

COVID-19, Depressive Symptoms and Psychosocial Risks through the Lens of Sexual Orientation

Mariana Ribeiro Duarte

Dissertação para obtenção do Grau de Mestre em
Psicologia Clínica e da Saúde
(2º ciclo de estudos)

Orientador: Prof. Doutor Henrique Marques Pereira

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junho de 2021

“Nas grandes batalhas da vida, o primeiro passo para a vitória, é o desejo de vencer”

Mahatma Gandhi

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Abstract

This dissertation aims to assess how the COVID-19 pandemic has impacted Portuguese and Brazilian LGB individuals, in their depressive symptoms and at the psychosocial level.

At first, with the article entitled “The Impact of COVID-19 on Depressive Symptoms through the Lens of Sexual Orientation” we sought to explore the impact of the COVID-19 pandemic on depressive symptoms, analyzing the discrepancies in sexual orientation in a sample of 1590 Portuguese and Brazilian individuals. After the participants answered the depression subscale of the Beck Symptoms Inventory-18 (BSI-18), the fear of COVID-19 scale, and the negative impact of COVID-19 scale, it was possible to conclude that the observed depressive symptoms were higher than expected, with women and bisexual participants having higher levels of depressive symptoms compared to male, heterosexual and gay or lesbian participants. In addition, depressive symptoms correlated positively with the aggravated responses of COVID-19, fear of COVID-19 and negative impact of COVID-19. Hierarchical linear regression analysis showed that age, gender and sexual orientation explained 6% of the variance in depressive symptoms. When fear and negative impact of COVID-19 were added, the model explained 23% of the results.

Secondly, the article entitled "Psychosocial Impacts of COVID-19 Pandemic on Lesbian, Gay and Bisexual People living in Portugal and Brazil - A Qualitative Study" sought to understand the psychosocial impact of the pandemic on the experiences and perceptions of 65 self-identified LGB individuals from Portugal and Brazil. After the participants answered the question “As a lesbian, gay, bisexual (or other) self-identified person, please elaborate on how the COVID-19 pandemic has impacted your life.” it was possible to conclude that several themes, including mental health, isolation, relationships, LGBTQI issues, coping strategies and changes, and problems related to work, education and finances were impacted by the pandemic.

These investigations offer an important contribution to understanding the factors arising from the pandemic that may have impacted the mental health and general well-being of sexual minorities, demonstrating what challenges LGB people face in a heteronormative and heterosexist society.

Resumo alargado

O surgimento da pandemia da COVID-19 revelou ter tido um impacto em diversas áreas, nomeadamente na saúde mental (Schmindt et al., 2020), com repercussões a nível económico e social (Dubey et al., 2020). Pessoas lésbicas, gays e bissexuais (LGB) que já se encontravam numa situação de desvantagem (Flores, 2019), foram um dos grupos mais afetados pela presente pandemia devido à intensificação das vulnerabilidades e desigualdades preexistentes na sociedade (Moore et al., 2021).

Assim, a presente dissertação pretende avaliar de que forma é que a pandemia da COVID-19 impactou os indivíduos LGB portugueses e brasileiros, a nível psicossocial e nos sintomas depressivos. Os dados da amostra foram recolhidos através de um site online construído para o efeito, sendo que os critérios de inclusão da amostra consistiam em ter uma idade superior a 18 anos e ser falante nativo de língua portuguesa.

Deste modo, e em relação ao primeiro artigo intitulado “The Impact of COVID-19 on Depressive Symptoms through the Lens of Sexual Orientation” foram reunidas respostas de um total de 1590 participantes, sendo que 88% dos participantes identificaram-se como heterossexuais, 6.1% identificaram-se como bissexuais e 5.9% identificaram-se como gays ou lésbicas. Os participantes responderam ao BSI-18, com o objetivo de avaliar a psicossintomatologia experienciada na última semana, através da subescala da depressão; à Escala de Medo da COVID-19, de forma a avaliar os níveis de medo face à pandemia, e, por último, à Escala de Impacto Negativo da COVID-19 através da qual se compreende a perceção dos participantes face ao impacto negativo da pandemia nas suas vidas. Todos os instrumentos apresentaram medidas de validade interna excelentes, com .94 pontos obtida na subescala depressão do BSI-18, e .87 pontos obtidas em ambas as escalas de Medo e de Impacto Negativo da COVID-19. Os resultados revelaram que os sintomas depressivos encontram-se ligeiramente acima do que seria esperado para uma amostra comunitária não-clínica e que as mulheres apresentam níveis mais elevados de sintomas depressivos e mais medo face à COVID-19 em comparação com os homens. Além disso, os participantes bissexuais apresentam níveis mais altos de sintomas depressivos e de medo face à COVID-19 em comparação aos participantes heterossexuais e gays ou lésbicas; sendo que os participantes bissexuais e os participantes gays ou lésbicas revelam um maior impacto negativo da COVID-19. O teste de correlação de Pearson permitiu observar que os sintomas depressivos se encontram negativamente correlacionados com a idade ($r = -.156$) e

positivamente correlacionados com a percepção de como a COVID-19 agravou as respostas na subescala da depressão ($r = .441$), com o medo da COVID-19 ($r = .257$) e com o impacto negativo da COVID-19 ($r = .421$). Os modelos de regressão linear múltipla demonstram que as variáveis “idade”, “género” e “orientação sexual” explicam 6% dos sintomas depressivos, enquanto que as variáveis do medo e do impacto negativo da COVID-19 explicam 23% dos sintomas depressivos.

No que concerne ao segundo artigo, intitulado “Psychosocial Impacts of COVID-19 Pandemic on Lesbian, Gay and Bisexual People living in Portugal and Brazil - A Qualitative Study”, foram reunidas respostas de um total de 65 participantes, sendo que a maioria eram homens (52.3%), mais de metade dos participantes identificaram-se como gays ou lésbicas (50.7%) e 49.3% identificaram-se como bissexuais. Os dados dos participantes foram recolhidos através da resposta à pergunta aberta "Como uma pessoa que se autoidentifica como lésbica, gay, bissexual (ou outra), explique como a pandemia COVID-19 afetou a sua vida." Os resultados revelaram que os participantes apresentam um agravamento na sua saúde mental devido ao surgimento da pandemia COVID-19 e da adoção, pelos governos, de medidas para a sua contenção. Devido a isso, existiu isolamento, por parte dos participantes do estudo, de familiares e amigos, e uma redução no contacto com a comunidade LGBT+, algo que afetou bastante os seus relacionamentos durante este período. Foi possível verificar que a pandemia exacerbou dificuldades preexistentes no acesso a cuidados de saúde e nos contextos laborais e de ensino, principalmente pelas experiências de discriminação que ocorrem nestes locais. Além disso, a situação financeira da amostra foi igualmente afetada, contudo, e apesar das dificuldades apresentadas, as mudanças a que a pandemia obrigou fez com que os participantes enfrentassem esta adversidade de forma positiva e a vissem como uma oportunidade de crescimento pessoal.

A presente dissertação pretendeu, assim, explorar e avaliar de que forma é que a pandemia da COVID-19 impactou os indivíduos LGB portugueses e brasileiros, a nível psicossocial e nos sintomas depressivos. As principais conclusões evidenciam a importância de mais investigações na área da saúde mental, especificamente com grupos de maior vulnerabilidade, como é o caso das pessoas LGB.

Palavras-Chave

Sintomas depressivos; riscos psicossociais; medo da COVID-19; impacto negativo da COVID-19; orientação sexual; pessoas LGB; Portugal; Brazil.

Introduction

This dissertation is part of the “HEPHAESTUS PROJECT – Occupational Health, Psychosocial Risk and Prevention In Straight/Cisgender And LGBT+ Populations in Portugal and Brazil”, whose objective is to investigate the levels of occupational health, psychosocial risks and prevention in heterosexual/cisgender and LGBT+ individuals.

The COVID-19 pandemic caused and continues to cause several changes and transformations, affecting the general population and, specifically, LGB people who were already in a situation of vulnerability due to the stress of minorities and the heterosexism present in today's society. In order to contribute to the advancement of scientific knowledge on this subject, this dissertation was developed to explore and evaluate how the COVID-19 pandemic has impacted Portuguese and Brazilian LGB individuals, at the psychosocial level and on depressive symptoms. This dissertation was divided into three chapters.

The first chapter refers to the investigation entitled “The Impact of COVID-19 on Depressive Symptoms through the Lens of Sexual Orientation” with the aim of evaluating the impact of the COVID-19 pandemic on depressive symptoms through the lens of sexual orientation. The levels of depressive symptoms, the fear of COVID-19 and the negative impact of COVID-19 were compared between men and women, and according to the participants' sexual orientation. The predictive effect of fear and the negative impact of COVID-19 on depressive symptoms in the sample was also determined. The present study can be classified as a descriptive quantitative study, as it allows the identification, register and analysis of variables, as well as the description of how they behave in the sample; comparative, as it is intended to compare how the variables behave between two distinct groups; predictive, as predictive relationships between variables are established; and, a cross-sectional study, because it measures the frequency of manifestations of an event in the population at a given time. In addition to the sociodemographic questionnaire, measures such as the Brief Symptom Inventory - 18 (BSI-18), the fear of COVID-19 scale and the negative impact of COVID-19 scale were used for data collection, with a total of 1590 Portuguese and Brazilian participants. The average age of participants was 33.68, with most participants identifying themselves as heterosexual, 6.1% identifying themselves as bisexual and 5.9% identifying themselves as gay or lesbian.

In addition to the article in the first chapter, this dissertation also includes a scientific article in the second chapter entitled "Psychosocial Impacts of COVID-19 Pandemic on Lesbian, Gay and Bisexual People living in Portugal and Brazil - A Qualitative Study" which sought to understand the psychosocial impact of the COVID-19 pandemic on the experiences and perceptions of Portuguese and Brazilian LGB people. Thematic analysis of the participants' responses revealed nine recurring themes (mental health, isolation, relationships, work, education, finance, change, coping and LGBTQI issues), encompassing 18 subcategories. The results were presented comparatively between Portugal and Brazil. This study can be classified as a qualitative study, as it allows the description and understanding of a topic through the perception of the subjects. For data collection, all participants answered the sociodemographic questionnaire, as well as the open question: "As a lesbian, gay, bisexual (or other) self-identified person, please elaborate on how the COVID-19 pandemic has impacted your life." The average age of participants was 34.48, with the majority being men (52.3%), 50.7% self-identified as gay or lesbian and 49.3% self-identified as bisexual.

Finally, the third chapter concerns a general discussion where the results obtained in the previous chapters were articulated, several suggestions and recommendations are mentioned, and the competences acquired with this dissertation are listed.

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Chapter 2:

Table 1. – Sociodemographic Characteristics of the Participants

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List of Acronyms

COVID-19	Corona Virus Disease 2019
LGB	Lesbian, Gay and Bisexual
BSI-18	Brief Symptom Inventory 18
LGBTQI	Lesbian, Gay, Bisexual, Transgender, Queer and Intersex
LGBT+	LGBT and related communities
WHO	World Health Organization
HIV	Human Immunodeficiency Virus
DSM	Diagnostic and Statistical Manual of Mental Disorders
LGBT	Lesbian, Gay, Bisexual and Transgender
COREQ	Consolidated Criteria for Reporting Qualitative Studies

Chapter 1: The Impact of COVID-19 on Depressive Symptoms through the Lens of Sexual Orientation

This chapter was written according to the following scientific activities:

- Publications

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- Published Abstract

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- Oral presentations

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Abstract

This research seeks to explore the impact of COVID-19 on depressive symptoms, analyzing discrepancies of sexual orientation in a Portuguese-speaking sample. 1590 individuals participated, of which 63% were women, and 88% self-identified as straight. Participants responded to the depression sub-scale of the Beck Symptoms Inventory-18, the fear of COVID-19 scale and the COVID-19 negative impact scale. Depressive symptoms observed were higher than expected, and several significant differences were obtained: women and self-identified bisexual participants had higher levels of depressive symptoms compared to male and straight and gay or lesbian participants. Depressive symptoms negatively correlated with age and positively correlated with COVID-19 aggravated responses, fear of COVID-19, and negative impact of COVID-19. Hierarchical linear regression analysis showed that age, gender and sexual orientation explained 6% of the variance of depressive symptoms, and when fear and the negative impact of COVID-19 was added, the model explained 23% of results. This study provides an important contribution to the understanding of factors arising from the pandemic that may have an impact on the mental health of sexual minorities.

Keywords

Depressive symptoms; fear of COVID-19; negative impact of COVID-19; sexual orientation; LGB people

1. Introduction

Corona Virus Disease 2019 (COVID-19), caused by the SARS-CoV-2 virus, manifests itself as a severe acute respiratory syndrome [1]. The first case was diagnosed in China in December 2019, spreading to different locations and populations around the world [2,3]. Due to its rapid spread and the increase in the number of critically ill patients, in just a few months, the World Health Organization (WHO) declared a state of pandemic worldwide [4]. As of early March 2021, the SARS-CoV-2 virus had infected approximately 115,660,000 people worldwide, and nearly 2,572,000 died from complications of the disease [5].

Since it was declared a pandemic, the spread of COVID-19 has been the focus of attention for governments and populations [6], having turned into a crisis at various levels with consequences worldwide [7]. One of the main concerns is the impact of this pandemic on the mental health of the population [6]. Several studies that investigated mental health showed a higher prevalence of depression, anxiety and insomnia in the population during the outbreak of COVID-19, concluding that the pandemic had a negative impact on the mental health of the population [8–10]. In a study carried out in Brazil, almost half of the samples showed sadness and symptoms of depression during the pandemic [11]. In Portugal, several investigations have shown that participants revealed significantly high levels of depression [12] and sadness during lockdown [13].

In addition to the psychological implications related to COVID-19, measures implemented to contain the disease may also consist of risk factors for mental health [6]. Social distancing and other measures that suspend day-to-day activities, despite protecting the physical health of the population, are associated with the development of various disorders, such as depression [4,14–16]. In this sense, negative effects were identified, such as symptoms of post-traumatic stress, confusion and anger at the measures implemented [17,18]. It was also concluded that people who were quarantined showed a higher prevalence of presenting depression compared to those who were not [11]. Exposure to news related to COVID-19, misinformation about the virus and consumption of false news, are also risk factors that can lead to increased fear, anxiety and feelings of sadness [19].

Lesbian, gay and bisexual (LGB) people are one of the groups affected by COVID-19 [20], as these individuals were already at a disadvantage due to the stigma of society against their sexual orientation [21]. According to the minority stress theory, stigma, prejudice and discrimination against LGB people generates stress, ultimately

having a negative impact on their mental health [22]. During the pandemic it was found that LGB individuals had less contact with their community, which would be essential for reduced psychological suffering [23]. These minorities may also have faced family conflicts, as they may have had the need to stay at home longer [9], and complications in accessing HIV prevention and treatment [24]. Such conditions present challenges to their mental health, including increased symptoms of depression [25].

Homosexuality was considered a mental disorder until 1973 by the Diagnostic and Statistical Manual of Mental Disorders (DSM) [26]. However, even after this classification was withdrawn, several discussions arose mainly within the religious community with a homophobic stance, allowing this “label” to exist until present day [27,28]. Generally, LGB people have a higher prevalence of mental health problems [29], including high levels of depression and substance use [30] compared to their straight peers [31], and bisexual people could be more at risk [32]. Among sexual minorities, there are indications that bisexual people have higher levels of suicidal ideation [33] than homosexual individuals [34]. Bisexual people consider that they are less connected to the LGBT+ community, as they face discrimination and exclusion within the community itself [35].

In addition, the LGB population is subject to a stressful social environment created from stigma, prejudice, social exclusion, hatred, and violence, often presenting a feeling of shame about their sexuality [36], with these phenomena being observable in cultures such as in Portugal and Brazil. Indeed, Brazil is one of the countries with the highest rates of violence against the LGB population [37], triggered by homophobia and prejudice [38]. The heteronormativity model imposed by society makes the LGB population more vulnerable to discrimination, intolerance and attitudes about hate heterosexual individuals [39]. In Portugal, despite the existence of a non-discrimination clause based on sexual orientation in the Constitution, a law that allows same-sex couples to marry (since 2011), and a law that allows same-sex couples to adopt and joint-adopt children (since 2016), discriminatory practices continue to exist within the population [40–42]. Thus, discrimination and violation of the rights of the LGB population, mainly due to moral grounds and religious conservatism [29], generates intense suffering, anguish and insecurity, leaving this minority more likely to manifest depressive symptoms [35].

Some investigations have revealed the negative impact of the pandemic on the mental health of LGB individuals [19,43,44]. In this sense, Barrientos et al. [45] reported that, in their study, LGB participants suffered a huge negative psychosocial impact due to the COVID-19 pandemic, and Moore et al. [46] stated that sexual and

gender minorities had higher levels of depression. However, given that there are no studies carried out on Portuguese-speaking populations, the present study was developed to assess the impact of COVID-19 on the levels of depressive symptoms through the lens sexual orientation.

2. Materials and Methods

Sample Size. The Portuguese and Brazilian population size combined equals around 220 million. We used a sample size calculator to compute the minimum number of necessary samples to meet the desired statistical constraints, applying the following formula: $n = N \times X / (X + N - 1)$, where $Z_{\alpha/2}^2 \times p \times (1 - p) / MOE^2$, and $Z_{\alpha/2}$ is the critical value of the normal distribution at $\alpha/2$ (for a confidence level of 99%), MOE is the margin of error, p is the sample proportion, and N is the population size. The result was 666 participants to have a confidence level of 99% that the real value was within $\pm 5\%$ of the surveyed value. Nevertheless, we were able to reach a number of participants well above that number ($n = 1590$).

Procedures. This research was carried out through an online website that was available between October and December 2020. This link, carried out through Microsoft Forms, was disseminated through social networks and e-mail addresses. Participation was voluntary, and participants were referred to a linked website created specifically for the purpose of this investigation. The first page of the questionnaire explained the objectives of the study, and informed participants about how to fill it in, how to withdraw from the study, and how to contact the authors for more information. They were also asked to read and agree to an informed consent waiver.

A total of about 8000 notifications were sent, and 1667 participants responded voluntarily (21% response rate), however 77 participants failed to meet the inclusion criteria, and were eliminated. This notwithstanding, 1590 participants fully met the inclusion criteria (20% response rate). The dissemination of the survey complied to all of the ethical principles of informed consent, anonymity and confidentiality. Neither rewards nor other incentives were offered. Inclusion criteria included the following: being older than 18 years of age, to be a Portuguese native speaker (from Portugal or Brazil).

