
Age (24–26)					9.23	7.12	9.34
Level of education (university degree)					2.78	2.18	3.12
Live during confinement? (Peers LGBTI+)					8.93	8.29	9.01
Number of inhabitants in place of residence (100,000)					7.23	7.01	8.22
Hope (future)					5.11	4.54	7.21
Reappraisal (reframing)					8.12	7.96	8.29
Coping humour					9.23	9.11	9.78
Self-efficacy					7.31	6.18	8.12
Social support (significant other)					9.18	9.01	9.89

Abbreviations: CI 95%, confidence intervals; F, test statistic (ANOVA); LL, lower limit; ns, non-significant; R^{2adj} , adjusted R-squared; SE, standard error; t, predictive variable test statistic; UL, upper limit; β , result of regression or beta equation.

* $p < .05$; ** $p < .01$; *** $p < .001$.

peers, in large cities, it would probably enhance their level of identification with the LGBTI+ community (Roberts, 2019), developing greater social support that would lead them to be more resilient. The visibility of sexual diversity is a basic human right (Commissioner for Human Rights, 2020) and fundamental in European educational and social policies (European Union, 2018). It would be advisable for the educational and community spheres to take specific action to increase visibility and sexual diversity in small and medium-sized cities to enhance these young people's resilience and mental health.

Other studies have reported similar results to the present study, for example, showing that people with a high level of self-efficacy and social support score higher on resilience (Chen & Bonano, 2020). These findings have also been reported in the context of confinement during the COVID-19 pandemic. People with higher levels of social support exhibited lower levels of stress (Xiong et al., 2020; Zhang & Ma, 2020) and had higher self-efficacy and greater hope with higher levels of resilience (Robles-Bello et al., 2020; Sánchez-Teruel, Robles-Bello, & Valencia-Naranjo, 2021). Another study with LGB, transgender and non-binary youth found that lower social support was related to higher levels of stress (Kidd et al., 2021), and an inverse relationship has been found between stress levels and resilience (Morales-Vives et al., 2020; Oducado et al., 2021), as well as between resilience and

neuroticism (a variable related to anxiety and depression) (Morales-Vives et al., 2020). The results from the present study are also in line with some cross-sectional and longitudinal studies that have postulated the importance of humour as a trait that helps people to cope with difficult situations through the modulation of positive reframing within a cognitive process of reappraisal (Fritz, 2020). All of these results suggest how certain protective psychosocial variables modulated a high level of resilience in homosexual people during the compulsory COVID-19 confinement in Spain. These results can help activists and organizations to implement actions to develop resilience in this group, offering concrete strategies for empowering those who form part of it.

5 | LIMITATIONS

The first limitation is the use of snowball sampling via social media, which means that the sample cannot be considered representative of young gay people in Spain. However, snowball sampling is a particularly useful method for accessing a hard-to-reach population and offers little control over the sample, and the people in the sample had broadly similar characteristics, having been contacted through LGBTI

+ organizations, it is more likely to have recruited people who are visible or more accepting of their sexual orientation. The second limitation is that online tools limit access to people who are not used to this technology or who may have had difficulties in going online during confinement. An additional limitation of the study is the fact that it was carried out in one country (Spain) and only with relatively young people. As no parallel cross-sectional studies have been done in other countries yet, it is difficult to generalize the results, especially considering the various biases and cultural differences. Finally, the use of self-reported measures is a limitation shared with previous studies conducted all over the world during the early stages of the pandemic.

6 | CONCLUSIONS

To our knowledge, this is one of the first studies of the effects of compulsory confinement due to COVID-19 on the LGBTI+ population in Spain, specifically on young homosexuals. Therefore, in addition to being in line with other studies in the general population, the results show that this group also has particular needs that must be addressed in order to improve their mental health and well-being. Currently, LGBTI+ people continue to have higher risks of exclusion/marginalization and mental health problems, including emotional and social vulnerability. Homosexual people are also more likely than the general population to experience biphobic/homophobic violence, including by religious and political authorities (Banerjee & Nair, 2020; Commissioner for Human Rights, 2020).