Measurements. The research protocol used in the present research encompasses four instrument measures: the sociodemographic questionnaire, the Brief Symptom Inventory 18 (BSI-18) and the scales of fear in relation to COVID-19 and the negative impact in relation to COVID-19.

Demographic Information. The sociodemographic information of the sample participants was collected through a questionnaire. Participants were asked about their age, gender, nationality, sexual orientation, marital status, socioeconomic status, among other characteristics.

Depressive Symptoms. Participants responded to the depressive symptoms subscale of the Portuguese version of the Beck Symptoms Inventory 18 (BSI-18) [47] in order to assess the possible problems or symptoms experienced in the previous week. The depression subscale encompasses six items focusing on the main symptoms of depressive disorders (e.g., feeling blue, feeling no interest in things, feeling lonely, feeling hopeless about the future, feeling worthless, and having suicidal thoughts). Likert-type responses assessing frequency of symptoms varied between 0-Never and 4-Always. The global severity index provides a measure of the individuals' levels of psychological malaise is obtained from the mean of the six items on the scale, with the highest scores revealing a more intense psychosymptomatology. The internal consistency obtained in the present study was $\alpha = 0.94$, which reveals excellent reliability. To complement the assessment of depression symptoms associated with the COVID-19 pandemic, a question was asked regarding the participants' perception of the worsening responses on the depression subscale due to the pandemic: "how were the responses you gave to the previous questions increased by the COVID-19 pandemic?" Likert-type responses varied between 1-Nothing and 6-A lot.

Fear of and Negative Impact of COVID-19. Participants also responded to the fear of COVID-19 scale and the negative impact of COVID-19 scale. The fear of COVID-19 scale was originally developed by Ahorsu et al. [48], and as in the original version, the Portuguese version comprised seven items, ranging in score from 1 to 5 as measured by a Likert-type scale, with higher scores indicating a greater the fear of COVID-19 [49]. Examples of questions are as follows: "It makes me uncomfortable to think about Corona", "When I watch news and stories about Corona on social media, I become nervous or anxious" or "I am afraid of losing my life because of Corona". Regarding the negative impact of COVID-19 scale, it allowed measuring the participants' perception of the negative impact that the pandemic had on their lives. It consisted of ten items related to the various areas of psychosocial functioning, ranging in score from 1 to 5 as measured by a Likert-type scale with higher scores meaning greater negative impact of COVID-19 [49]. Examples of questions are as follows: "Compared to my life before the COVID-19 pandemic, it had a negative impact ... on my professional or academic life, . . . on my family life, . . . on my financial life, etc." The internal consistency obtained was $\alpha = 0.87$ for both scales, which indicates excellent reliability.

Data Analysis. Descriptive statistics were performed to describe the sample (mean, standard deviation, frequencies and percentages). Student *t*-tests, and one-way ANOVAs were conducted to evaluate differences between comparison groups. To assess the association between relationship fear of COVID-19, negative impact of COVID-19 and depressive symptoms, Pearson correlation coefficients were conducted. Finally, A hierarchical linear regression analysis was conducted to examine the effects of independent variables (age, gender, sexual orientation, fear of COVID-19, and negative impact of COVID-19) on the dependent variable (depressive symptoms).

3. Results

A total of 1590 participants (63.0% women, 37.0% men) aged between 18 and 74 years took part in the study ($M_{age} = 33.67$; $SD = 12.95$). Regarding nationality, 76.8% were Portuguese and 23.2% Brazilian. The majority of participants (56.8%) reported being single, holding a university degree (68.8), living in small urban environments (42.2%), and belonging to a middle socioeconomic status (57.8%). Regarding sexual orientation, 1399 individuals (88.0%) identified as straight, while 97 participants (6.1%) identified as bisexual, and 94 participants (5.9%) identified as gay or lesbian. Regarding professional status, 49.0% of the participants claimed to be employed. The sample's sociodemographic data are shown in Table 1 in greater detail.

Table 1. Sociodemographic characteristics of the participants ($N = 1590$; $M_{age} = 33.68$; $SD = 12.95$)

Variable	Category	<i>N</i>	%
Gender	Women	1002	63.0
	Men	588	37.0
Nationality	Portuguese	1221	76.8
	Brazilian	369	23.2
Marital Status	Single	903	56.8
	Married	412	25.9
	De facto union	167	10.5
	Divorced/Separated	94	5.9
	Widower	14	0.9
Educational Attainment	No schooling	2	0.1
	Up to 9 years of school	57	3.6
	Up to 12 years of school	437	27.5
	Undergraduate degree	537	33.8
	Postgraduate degree	388	24.4
	Ph.D.	169	10.6
Place of residence	Small rural	280	17.6

	Big rural	154	9.7
	Small urban	671	42.2
	Big urban	485	30.5
Socioeconomic Status	Low	68	4.3
	Middle-Low	383	24.1
	Middle	919	57.8
	Middle-High	205	12.9
	High	15	1.0
Sexual Orientation	Straight	1399	88.0
	Bisexual	97	6.1
	Gay or Lesbian	94	5.9
Professional Status	Unemployed	36	2.3
	Student	425	26.7
	Working student	186	11.7
	Self-employed	139	8.7
	Employed	779	49.0
	Retired	25	1.6

Mean scores for depressive symptoms were $M = 1.01$ ($SD = 0.86$), which was slightly above what would be expected when compared to the community sample (without psychopathology) drawn from literature ($M = 0.89$, $SD = 0.72$) [50]. The independent samples t -test demonstrated the existence of statistically significant differences in depressive symptoms by genders ($t(1335) = 4.108$; $p < 0.001$), indicating that female participants had higher levels of depressive symptoms ($M = 1.08$; $SD = 0.86$) than male participants ($M = 0.89$; $SD = 0.85$) (see Table 2).

Table 2. Differences in Depression Symptoms by Gender and Sexual Orientation

Dependent Variable	Categories	Sub-Categories	N	M	SD	$t/F(df)$	p	
Depressive Symptoms	Gender	Women	1002	1.08	0.86	4.108 (1335)	0.000*	
		Men	588	0.89	0.85			
	Sexual Orientation	Sexual Orientation	Straight	1399	0.95	0.83	27.809 (20.257;0.701)	0.000*
			Bisexual	97	1.61	0.97		
			Gay or	94	1.17	0.90		
			Lesbian					

* $p < 0.001$.

One-way analysis of variance (ANOVA) showed statistically significant differences in depressive symptoms by sexual orientation ($F(20.257; 0.701) = 27.809$; $p < 0.001$), indicating that self-identified bisexual participants scored higher (Table 2). The post-hoc

test (Tukey) confirmed the statistically significant differences between bisexual and straight participants ($p < 0.001$), between bisexual and gay and lesbian participants ($p = 0.002$), and between straight, and gay and bisexual participants ($p < 0.05$) (Table 3).

Table 3. Results for Depressive Symptoms by comparison groups (Sexual Orientation).

Dependent Variable	(I) Sexual Orientation	(J) Sexual Orientation	Mean Difference I-J	<i>p</i>
Depressive Symptoms	Straight	Bisexual	- 0.66075	0.000 **
		Gay or Lesbian	- 0.22505	0.042 *
	Bisexual	Straight	0.66075	0.000 **
		Gay or Lesbian	0.43570	0.002 *
	Gay or Lesbian	Straight	0.22505	0.042 *
		Bisexual	- 0.43570	0.002 *

* $p < 0.05$; ** $p < 0.001$.

Mean scores for fear of COVID-19 were $M = 2.44$ ($SD = 0.84$). The independent samples *t*-test demonstrated the existence of statistically significant differences in fear of COVID-19 by gender ($t(1418) = 6.876$; $p < 0.001$), indicating that female participants had higher levels of fear of COVID-19 ($M = 2.55$; $SD = 0.83$) than male participants ($M = 2.23$; $SD = 0.82$) (see Table 4).

Table 4. Differences in Fear of COVID-19 by Gender and Sexual Orientation

Dependent Variable	Categories	Sub-Categories	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t/F (df)</i>	<i>p</i>	
Fear of COVID-19	Gender	Women	1002	2.55	0.83	6.876 (1418)	0.000**	
		Men	588	2.23	0.82			
	Sexual Orientation	Straight	Straight	1399	2.42	0.83	6.014 (4.258;0.708)	0.003*
			Bisexual	97	2.71	0.83		
			Gay or Lesbian	94	2.58	0.94		

* $p < 0.05$; ** $p < 0.001$.

One-way analysis of variance (ANOVA) showed statistically significant differences in fear of COVID-19 by sexual orientation ($F(4.258; 0.708) = 6.014$; $p = 0.003$), indicating that self-identified bisexual participants scored higher. The post-hoc test (Tukey) confirmed the statistically significant differences between bisexual and straight participants ($p = 0.006$) (see Table 5).

Table 5. Results for Fear of COVID-19 by comparison groups (Sexual Orientation).

Dependent Variable	(I) Sexual Orientation	(J) Sexual Orientation	Mean Difference I-J	<i>p</i>
Fear of COVID-19	Straight	Bisexual	- 0.29104	0.006 *
		Gay or Lesbian	- 0.16757	0.161
	Bisexual	Straight	0.29104	0.006 *
		Gay or Lesbian	0.12347	0.600
	Gay or Lesbian	Straight	0.16757	0.161
		Bisexual	- 0.12347	0.600

* $p < 0.05$.

Mean scores for the negative impact of COVID-19 were $M = 2.60$ ($SD = 0.88$). The independent samples *t*-test demonstrated no statistically significant differences by gender ($t(1408) = 1.232$; $p = 0.186$) (see Table 6).

Table 6. Differences in the Negative Impact of COVID-19 by Gender and Sexual Orientation.

Dependent Variable	Categories	Sub-Categories	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t/F (df)</i>	<i>p</i>	
Negative Impact of COVID-19	Gender	Women	1002	2.63	0.87	1.232 (1408)	0.186	
		Men	588	2.57	0.91			
	Sexual Orientation	Sexual Orientation	Straight	1399	2.55	0.88	19.282 (14.697;0.762)	0.000*
			Bisexual	97	3.01	0.94		
			Gay or Lesbian	94	2.98	0.98		

* $p < 0.001$.

One-way analysis of variance (ANOVA) showed statistically significant differences in the negative impact of COVID-19 by sexual orientation ($F(14.697; 0.762) = 19.282$; $p < 0.001$), indicating that self-identified bisexual, and gay or lesbian participants scored higher. The post-hoc test (Tukey) confirmed the statistically significant differences between straight and bisexual participants, and between straight and gay or lesbian participants ($p < 0.001$) (see Table 7).

Table 7. Results for the Negative Impact of COVID-19 by comparison groups (Sexual Orientation).

Dependent Variable	(I) Sexual Orientation	(J) Sexual Orientation	Mean Difference I-J	<i>p</i>
Negative	Straight	Bisexual	- 0.45154 *	0.000 *

Impact of COVID-19		Gay or Lesbian	- 0.42625 *	0.000 *
	Bisexual	Straight	0.45154 *	0.000 *
		Gay or Lesbian	0.02530	0.980
	Gay or Lesbian	Straight	0.42625 *	0.000*
Bisexual		- 0.02530	0.980	

** $p < 0.001$.

Pearson’s correlation coefficient test showed that depressive symptoms correlated negatively with age ($r = -0.156$; $p < 0.001$), positively with the perception of how COVID-19 aggravated responses to the Depression Symptoms Scale ($r = 0.441$; $p < 0.001$), positively with the fear of COVID-19 ($r = 0.257$; $p < 0.001$), finally, also positively with negative impact of COVID-19 ($r = 0.421$; $p < 0.001$) (see Table 8).

Table 8. Correlation Matrix

Variables	1	2	3	4	5
1 – Age	-				
2 – COVID-19 Aggravated Responses	-0.085 **	-			
3 – Fear of COVID-19	0.008	0.464 **	-		
4 – Negative Impact of COVID-19	-0.037	0.557 **	0.402 **	-	
5 – Depressive Symptoms	-0.156 **	0.441 **	0.257 **	0.421 **	-

** $p < 0.001$.

We also carried out a hierarchical linear regression analysis to assess the effects of age, gender, sexual orientation, fear and negative impact of COVID-19 on the depressive symptoms of the sample. The variables “age”, “gender” and “sexual orientation” were added in the first block (Model I). COVID-19’s Fear and Negative Impact were added in the second block (Model II). The first block of analysis explained 6% of the variance of depressive symptoms, while the second block explained 23%. Thus, as shown in Table 9, all variables are strong predictors of depressive symptoms.

Table 9. Hierarchical linear regression analysis predicting Depressive Symptoms.

Variable	Model I			Model II		
	B	SE B	β	B	SE B	β
Age				-0.009	0.002	-0.139 **
Gender				-0.147	0.045	-0.084 *
Sexual Orientation	-0.009	0.002	-0.140 **	0.150	0.042	0.092 **
Fear of COVID-19	-0.217	0.049	-0.123 **	0.101	0.028	0.098 **
Negative Impact of COVID-19	0.270	0.045	0.165 **	0.359	0.026	0.371 **

R ²	0.060	0.230
F	27.361 **	76.727 **

* $p < 0.05$; ** $p < 0.001$.

4. Discussion

This investigation sought to explore the impact of COVID-19 on depressive symptoms through the lens of sexual orientation in a Portuguese-speaking sample. Results showed that depressive symptoms are present in the study sample, being above what would be expected for a non-clinical community normative sample. This result is associated with the emergence of the COVID-19 pandemic. As found in other studies conducted in Portuguese-speaking samples [51], the majority of participants felt depressed during the period of national state of emergency due to changes in routines and decreased contact with friends and family caused by measures of social distance. In addition, the fear of infecting or being infected by COVID-19 [52], concerns about the professional future and financial instability [53] generated emotional vulnerability associated with depressive symptoms, especially among women [54–56]. This can be explained by the fact that women have a greater psychological vulnerability [57], poor adaptive coping styles, greater prevalence of somatic diseases and greater social and cultural insecurity [58]. Women also tend to ruminate more on negative thoughts, which prolongs their suffering [59]. In addition, the vision of women in society and the different roles played by women, such as carrying out domestic chores, providing care for children/the elderly and professional responsibilities, which were carried out simultaneously during the quarantine period [60], as well as the increase in domestic violence during this period [61] may correspond with the explanation of our results.

Participants who self-identified as bisexual also had higher levels of depressive symptoms as compared to participants who self-identified as straight, and gay or lesbian. These results are congruent with other studies that emphasize that the levels of depression among LGB individuals tend to be high [62], with a prevalence of two to four times higher compared to straight people [63]. Bostwick et al. [35] claim that it is bisexual individuals who have higher levels of mental health problems when compared to homosexual individuals, because bisexual individuals tend to hide their sexual orientation in different social contexts in order to protect themselves from discrimination and stigma [40]. Generally, bisexual individuals experience high levels of the three main stressors that make up the minority stress model—internalized homophobia, stigma and discrimination [22]. In addition, due to the COVID-19 pandemic and the measures

adopted to contain it, individuals from sexual minorities demonstrated health problems and impaired well-being, which was reflected in the onset or worsening of depression symptoms during the first few months of the pandemic [46,64–68].

Our results also showed that older participants revealed fewer depressive symptoms. This confirms other research [69] reporting that younger people have higher levels of depression. However, most studies claim that stressful life events, such as the COVID-19 pandemic, are risk factors for depression in older people and that depressive symptoms increase with age [70]. The result of the present study seems to demonstrate that the ability to develop strategies and to adapt emotionally and psychologically to losses increases with age, which can decrease the risk factors for depressive symptoms [71]. In this sense, the fact that older adults are more effective in regulating their emotions when compared to younger adults helps to explain why depressive symptoms decrease with advancing in age [72].

The results also show that the COVID-19 pandemic appears to have aggravated the depressive symptoms of the sample participants. This result is in line with the existing literature [73], which demonstrated that when comparing the levels of depression before and during the pandemic among people without previous mental disorders or with less severe mental disorders, an increase in the levels of depressive symptoms was observed. We can see that the COVID-19 pandemic has had consequences for the entire population, having a negative impact in several areas. This impact is directly related to the fear of being infected, of infecting others or of dying from the virus [74], and also to the fear of losing one's job or being socially excluded by friends and family [75].

Depressive symptoms increase according to the fear of COVID-19 felt by individuals and negative impact experiences associated with the pandemic. In fact, fear related to COVID-19 affects people's psychological well-being and can lead to symptoms of depression [8], and overall negative psychological responses [76]. The measures adopted by governments to contain the pandemic, such as quarantine or social isolation, may have contributed to this psychological suffering [77]. This impact can also be reflected in the economic instability of the population, since the pandemic has left a large number of people unemployed [78]. This further intensifies the negative emotions experienced by individuals during the pandemic, which can lead to the development of depressive symptoms [79].

The comparison between the various dimensions that acted as predictors of depressive symptoms showed that age, gender, and sexual orientation, but mostly fear and the negative impact of COVID-19 contributed to the explanation of the depressive symptoms. The fact that the pandemic has had an impact on the health

system, politics, the economy and education can be reflected in the appearance of several mental disorders, namely depression [16]. Women and individuals belonging to sexual minorities may have seen greater negative impact from COVID-19 and had higher levels of depression [52] and this level of concern and fear can be highly disabling [6,8,80].

This research is not without limitations. Firstly, this was a convenience sample collected online. Despite the fact that the proportion of LGB participants in the sample is reflective of the prevalence in population (around 10%), comparative analysis may have been subject to bias since comparison groups are disproportionate. Thus, these results cannot be generalized, although we believe that this is a credible option to promote the representation of sexual minorities in this study. Secondly, the sample was disproportionately differentiated, with contributions from two distinct cultural settings (Portugal and Brazil). Thirdly, as presented in the research, other variables can be predictors of depressive symptoms. In fact, depression can be related to factors such as loneliness [52,55], socioeconomic status [24,64–66] or maladaptive coping mechanisms [59], mainly among women [67,68]. Future studies should include more varied samples and other research methodologies, such as face to face inquiries or qualitative analysis. In addition, longitudinal methodologies would be important to assess the long-term impact of the COVID-19 pandemic on depressive symptoms in sexual minority groups.

5. Conclusions

This was an important contribution to the analysis of how the COVID-19 pandemic has unevenly affected the mental health of the world population. Those who were in a vulnerable situation suffered most from the consequences of this new reality, and this negative impact highlights the need for further research in the area of mental health, specifically with groups of greater vulnerability. Given that the consequences of this pandemic can prolong over time, it will be decisive to devise psychological intervention strategies in order to respond to the needs and difficulties of the groups most at risk such as women and LGB people. This study provides an important contribution to the understanding and clarification of factors arising from the pandemic that may have an impact on the mental health of sexual minorities.

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Chapter 2: Psychosocial Impacts of COVID-19 Pandemic on Lesbian, Gay and Bisexual People living in Portugal and Brazil - A Qualitative Study

This chapter was written according to the following scientific activities:

- Publications

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- Published Abstract

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- Oral presentations

Pereira, H., Pedro, J., Mendes, C., Duarte, M., & Silva, P.G. (2021, May 7th). Psychosocial Impacts of COVID-19 Pandemic on Lesbian, Gay, and Bisexual People Living in Portugal and Brazil – A Qualitative Study. [Conference session] XXIX Congresso Internacional INFAD – Confiança em tempos de crise, Coimbra.

- Awards

Distinction award for one of the best oral communications in the XXIX Congresso Internacional INFAD – Confiança em tempos de crise (2021, May 7th).

Abstract

Introduction: Not many studies have been reported from Portugal or Brazil to date, reading the psychosocial impacts of COVID-19 on lesbian, gay, and bisexual (LGB) people, especially from a qualitative perspective.

Materials and Methods: A convenience sample of 65 self-identified LGB individuals from Portugal and Brazil participated in this study. Thirty-two participants were from Portugal and 33 from Brazil. The average age was 34.48 years (standard deviation = 11.66), ranging from 19 to 67. We used an online interview approach in an asynchronous format. All study respondents completed a structured inquiry consisting of a short section of sociodemographic questions and a single openended question: “As a lesbian, gay, bisexual (or other) self-identified person, please elaborate on how the COVID-19 pandemic has impacted your life.”

Results: The thematic analysis of participants’ responses revealed 9 recurring themes, encompassing 18 subcategories to occur: mental health (depression, anxiety, fear, anger, and loneliness), isolation (social distancing and leisure impediments), relationships (family and friends), work-related problems, education-related problems, financial problems, changes (behavioral changes and opportunity to grow), coping (seeking support, accessing information and physical activities), and LGBTQI topics (health barriers, going back into the closet, pride celebration events, and online dating).

Conclusions: Our results provide voice to LGB Portuguese and Brazilian people during the COVID-19 pandemic demonstrating specific challenges exacerbated by stigma and sexual discrimination amplified by preexistent social inequalities.

Keywords

COVID-19, psychosocial impacts, LBG people, Portugal, Brazil, qualitative research

Introduction

The COVID-19 outbreak started in December 2019 in China, ¹ and its rapid spread around the globe ² made it recognized by the World Health Organization as a worldwide pandemic. ³ In Portugal, the first cases emerged in March 2020 ⁴ and, in the same month, a state of emergency was declared as a way to contain the spread of the virus, with lockdown measures put in place. ⁵ In Brazil, the first cases appeared in February 2020, ⁶ and like in other countries, measures of social distancing, travel restrictions, and quarantine were adopted, ⁷ impacting on social and financial structures of the country. ⁸ As a worldwide public health concern, the COVID-19 pandemic had several impacts in the most different domains and areas of society. ⁹⁻¹¹ Lockdown measures and the duty to stay at home increased isolation and the need to create changes and adjustments to the general population's daily life and routines ¹² which contributed to the compromise of mental health. ¹³ This adverse circumstance may have impacted more on the lives of previously more vulnerable populations, such as LGBTQI individuals.

The literature constantly identifies significant discrepancies between heterosexual and LGBTQI individuals concerning mental health and well-being, sexual minorities scoring lower. ^{14,15} Additionally, sexual minorities also show higher prevalence for having mood disorders such as anxiety, experiencing suicidal ideation and behavior, misusing illicit substances, ¹⁶⁻¹⁸ and experiencing difficulties accessing health, employment, and other socioeconomic resources. ¹⁹

The minority stress model may explain how COVID-19 had a more significant impact on LGBTQI individuals than heterosexual people ¹⁴ because it causes reduced well-being and greater levels of mental health impairment related to exacerbating and intensifying of preexistent vulnerabilities and inequalities in society. ^{14,15} Lockdown measures forced many LGBTQI individuals to cease having access to social and community groups that are essential sources of support, thus increasing the psychosocial impairment during the pandemic, including anxiety and depressive symptoms ^{11,16-20} as well as limited access to mental health services despite the increase of electronic interventions. ²¹ Therefore, the need for social and mental health support for LGBTQI individuals becomes evident. ²²

Concerning the Portuguese sociopolitical context, the progressive acceptance of sexual minorities in Western countries, as is the case in Portugal, does not invalidate the occurrence of experiences associated with stigma and discrimination.²³ Although the country has undergone sociopolitical and legislative advances, such as same-sex

marriage, and same-sex couples adoption, ²⁴ it did not stop Portuguese LGBTQI individuals from facing sexual prejudice. ^{25,26}

The Brazilian sociopolitical context is guided by a conservative mentality, which is reflected in the fact that Brazil is one of the countries with the highest rate of crimes for homophobia. ²⁷ Thus, sexual minorities in Brazil are more likely to experience insecurity, hostility, and violence since laws and measures aimed at criminalizing hate attitudes against sexual minorities have not yet been adopted, ²⁸ and consequently, laws that protect the rights of the lesbian, gay, and bisexual (LGB) community ²⁹ are still ineffective in Brazil.

Portugal-Brazil relations have spanned over 5 centuries. In addition to a commonality of language and religion, both countries are members of the Lusophone world. As common cultural values favor the development of similar social norms, not many studies have been reported from Portugal or Brazil to date, reading the psychosocial impact of COVID-19 on LGBTQI individuals, especially from a qualitative perspective. Articulating these issues and giving voice to Portuguese and Brazilian LGBTQI individuals is our study's primary goal. We correspondingly adopted a qualitative approach to present our research results on the COVID-19-related psychosocial experiences and perceptions of LGB participants to weave lessons for a more inclusive psychosocial intervention during the pandemic and future adverse circumstances.

Materials and Methods

Participants

A convenience sample of 65 self-identified LGB individuals from Portugal and Brazil participated in this study. Thirty-two participants were from Portugal and 33 from Brazil. The average age was 34.48 years (standard deviation = 11.66), ranging from 19 to 67. Half (50.7%) of participants identified as gay or lesbian, and the other half as bisexual. In Table 1, we describe in greater detail sociodemographic information. Both samples were highly educated; most participants were single and from urban origin. The sample size was determined by thematic saturation, and we collected data from those LGBTQI individuals to which we had most convenient access.

Table 1 – Sociodemographic Characteristics of the Participants

Portugal	Brazil	Total
(n=32, Mean Age=32.14, SD=11.05)	(n=33, Mean Age=36.50, SD=12.00)	(n=65; Mean Age=34.48, SD=11.66)

		n	%	n	%	n	%
Gender	Male	12	18.5	22	33.8	34	52.3
	Female	20	30.8	11	16.9	31	47.7
Marital status	Single	24	36.9	18	27.7	42	64.6
	Married	6	9.2	6	9.2	12	18.5
	Divorced	1	1.5	3	4.6	4	6.1
	Civil union	2	3.1	5	7.7	7	10.8
Education	Up to 12 years	11	16.9	3	4.6	14	21.5
	University – BA	9	13.8	9	13.8	18	27.7
	University – MA	11	16.9	12	18.5	23	35.4
	University – PhD	1	1.5	9	13.8	10	15.4
Place of residence	Urban	27	41.5	32	49.2	59	90.8
	Rural	5	7.7	1	1.5	6	9.2
Socio-economic status	Low	2	3.1	1	1.5	3	4.6
	Low-average	14	21.5	12	18.5	26	40
	Average	13	20	15	23.1	28	43.1
	Average-high	3	4.6	3	4.6	6	9.2
	High	0	0	2	3.1	2	3.1
Sexual orientation	Gay or Lesbian	18	27.7	15	23.1	33	50.7
	Bisexual	15	23.1	17	26.1	22	49.3

Measures

We used the online interview approach in an asynchronous format, adhering to the guidelines of O'Connor and Madge³⁰ and Hamilton and Bowers.³¹ Online interviewing was conducted in non-real-time or asynchronously facilitated via email, with the advantage of online recruitment possibilities, which constitute an enhanced opportunity to discuss sensitive topics with greater openness and readiness. All study respondents were invited to complete a structured inquiry consisting of a short section of sociodemographic questions, such as age, gender identity (male, female, or other), sexual orientation (gay/lesbian, bisexual, or other), nationality, education, socioeconomic status, marital status (single, married, divorced, civil union, or other), and place of residence, and a single open-ended and fundamental question: “As a lesbian, gay, bisexual (or other) self-identified person, please elaborate on how the COVID-19 pandemic has impacted on your life.” The inquiry was expected to take around 10 min. Participants responded to this outreach online through 1 website created for this

purpose, in Portuguese language (standardized for both European and Brazilian Portuguese). The first page of the questionnaire explained the study's objectives, informed participants about how to complete the survey, their freedom to withdraw from the study, and how to contact the authors for further information if needed.

Procedures

Participants were recruited online and were invited to fill out an interview script between October 2020 and November 2020 during pandemic times. Recruitment targeted specifically self-identified sexual minority individuals and involved Internet notifications (emails and electronic messages) sent to LGB organizations in Portugal and Brazil, social networks such as Facebook, and mailing lists. Accessible online information concerning the study presented its goals and procedures and included all of the principles of traditional research ethics: confidentiality and anonymity, and informed consent. Participation in the study was formalized after acknowledging the guidelines of informed consent. The interview script's design phase (question format, content, order, number, and question delivery) led to a script with a single central open-ended question. This was a deliberate choice by the researchers, designed to meet the requirements indicated by Hsieh and Shannon³² for subsequent data content analysis. Confidentiality was assured by using codes on data documents, encrypting identifiable data, assigning security codes to computerized records, and limiting access to identifiable information (IP address). The Ethical Committee of the University of Beira Interior (Portugal, CEUBI-Pj-2020-088) approved this study.

Analyses

The transcripts from all interviews were entered in NVivo (version 12), which is a software program used for qualitative methods research to process a rich dataset of unstructured information (like interviews). The software automates manual tasks, like classifying or organizing information. Specifically, it analyzes the unstructured text, namely, qualitative content analysis, to identify concepts that emerge from the text, subsequently linked together.³³ We adopted a conventional conceptual content analysis approach (the analysis involved quantifying and counting the presence explicit and implicit terms in order to examine the occurrence of selected terms in the data) that enabled us to gain direct information from participants without imposing preconceived categories and names for the categories derived from the data.³² The following steps for conducting the conceptual content analysis were taken: (a) we decided the level of analysis: word, word sense, phrase, sentence, themes; (b) we decided how many concepts

to code for allowing flexibility to add categories through the coding process; (c) we decided to code for existence or frequency of a concept in the text; (d) we created coding rules so that similar word segments were transparently categorized in a logical fashion to provide clear distinction among concepts; (e) we developed rules for coding of the texts, to promote validity; (f) we ignored irrelevant information; (g) we coded the text using NVivo, inputting categories and having coding done automatically; and (h) we finally analyzed our results, quantifying general trends and patterns.

Trustworthiness/rigor of our study was ensured by conducting all research tasks in a precise, consistent, and exhaustive manner to enable credibility, transferability, dependability, and confirmability. COREQ compliance for this study was checked for each of the 32 criteria (rated yes/ no) by the researchers. Discrepancies in study inclusion or item ratings were resolved with the inclusion of two experts who examined all transcripts independently, thus identifying broader principal themes that emerged from the interview. These two experts then followed a “negotiated agreement” approach ³⁴ to assess intercoder reliability, compare coding, and discuss disagreement to reconcile and reach a final version. Based on this conjoint analytic procedure, the final broader themes were organized, assessed, analyzed, and presented. The illustrative quotations used came from the online interviews and indicated each participant’s age, nationality, gender, and sexual orientation.

Results

The thematic analysis of the participants’ responses revealed 9 recurring themes, encompassing 18 subcategories to occur, as shown in Table 2. Subcategories that were mentioned less than 5 times were excluded from this analysis. The results are presented comparatively between Portugal and Brazil.

The illustrative quotations used come directly from the online interviews and indicate the first name (a fictitious name assigned by the study’s authors), sexual orientation, and gender identity, age, and country of origin of each participant.

Table 2 – Key Themes Identified

Theme	Subcategory	Portugal	Brazil
Mental health	Sadness/depression	10	7
	Anxiety/stress	12	11
	Fear/panic	8	8
	Anger	5	6

	Loneliness	6	5
Isolation	Social distancing	14	12
	Leisure impediments	9	7
Relationships	Family	8	10
	Friends	7	8
Work	Work-related problems	13	11
Education	Education-related problems	9	9
Finances	Money problems	7	9
Change	Behavioral changes	10	9
	Opportunity to grow	7	6
Coping	Seeking support	8	6
	Accessing information	7	7
	Physical activities	5	8
LGBTQI issues	Health barriers	5	5
	Going back into the closet	6	7
	Pride celebration events	7	9
	Online dating	8	7

Mental Health

LGBTQI individuals traditionally present poorer mental health indicators than heterosexual people due to the effect of sexual stigma and discrimination, as suggested by the minority stress theory.³⁵⁻³⁷ In the scenario of COVID-19, the pandemic significantly affected our participants' mental health by creating discourses of sadness and depression, anxiety and stress, fear and panic, anger, and loneliness. These negative emotional manifestations were increased by the pandemic circumstances, given that, in some cases, self-assessment of mental health was already poor and was worsened by the impediment of maintaining social and family support contacts, by the need to adapt to behavioral changes and permanent immersion in a threatening, dangerous environment. The uncertainty about the future, the fear of catching the disease, the fear of losing their jobs, and the anger at the criticism of the way governments managed the pandemic have created intense feelings of anxiety, yet more accentuated by loneliness.

COVID-19 has had a very negative impact on my life because my mental health was already fragile before the pandemic; the problem is that now, due to knowing that I cannot be with my friends or family, I get much sadder. I need the touch, the kisses, and the hugs to be happier.

—António, bisexual man, 19 years old, Portugal.

As I belong to the risk group and have family members with whom I live daily who also do, I feel sad and hopeless when I see people not wearing a mask, and where I live, the elderly who walk around without a mask predominate. It really affects my life.

—Thiago, gay man, 54 years old, Brazil.

It made me postpone or suspend opportunities that were about to happen, suspending my life. This creates a lot of anxiety and insecurity about the future.

—Pedro, bisexual man, 37 years old, Portugal.

The new job requests happen in a virtual environment, which is not at all welcoming. Besides, it creates much anxiety because I want to adapt and participate, but it is not easy. However, it is not only anxiety about the present, but also about the future, the reorganization of society and its mechanisms, an aggravated situation where one is in a condition of vulnerability.

—Rodrigo, bisexual man, 34 years old, Brazil.

Physical symptoms of anxiety arose, but I had a hard time noticing them and asking for medical help. Only later was it confirmed that I had anxiety, I started taking medication and took up psychotherapy.

—Mariana, lesbian woman, 22 years old, Portugal.

Working in healthcare, I was very overwhelmed. My grandmother had cancer, and I was afraid to visit her because of the pandemic, and she eventually passed away without my being able to live with her at the end of her life. Before the pandemic, I bought a property, and this burden has repercussions on my financial life. It has been a tough year. Lots of stress.

—Paulo, bisexual man, 29 years old, Brazil.

The socio-labor transformations imposed by the pandemic have created several fears, especially those of infecting the most vulnerable people around them, such as parents or grandparents, fear of becoming infected with COVID-19, fear of losing their jobs, and fear of being around people and socializing. Thus, the discourses of our participants demonstrate the greater vulnerability resulting from belonging to a sexual

minority, namely, the feeling unprotected and without social support, which, in turn, generated feelings of anger.

I am very affected by COVID-19 because I live with my elderly parents, and I am afraid they are contracting it.

—Ricardo, gay man, 41 years old, Brazil.

I had a drastic salary reduction that will go until December 2021 by collective agreement (for the non-dismissal of all employees). I had COVID-19 and stayed away from everything and everyone during quarantine, and I still (even after three months) have some symptoms (sequelae). I'm afraid (despite all the care) that my parents would get the disease.

—Fábio, gay man, 42 years old, Brazil.

I am afraid of socializing and panicked every time I was around people.

—Cristina, bisexual woman, 33 years, Portugal.

The pandemic has changed my whole life routine and that of my family. The fact that my country's authorities do not take proper action to control the disease makes me angry and constantly stressed.

—Rodrigo, bisexual man, 34 years old, Brazil.

I feel loneliness, many difficulties in relating to people, and much stress because I have little work and many difficulties in paying the bills.

—Luís, gay man, 36 years old, Portugal.

Isolation

LGBTQI individuals, especially the most vulnerable, such as young or older LGBTQI individuals, are more likely to feel socially isolated due to the circumstances of marginalization and anticipation of rejection by family and friends, especially when access to available community support structures is not possible. Given that one of the prophylactic measures to contain the pandemic involves precisely the prescription of isolation and social distancing, this has had a significant impact on our participants'

lives, especially on mental health, being intrinsically linked to feelings of anxiety, depression, and even suicide.

Social isolation made life quite complicated.

—Lara, lesbian woman, 37 years old, Brazil.

Social isolation has considerably worsened my mental health.

—Cristina, bisexual woman, 33 years old, Portugal.

The existence of the disease (COVID-19) itself did not affect me much. What affected me a lot was the need for indefinite isolation at a time of drastic and important changes (going to university), uncertainties, and a lack of sharing experiences with other first-year students. It affected me a lot at the mental level.

—João, bisexual man, 20 years old, Portugal.

The impact of the pandemic on physical health is real and visible. The emotional impact is also real but invisible, at least in the short term, and it worries me. I am worried about people's emotional isolation. At a time when we need to feel close and supported by our own, it is when we are required to stay far away.

—Beatriz, bisexual woman, 30 years old, Portugal.

The pandemic had a very negative impact on me, especially at the time of the state of emergency and now that I am at home in isolation. Being closed at home and having too much free time makes me think about many things, even suicide, something that has not happened in a long time.