The pandemic, and enforced confinement, was a notable psychosocial risk for the general population, and specifically for homosexuals in Spain. The conclusions of the study indicate that the main psychosocial protection factors are related to positive reframing through humour, having or perceiving oneself as having greater self-efficacy, and social support, as well as indicators such as living with LGBTI+ peers in large cities. These factors have been found to be associated with greater resilience, and related to people exhibiting fewer symptoms of anxiety or depression. Therefore, the professionals who serve these groups, and society in general, should consider these variables in order to reduce stigma, improve sex education and, above all, to make the diversity of human sexuality visible.

ACKNOWLEDGEMENT

The authors thank all the organizations involved in the study and all the participants.

FUNDING INFORMATION

This research was not supported by any funding sources.

CONFLICT OF INTEREST

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

ORCID

María Auxiliadora Robles-Bello  <https://orcid.org/0000-0002-4979-5399>

REFERENCES

- Aguayo, F., Fontbona, J., Gálvez, C., Lagazzi, I., Leyton, F., Martínez, C., Quiroz, C., Rodríguez, J., Rosenbaum, C., & Tomicic, A. (2016). Suicidio en poblaciones lesbiana, gay, bisexual y trans: revisión sistemática de una década de investigación (2004-2014). *Revista Médica de Chile*, 44(6), 723–733. <https://doi.org/10.4067/S0034-98872016000600006>
- Alozie, A., Paranskaya, L., Westphal, B., Kaminski, A., Sherif, M., Sindt, M., Kische, S., Schubert, J., Diedrich, D., Ince, H., Steinhoff, G., & Öner, A. (2017). Clinical outcomes of conventional surgery versus MitraClip® therapy for moderate to severe symptomatic mitral valve regurgitation in the elderly population: An institutional experience. *BMC Cardiovascular Disorders*, 17, 85. <https://doi.org/10.1186/s12872-017-0523-4>
- Banerjee, D., & Nair, V. S. (2020). “The untold side of COVID-19”: Struggle and perspectives of the sexual minorities. *Journal of Psychosocial Health*, 2(2), 113–120. <https://doi.org/10.1177/2631831820939017>
- Basque Institute of Statistics. (2018). *Population in the EU 27 from 2009 to 2020*. https://www.eurostat.eu/elementos/ele0009800/ti_poblacion-en-la-ue-27-desde-2020-n-de-habitantes-2009-2020/tbl0009913_c.html
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *BDI-II Manual*. The Psychological Corporation.
- Boletín Oficial del Estado-BOE. (2020). COVID-19: Derecho Europeo, Estatal y Autonómico. *Boletín Oficial del Estado*, 355, 1–709.
- Caird, S., & Martin, R. A. (2014). Relationship-focused humor styles and relationship satisfaction in dating couples: A repeated-measures design. *Humor*, 27, 227–247. <https://doi.org/10.1515/humor-2014-0015>
- Chang, C. J., Feinstein, B. A., Chu, B. C., & Selby, E. A. (2022). Application of minority stress and the interpersonal theory of suicide in bisexual+ versus gay/lesbian young adults. *Suicide & Life-Threatening Behavior*, 00, 1–15. <https://doi.org/10.1111/sltb.12856>
- Chen, G. H., & Martin, R. A. (2007). A comparison of humor styles, coping humor, and mental health between Chinese and Canadian university students. *Humor*, 20(3), 215–234. <https://doi.org/10.1515/HUMOR.2007.011>
- Chen, S., & Bonano, G. A. (2020). Psychological adjustment during the global outbreak of COVID-19: A resilience perspective. *Psychological Trauma Theory Research Practice and Policy*, 12(1), 51–54. <https://doi.org/10.1037/tra0000685>
- Commissioner for Human Rights. (2020). *COVID-19: The suffering and resilience of LGBT persons must be visible and inform the actions of states. Statement by human rights experts on the International Day against Homophobia, Transphobia and Biphobia*. Commissioner for Human Rights. <https://www.coe.int/en/web/commissioner/-/covid-19-the-suffering-and-resilience-of-lgbt-persons-must-be-visible-and-inform-the-actions-of-states>
- Connor, K. M., & Davidson, J. R. (2003). Development of a new resilience scale: The Connor-Davidson resilience scale (CD-RISC). *Depression and Anxiety*, 18, 76–82. <https://doi.org/10.1002/da.10113>
- Corporation, I. B. M. (2013). *IBM SPSS statistics for windows, version 22.0*. IBM Corporation.
- De Lira, A. N., & De Morais, N. A. (2018). Resilience in lesbian, gay, and bisexual (LGB) Populations: An integrative literature review. *Sexuality Research & Social Policy*, 15(3), 272–282. <https://doi.org/10.1007/s13178-017-0285-x>
- Díaz-Serrano, L., & Meix-Llop, E. (2016). Do schools discriminate against homosexual parents? Evidence from a randomized correspondence experiment. *Economics of Education Review*, 53, 133–142. <https://doi.org/10.1016/j.econedurev.2016.06.001>
- Domínguez-Fuentes, J. M., Hombrados-Mendieta, M. I., & García-Leiva, P. (2012). Social support and life satisfaction among gay men in Spain.