—José, gay man, 32 years old, Portugal.

Several participants reported that isolation harmed previously commonplace leisure activities. Given that many of these activities were associated with maintaining physical and mental health, namely to mediate stress, the negative impact of not having these activities causes in their lives is notorious.

My work has been entirely at a distance since the end of March 2020, and this often leaves me exhausted because I work more than I should, and I cannot

distinguish between work and leisure time. This lack of boundaries makes me constantly concerned about work and personal life at all times.

—Joana, bisexual woman, 24 years old, Brazil.

The pandemic prevented leisure activities that, for me, were fundamental to be able to de-stress.

—Manoel, gay man, 59 years old, Brazil

As a hairdresser, I was not able to work and, at the same time, without being able to do the leisure activities that gave me pleasure.

—Bruno, gay man, 43 years old, Portugal.

As I live in a more rural area and with a specific work with poor contact with the public, the pandemic has only changed the way I do leisure activities. Since the beginning of the pandemic, I have been avoiding cities, shopping malls, cinema, etc.

—Francisco, gay man, 37 years old, Portugal.

Relationships

Most participants mentioned significant relationships, especially family and friends, as areas significantly affected by the COVID-19 pandemic. The circumstances of isolation activated feelings of responsibility, fear of contagion, and maintenance of preestablished dynamics, namely maintaining physical and emotional balance.

For me, the main impact of this pandemic was the distancing of my family.

—Vinicius, gay man, 25 years old, Brazil.

I do not care about myself. I care about my family. I do not mind dying, but I do not want my family members to die.

—Helena, bisexual woman, 37 years old, Brazil.

COVID-19 shook all structures, social, labor and economical, but the worst was at the time the lockdown was enacted, I was isolated from all my family and friends, and this brought many negative impacts to my physical and emotional health.

—Gilberto, gay man, 36 years old, Brazil.

On the other hand, especially for younger participants, it was clear the pandemic's negative impact on maintaining friendship relationships, which were one of the primary sources of social support that LGB youth are more likely to feel.³⁸ The lack of maintenance of friendship relationships activated feelings of vulnerability and low self-esteem associated with others' anticipation of rejection.

I feel like I walked away from my friends during the pandemic, and somehow, I was responsible for it.

—Berta, bisexual woman, 23 years old, Brazil.

The biggest impact I felt was at an emotional level because I stopped having the routine of going to college, not being able to see many of my friends, interact with them, and not being able to do the things I like most with them... this has been quite complicated.

—Rita, bisexual woman, 23 years old, Portugal.

Work and Finances

Workplaces can be, for most LGBTQI individuals, contexts that are not open to visibility. For this reason, many people choose to stay in the closet, hiding their sexual orientation for fear of harassment, discrimination, or oppression. The COVID19 pandemic, coupled with wage and labor restrictions, has activated many of these fears in our participants.

I am afraid I will be out of work. I depend on my work to survive, and the fact that I work in the primary sector as a bi-man does not help. What would be worse than being discriminated against for being bisexual? Being discriminated against for being bisexual and unemployed.

—Júlio, bisexual man, 35 years old, Brazil.

I had to accept the company's conditions on downsizing and laying-off because at this moment, and there is no alternative. This leaves me in a very precarious situation.

—Fábio, gay man, 42 years old, Brazil.

Education

The impact of COVID-19 on our participants' education stems mainly from the pandemic changes in the nature and quality of teaching-learning activities. More or less promptly, governments have determined measures to stop the school/ university activities or continue them in an online format.

The lack of government actions to return to academic activities will leave permanent marks of delay in my professional curriculum.

—Vitor, bisexual man, 25 years old, Brazil.

My doctoral program course and all classes have moved to the online format. My field project for doctoral research has been completely modified. I had COVID-19 and stayed away from everything and everyone and lost track of things.

—Fábio, gay man, 42 years old, Brazil

Study activities have changed dramatically, I have had constant requests for online events and to publish articles, and to be bombarded with “interesting” lives, as well as invited to attend communications, and I have the willingness to participate in everything even if it is humanly impossible.

—Rodrigo, bisexual man, 34 years old, Brazil.

Behavioral Changes

The pandemic's behavioral changes, namely the adoption of new hygiene habits and prophylaxis of virus infection, were not easy to implement because they were not generated from intrinsic motivations but rather externally imposed by health authorities to prevent the occurrence of contagions. These circumstances have forced many of our participants to review their core value systems, although some may have been in a phase of contemplation and distanced from tangible threats.

I was forced to review several behaviors in particular and in general, due to the severity of the problem, as well as its consequences, often unknown.

—Hugo, bisexual man, 67 years old, Brazil.

I had to change the way I perceive having control in life because plans change daily or are only made for the short term.

—Fábio, gay man, 42 years old, Brazil.

Personal Growth

For many of our participants, the COVID-19 pandemic constituted an opportunity for personal growth. From a new world organization, unfamiliar and uncertain, unpredictable and uncontrollable, many managed to take advantage of adversity to solve chronic problems, improve health habits, or start new achievements. These participants were able to interpret and respond to the crisis with a positive attitude, relativizing and looking at difficulty, and embracing adversity, generating positive emotions integrated into their purpose of human growth.

It all turned out to be OK because I am in telework, and it physically took me away from what disturbs me in professional terms, bad people and the bad environment in the workplace. This allowed me to feel better about myself and my abilities.

—Luísa, lesbian woman, 30 years old, Portugal

I had no negative impact. On the contrary, during the pandemic, I improved my eating habits, approached some important people, started exercising regularly, and some situations (such as seeing the struggle of doctors and nurses, for example) renewed my hopes in humanity, in a way.

—Vanessa, bisexual woman, 27 years old, Brazil.

It forced me to change the way I relate to others. I started a new relationship in the middle of the pandemic, which has survived until now, and is now solidified, which is the best I could ask for.

—Fernando, gay man, 28 years old, Portugal.

Coping Mechanisms

Several participants mentioned the importance of seeking support to address the specific need to deal with the pandemic's negative consequences, namely the search for physical and mental health care. Other participants mentioned the importance of keeping physical activity a fundamental strategy for maintaining physical sanity and meditation to maintain mental sanity. Limited access to COVID-19-related information was also mentioned as a valuable and effective way to mediate the pandemic's negative impact.

I started to have physical and psychological symptoms. At first, I was afraid to seek medical services due to hospitals' barriers and fear of catching COVID-19. However, then I was able to make an appointment and started taking medications and doing psychotherapy, which has helped a lot to deal with various issues.

—Nuno, gay man, 22 years old, Portugal.

I live in a house, and I practice slackline on the outside. Therefore, physical activities were not impacted, and this has helped me feel good. I value contact with nature, plants, and trees. Although there is social isolation, I have plenty of space to walk around. Nature calms me down. Besides, I practice meditation, and this also contributes to being relaxed in the face of difficulties. I watch little and selected news, and this selectivity of information helps me feel good. I try to focus on the solutions, avoiding putting the problem bigger than is necessary.

—Roberto, gay man, 27 years old, Brazil.

LGBTQI Topics

Participants mentioned specific aspects of the impact of COVID-19 on their lives as sexual minority people due to social inequalities that they face, which may harm their wellbeing, as it is likely that people most marginalized by society due to their minority sexual status will have more difficulties in adapting to new circumstances. This reflects fewer resources, fewer traditional sources of social support, and constant exposure to adverse social circumstances characterized by discrimination and social exclusion. Some participants mentioned the difficulties in accessing health care, not only because they were afraid of the COVID-19 infection that could occur when going to the hospital/health center but also because they had some specific pathology, for example, HIV, which involved greater visibility of their sexual orientation, thus anticipating increased stress. Other participants expressed their frustration at the cancellation of LGB pride celebration events and activities. These are moments of affirmation of minority sexual identities that lack constant visibility. The fact that they could not be carried out for epidemiological reasons has also generated some fear about the strengthening of invisibility and hate discourses toward LGBTQI individuals.

On the other hand, it was mentioned by some participants that, in this pandemic circumstance, they were forced to return to the closet, either explicitly or implicitly, for example, when they had to return to live at their parents, and the topic of sexual identity was found to be a taboo. Job hunting as an LGB person also created fears about being

discriminated against at the workplace. Finally, some participants reported specific difficulties in the search for sexual or meaningful relationships. Although it was easy to establish contacts through online dating sites or apps, the pandemic imposed physical barriers that were not easy to manage and put in standby many loving expectations.

Being HIV positive and therefore with immunity problems, I was afraid that getting COVID-19 would be a death sentence for me. So, I did not leave the house and even let the antiretroviral medication run out. Fortunately, it was possible to have it delivered to my house, which prevented me from going out.

—Cláudio, gay man, 31 years old, Portugal.

I was very sorry that all LGB pride celebration events had to be canceled. These are significant moments for LGB activism, a time of celebration and joy, and the affirmation and strengthening of minority identities that cannot be forgotten and deserve to be dignified. I hope that soon everything will be able to return to normal.

—Inês, lesbian woman, 26 years old, Portugal.

Unfortunately, I lost my job and ran out of money to pay for rent and had to go back to my parents' house, who never accepted my being gay. We live in a tense environment where nobody talks. I had to go back into the closet, and I feel like I am 16 again. Backsliding like this is very bad.

—Guilherme, gay man, 38 years old, Brazil.

It is a paradox, nowadays, social networks bring us closer, but with the pandemic, you cannot do much with it. I have made some contacts, I would like to get a girlfriend, but then it was so challenging, if not impossible, to have a date. The fears that the pandemic brings are very frustrating.

—Jéssica, lesbian woman, 26 years old, Brazil.

Discussion

This study aimed to understand the psychosocial impacts of the COVID-19 pandemic on Portuguese and Brazilian LGBTQI individuals. General results show different themes emerged: mental health, isolation, relationships, work, education,

finances, changes, coping, and LGBTQI topics. These results corroborate with others, in which LGBTQI individuals are also suffering from more significant psychosocial stressors during the pandemic.^{17,39-41} Understanding these results is especially important since these stressors can further increase physical and mental health disparities in an already vulnerable population due to oppression from a discriminatory social environment.^{25,35,36,42}

Mental Health

The LGB population is one of the groups most affected by COVID-19.¹⁷ These individuals were already at a social disadvantage due to sexual stigma, prejudice, and society's discrimination against their sexual orientation,⁴³ which negatively impacts their mental health.^{35,36} Moreover, LGBTQI individuals have a higher prevalence of problems related to mental health functioning,²⁵ including higher levels of depression, anxiety, and suicidal ideation,^{44,45} compared to their heterosexual peers.⁴⁶ Thus, our study results are in line with the existing literature that shows that the emergence of the COVID-19 pandemic and the adoption of lockdown measures to contain it has aggravated LGBTQI individuals' mental health.¹⁴

Some participants still mentioned the difficulties in accessing health care, mainly by those who had some pathology, such as HIV. According to the OutRight Action⁴⁷ report, sexual minority people without antiretroviral treatment are at risk of contracting the most severe cases of COVID-19. Fear and concerns about how they would be treated, anticipated stigma, discrimination, and isolation were also associated with the delay in seeking health care,⁴⁷ which contributed to the negative impact on their physical health as well.⁴⁸

Isolation

The adoption of COVID-19 lockdown measures led to a reduction in contact with family and friends by the participants in this study. The fear that their family and friends would be infected with the new coronavirus⁴⁹ may have affected these relationships' maintenance. Moreover, adopted measures resulted in feelings of loneliness and rejection in the sample, which led to depressive and anxiogenic symptoms.⁵⁰ Since the pandemic caused many LGB individuals to have to stay at home longer or move in with family members,⁵¹ some participants pointed to their need to return to the closet and deal with family stress. This was because many sexual minority people tend to suffer from prejudice and rejection from their own families,⁵² with increased conflictual dynamics.⁵¹ During the pandemic, a hostile family climate was associated with higher levels of depression and anxiety.⁵³

Relationships

Additionally, LGB individuals had less contact with LGB community systems⁵⁴ and the cancellation of pride events seems to have negatively affected some of our participants. This is of particular relevance, insofar as pride celebration events have been proved to be an essential resource for resilience, connection, and support for sexual minority people,⁴² being associated with higher levels of overall wellbeing.^{36,55} The search for sexual or significant relationships was also affected, which, according to Sanchez et al,³⁹ is a concern since intimate relations are generally considered protective for mental and physical health and relationships.^{56,57} Finally, lockdown also prevented our participants from taking part in leisure activities, such as going to the cinema, traveling, or going to the gym, which harmed their lives since these activities promote the overall quality of life.⁵⁸

Work and Education

The LGB population is subject to a stressful social environment created from sexual stigma, prejudice, and discrimination, often exhibiting feelings of internalized shame about their sexual identity,⁵⁹ which can also occur at the workplace.⁵¹ In a study by Pereira and Costa,²⁵ 24% of the sample participants stated that they felt the need to hide their sexual orientation in the workplace to avoid discrimination experiences. According to the literature,^{60,61} financial problems severely affect the LGB community, especially in Brazil. For example, in a Brazilian study of about 10,000 LGBTQI individuals, 1 in 5 participants reported not having any income due to the pandemic, with 4 out of 10 being unable to survive without a salary for more than 1 month.⁶² This seems to reflect how the heteronormativity model imposed by society⁴³ may have harmed the participants in this study.⁶³

The COVID-19 pandemic led governments to shut down several educational establishments and continue teaching activities in an online format. However, distance learning tends to exacerbate existing inequalities since not all students have the necessary and quality equipment to take classes online.⁶⁴ Also, many teachers and professors felt overwhelmed and needed to learn, in a short time, how to use digital platforms,⁶⁵ which may have negatively influenced the learning outcomes of those of our participants who were students.⁶⁶

Change and Coping

Despite the difficulties and stigma experienced by LGBTQI individuals in this study, the pandemic's behavioral changes led many participants to reflect on their life

values, manage to respond to the crisis positively, embrace adversity, and focus on their personal growth. Many have adopted strategies such as seeking physical and mental health care, exercising, meditating, and maintaining limited access to information related to COVID-19 to lessen the negative impact of the pandemic and maintain good physical and mental health levels.

This positive outlook may be linked to the participants' sense of belonging in their minority category and resilience, ⁶⁷ which helped identify a certain level of positive marginality. ⁶⁸ Coherence with their marginal status helped build a sense of authenticity and well-being, enabling the pandemic crisis to create higher resilience levels. ⁶⁹

LGBTIQ Topics

Our results suggest that the COVID-19 pandemic has impacted LGBTQI individuals in very unique ways due to the presence of negative emotional concerns among Portuguese and Brazilian participants that led them to perceive barriers when accessing health services, to be forced to go back into the closet, to not be able to attend pride celebration events, and dealing with limitations when dating online. These psychosocial circumstances may have increased the existing vulnerabilities of this population. Our study confirms previous data from Portugal and Brazil ^{70,71} concerning the impact of COVID-19 among LGBTQI population on mental health and work-related quality of life, and this may have conditioned the access to health care services, through the anticipation of rejection and fear of the disease. On the other hand, the fact that many families do not accept their LGBTQI family members, led many of our participants to go back into the closet, and this is not without relevant psychosocial consequences, such as LGBTQI identity erasure on the existing heteronormative culture and exposure to sexual stigma. ⁷² Also, the cancelling of all LGBTQI pride celebration events negatively affected our participants significantly, because these events constitute a single opportunity to promote visibility, empowerment, and community support. ⁷³ Finally, being forced to stay at home made LGBTQI individuals to be more exposed to the risk of social isolation and lack of dating interaction, with a drastic decrease of regular sexual and relational activities and an increased risk of sexual and relational activities under the effect of illicit substances, ⁷⁴ and sexual and intimate partner violence. ⁷⁵ Therefore, the COVID-19 pandemic led to a long-lasting exposure to adverse circumstances among LGBTQI individuals in Portugal and Brazil.

Limitations and Future Directions

This study is not without limitations. The first one refers to the transversal nature of the study. As the pandemic's future is still uncertain and people are usually influenced by their environment, ⁷⁶ individuals' perceptions can be altered according to their success. In this sense, it would be helpful to investigate psychosocial impacts' perception over time in a longitudinal study that could contribute to the long-term understanding of issues sensitive to the LGBTQI community during and after the COVID-19 pandemic, as well as its psychosexual health consequences. The pandemic's effect on psychosexual health and deprivation of "social touch" remains unknown among LGBTQI individuals but is critically detrimental to well-being. ⁷⁷ As COVID-19 is a highly contagious infection, this has led to doubts relating to how sexual relationships, sexual health, and sexual well-being can be affected.

Given the qualitative nature of this research, we decided not to separate the results by sexual orientation or nationality, considering that, in general, all participants represent a sexual minority subject to discrimination and social stigma. ^{35,36} However, in future studies, it would be intriguing to compare the specificities of each of the sexual minority's categories, as in the case of bisexuals, who, because of the double stigma effect, may suffer more from significant psychosocial stressors, which affect their physical and mental health. ⁷⁸ Or, in the case of Brazil's society being so violent toward sexual minority people, in future studies, it would be helpful to examine these exacerbated influences in the psychosocial well-being of LGBTQI individuals.

Compared to the traditional qualitative studies which use a semi-structured interview guide, we have used a single openended question with the lack of a person-guided interview. Also, as it was purely online, there were no chances of probes or memos which could have further elaborated the rich contextual information. Finally, the study was composed of single, middle-class participants with university training and from urban environments, thus not being representative of all LGBTQI individuals in Portugal and Brazil. Despite this, the sample size and the rigor of analysis reinforce our intention to put the voice of this minority group on the social agenda so that their perceptions on the psychosocial impact of COVID-19 in their lives are heard. In future studies, it would be convenient to add larger and more representative samples, which would contribute to the adoption of relevant policies to promote the fundamental rights of sexual minorities in times of COVID-19 pandemic.

Conclusions and Implications

This study provides an important contribution to current knowledge of the psychosocial factors resulting from the pandemic that impacted LGB individuals in

Portugal and Brazil. The COVID-19 pandemic poses specific challenges exacerbated by stigma and sexual discrimination and amplifies social inequalities.^{47,79} LGBTQI individuals are at increased emotional and social risks during the ongoing pandemic, and their voices are mostly unheard. Hence, there is a need for policy implementation and community awareness about their social welfare and this is vital to improving their health and well-being.^{80,81} Despite this, several participants proved to be positive, resilient, and determined to their personal growth, which is an essential factor in strengthening the LGBTQI community.

Given that the consequences of COVID-19 may extend over time, it is necessary to place this population in the center of pandemic strategies, maintain organizations that represent LGB rights, physical, mental, and specific, educational health services, as well as other social support networks (food, safe shelter, etc.) available during the pandemic.^{47,82} It is also important to reach both inside and outside the LGBTQI communities to increase efforts to mitigate the negative impact already existing and enhanced by the pandemic.

Portugal has transitioned from repressive and exclusive environments for LGBTQI individuals to more accepting and inclusive ones and is among a handful of countries in the world that have enshrined in their constitutions the prohibition of discrimination on the grounds of sexual orientation. Nonetheless, Portuguese society is still restricted by negative societal attitudes toward LGBTQI individuals, and our results are consistent with accumulating data indicating that psychosocial quality of life can be diminished due to exposure to social discrimination,⁸³ and policymakers in Portugal need to be particularly aware of LGBTQI people's needs in their social inclusion decisions, currently scarce in both Portugal and Brazil.

With a rich religious history of Catholicism juxtaposed with a sexually liberal public, Brazil interacts with its LGBTQI community in a very distinct and often conflicting manner. Being the worst transgressor of LGBTQI rights in the world, Brazil has operated in a paradoxical situation where it is also a world leader in the campaign for LGBTQI rights.⁸⁴ Therefore, our results can be seen a catalyst for the Brazilian LGBTQI human rights discourse and raise awareness to the necessity of more effective measures to end anti-LGBTIQ violence.

To begin addressing this omission, this study documented the psychosocial impacts of COVID-19 pandemic on LGB people living in Portugal and Brazil, but more research is needed, namely, the inclusion of transgender, intersexed, and queer individuals to address psychosocial disparities among these groups. In addition, quantitative research is needed to address the needs of LGBTQI individuals that could

translate into more inclusive policy measures, namely, innovation when implementing local and global actions to protect LGBTIQ individuals and facilitating the improvement of their overall levels of quality of life and psychosexual health during and after the COVID-19 pandemic.

Still, these data add to the international discourse on stigma among sexual minority persons during the COVID-19 pandemic. Furthermore, our results facilitated dialogue, questioning sources of oppression, and promoting of values which among Portuguese and Brazilian cultures are committed to social change for this group of people, ensuring the implementation of prejudiced-free practice guidelines in these 2 countries and others.

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Chapter 3: Discussion

This dissertation, carried out within the scope of obtaining a master's degree in Clinical and Health Psychology, sought to understand and explore the impact of the COVID-19 pandemic on depressive symptoms and at the psychosocial level in a sample of Portuguese and Brazilian LGB people. In this sense, and at first, the levels of depressive symptoms in heterosexual, bisexual and gay or lesbian men and women were compared, determining the predictive effect of fear and the negative impact of COVID-19 on depressive symptoms in the sample. Secondly, we sought to understand the psychosocial impact that the COVID-19 pandemic had on the experiences and perceptions of LGB people. Thus, and since there are no studies with Portuguese language samples and with a qualitative approach that relates the above-mentioned variables, the present studies are innovative and pioneering in this area of investigation, filling a gap verified in the literature.

The results obtained in the studies are in line with what was initially expected and are consistent with the existing literature, which reveals that the LGB population has a higher prevalence of problems related to mental health, and specifically, more depressive symptoms. Furthermore, it was possible to conclude that sexual minorities were the ones that experienced the most negative impact at various levels during the COVID-19 pandemic. Regarding the first study, it was concluded that the sample's mental health was impaired, and bisexual participants were those who presented greater depressive symptoms. Additionally, LGB participants experienced a higher negative impact of COVID-19 when compared to heterosexual participants. It was also found that depressive symptoms were positively correlated with fear and the negative impact of the pandemic, as well as with the perception of how the COVID-19 pandemic aggravated their responses to the BSI-18 depression subscale. Likewise, it was possible to conclude that fear and the impact of COVID-19 are predictors of depressive symptoms in the LGB population. Regarding the second study, it was found that the pandemic had an impact on mental health, but also on isolation and relationships with friends and family, due to the virus containment measures. In addition, the COVID-19 pandemic also had an impact on work and education, finances and LGBTQI issues, as well as on the changes and coping strategies used during this period by LGB participants.

In this regard, it is considered crucial the development of studies in this area in order to understand and clarify the factors resulting from the pandemic that had an

impact on the mental health and general well-being of the LGB community, one of the most vulnerable groups. Given that the consequences of the pandemic can be prolonged over time, it is essential to design and plan psychological intervention projects, to respond to the needs and difficulties of groups at higher risk. Besides, it is important to keep organizations representing LGBTQI rights and other support networks available, especially online, to support sexual minorities and reduce the negative impact that already exists and has been exacerbated by the pandemic. It is also crucial to promote the inclusion and social integration of the LGB population, as well as the promotion of policies aimed at specific health care provided to sexual minorities by different professionals, namely in terms of public health.

Portugal and Brazil are two of the countries that are currently going through a period of change and transformation at various levels due to the COVID-19 pandemic. It is therefore imperative that society understands that despite the fact that this new reality impacted the lives of the entire population, those who were already in a vulnerable situation were the ones who suffered most from this pandemic. In this way, we expected to contribute to the awareness of the impact of COVID-19 on the LGB population, promoting reflection on the consequences that prejudice, discrimination, and the stigma to which sexual minorities are subject to have on their mental health and their well-being.

It is important to mention that these investigations brought several benefits to Clinical and Health Psychology professionals since relevant, and current scientific knowledge was offered on the topic of sexual minorities and the COVID-19 pandemic. This, we believe, will allow for improvements in psychological intervention practices in this population.

With this dissertation and during its elaboration, it was possible to acquire several research skills in the field of Psychology, such as the preparation of a research project, the collection, processing, and analysis of data, the collection, and processing of information, as well as its conversion into intelligible information and the communication of scientific writing to diverse audiences with international diffusion. In this way, the various objectives proposed by EuroPsy - the European Certificate in Psychology (EFPA, 2019) were achieved, as well as the dissemination of results to vast audiences, positively affecting agents of scientific and social change.

Overall, the elaboration of this dissertation was very enriching, in the sense that it contributed to personal and professional growth and allowed the acquisition of new knowledge and essential skills for future clinical practice as a psychologist.

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Appendices

Appendix 1: The Impact of COVID-19 on Depressive Symptoms through the Lens of Sexual Orientation

Article

The Impact of COVID-19 on Depressive Symptoms through the Lens of Sexual Orientation

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Abstract: This research seeks to explore the impact of COVID-19 on depressive symptoms, analyzing discrepancies of sexual orientation in a Portuguese-speaking sample. 1590 individuals participated, of which 63% were women, and 88% self-identified as straight. Participants responded to the depression sub-scale of the Beck Symptoms Inventory-18, the fear of COVID-19 scale and the COVID-19 negative impact scale. Depressive symptoms observed were higher than expected, and several significant differences were obtained: women and self-identified bisexual participants had higher levels of depressive symptoms compared to male and straight and gay or lesbian participants. Depressive symptoms negatively correlated with age and positively correlated with COVID-19 aggravated responses, fear of COVID-19, and negative impact of COVID-19. Hierarchical linear regression analysis showed that age, gender and sexual orientation explained 6% of the variance of depressive symptoms, and when fear and the negative impact of COVID-19 was added, the model explained 23% of results. This study provides an important contribution to the understanding of factors arising from the pandemic that may have an impact on the mental health of sexual minorities.

Keywords: depressive symptoms; fear of COVID-19; negative impact of COVID-19; sexual orientation; LGB people



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1. Introduction

Corona Virus Disease 2019 (COVID-19), caused by the SARS-CoV-2 virus, manifests itself as a severe acute respiratory syndrome [1]. The first case was diagnosed in China in December 2019, spreading to different locations and populations around the world [2,3]. Due to its rapid spread and the increase in the number of critically ill patients, in just a few months, the World Health Organization (WHO) declared a state of pandemic worldwide [4]. As of early March 2021, the SARS-CoV-2 virus had infected approximately 115,660,000 people worldwide, and nearly 2,572,000 died from complications of the disease [5].

Since it was declared a pandemic, the spread of COVID-19 has been the focus of attention for governments and populations [6], having turned into a crisis at various levels with consequences worldwide [7]. One of the main concerns is the impact of this pandemic on the mental health of the population [6]. Several studies that investigated mental health showed a higher prevalence of depression, anxiety and insomnia in the population during the outbreak of COVID-19, concluding that the pandemic had a negative impact on the mental health of the population [8–10]. In a study carried out in Brazil, almost half of the samples showed sadness and symptoms of depression during the pandemic [11]. In Portugal, several investigations have shown that participants revealed significantly high levels of depression [12] and sadness during lockdown [13].

In addition to the psychological implications related to COVID-19, measures implemented to contain the disease may also consist of risk factors for mental health [6]. Social distancing and other measures that suspend day-to-day activities, despite protecting the

physical health of the population, are associated with the development of various disorders, such as depression [4,14–16]. In this sense, negative effects were identified, such as symptoms of post-traumatic stress, confusion and anger at the measures implemented [17,18]. It was also concluded that people who were quarantined showed a higher prevalence of presenting depression compared to those who were not [11]. Exposure to news related to COVID-19, misinformation about the virus and consumption of false news, are also risk factors that can lead to increased fear, anxiety and feelings of sadness [19].

Lesbian, gay and bisexual (LGB) people are one of the groups affected by COVID-19 [20], as these individuals were already at a disadvantage due to the stigma of society against their sexual orientation [21]. According to the minority stress theory, stigma, prejudice and discrimination against LGB people generates stress, ultimately having a negative impact on their mental health [22]. During the pandemic it was found that LGB individuals had less contact with their community, which would be essential for reduced psychological suffering [23]. These minorities may also have faced family conflicts, as they may have had the need to stay at home longer [9], and complications in accessing HIV prevention and treatment [24]. Such conditions present challenges to their mental health, including increased symptoms of depression [25].

Homosexuality was considered a mental disorder until 1973 by the Diagnostic and Statistical Manual of Mental Disorders (DSM) [26]. However, even after this classification was withdrawn, several discussions arose mainly within the religious community with a homophobic stance, allowing this “label” to exist until present day [27,28]. Generally, LGB people have a higher prevalence of mental health problems [29], including high levels of depression and substance use [30] compared to their straight peers [31], and bisexual people could be more at risk [32]. Among sexual minorities, there are indications that bisexual people have higher levels of suicidal ideation [33] than homosexual individuals [34]. Bisexual people consider that they are less connected to the LGBT+ community, as they face discrimination and exclusion within the community itself [35].

In addition, the LGB population is subject to a stressful social environment created from stigma, prejudice, social exclusion, hatred and violence, often presenting a feeling of shame about their sexuality [36], with these phenomena being observable in cultures such as in Portugal and Brazil. Indeed, Brazil is one of the countries with the highest rates of violence against the LGB population [37], triggered by homophobia and prejudice [38]. The heteronormativity model imposed by society makes the LGB population more vulnerable to discrimination, intolerance and attitudes about hate heterosexual individuals [39]. In Portugal, despite the existence of a non-discrimination clause based on sexual orientation in the Constitution, a law that allows same-sex couples to marry (since 2011), and a law that allows same-sex couples to adopt and joint-adopt children (since 2016), discriminatory practices continue to exist within the population [40–42]. Thus, discrimination and violation of the rights of the LGB population, mainly due to moral grounds and religious conservatism [29], generates intense suffering, anguish and insecurity, leaving this minority more likely to manifest depressive symptoms [35].

Some investigations have revealed the negative impact of the pandemic on the mental health of LGB individuals [19,43,44]. In this sense, Barrientos et al. [45] reported that, in their study, LGB participants suffered a huge negative psychosocial impact due to the COVID-19 pandemic, and Moore et al. [46] stated that sexual and gender minorities had higher levels of depression. However, given that there are no studies carried out on Portuguese-speaking populations, the present study was developed to assess the impact of COVID-19 on the levels of depressive symptoms through the lens sexual orientation.

2. Materials and Methods

Sample Size. The Portuguese and Brazilian population size combined equals around 220 million. We used a sample size calculator to compute the minimum number of necessary samples to meet the desired statistical constraints, applying the following formula: $n = N \times X / (X + N - 1)$, where $Z_{\alpha/2}^2 \times p \times (1 - p) / MOE^2$, and $Z_{\alpha/2}$ is the critical value of

the normal distribution at $\alpha/2$ (for a confidence level of 99%), MOE is the margin of error, p is the sample proportion, and N is the population size. The result was 666 participants to have a confidence level of 99% that the real value was within $\pm 5\%$ of the surveyed value. Nevertheless, we were able to reach a number of participants well above that number ($n = 1590$).

Procedures. This research was carried out through an online website that was available between October and December 2020. This link, carried out through Microsoft Forms, was disseminated through social networks and e-mail addresses. Participation was voluntary, and participants were referred to a linked website created specifically for the purpose of this investigation. The first page of the questionnaire explained the objectives of the study, and informed participants about how to fill it in, how to withdraw from the study, and how to contact the authors for more information. They were also asked to read and agree to an informed consent waiver.

A total of about 8000 notifications were sent, and 1667 participants responded voluntarily (21% response rate), however 77 participants failed to meet the inclusion criteria, and were eliminated. This notwithstanding, 1590 participants fully met the inclusion criteria (20% response rate). The dissemination of the survey complied to all of the ethical principles of informed consent, anonymity and confidentiality. Neither rewards nor other incentives were offered. Inclusion criteria included the following: being older than 18 years of age, to be a Portuguese native speaker (from Portugal or Brazil).

Measurements. The research protocol used in the present research encompasses four instrument measures: the sociodemographic questionnaire, the Brief Symptom Inventory 18 (BSI-18) and the scales of fear in relation to COVID-19 and the negative impact in relation to COVID-19.

Demographic Information. The sociodemographic information of the sample participants was collected through a questionnaire. Participants were asked about their age, gender, nationality, sexual orientation, marital status, socioeconomic status, among other characteristics.

Depressive Symptoms. Participants responded to the depressive symptoms sub-scale of the Portuguese version of the Brief Symptom Inventory 18 (BSI-18) [47] in order to assess the possible problems or symptoms experienced in the previous week. The depression subscale encompasses six items focusing on the main symptoms of depressive disorders (e.g., feeling blue, feeling no interest in things, feeling lonely, feeling hopeless about the future, feeling worthless, and having suicidal thoughts). Likert-type responses assessing frequency of symptoms varied between 0-Never and 4-Always. The global severity index, provides a measure of the individuals' levels of psychological malaise is obtained from the mean of the six items on the scale, with the highest scores revealing a more intense psychosymptomatology. The internal consistency obtained in the present study was $\alpha = 0.94$, which reveals excellent reliability. To complement the assessment of depression symptoms associated with the COVID-19 pandemic, a question was asked regarding the participants' perception of the worsening responses on the depression subscale due to the pandemic: "how were the responses you gave to the previous questions increased by the COVID-19 pandemic?" Likert-type responses varied between 1-Nothing and 6-A lot.

Fear of and Negative Impact of COVID-19. Participants also responded to the fear of COVID-19 scale and the negative impact of COVID-19 scale. The fear of COVID-19 scale was originally developed by Ahorsu et al. [48], and as in the original version, the Portuguese version comprised seven items, ranging in score from 1 to 5 as measured by a Likert-type scale, with higher scores indicating a greater the fear of COVID-19 [49]. Examples of questions are as follows: "It makes me uncomfortable to think about Corona", "When I watch news and stories about Corona on social media, I become nervous or anxious" or "I am afraid of losing my life because of Corona". Regarding the negative impact of COVID-19 scale, it allowed measuring the participants' perception of the negative impact that the pandemic had on their lives. It consisted of ten items related to the various areas of psychosocial functioning, ranging in score from 1 to 5 as measured by a Likert-type scale with higher scores meaning greater negative impact of COVID-19 [49]. Examples of

questions are as follows: “Compared to my life before the COVID-19 pandemic, it had a negative impact ... on my professional or academic life, ... on my family life, ... on my financial life, etc.” The internal consistency obtained was $\alpha = 0.87$ for both scales, which indicates excellent reliability.

Data Analysis. Descriptive statistics were performed to describe the sample (mean, standard deviation, frequencies and percentages). Student *t*-tests, and one-way ANOVAs were conducted to evaluate differences between comparison groups. To assess the association between relationship fear of COVID-19, negative impact of COVID-19 and depressive symptoms, Pearson correlation coefficients were conducted. Finally, A hierarchical linear regression analysis was conducted to examine the effects of independent variables (age, gender, sexual orientation, fear of COVID-19, and negative impact of COVID-19) on the dependent variable (depressive symptoms).

3. Results

A total of 1590 participants (63.0% women, 37.0% men) aged between 18 and 74 years took part in the study ($M_{age} = 33.67$; $SD = 12.95$). Regarding nationality, 76.8% were Portuguese and 23.2% Brazilian. The majority of participants (56.8%) reported being single, holding a university degree (68.8), living in small urban environments (42.2%), and belonging to a middle socioeconomic status (57.8%). Regarding sexual orientation, 1399 individuals (88.0%) identified as straight, while 97 participants (6.1%) identified as bisexual, and 94 participants (5.9%) identified as gay or lesbian. Regarding professional status, 49.0% of the participants claimed to be employed. The sample’s sociodemographic data are shown in Table 1 in greater detail.

Table 1. Sociodemographic characteristics of the participants ($N = 1590$; $M_{age} = 33.68$; $SD = 12.95$).

Variable	Category	N	%
Gender	Women	1002	63.0
	Men	588	37.0
Nationality	Portuguese	1221	76.8
	Brazilian	369	23.2
Marital Status	Single	903	56.8
	Married	412	25.9
	De facto union	167	10.5
	Divorced/Separated	94	5.9
	Widower	14	0.9
Educational Attainment	No schooling	2	0.1
	Up to 9 years of school	57	3.6
	Up to 12 years of school	437	27.5
	Undergraduate degree	537	33.8
	Postgraduate degree	388	24.4
Place of residence	Ph.D.	169	10.6
	Small rural	280	17.6
	Big rural	154	9.7
	Small urban	671	42.2
Socioeconomic Status	Big urban	485	30.5
	Low	68	4.3
	Middle-Low	383	24.1
	Middle	919	57.8
	Middle-High	205	12.9
Sexual Orientation	High	15	1.0
	Straight	1399	88.0
	Bisexual	97	6.1
Professional Status	Gay or Lesbian	94	5.9
	Unemployed	36	2.3
	Student	425	26.7
	Working student	186	11.7
	Self-employed	139	8.7
Professional Status	Employed	779	49.0
	Retired	25	1.6

Mean scores for depressive symptoms were $M = 1.01$ ($SD = 0.86$), which was slightly above what would be expected when compared to the community sample (without psychopathology) drawn from literature ($M = 0.89$, $SD = 0.72$) [50]. The independent samples t -test demonstrated the existence of statistically significant differences in depressive symptoms by genders ($t(1335) = 4.108$; $p < 0.001$), indicating that female participants had higher levels of depressive symptoms ($M = 1.08$; $SD = 0.85$) than male participants ($M = 0.88$; $SD = 0.85$) (see Table 2).