- Journal of Homosexuality*, 59(2), 241–255. <https://doi.org/10.1080/00918369.2012.648879>
- Döring, N. (2020). How is the COVID-19 pandemic affecting our sexualities? An overview of the current media narratives and research hypotheses. *Archives of Sexual Behavior*, 49, 2765–2778. <https://doi.org/10.1007/s10508-020-01790-z>
- European Commission. (2020). *Union of Equality: LGBTIQ equality strategy 2020–2025*. European Commission.
- European Union. (2018). *The European Union in figures: Life in the European Union*. https://europa.eu/european-union/about-eu/figures/living_es
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fenollar-Cortés, J., Jiménez, Ó., Ruiz-García, A., & Resurrección, D. M. (2021). Gender differences in psychological impact of the confinement during the COVID-19 outbreak in Spain: A longitudinal study. *Frontiers in Psychology*, 12, 682860.
- Fonseca, E., Paino, M., Sierra, S., Lemos, S., & Muñoz, J. (2012). Propiedades psicométricas del "Cuestionario de ansiedad estado-rasgo" (STAI) en universitarios [Psychometric properties of the "state-trait anxiety questionnaire" (STAI) in university students]. *Psicología Conductual*, 20, 547.
- Fritz, H. L. (2020). Why are humor styles associated with well-being, and does social competence matter? Examining relations to psychological and physical wellbeing, reappraisal, and social support. *Personality and Individual Differences*, 154, 109641. <https://doi.org/10.1016/j.paid.2019.109641>
- Frost, D. M., & Meyer, I. H. (2012). Measuring community connectedness among diverse sexual minority populations. *Journal of Sex Research*, 49(1), 36–49. <https://doi.org/10.1080/00224499.2011.565427>
- García-Cano, M., Buenestado, M., Gutiérrez, P., Hinojosa, E. F., & Naranjo, A. (2018). *Apuntes para la inclusión en la comunidad universitaria. LGTBI+: Diversidad afectivo-sexual e identidades de género [Notes for inclusion in the university community. LGTBI+: Affective-sexual diversity and gender identities]*. Universidad de Córdoba.
- Gato, J., Barrientos, J., Tasker, F., Miscioscia, M., Cerqueira-Santos, E., Malmquist, A., Seabra, D., Leal, D., Houghton, M., Poli, M., Gubello, A., de Miranda, M., Guzmán, M., Urzúa, A., Ulloa, F., & Wurm, M. (2021). Psychosocial effects of the COVID-19 pandemic and mental health among LGBTQ+ young adults: A cross-cultural comparison across six nations. *Journal of Homosexuality*, 68(4), 612–630.
- Graham, J. W. (2012). *Missing data: Analysis and design*. Springer Science & Business Media.
- Green, A., Dorison, S., & Price-Feeny, M. (2020). *Implications of COVID-19 for LGBTQ youth mental health and suicide prevention*. Trevor Project.
- Herth, K. (1992). Abbreviated instrument to measure hope: Development and psychometric evaluation. *Journal of Advanced Nursing*, 17(10), 1251–1259. <https://doi.org/10.1111/j.1365-2648.1992.tb01843.x>
- Huang, Y., & Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: A web-based cross-sectional survey. *Psychiatry Research*, 288, 112954. <https://doi.org/10.1016/j.psychres.2020.112954>
- ILGA-Europe & TEGEU. (2019). *LGBTI rights in the reform of the common European asylum system (CEAS)*. https://www.ilga-europe.org/sites/default/files/overview_of_the_ceas_reform_-_ilga-europe_tgeu.pdf
- Katz, J., Federici, D., & Brown, D. (2021). Effects of humor and bystander gender on responses to antigay harassment. *Journal of Homosexuality*, 69, 947–966. <https://doi.org/10.1080/00918369.2021.1898804>
- Kavčič, T., Avsec, A., & Zager-Kocjan, G. (2021). Psychological functioning of Slovene adults during the COVID-19 pandemic: Does resilience matter? *Psychiatric Quarterly*, 92, 207–216. <https://doi.org/10.1007/s11126-020-09789-4>
- Kidd, J. D., Jackman, K. B., Barucco, R., Dworkin, J. D., Dolezal, C., Navalta, T. V., Belloir, J., & Bockting, W. O. (2021). Understanding the impact of the COVID-19 pandemic on the mental health of transgender and gender nonbinary individuals engaged in a longitudinal cohort study. *Journal of Homosexuality*, 68(4), 592–611. <https://doi.org/10.1080/00918369.2020.1868185>