Table 2. Differences in Depressive Symptoms by Gender and Sexual Orientation.

Dependent Variable	Categories	Sub-Categories	N	M	SD	t/F (df)	p
Depressive Symptoms	Gender	Women	1002	1.08	0.86	4.108 (1335)	0.000 *
		Men	588	0.89	0.85		
	Sexual Orientation	Straight	1399	0.95	0.83	27.809 (20.257;0.701)	0.000 *
		Bisexual	97	1.61	0.97		
		Gay or Lesbian	94	1.17	0.90		

* $p < 0.001$.

One-way analysis of variance (ANOVA) showed statistically significant differences in depressive symptoms by sexual orientation ($F(20.257; 0.701) = 27.809$; $p < 0.001$), indicating that self-identified bisexual participants scored higher (Table 2). The post-hoc test (Tukey) confirmed the statistically significant differences between bisexual and straight participants ($p < 0.001$), between bisexual and gay and lesbian participants ($p = 0.002$), and between straight, and gay and bisexual participants ($p < 0.05$) (Table 3).

Table 3. Results for Depressive Symptoms by comparison groups (Sexual Orientation).

Dependent Variable	(I) Sexual Orientation	(J) Sexual Orientation	Mean Difference I–J	p
Depressive Symptoms	Straight	Bisexual	−0.66075	0.000 **
		Gay or Lesbian	−0.22505	0.042 *
	Bisexual	Straight	0.66075	0.000 **
		Gay or Lesbian	0.43570	0.002 *
	Gay or Lesbian	Straight	0.22505	0.042 *
		Bisexual	−0.43570	0.002 *

* $p < 0.05$; ** $p < 0.001$.

Mean scores for fear of COVID-19 were $M = 2.44$ ($SD = 0.84$). The independent samples t -test demonstrated the existence of statistically significant differences in fear of COVID-19 by gender ($t(1418) = 6.876$; $p < 0.001$), indicating that female participants had higher levels of fear of COVID-19 ($M = 2.55$; $SD = 0.83$) than male participants ($M = 2.23$; $SD = 0.82$) (see Table 4).

Table 4. Differences in Fear of COVID-19 by Gender and Sexual Orientations.

Dependent Variable	Categories	Sub-Categories	N	M	SD	t/F (df)	p
Fear of COVID-19	Gender	Women	1002	2.55	0.83	6.876 (1418)	0.000 **
		Men	588	2.23	0.82		
	Sexual Orientation	Straight	1399	2.42	0.83	6.014 (4.258; 0.708)	0.003 *
		Bisexual	97	2.71	0.83		
		Gay or Lesbian	94	2.58	0.94		

* $p < 0.05$; ** $p < 0.001$.

One-way analysis of variance (ANOVA) showed statistically significant differences in fear of COVID-19 by sexual orientation ($F(4.258; 0.708) = 6.014$; $p = 0.003$), indicating that self-identified bisexual participants scored higher. The post-hoc test (Tukey) confirmed the

statistically significant differences between bisexual and straight participants ($p = 0.006$) (see Table 5).

Table 5. Results for Fear of COVID-19 by comparison groups (Sexual Orientation).

Dependent Variable	(I) Sexual Orientation	(J) Sexual Orientation	Mean Difference I–J	<i>p</i>
Fear of COVID-19	Straight	Bisexual	−0.29104	0.006 *
		Gay or Lesbian	−0.16757	0.161
	Bisexual	Straight	0.29104	0.006 *
		Gay or Lesbian	0.12347	0.600
	Gay or Lesbian	Straight	0.16757	0.161
		Bisexual	−0.12347	0.600

* $p < 0.05$.

Mean scores for the negative impact of COVID-19 were $M = 2.60$ ($SD = 0.88$). The independent samples *t*-test demonstrated no statistically significant differences by gender ($t(1408) = 1.232$; $p = 0.186$) (see Table 6).

Table 6. Differences in the Negative Impact of COVID-19 by Gender and Sexual Orientations.

Dependent Variable	Categories	Sub-Categories	<i>N</i>	<i>M</i>	<i>SD</i>	<i>t/F (df)</i>	<i>p</i>
Fear of COVID-19	Gender	Women	1002	2.63	0.87	1.232 (1408)	0.186
		Men	588	2.57	0.91		
	Sexual Orientation	Straight	1399	2.55	0.88	19.282 (14.697; 0.762)	0.000 *
		Bisexual	97	3.01	0.94		
		Gay or Lesbian	94	2.98	0.98		

* $p < 0.001$.

One-way analysis of variance (ANOVA) showed statistically significant differences in the negative impact of COVID-19 by sexual orientation ($F(14.697; 0.762) = 19.282$; $p < 0.001$), indicating that self-identified bisexual, and gay or lesbian participants scored higher. The post-hoc test (Tukey) confirmed the statistically significant differences between straight and bisexual participants, and between straight and gay or lesbian participants ($p < 0.001$) (see Table 7).

Table 7. Results for the Negative Impact of COVID-19 by comparison groups (Sexual Orientation).

Dependent Variable	(I) Sexual Orientation	(J) Sexual Orientation	Mean Difference I–J	<i>p</i>
Fear of COVID-19	Straight	Bisexual	−0.45154 *	0.000 *
		Gay or Lesbian	−0.42625 *	0.000 *
	Bisexual	Straight	0.45154 *	0.000 *
		Gay or Lesbian	0.02530	0.980
	Gay or Lesbian	Straight	0.42625 *	0.000 *
		Bisexual	−0.02530	0.980

* $p < 0.001$.

Pearson's correlation coefficient test showed that depressive symptoms correlated negatively with age ($r = -0.156$; $p < 0.001$), positively with the perception of how COVID-19 aggravated responses to the Depression Symptoms Scale ($r = 0.441$; $p < 0.001$), positively with the fear of COVID-19 ($r = 0.257$; $p < 0.001$), finally, also positively with negative impact of COVID-19 ($r = 0.421$; $p < 0.001$) (see Table 8).

Table 8. Correlation Matrix.

Variables	1	2	3	4	5
1—Age	-				
2—COVID-19 Aggravated Responses	−0.085 **	-			
3—Fear of COVID-19	0.008	0.464 **	-		
4—Negative Impact of COVID-19	−0.037	0.557 **	0.402 **	-	
5—Depressive Symptoms	−0.156 **	0.441 **	0.257 **	0.421 **	-

** $p < 0.001$.

We also carried out a hierarchical linear regression analysis to assess the effects of age, gender, sexual orientation, fear and negative impact of COVID-19 on the depressive symptoms of the sample. The variables “age”, “gender” and “sexual orientation” were added in the first block (Model I). COVID-19’s Fear and Negative Impact were added in the second block (Model II). The first block of analysis explained 6% of the variance of depressive symptoms, while the second block explained 23%. Thus, as shown in Table 9, all variables are strong predictors of depressive symptoms.

Table 9. Hierarchical linear regression analysis predicting Depressive Symptoms.

Variable	Model I			Model II		
	B	SE B	β	B	SE B	β
Age	−0.009	0.002	−0.140 **	−0.009	0.002	−0.139 **
Gender	−0.217	0.049	−0.123 **	−0.147	0.045	−0.084 *
Sexual Orientation	0.270	0.045	0.165 **	0.150	0.042	0.092 **
Fear of COVID-19				0.101	0.028	0.098 **
Negative Impact of COVID-19				0.359	0.026	0.371 **
R^2			0.060			0.230
F			27.361 **			76.727 **

* $p < 0.05$; ** $p < 0.001$.

4. Discussion

This investigation sought to explore the impact of COVID-19 on depressive symptoms through the lens of sexual orientation in a Portuguese-speaking sample. Results showed that depressive symptoms are present in the study sample, being above what would be expected for a non-clinical community normative sample. This result is associated with the emergence of the COVID-19 pandemic. As found in other studies conducted in Portuguese-speaking samples [51], the majority of participants felt depressed during the period of national state of emergency due to changes in routines and decreased contact with friends and family caused by measures of social distance. In addition, the fear of infecting or being infected by COVID-19 [52], concerns about the professional future and financial instability [53] generated emotional vulnerability associated with depressive symptoms, especially among women [54–56]. This can be explained by the fact that women have a greater psychological vulnerability [57], poor adaptive coping styles, greater prevalence of somatic diseases and greater social and cultural insecurity [58]. Women also tend to ruminate more on negative thoughts, which prolongs their suffering [59]. In addition, the vision of women in society and the different roles played by women, such as carrying out domestic chores, providing care for children/the elderly and professional responsibilities, which were carried out simultaneously during the quarantine period [60], as well as the increase in domestic violence during this period [61] may correspond with the explanation of our results.

Participants who self-identified as bisexual also had higher levels of depressive symptoms as compared to participants who self-identified as straight, and gay or lesbian. These results are congruent with other studies that emphasize that the levels of depression among LGB individuals tend to be high [62], with a prevalence of two to four times higher com-

pared to straight people [63]. Bostwick et al. [35] claim that it is bisexual individuals who have higher levels of mental health problems when compared to homosexual individuals, because bisexual individuals tend to hide their sexual orientation in different social contexts in order to protect themselves from discrimination and stigma [40]. Generally, bisexual individuals experience high levels of the three main stressors that make up the minority stress model—internalized homophobia, stigma and discrimination [22]. In addition, due to the COVID-19 pandemic and the measures adopted to contain it, individuals from sexual minorities demonstrated health problems and impaired well-being, which was reflected in the onset or worsening of depression symptoms during the first few months of the pandemic [46,64–68].

Our results also showed that older participants revealed fewer depressive symptoms. This confirms other research [69] reporting that younger people have higher levels of depression. However, most studies claim that stressful life events, such as the COVID-19 pandemic, are risk factors for depression in older people and that depressive symptoms increase with age [70]. The result of the present study seems to demonstrate that the ability to develop strategies and to adapt emotionally and psychologically to losses increases with age, which can decrease the risk factors for depressive symptoms [71]. In this sense, the fact that older adults are more effective in regulating their emotions when compared to younger adults helps to explain why depressive symptoms decrease with advancing in age [72].

The results also show that the COVID-19 pandemic appears to have aggravated the depressive symptoms of the sample participants. This result is in line with the existing literature [73], which demonstrated that when comparing the levels of depression before and during the pandemic among people without previous mental disorders or with less severe mental disorders, an increase in the levels of depressive symptoms was observed. We can see that the COVID-19 pandemic has had consequences for the entire population, having a negative impact in several areas. This impact is directly related to the fear of being infected, of infecting others or of dying from the virus [74], and also to the fear of losing one's job or being socially excluded by friends and family [75].

Depressive symptoms increase according to the fear of COVID-19 felt by individuals and negative impact experiences associated with the pandemic. In fact, fear related to COVID-19 affects people's psychological well-being and can lead to symptoms of depression [8], and overall negative psychological responses [76]. The measures adopted by governments to contain the pandemic, such as quarantine or social isolation, may have contributed to this psychological suffering [77]. This impact can also be reflected in the economic instability of the population, since the pandemic has left a large number of people unemployed [78]. This further intensifies the negative emotions experienced by individuals during the pandemic, which can lead to the development of depressive symptoms [79].

The comparison between the various dimensions that acted as predictors of depressive symptoms showed that age, gender, and sexual orientation, but mostly fear and the negative impact of COVID-19 contributed to the explanation of the depressive symptoms. The fact that the pandemic has had an impact on the health system, politics, the economy and education can be reflected in the appearance of several mental disorders, namely depression [16]. Women and individuals belonging to sexual minorities may have seen greater negative impact from COVID-19 and had higher levels of depression [52] and this level of concern and fear can be highly disabling [6,8,80].

This research is not without limitations. Firstly, this was a convenience sample collected online. Despite the fact that the proportion of LGB participants in the sample is reflective of the prevalence in population (around 10%), comparative analysis may have been subject to bias since comparison groups are disproportionate. Thus, these results cannot be generalized, although we believe that this is a credible option to promote the representation of sexual minorities in this study. Secondly, the sample was disproportionately differentiated, with contributions from two distinct cultural settings (Portugal and Brazil). Thirdly, as presented in the research, other variables can be predictors of

depressive symptoms. In fact, depression can be related to factors such as loneliness [52,55], socioeconomic status [24,64–66] or maladaptive coping mechanisms [59], mainly among women [67,68]. Future studies should include more varied samples and other research methodologies, such as face to face inquiries or qualitative analysis. In addition, longitudinal methodologies would be important to assess the long-term impact of the COVID-19 pandemic on depressive symptoms in sexual minority groups.

5. Conclusions

This was an important contribution to the analysis of how the COVID-19 pandemic has unevenly affected the mental health of the world population. Those who were in a vulnerable situation suffered most from the consequences of this new reality, and this negative impact highlights the need for further research in the area of mental health, specifically with groups of greater vulnerability. Given that the consequences of this pandemic can prolong over time, it will be decisive to devise psychological intervention strategies in order to respond to the needs and difficulties of the groups most at risk such as women and LGB people. This study provides an important contribution to the understanding and clarification of factors arising from the pandemic that may have an impact on the mental health of sexual minorities.

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**Appendix 2: Psychosocial Impacts of
COVID-19 Pandemic on Lesbian, Gay
and Bisexual People living in
Portugal and Brazil - A Qualitative
Study**

Psychosocial Impacts of COVID-19 Pandemic on Lesbian, Gay, and Bisexual People Living in Portugal and Brazil—A Qualitative Study

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Abstract

Introduction: Not many studies have been reported from Portugal or Brazil to date, reading the psychosocial impacts of COVID-19 on lesbian, gay, and bisexual (LGB) people, especially from a qualitative perspective.

Materials and Methods: A convenience sample of 65 self-identified LGB individuals from Portugal and Brazil participated in this study. Thirty-two participants were from Portugal and 33 from Brazil. The average age was 34.48 years (standard deviation = 11.66), ranging from 19 to 67. We used an online interview approach in an asynchronous format. All study respondents completed a structured inquiry consisting of a short section of sociodemographic questions and a single open-ended question: “As a lesbian, gay, bisexual (or other) self-identified person, please elaborate on how the COVID-19 pandemic has impacted your life.”

Results: The thematic analysis of participants’ responses revealed 9 recurring themes, encompassing 18 subcategories to occur: mental health (depression, anxiety, fear, anger, and loneliness), isolation (social distancing and leisure impediments), relationships (family and friends), work-related problems, education-related problems, financial problems, changes (behavioral changes and opportunity to grow), coping (seeking support, accessing information and physical activities), and LGBTQI topics (health barriers, going back into the closet, pride celebration events, and online dating).

Conclusions: Our results provide voice to LGB Portuguese and Brazilian people during the COVID-19 pandemic demonstrating specific challenges exacerbated by stigma and sexual discrimination amplified by preexistent social inequalities.

Keywords

COVID-19, psychosocial impacts, LBG people, Portugal, Brazil, qualitative research

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Introduction

The COVID-19 outbreak started in December 2019 in China,¹ and its rapid spread around the globe² made it recognized by the World Health Organization as a worldwide pandemic.³ In Portugal, the first cases emerged in March 2020⁴ and, in the same month, a state of emergency was declared as a way to contain the spread of the virus, with lockdown measures put in place.⁵ In Brazil, the first cases appeared in February 2020,⁶ and like in other countries, measures of social distancing, travel restrictions, and quarantine were adopted,⁷ impacting on social and financial structures of the country.⁸

As a worldwide public health concern, the COVID-19 pandemic had several impacts in the most different domains and areas of society.^{9–11} Lockdown measures and the duty

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to stay at home increased isolation and the need to create changes and adjustments to the general population's daily life and routines¹² which contributed to the compromise of mental health.¹³ This adverse circumstance may have impacted more on the lives of previously more vulnerable populations, such as LGBTQI individuals.

The literature constantly identifies significant discrepancies between heterosexual and LGBTQI individuals concerning mental health and well-being, sexual minorities scoring lower.^{14,15} Additionally, sexual minorities also show higher prevalence for having mood disorders such as anxiety, experiencing suicidal ideation and behavior, misusing illicit substances,¹⁶⁻¹⁸ and experiencing difficulties accessing health, employment, and other socioeconomic resources.¹⁹

The minority stress model may explain how COVID-19 had a more significant impact on LGBTQI individuals than heterosexual people¹⁴ because it causes reduced well-being and greater levels of mental health impairment related to exacerbating and intensifying of preexistent vulnerabilities and inequalities in society.^{14,15} Lockdown measures forced many LGBTQI individuals to cease having access to social and community groups that are essential sources of support, thus increasing the psychosocial impairment during the pandemic, including anxiety and depressive symptoms^{11,16-20} as well as limited access to mental health services despite the increase of electronic interventions.²¹ Therefore, the need for social and mental health support for LGBTQI individuals becomes evident.²²

Concerning the Portuguese sociopolitical context, the progressive acceptance of sexual minorities in Western countries, as is the case in Portugal, does not invalidate the occurrence of experiences associated with stigma and discrimination.²³ Although the country has undergone sociopolitical and legislative advances, such as same-sex marriage, and same-sex couples adoption,²⁴ it did not stop Portuguese LGBTQI individuals from facing sexual prejudice.^{25,26}

The Brazilian sociopolitical context is guided by a conservative mentality, which is reflected in the fact that Brazil is one of the countries with the highest rate of crimes for homophobia.²⁷ Thus, sexual minorities in Brazil are more likely to experience insecurity, hostility, and violence since laws and measures aimed at criminalizing hate attitudes against sexual minorities have not yet been adopted,²⁸ and consequently, laws that protect the rights of the lesbian, gay, and bisexual (LGB) community²⁹ are still ineffective in Brazil.

Portugal-Brazil relations have spanned over 5 centuries. In addition to a commonality of language and religion, both countries are members of the Lusophone world. As common cultural values favor the development of similar social norms, not many studies have been reported from Portugal or Brazil to date, reading the psychosocial impact of COVID-19 on LGBTQI individuals, especially from a qualitative perspective. Articulating these issues and giving voice to Portuguese and Brazilian LGBTQI individuals is our study's primary goal. We correspondingly adopted a

qualitative approach to present our research results on the COVID-19-related psychosocial experiences and perceptions of LGB participants to weave lessons for a more inclusive psychosocial intervention during the pandemic and future adverse circumstances.

Materials and Methods

Participants

A convenience sample of 65 self-identified LGB individuals from Portugal and Brazil participated in this study. Thirty-two participants were from Portugal and 33 from Brazil. The average age was 34.48 years (standard deviation = 11.66), ranging from 19 to 67. Half (50.7%) of participants identified as gay or lesbian, and the other half as bisexual. In Table 1, we describe in greater detail sociodemographic information. Both samples were highly educated; most participants were single and from urban origin. The sample size was determined by thematic saturation and we collected data from those LGBTQI individuals to which we had most convenient access.

Measures

We used the online interview approach in an asynchronous format, adhering to the guidelines of O'Connor and Madge³⁰ and Hamilton and Bowers.³¹ Online interviewing was conducted in non-real-time or asynchronously facilitated via email, with the advantage of online recruitment possibilities, which constitute an enhanced opportunity to discuss sensitive topics with greater openness and readiness. All study respondents were invited to complete a structured inquiry consisting of a short section of sociodemographic questions, such as age, gender identity (male, female, or other), sexual orientation (gay/lesbian, bisexual, or other), nationality, education, socioeconomic status, marital status (single, married, divorced, civil union, or other), and place of residence, and a single open-ended and fundamental question: "As a lesbian, gay, bisexual (or other) self-identified person, please elaborate on how the COVID-19 pandemic has impacted on your life." The inquiry was expected to take around 10 min. Participants responded to this outreach online through 1 website created for this purpose, in Portuguese language (standardized for both European and Brazilian Portuguese). The first page of the questionnaire explained the study's objectives, informed participants about how to complete the survey, their freedom to withdraw from the study, and how to contact the authors for further information if needed.

Procedures

Participants were recruited online and were invited to fill out an interview script between October 2020 and

Table 1. Sociodemographic Characteristics of the Participants

		Portugal (n = 32, Mean Age = 32.14, SD = 11.05)		Brazil (n = 33, Mean Age = 36.50, SD = 12.00)		Total (n = 65; Mean Age = 34.48, SD = 11.66)	
		n	%	n	%	n	%
Gender	Male	12	18.5	22	33.8	34	52.3
	Female	20	30.8	11	16.9	31	47.7
Marital status	Single	24	36.9	18	27.7	42	64.6
	Married	6	9.2	6	9.2	12	18.5
	Divorced	1	1.5	3	4.6	4	6.1
	Civil union	2	3.1	5	7.7	7	10.8
Education	Up to 12 years	11	16.9	3	4.6	14	21.5
	University—BA	9	13.8	9	13.8	18	27.7
	University—MA	11	16.9	12	18.5	23	35.4
	University—PhD	1	1.5	9	13.8	10	15.4
Place of residence	Urban	27	41.5	32	49.2	59	90.8
	Rural	5	7.7	1	1.5	6	9.2
Socioeconomic status	Low	2	3.1	1	1.5	3	4.6
	Low-average	14	21.5	12	18.5	26	40
	Average	13	20	15	23.1	28	43.1
	Average-high	3	4.6	3	4.6	6	9.2
	High	0	0	2	3.1	2	3.1
Sexual orientation	Gay or lesbian	18	27.7	15	23.1	33	50.7
	bisexual	15	23.1	17	26.1	32	49.3

November 2020 during pandemic times. Recruitment targeted specifically self-identified sexual minority individuals, and involved Internet notifications (emails and electronic messages) sent to LGB organizations in Portugal and Brazil, social networks such as Facebook, and mailing lists. Accessible online information concerning the study presented its goals and procedures and included all of the principles of traditional research ethics: confidentiality and anonymity, and informed consent. Participation in the study was formalized after acknowledging the guidelines of informed consent. The interview script's design phase (question format, content, order, number, and question delivery) led to a script with a single central open-ended question. This was a deliberate choice by the researchers, designed to meet the requirements indicated by Hsieh and Shannon³² for subsequent data content analysis. Confidentiality was assured by using codes on data documents, encrypting identifiable data, assigning security codes to computerized records, and limiting access to identifiable information (IP address). The Ethical Committee of the University of Beira Interior (Portugal, CEUBI-Pj-2020-088) approved this study.

Analyses

The transcripts from all interviews were entered in NVivo (version 12), which is a software program used for qualitative methods research to process a rich dataset of unstructured information (like interviews). The software automates manual tasks, like classifying or organizing information. Specifically,

it analyzes the unstructured text, namely, qualitative content analysis, to identify concepts that emerge from the text, subsequently linked together.³³ We adopted a conventional conceptual content analysis approach (the analysis involved quantifying and counting the presence explicit and implicit terms in order to examine the occurrence of selected terms in the data) that enabled us to gain direct information from participants without imposing preconceived categories and names for the categories derived from the data.³² The following steps for conducting the conceptual content analysis were taken: (a) we decided the level of analysis: word, word sense, phrase, sentence, themes; (b) we decided how many concepts to code for allowing flexibility to add categories through the coding process; (c) we decided to code for existence or frequency of a concept in the text; (d) we created coding rules so that similar word segments were transparently categorized in a logical fashion to provide clear distinction among concepts; (e) we developed rules for coding of the texts, to promote validity; (f) we ignored irrelevant information; (g) we coded the text using NVivo, inputting categories and having coding done automatically; and (h) we finally analyzed our results, quantifying general trends and patterns.

Trustworthiness/rigor of our study was ensured by conducting all research tasks in a precise, consistent, and exhaustive manner to enable credibility, transferability, dependability, and confirmability. COREQ compliance for this study was checked for each of the 32 criteria (rated yes/no) by the researchers. Discrepancies in study inclusion or

item ratings were resolved with the inclusion of two experts who examined all transcripts independently, thus identifying broader principal themes that emerged from the interview. These two experts then followed a “negotiated agreement” approach³⁴ to assess intercoder reliability, compare coding, and discuss disagreement to reconcile and reach a final version. Based on this conjoint analytic procedure, the final broader themes were organized, assessed, analyzed, and presented. The illustrative quotations used came from the online interviews and indicated each participant’s age, nationality, gender, and sexual orientation.

Results

The thematic analysis of the participants’ responses revealed 9 recurring themes, encompassing 18 subcategories to occur, as shown in Table 2. Subcategories that were mentioned less than 5 times were excluded from this analysis. The results are presented comparatively between Portugal and Brazil.

The illustrative quotations used come directly from the online interviews and indicate the first name (a fictitious name assigned by the study’s authors), sexual orientation, and gender identity, age, and country of origin of each participant.

Mental Health

LGBTQI individuals traditionally present poorer mental health indicators than heterosexual people due to the effect of sexual stigma and discrimination, as suggested by the

minority stress theory.³⁵⁻³⁷ In the scenario of COVID-19, the pandemic significantly affected our participants’ mental health by creating discourses of sadness and depression, anxiety and stress, fear and panic, anger, and loneliness. These negative emotional manifestations were increased by the pandemic circumstances, given that, in some cases, self-assessment of mental health was already poor and was worsened by the impediment of maintaining social and family support contacts, by the need to adapt to behavioral changes and permanent immersion in a threatening, dangerous environment. The uncertainty about the future, the fear of catching the disease, the fear of losing their jobs, and the anger at the criticism of the way governments managed the pandemic have created intense feelings of anxiety, yet more accentuated by loneliness.

COVID-19 has had a very negative impact on my life because my mental health was already fragile before the pandemic; the problem is that now, due to knowing that I cannot be with my friends or family, I get much sadder. I need the touch, the kisses, and the hugs to be happier.

—António, bisexual man, 19 years old, Portugal.

As I belong to the risk group and have family members with whom I live daily who also do, I feel sad and hopeless when I see people not wearing a mask, and where I live, the elderly who walk around without a mask predominate. It really affects my life.

—Thiago, gay man, 54 years old, Brazil.

Table 2. Key Themes Identified

Theme	Subcategory	Portugal	Brazil
Mental health	Sadness/depression	10	7
	Anxiety/stress	12	11
	Fear/panic	8	8
	Anger	5	6
	Loneliness	6	5
Isolation	Social distancing	14	12
	Leisure impediments	9	7
Relationships	Family	8	10
	Friends	7	8
Work	Work-related problems	13	11
Education	Education-related problems	9	9
Finances	Money problems	7	9
Change	Behavioral changes	10	9
	Opportunity to grow	7	6
Coping	Seeking support	8	6
	Accessing information	7	7
	Physical activities	5	8
LGBTQI topics	Health barriers	5	5
	Going back into the closet	6	7
	Pride celebration events	7	9
	Online dating	8	7

It made me postpone or suspend opportunities that were about to happen, suspending my life. This creates a lot of anxiety and insecurity about the future.

—Pedro, bisexual man, 37 years old, Portugal.

The new job requests happen in a virtual environment, which is not at all welcoming. Besides, it creates much anxiety because I want to adapt and participate, but it is not easy. However, it is not only anxiety about the present, but also about the future, the reorganization of society and its mechanisms, an aggravated situation where one is in a condition of vulnerability.

—Rodrigo, bisexual man, 34 years old, Brazil.

Physical symptoms of anxiety arose, but I had a hard time noticing them and asking for medical help. Only later was it confirmed that I had anxiety, I started taking medication and took up psychotherapy.

—Mariana, lesbian woman, 22 years old, Portugal.

Working in healthcare, I was very overwhelmed. My grandmother had cancer, and I was afraid to visit her because of the pandemic, and she eventually passed away without my being able to live with her at the end of her life. Before the pandemic, I bought a property, and this burden has repercussions on my financial life. It has been a tough year. Lots of stress.

—Paulo, bisexual man, 29 years old, Brazil.

The socio-labor transformations imposed by the pandemic have created several fears, especially those of infecting the most vulnerable people around them, such as parents or grandparents, fear of becoming infected with COVID-19, fear of losing their jobs, and fear of being around people and socializing. Thus, the discourses of our participants demonstrate the greater vulnerability resulting from belonging to a sexual minority, namely, the feeling unprotected and without social support, which, in turn, generated feelings of anger.

I am very affected by COVID-19 because I live with my elderly parents, and I am afraid they are contracting it.

—Ricardo, gay man, 41 years old, Brazil.

I had a drastic salary reduction that will go until December 2021 by collective agreement (for the non-dismissal of all employees). I had COVID-19 and stayed away from everything and everyone during quarantine, and I still (even after three months) have some symptoms (sequelae). I'm afraid (despite all the care) that my parents would get the disease.

—Fábio, gay man, 42 years old, Brazil.

I am afraid of socializing and panicked every time I was around people.

—Cristina, bisexual woman, 33 years, Portugal.

The pandemic has changed my whole life routine and that of my family. The fact that my country's authorities do not take proper action to control the disease makes me angry and constantly stressed.

—Rodrigo, bisexual man, 34 years old, Brazil.

I feel loneliness, many difficulties in relating to people, and much stress because I have little work and many difficulties in paying the bills.

—Luís, gay man, 36 years old, Portugal.

Isolation

LGBTQI individuals, especially the most vulnerable, such as young or older LGBTQI individuals, are more likely to feel socially isolated due to the circumstances of marginalization and anticipation of rejection by family and friends, especially when access to available community support structures is not possible. Given that one of the prophylactic measures to contain the pandemic involves precisely the prescription of isolation and social distancing, this has had a significant impact on our participants' lives, especially on mental health, being intrinsically linked to feelings of anxiety, depression, and even suicide.

Social isolation made life quite complicated.

—Lara, lesbian woman, 37 years old, Brazil.

Social isolation has considerably worsened my mental health.

—Cristina, bisexual woman, 33 years old, Portugal.

The existence of the disease (COVID-19) itself did not affect me much. What affected me a lot was the need for indefinite isolation at a time of drastic and important changes (going to university), uncertainties, and a lack of sharing experiences with other first-year students. It affected me a lot at the mental level.

—João, bisexual man, 20 years old, Portugal.

The impact of the pandemic on physical health is real and visible. The emotional impact is also real but invisible, at least in the short term, and it worries me. I am worried about people's emotional isolation. At a time when we need to feel close and supported by our own, it is when we are required to stay far away.

—Beatriz, bisexual woman, 30 years old, Portugal.

The pandemic had a very negative impact on me, especially at the time of the state of emergency and now that I am at home in isolation. Being closed at home and having too much free time makes me think about many things, even suicide, something that has not happened in a long time.

—José, gay man, 32 years old, Portugal.

Several participants reported that isolation harmed previously commonplace leisure activities. Given that many of these activities were associated with maintaining physical and mental health, namely to mediate stress, the negative impact of not having these activities causes in their lives is notorious.

My work has been entirely at a distance since the end of March 2020, and this often leaves me exhausted because I work more than I should, and I cannot distinguish between work and leisure time. This lack of boundaries makes me constantly concerned about work and personal life at all times.

—Joana, bisexual woman, 24 years old, Brazil.

The pandemic prevented leisure activities that, for me, were fundamental to be able to de-stress.

—Manoel, gay man, 59 years old, Brazil.

As a hairdresser, I was not able to work and, at the same time, without being able to do the leisure activities that gave me pleasure.

—Bruno, gay man, 43 years old, Portugal.

As I live in a more rural area and with a specific work with poor contact with the public, the pandemic has only changed the way I do leisure activities. Since the beginning of the pandemic, I have been avoiding cities, shopping malls, cinema, etc.

—Francisco, gay man, 37 years old, Portugal.

Relationships

Most participants mentioned significant relationships, especially family and friends, as areas significantly affected by the COVID-19 pandemic. The circumstances of isolation activated feelings of responsibility, fear of contagion, and maintenance of preestablished dynamics, namely maintaining physical and emotional balance.

For me, the main impact of this pandemic was the distancing of my family.

—Vinicius, gay man, 25 years old, Brazil.

I do not care about myself. I care about my family. I do not mind dying, but I do not want my family members to die.

—Helena, bisexual woman, 37 years old, Brazil.

COVID-19 shook all structures, social, labor and economical, but the worst was at the time the lockdown was enacted, I was isolated from all my family and friends, and this brought many negative impacts to my physical and emotional health.

—Gilberto, gay man, 36 years old, Brazil.

On the other hand, especially for younger participants, it was clear the pandemic's negative impact on maintaining

friendship relationships, which were one of the primary sources of social support that LGB youth are more likely to feel.³⁸ The lack of maintenance of friendship relationships activated feelings of vulnerability and low self-esteem associated with others' anticipation of rejection.

I feel like I walked away from my friends during the pandemic, and somehow I was responsible for it.

—Berta, bisexual woman, 23 years old, Brazil.

The biggest impact I felt was at an emotional level because I stopped having the routine of going to college, not being able to see many of my friends, interact with them, and not being able to do the things I like most with them... this has been quite complicated.

—Rita, bisexual woman, 23 years old, Portugal.

Work and Finances

Workplaces can be, for most LGBTQI individuals, contexts that are not open to visibility. For this reason, many people choose to stay in the closet, hiding their sexual orientation for fear of harassment, discrimination, or oppression. The COVID-19 pandemic, coupled with wage and labor restrictions, has activated many of these fears in our participants.

I am afraid I will be out of work. I depend on my work to survive, and the fact that I work in the primary sector as a bi-man does not help. What would be worse than being discriminated against for being bisexual? Being discriminated against for being bisexual and unemployed.

—Júlio, bisexual man, 35 years old, Brazil.

I had to accept the company's conditions on downsizing and laying-off because at this moment, and there is no alternative. This leaves me in a very precarious situation.

—Fábio, gay man, 42 years old, Brazil.

Education

The impact of COVID-19 on our participants' education stems mainly from the pandemic changes in the nature and quality of teaching-learning activities. More or less promptly, governments have determined measures to stop the school/university activities or continue them in an online format.

The lack of government actions to return to academic activities will leave permanent marks of delay in my professional curriculum.

—Vitor, bisexual man, 25 years old, Brazil.

My doctoral program course and all classes have moved to the online format. My field project for doctoral research has been completely modified. I had COVID-19 and stayed away from everything and everyone and lost track of things.

—Fábio, gay man, 42 years old, Brazil.

Study activities have changed dramatically, I have had constant requests for online events and to publish articles, and to be bombarded with “interesting” lives, as well as invited to attend communications, and I have the willingness to participate in everything even if it is humanly impossible.

—Rodrigo, bisexual man, 34 years old, Brazil.

Behavioral Changes

The pandemic’s behavioral changes, namely the adoption of new hygiene habits and prophylaxis of virus infection, were not easy to implement because they were not generated from intrinsic motivations but rather externally imposed by health authorities to prevent the occurrence of contagions. These circumstances have forced many of our participants to review their core value systems, although some may have been in a phase of contemplation and distanced from tangible threats.

I was forced to review several behaviors in particular and in general, due to the severity of the problem, as well as its consequences, often unknown.

—Hugo, bisexual man, 67 years old, Brazil.

I had to change the way I perceive having control in life because plans change daily or are only made for the short term.

—Fábio, gay man, 42 years old, Brazil.

Personal Growth

For many of our participants, the COVID-19 pandemic constituted an opportunity for personal growth. From a new world organization, unfamiliar and uncertain, unpredictable and uncontrollable, many managed to take advantage of adversity to solve chronic problems, improve health habits, or start new achievements. These participants were able to interpret and respond to the crisis with a positive attitude, relativizing and looking at difficulty, and embracing adversity, generating positive emotions integrated into their purpose of human growth.

It all turned out to be OK because I am in telework, and it physically took me away from what disturbs me in professional terms, bad people and the bad environment in the workplace. This allowed me to feel better about myself and my abilities.

—Luísa, lesbian woman, 30 years old, Portugal.

I had no negative impact. On the contrary, during the pandemic, I improved my eating habits, approached some important people, started exercising regularly, and some situations (such as seeing the struggle of doctors and nurses, for example) renewed my hopes in humanity, in a way.

—Vanessa, bisexual woman, 27 years old, Brazil.