- Kimhi, S., Eshel, Y., Marciano, H., & Adini, B. (2020). A renewed outbreak of the COVID-19 pandemic: A longitudinal study of distress, resilience, and subjective well-being. *International Journal of Environmental Research and Public Health*, 17, 7743. <https://doi.org/10.3390/ijerph17217743>
- Kleinbaum, D. G., Kupper, L. L., & Muller, K. E. (1988). *Variable reduction and factor analysis. Applied regression analysis and other multivariable methods*. PWS Kent Publishing Co.
- Kuiper, N. A., Grimshaw, M., Leite, C., & Kirsh, G. (2004). Humor is not always the best medicine: Specific components of sense of humor and psychological well-being. *Humor: International Journal of Humor Research*, 17(1/2), 135–168. <https://doi.org/10.1515/humr.2004.002>
- Landeta, O., & Calvete, E. (2002). Adaptación y validación de la escala multidimensional de apoyo social percibido [Adaptation and validation of the multidimensional scale of perceived social support]. *Ansiedad y Estrés*, 8(2–3), 173–182.
- Langhinrichsen-Rohling, J., Lamis, D. A., & Malone, P. (2010). Sexual attraction status and adolescent suicide proneness: The roles of hopelessness, depression, and social support. *Journal of Homosexuality*, 58(1), 52–82. <https://doi.org/10.1080/00918369.2011.533628>
- Lefcourt, H. M., & Martin, R. A. (1986). *Humor and life stress. Antidote to adversity*. Springer.
- Litam, S. D. A., & Hipolito-Delgado, C. P. (2021). When being “essential” illuminates disparities: Counseling clients affected by COVID-19. *Journal of Counseling & Development*, 99(1), 3–10.
- López-Bravo, A., García-Azorín, D., Belvis, R., González-Oria, C., Latorre, G., Santos-Lasaosa, S., & Guerrero-Peral, A. L. (2020). Impact of the COVID-19 pandemic on headache patient care in Spain: Situation analysis with a look to the future. *Neurología*, 35(6), 372–380. <https://doi.org/10.1016/j.nrl.2020.05.006>
- McConnell, E. A., Janulis, P., Phillips, G., Truong, R., & Birkett, M. (2018). Multiple minority stress and LGBT community resilience among sexual minority men. *Psychology of Sexual Orientation and Gender Diversity*, 5, 1–12. <https://doi.org/10.1037/sgd0000265>
- McDonald, R. P. (1999). *Test theory: A unified treatment*. Erlbaum.
- Moore, S. E., Wierenga, K. L., Faha, R. N., Prince, D. M., Gillani, B., & Mintz, L. J. (2021). Disproportionate impact of the COVID-19 pandemic on perceived social support, mental health and somatic symptoms in sexual and gender minority populations. *Journal of Homosexuality*, 68(4), 577–591. <https://doi.org/10.1080/00918369.2020.1868184>
- Morales-Vives, F., Dueñas, J.-M., Vigil-Colet, A., & Camarero-Figuerola, M. (2020). Psychological variables related to adaptation to the COVID-19 lockdown in Spain. *Frontiers in Psychology*, 11, 565634. <https://doi.org/10.3389/fpsyg.2020.565634>
- Oducado, R. M. F., Parreño-Lachica, G. M., & Rabacal, J. S. (2021). Resiliencia personal y su influencia en el estrés, la ansiedad y el miedo de COVID-19 entre los estudiantes graduados en Filipinas [Personal Resilience and Its Influence on COVID-19 stress, anxiety, and fear among graduate students in The Philippines]. *International Journal of Educational Research and Innovation*, 15, 431–443. <https://doi.org/10.46661/ijeri.5484>
- O'Shea, A., Latham, J. R., McNair, R., Despott, N., Rose, M., Mountford, R., & Frawley, P. (2020). Experiences of LGBTIQ+ people with disability in healthcare and community services: Towards embracing multiple identities. *International Journal of Environmental Research and Public Health*, 17, 8080. <https://doi.org/10.3390/ijerph17218080>
- Osman, A., Lamis, D. A., Freedenthal, S., Gutierrez, P. M., & McNaughton-Cassill, M. (2014). The multidimensional scale of perceived social support: Analyses of internal reliability, measurement invariance and correlates across gender. *Journal of Personality Assessment*, 96(1), 103–112. <https://doi.org/10.1080/00223891.2013.838170>