It forced me to change the way I relate to others. I started a new relationship in the middle of the pandemic, which has survived until now, and is now solidified, which is the best I could ask for.

—Fernando, gay man, 28 years old, Portugal.

Coping Mechanisms

Several participants mentioned the importance of seeking support to address the specific need to deal with the pandemic’s negative consequences, namely the search for physical and mental health care. Other participants mentioned the importance of keeping physical activity a fundamental strategy for maintaining physical sanity and meditation to maintain mental sanity. Limited access to COVID-19-related information was also mentioned as a valuable and effective way to mediate the pandemic’s negative impact.

I started to have physical and psychological symptoms. At first, I was afraid to seek medical services due to hospitals’ barriers and fear of catching COVID-19. However, then I was able to make an appointment and started taking medications and doing psychotherapy, which has helped a lot to deal with various issues.

—Nuno, gay man, 22 years old, Portugal.

I live in a house, and I practice slackline on the outside. Therefore, physical activities were not impacted, and this has helped me feel good. I value contact with nature, plants, and trees. Although there is social isolation, I have plenty of space to walk around. Nature calms me down. Besides, I practice meditation, and this also contributes to being relaxed in the face of difficulties. I watch little and selected news, and this selectivity of information helps me feel good. I try to focus on the solutions, avoiding putting the problem bigger than is necessary.

—Roberto, gay man, 27 years old, Brazil.

LGBTQI Topics

Participants mentioned specific aspects of the impact of COVID-19 on their lives as sexual minority people due to social inequalities that they face, which may harm their well-being, as it is likely that people most marginalized by society due to their minority sexual status will have more difficulties in adapting to new circumstances. This reflects fewer resources, fewer traditional sources of social support, and constant exposure to adverse social circumstances characterized by discrimination and social exclusion. Some participants mentioned the difficulties in accessing health care, not only because they were afraid of the COVID-19 infection that could occur when going to the hospital/health center but also because they had some specific pathology, for example, HIV, which involved greater visibility of their sexual orientation, thus anticipating increased stress. Other

participants expressed their frustration at the cancellation of LGB pride celebration events and activities. These are moments of affirmation of minority sexual identities that lack constant visibility. The fact that they could not be carried out for epidemiological reasons has also generated some fear about the strengthening of invisibility and hate discourses toward LGBTQI individuals.

On the other hand, it was mentioned by some participants that, in this pandemic circumstance, they were forced to return to the closet, either explicitly or implicitly, for example, when they had to return to live at their parents, and the topic of sexual identity was found to be a taboo. Job hunting as an LGB person also created fears about being discriminated against at the workplace. Finally, some participants reported specific difficulties in the search for sexual or meaningful relationships. Although it was easy to establish contacts through online dating sites or apps, the pandemic imposed physical barriers that were not easy to manage and put in standby many loving expectations.

Being HIV positive and therefore with immunity problems, I was afraid that getting COVID-19 would be a death sentence for me. So, I did not leave the house and even let the antiretroviral medication run out. Fortunately, it was possible to have it delivered to my house, which prevented me from going out.

—Cláudio, gay man, 31 years old, Portugal.

I was very sorry that all LGB pride celebration events had to be canceled. These are significant moments for LGB activism, a time of celebration and joy, and the affirmation and strengthening of minority identities that cannot be forgotten and deserve to be dignified. I hope that soon everything will be able to return to normal.

—Inês, lesbian woman, 26 years old, Portugal.

Unfortunately, I lost my job and ran out of money to pay for rent and had to go back to my parents' house, who never accepted my being gay. We live in a tense environment where nobody talks. I had to go back into the closet, and I feel like I am 16 again. Backsliding like this is very bad.

—Guilherme, gay man, 38 years old, Brazil.

It is a paradox, nowadays, social networks bring us closer, but with the pandemic, you cannot do much with it. I have made some contacts, I would like to get a girlfriend, but then it was so challenging, if not impossible, to have a date. The fears that the pandemic brings are very frustrating.

—Jéssica, lesbian woman, 26 years old, Brazil.

Discussion

This study aimed to understand the psychosocial impacts of the COVID-19 pandemic on Portuguese and Brazilian

LGBTQI individuals. General results show different themes emerged: mental health, isolation, relationships, work, education, finances, changes, coping, and LGBTQI topics. These results corroborate with others, in which LGBTQI individuals are also suffering from more significant psychosocial stressors during the pandemic.^{17,39-41} Understanding these results is especially important since these stressors can further increase physical and mental health disparities in an already vulnerable population due to oppression from a discriminatory social environment.^{25,35,36,42}

Mental Health

The LGB population is one of the groups most affected by COVID-19.¹⁷ These individuals were already at a social disadvantage due to sexual stigma, prejudice, and society's discrimination against their sexual orientation,⁴³ which negatively impacts their mental health.^{35,36} Moreover, LGBTQI individuals have a higher prevalence of problems related to mental health functioning,²⁵ including higher levels of depression, anxiety, and suicidal ideation,^{44,45} compared to their heterosexual peers.⁴⁶ Thus, our study results are in line with the existing literature that shows that the emergence of the COVID-19 pandemic and the adoption of lockdown measures to contain it has aggravated LGBTQI individuals' mental health.¹⁴

Some participants still mentioned the difficulties in accessing health care, mainly by those who had some pathology, such as HIV. According to the OutRight Action⁴⁷ report, sexual minority people without antiretroviral treatment are at risk of contracting the most severe cases of COVID-19. Fear and concerns about how they would be treated, anticipated stigma, discrimination, and isolation were also associated with the delay in seeking health care,⁴⁷ which contributed to the negative impact on their physical health as well.⁴⁸

Isolation

The adoption of COVID-19 lockdown measures led to a reduction in contact with family and friends by the participants in this study. The fear that their family and friends would be infected with the new coronavirus⁴⁹ may have affected these relationships' maintenance. Moreover, adopted measures resulted in feelings of loneliness and rejection in the sample, which led to depressive and anxiogenic symptoms.⁵⁰ Since the pandemic caused many LGB individuals to have to stay at home longer or move in with family members,⁵¹ some participants pointed to their need to return to the closet and deal with family stress. This was because many sexual minority people tend to suffer from prejudice and rejection from their own families,⁵² with increased conflictual dynamics.⁵¹ During the pandemic, a hostile family climate was associated with higher levels of depression and anxiety.⁵³

Relationships

Additionally, LGB individuals had less contact with LGB community systems⁵⁴ and the cancellation of pride events seems to have negatively affected some of our participants. This is of particular relevance, insofar as pride celebration events have been proved to be an essential resource for resilience, connection, and support for sexual minority people,⁴² being associated with higher levels of overall well-being.^{36,55} The search for sexual or significant relationships was also affected, which, according to Sanchez et al,³⁹ is a concern since intimate relations are generally considered protective for mental and physical health and relationships.^{36,57} Finally, lockdown also prevented our participants from taking part in leisure activities, such as going to the cinema, traveling, or going to the gym, which harmed their lives since these activities promote the overall quality of life.⁵⁸

Work and Education

The LGB population is subject to a stressful social environment created from sexual stigma, prejudice, and discrimination, often exhibiting feelings of internalized shame about their sexual identity,⁵⁹ which can also occur at the workplace.⁵¹ In a study by Pereira and Costa,²⁵ 24% of the sample participants stated that they felt the need to hide their sexual orientation in the workplace to avoid discrimination experiences. According to the literature,^{60,61} financial problems severely affect the LGB community, especially in Brazil. For example, in a Brazilian study of about 10,000 LGBTIQ individuals, 1 in 5 participants reported not having any income due to the pandemic, with 4 out of 10 being unable to survive without a salary for more than 1 month.⁶² This seems to reflect how the heteronormativity model imposed by society⁴³ may have harmed the participants in this study.⁶³

The COVID-19 pandemic led governments to shut down several educational establishments and continue teaching activities in an online format. However, distance learning tends to exacerbate existing inequalities since not all students have the necessary and quality equipment to take classes online.⁶⁴ Also, many teachers and professors felt overwhelmed and needed to learn, in a short time, how to use digital platforms,⁶⁵ which may have negatively influenced the learning outcomes of those of our participants who were students.⁶⁶

Change and Coping

Despite the difficulties and stigma experienced by LGBTIQ individuals in this study, the pandemic's behavioral changes led many participants to reflect on their life values, manage to respond to the crisis positively, embrace adversity, and focus on their personal growth. Many have adopted strategies such as seeking physical and mental health care, exercising,

meditating, and maintaining limited access to information related to COVID-19 to lessen the negative impact of the pandemic and maintain good physical and mental health levels.

This positive outlook may be linked to the participants' sense of belonging in their minority category and resilience,⁶⁷ which helped identify a certain level of positive marginality.⁶⁸ Coherence with their marginal status helped build a sense of authenticity and well-being, enabling the pandemic crisis to create higher resilience levels.⁶⁹

LGBTIQ Topics

Our results suggest that the COVID-19 pandemic has impacted LGBTIQ individuals in very unique ways due to the presence of negative emotional concerns among Portuguese and Brazilian participants that led them to perceive barriers when accessing health services, to be forced to go back into the closet, to not be able to attend pride celebration events, and dealing with limitations when dating online. These psychosocial circumstances may have increased the existing vulnerabilities of this population. Our study confirms previous data from Portugal and Brazil^{70,71} concerning the impact of COVID-19 among LGBTIQ population on mental health and work-related quality of life, and this may have conditioned the access to health care services, through the anticipation of rejection and fear of the disease. On the other hand, the fact that many families do not accept their LGBTIQ family members, led many of our participants to go back into the closet, and this is not without relevant psychosocial consequences, such as LGBTIQ identity erasure on the existing heteronormative culture and exposure to sexual stigma.⁷² Also, the cancelling of all LGBTIQ pride celebration events negatively affected our participants significantly, because these events constitute a single opportunity to promote visibility, empowerment, and community support.⁷³ Finally, being forced to stay at home made LGBTIQ individuals to be more exposed to the risk of social isolation and lack of dating interaction, with a drastic decrease of regular sexual and relational activities and an increased risk of sexual and relational activities under the effect of illicit substances,⁷⁴ and sexual and intimate partner violence.⁷⁵ Therefore, the COVID-19 pandemic led to a long-lasting exposure to adverse circumstances among LGBTIQ individuals in Portugal and Brazil.

Limitations and Future Directions

This study is not without limitations. The first one refers to the transversal nature of the study. As the pandemic's future is still uncertain and people are usually influenced by their environment,⁷⁶ individuals' perceptions can be altered according to their success. In this sense, it would be helpful to investigate psychosocial impacts' perception over time in a longitudinal study that could contribute to the long-term

understanding of issues sensitive to the LGBTQI community during and after the COVID-19 pandemic, as well as its psychosexual health consequences. The pandemic's effect on psychosexual health and deprivation of "social touch" remains unknown among LGBTQI individuals but is critically detrimental to well-being.⁷⁷ As COVID-19 is a highly contagious infection, this has led to doubts relating to how sexual relationships, sexual health, and sexual well-being can be affected.

Given the qualitative nature of this research, we decided not to separate the results by sexual orientation or nationality, considering that, in general, all participants represent a sexual minority subject to discrimination and social stigma.^{35,36} However, in future studies, it would be intriguing to compare the specificities of each of the sexual minority's categories, as in the case of bisexuals, who, because of the double stigma effect, may suffer more from significant psychosocial stressors, which affect their physical and mental health.⁷⁸ Or, in the case of Brazil's society being so violent toward sexual minority people, in future studies, it would be helpful to examine these exacerbated influences in the psychosocial well-being of LGBTQI individuals.

Compared to the traditional qualitative studies which use a semistructured interview guide, we have used a single open-ended question with the lack of a person-guided interview. Also, as it was purely online, there were no chances of probes or memos which could have further elaborated the rich contextual information. Finally, the study was composed of single, middle-class participants with university training and from urban environments, thus not being representative of all LGBTQI individuals in Portugal and Brazil. Despite this, the sample size and the rigor of analysis reinforce our intention to put the voice of this minority group on the social agenda so that their perceptions on the psychosocial impact of COVID-19 in their lives are heard. In future studies, it would be convenient to add larger and more representative samples, which would contribute to the adoption of relevant policies to promote the fundamental rights of sexual minorities in times of COVID-19 pandemic.

Conclusions and Implications

This study provides an important contribution to current knowledge of the psychosocial factors resulting from the pandemic that impacted LGB individuals in Portugal and Brazil. The COVID-19 pandemic poses specific challenges exacerbated by stigma and sexual discrimination and amplifies social inequalities.^{47,79} LGBTQI individuals are at increased emotional and social risks during the ongoing pandemic, and their voices are mostly unheard. Hence, there is a need for policy implementation and community awareness about their social welfare and this is vital to improving their health and well-being.^{80,81} Despite this, several participants proved to be positive, resilient, and determined to their personal growth, which is an essential factor in strengthening the LGBTQI community.

Given that the consequences of COVID-19 may extend over time, it is necessary to place this population in the center of pandemic strategies, maintain organizations that represent LGB rights, physical, mental, and specific, educational health services, as well as other social support networks (food, safe shelter, etc.) available during the pandemic.^{47,82} It is also important to reach both inside and outside the LGBTQI communities to increase efforts to mitigate the negative impact already existing and enhanced by the pandemic.

Portugal has transitioned from repressive and exclusive environments for LGBTIQ individuals to more accepting and inclusive ones and is among a handful of countries in the world that have enshrined in their constitutions the prohibition of discrimination on the grounds of sexual orientation. Nonetheless, Portuguese society is still restricted by negative societal attitudes toward LGBTIQ individuals, and our results are consistent with accumulating data indicating that psychosocial quality of life can be diminished due to exposure to social discrimination,⁸³ and policymakers in Portugal need to be particularly aware of LGBTIQ people's needs in their social inclusion decisions, currently scarce in both Portugal and Brazil.

With a rich religious history of Catholicism juxtaposed with a sexually liberal public, Brazil interacts with its LGBTIQ community in a very distinct and often conflicting manner. Being the worst transgressor of LGBTIQ rights in the world, Brazil has operated in a paradoxical situation where it is also a world leader in the campaign for LGBTIQ rights.⁸⁴ Therefore, our results can be seen as a catalyst for the Brazilian LGBTIQ human rights discourse and raise awareness to the necessity of more effective measures to end anti-LGBTIQ violence.

To begin addressing this omission, this study documented the psychosocial impacts of COVID-19 pandemic on LGB people living in Portugal and Brazil, but more research is needed, namely, the inclusion of transgender, intersexed, and queer individuals to address psychosocial disparities among these groups. In addition, quantitative research is needed to address the needs of LGBTIQ individuals that could translate into more inclusive policy measures, namely, innovation when implementing local and global actions to protect LGBTIQ individuals and facilitating the improvement of their overall levels of quality of life and psychosexual health during and after the COVID-19 pandemic.

Still, these data add to the international discourse on stigma among sexual minority persons during the COVID-19 pandemic. Furthermore, our results facilitated dialogue, questioning sources of oppression, and promoting of values which among Portuguese and Brazilian cultures are committed to social change for this group of people, ensuring the implementation of prejudiced-free practice guidelines in these 2 countries and others.

Informed Consent Statement

All subjects gave their informed consent for inclusion before they participated in the study.

Research Involving Human Participants' Statement

This research was approved by the Ethical Committee of the University of Beira Interior (Portugal, CEUBI-Pj-2020-088), and it was conducted in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments regarding research involving human participants.

Declaration of Conflicting Interests

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Attachments

XXIX CONGRESO INTERNACIONAL INFAD

“CONFIANÇA EM TEMPOS DE CRISE”

“CONFIANZA EN TIEMPOS DE CRISIS”

INSTITUTO POLITECNICO DE COIMBRA

ESCOLA SUPERIOR DE EDUCAÇÃO DE COIMBRA

COIMBRA | 6-8 MAYO 2021

D. Florencio Vicente Castro y Dña. Sonia Brito Costa, presidentes del Comité Organizador del *XXIX Congreso Internacional INFAD “Confianza en tiempos de crisis”* celebrado en el Instituto Politécnico de Coimbra de forma online los días del 6 al 8 de mayo de 2021

Certifican que D/D^a

MARIANA DUARTE

Ha participado en el mencionado Congreso Internacional

PRESENTANDO UNA COMUNICACIÓN CON EL TÍTULO: “O impacto da COVID-19 nos sintomas depressivos através da lente da orientação sexual”



Fdo: Florencio Vicente Castro
Presidente Asociación INFAD



Fdo: Sonia Brito Costa
Coordenadora do Núcleo de Investigação em Ciências Sociais e Humanas da ESEC

INFAD (ASOCIACIÓN DE PSICOLOGÍA DE LA INFANCIA, ADOLESCENCIA, ADULTOS Y DISCAPACIDAD) Y NICSH (NÚCLEO DE INVESTIGAÇÃO EM CIÊNCIAS SOCIAIS E HUMANAS DA ESEC)



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PRESENTANDO UNA COMUNICACIÓN CON EL TÍTULO: “Impacto psicossociais da pandemia da COVID-19 sobre as pessoas lésbicas, gays e bissexuais que vivem em Portugal e no Brasil – um estudo qualitativo”



Fdo: Florencio Vicente Castro
Presidente Asociación INFAD



Fdo: Sonia Brito Costa
Coordenadora do Núcleo de Investigação em Ciências Sociais e Humanas da ESEC

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Distinción de Mejores Comunicaciones Orales

Henrique Pereira, Jéssica Pedro, Cindy Mendes, Mariana Duarte, Patrícia G.Silva

Simposio

“El impacto de COVID-19 en el Bienestar Psicosocial a través del Lente de Minorías Sexuales y de Género en Portugal y Brasil”

Trabajos:

Psychosocial Impacts of COVID-19 Pandemic on Lesbian, Gay and Bisexual People living in Portugal and Brazil - A Qualitative Study

Assessing the Impact of COVID-19 on Work-Related Quality of Life through the Lens of Sexual Orientation

Measuring Anxiety Symptoms during the COVID-19 Pandemic through the Lens of Sexual Orientation

The Impact of COVID-19 on Depressive Symptoms through the Lens of Sexual Orientation

Assessing Work-Related Quality of Life during the COVID-19 Pandemic: Gender Perspectives among a Brazilian Sample



Fdo: Florencio Vicente Castro
Presidente Asociación INFAD



Fdo: Sonia Brito Costa
Coordenadora do Núcleo de Investigação em Ciências Sociais e Humanas da ESEC

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