- Parrado-González, A., & León-Jariego, J. C. (2020). COVID-19: Factores asociados al malestar emocional y morbilidad psiquiátrica en población española [COVID-19: Factors associated with emotional distress and psychiatric morbidity in the Spanish population]. *Revista Española de Salud Pública*, 94(8), 1–6.
- Rhoten, B., Burkhalter, J. E., Joo, R., Mujawar, I., Bruner, D., Scout, N. F. N., & Margolies, L. (2021). Impact of an LGBTQ cultural competence training program for providers on knowledge. *Attitudes, Self-Efficacy and Intentions, Journal of Homosexuality*, 1–12, 1030–1041. <https://doi.org/10.1080/00918369.2021.1901505>
- Rimes, K. A., Shivakumar, S., Ussher, G., Baker, D., Rahman, Q., & West, E. (2019). Psychosocial factors associated with suicide attempts, ideation, and future risk in lesbian, gay, and bisexual youth: The youth chances study. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 40(2), 83–92. <https://doi.org/10.1027/0227-5910/a000527>
- Roberts, L. (2019). Changing worldwide attitudes toward homosexuality: The influence of global and region-specific cultures, 1981–2012. *Social Science Research*, 80, 114–131. <https://doi.org/10.1016/j.ssresearch.2018.12.003>
- Robles-Bello, M. A., Sánchez-Teruel, D., & Valencia-Naranjo, N. (2020). Variables protecting mental health in the Spanish population affected by the COVID-19 pandemic. *Current Psychology*, 41, 5640–5651. <https://doi.org/10.1007/s12144-020-01132-1>
- Salerno, J. P., Williams, N. D., & Gattamorta, K. A. (2020). LGBTQ populations: Psychologically vulnerable communities in the COVID-19 pandemic. *Psychological Trauma Theory Research Practice and Policy*, 12(S1), S239–S242. <https://doi.org/10.1037/tra0000837>
- Sánchez-Teruel, D., & Robles-Bello, M. A. (2014). Factores protectores que promueven la resiliencia ante el suicidio en adolescentes y jóvenes [Protective factors that promote resilience to suicide in adolescents and young people]. *Papeles del Psicólogo*, 35(3), 181–192.
- Sánchez-Teruel, D., & Robles-Bello, M. A. (2015). Escala de Resiliencia 14 ítems (RS-14): Propiedades Psicométricas de la Versión en Español. *Revista Iberoamericana de Diagnóstico y Evaluación – E Avaliação Psicológica*, 2(40), 103–113.
- Sánchez-Teruel, D., Robles-Bello, M. A., & Camacho-Conde, J. A. (2021). Adaptation and psychometric properties in spanish of the Herth Hope index in people who have attempted suicide. *Psychiatric Quarterly*, 92(1), 169–175. <https://doi.org/10.1007/s11126-020-09766-x>
- Sánchez-Teruel, D., Robles-Bello, M. A., & Valencia-Naranjo, N. (2021). Do psychological strengths protect college students confined by COVID-19 to emotional stress? The role of gender. *Personality and Individual Differences*, 171, 110507. <https://doi.org/10.1016/j.paid.2020.110507>
- Sandín, B., Valiente, R. M., García-Escalera, J., & y Chorot, P. (2020). Impacto psicológico de la pandemia de COVID-19: Efectos negativos y positivos en población española asociados al periodo de confinamiento nacional [Psychological impact of the COVID-19 pandemic: Negative and positive effects on the Spanish population associated with the period of national confinement]. *Revista de Psicopatología y Psicología Clínica*, 25(1), 1–22. <https://doi.org/10.5944/rppc.27569>
- Sanjuán, P., Pérez García, A., & Bermúdez, J. (2000). Escala de autoeficacia general: datos psicométricos de la adaptación para población española. [General self-efficacy scale: adaptation psychometric data for the Spanish population]. *Psicothema*, 12(2), 509–513.
- Sanz, J., García-Vera, M. P., Espinosa, R., Fortún, M., & Vázquez, C. (2005). Spanish adaptation of the Beck depression inventory-II (BDI-II): Psychometric features in patients with psychological disorders. *Clínica y Salud*, 1(2), 121–142.
- Schwarzer, R., & Jerusalem, M. (1995). General self-efficacy scale. In I. J. Weinman, S. Wright, & M. Johnston (Eds.), *Measures in health psychology: A user's portfolio. Causal and control beliefs* (pp. 35–37). NFER-NELSON.
- Siegel, K., & Meyer, I. H. (1999). Hope and resilience in suicide ideation and behavior of gay and bisexual men following notification of HIV infection. *AIDS Education and Prevention*, 11(1), 53–64.
- Snapp, S. D., Watson, R. J., Russell, S. T., Diaz, R. M., & Ryan, C. (2015). Social support networks for LGBT young adults: Low cost strategies for positive adjustment. *Family Relations*, 64, 420–430. <https://doi.org/10.1111/fare.12124>
- Spielberger, C. D., Gorsuch, R., & Lushene, R. (1970). *Manual for the state-trait anxiety inventory*. Consulting Psychologist Press.
- Suen, Y. T., Chan, R., & Wong, E. (2020). Effects of general and sexual minority-specific COVID-19-related stressors on the mental health of lesbian, gay, and bisexual people in Hong Kong. *Psychiatry Research*, 292, 113365. <https://doi.org/10.1016/j.psychres.2020.113365>
- Wagnild, G. M. (2009). *The resilience scale User's guide for the US English version of the resilience scale and the 14-item resilience scale*. The Resilience Center.
- Xiong, J., Lipsitz, O., Nasri, F., Lui, L. M. W., Gill, H., Phan, L., Chen-Li, D., Jacobucci, M., Ho, R., Majeed, A., & McIntyre, R. S. (2020). Impact of COVID-19 pandemic on mental health in the general population: A systematic review. *Journal of Affective Disorders*, 227, 55–64. <https://doi.org/10.1016/j.jad.2020.08.001>
- Yoo, W., Namkoong, K., Choi, M., Shah, D. V., Tsang, S., Hong, Y., Aguilar, M., & Gustafson, D. H. (2014). Giving and receiving emotional support online: Communication competence as a moderator of psychosocial benefits for women with breast cancer. *Computers in Human Behavior*, 30, 13–22. <https://doi.org/10.1016/j.chb.2013.07.024>
- Zhang, Y., & Ma, Z. F. (2020). Impact of the COVID-19 pandemic on mental health and quality of life among local residents in Liaoning Province, China: A cross-sectional study. *International Journal of Environmental Research and Public Health*, 17(7), 2381. <https://doi.org/10.3390/ijerph17072381>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multi-dimensional scale of perceived social support. *The Journal of Personality Assessment*, 52(1), 30–41. https://doi.org/10.1207/s15327752jpa5201_2

How to cite this article: Lorabi, S., Sánchez-Teruel, D., Robles-Bello, M. A., & Ruiz-García, A. (2023). Variables that enhance the development of resilience in young gay people affected by the COVID-19 pandemic. *Early Intervention in Psychiatry*, 17(11), 1107–1115. <https://doi.org/10.1111/eip.13405>