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Comportamentos Suicidários em Jovens LGBT+ Portugueses/as

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Abbreviations

LGBT+ - Lesbian, Gay, Bisexual, Transgender and more

AFAB - Assigned Female at Birth

AMAB - Assigned Male at Birth

FTM - Female to Male

MTF - Male to Female

WHO - World Health Organization

NSSI - Non-Suicidal Self-Injury

SGM - Sexual and Gender Minorities

MST- Minority Stress Theory

ITS - Interpersonal Theory of Suicide

SBQ-R - Suicidal Behaviours Questionnaire-Revised

GAD - General Anxiety Disorder

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Abstract

Suicide remains one of the leading causes of death among young people worldwide and is a major public health problem. Sexual and gender minority youth are consistently at a greater risk than their cis-heterosexual peers, a disparity shaped by minority stress, discrimination, and social exclusion. Risk factors such as anxiety, depression, and non-suicidal self-injury further heighten this vulnerability, while protective factors including supportive networks and community engagement may help reduce the risk. In Portugal, despite the existence of LGBT+ organizations and communities, little research has examined their potential in suicide prevention.

This study set out with two main aims. First, to compare suicidal behaviours among LGBT+ and non-LGBT+ youth in Portugal (H1), and second, to assess whether organizational contact was associated with reduced suicide risk (H2). Drawing on data from the FREE Project (N = 1 177), results confirmed H1, that LGBT+ participants reported significantly higher rates of anxiety, depression, non-suicidal self-injury, suicidal ideation and suicide attempts, compared to non-LGBT+. In contrast, H2 was not supported, organizational contact did not consistently reduce suicide risk and, in some cases, was associated with greater distress, suggesting it often occurs as a crisis response rather than a preventive factor.

These findings underscore the need to strengthen the preventive potential of LGBT+ organizations in Portugal through earlier outreach, increased visibility beyond major urban areas, and building stronger partnerships with schools, families and healthcare providers. By highlighting both the vulnerabilities and the paths for support, this study contributes to the international literature on minority stress and suicide prevention, while pointing to practical directions for prevention.

Keywords

LGBT+ youth, LGBT+ Organizations, Sexual and Gender Minorities, Suicidal Behaviour, Risk Factors, Protective Factors, Portugal.

Resumo

O suicídio continua a ser uma das principais causas de morte nos jovens em todo o mundo e constitui um problema grave de saúde pública. Os jovens pertencentes a minorias sexuais e de género apresentam sistematicamente um maior risco do que os seus pares cis-heterossexuais, uma disparidade moldada pelo stress minoritário, discriminação e exclusão social. Fatores de risco como a ansiedade, a depressão, e comportamentos autolesivos não suicida, aumentam ainda mais esta vulnerabilidade, enquanto fatores protetores, incluindo redes de apoio e o envolvimento comunitário, podem contribuir para a redução do risco. Em Portugal, apesar da existência de organizações, grupos e comunidades LGBTQ+, pouca investigação examinou o seu potencial na prevenção do suicídio.

O presente estudo teve dois objetivos principais. Em primeiro lugar, comparar os comportamentos suicidários entre jovens LGBTQ+ e não LGBTQ+ em Portugal (H1), e em segundo lugar, avaliar se o contacto com organizações LGBTQ+ estava associado a um menor risco suicidário (H2). Com base em dados do FREE Project (N = 1177), os resultados confirmaram H1, demonstrando que os participantes LGBTQ+ reportaram taxas significativamente mais elevadas de ansiedade, depressão, autolesão não suicida, ideação suicida e tentativas de suicídio em comparação com quem não é LGBTQ+. Em contraste, H2 não foi sustentada, o contacto com organizações LGBTQ+ não reduziu de forma consistente o risco suicidário e, em alguns casos, demonstrou-se associado a maior sofrimento, sugerindo que o contacto tende a ocorrer mais como resposta a crises do que como fator preventivo.

Estes resultados sublinham a necessidade de reforçar o potencial preventivo das organizações LGBTQ+ em Portugal, através de uma intervenção mais precoce, maior visibilidade para além dos grandes centros urbanos e do fortalecimento de parcerias com escolas, famílias e profissionais de saúde. Ao destacar simultaneamente as vulnerabilidades e as vias de apoio, este estudo contribui para a literatura internacional sobre stress minoritário e prevenção do suicídio, apontando igualmente para direções práticas no âmbito da prevenção.

Palavra-chave

Jovens LGBTQ+, Organizações LGBTQ+, Minorias Sexuais e de Género, Comportamento Suicidário, Fatores de Risco, Fatores de Proteção, Portugal.

1. Introduction

Suicide is a major global public health challenge, representing a complex and multifaceted phenomenon shaped by various biopsychosocial factors. It remains one of the leading causes of death among adolescents and young adults worldwide. According to the World Health Organization (WHO), suicide is defined as an act deliberately initiated and carried out by an individual with full awareness of its fatal outcome, intended to end one's own life (1,2).

Suicidal behaviours encompass a spectrum of thoughts and actions associated with the desire to cause self-harm and death, ranging from suicidal ideation, general or specific cognitions about dying, to suicide attempts, which may or may not result in death, regardless of lethality. Non-Suicidal Self-Injury (NSSI), defined as intentional self-inflicted harm without the intention to die, is also part of this continuum (1,3-5). Suicidal ideation often emerges as an early indicator of risk, acting as both a precursor and a predictor of suicide attempts (4-6).

In 2019, it was estimated that, more than 800,000 people die by suicide globally, making it the third leading cause of death among those aged 15-29 years (5,7). In Portugal, suicide mortality is estimated at 11.5 per 100,000 inhabitants per year, though figures may be underestimated as suicide is often underreported (3). Adolescents and young adults are particularly vulnerable, and within this age group, sexual and gender minority (SGM) youth face significantly higher risks than their cisgender and heterosexual peers (6,8-11). International evidence indicates that LGBT+ youth are between five to eight times more likely to report suicidal ideation and attempts (8,11). Contributing factors include mental health difficulties, bullying, stigma, discrimination, socioeconomic disadvantage, lack of social support, family rejection, and social isolation (12).

Despite these elevated risks, protective factors can mitigate vulnerability and foster resilience. One factor is connection with support systems such as LGBT+ organizations and community groups. Access to these networks can reduce isolation, which in turn promotes belonging, and enhances mental well-being (13).

In Portugal, research exploring the role of LGBT+ organization in suicide prevention remains limited. While legal protections for LGBT+ people are relatively advanced, evidence on how community support systems influence youth mental health and suicidality is scarce. Addressing this gap is crucial for developing effective prevention strategies tailored to the Portuguese context.

The present study was developed within the ICBAS master's in legal medicine and aims to examine the relationship between suicidal behaviours and contact with LGBT+ organizations among Portuguese youth. It seeks to investigate if engagement with such organizations is associated with a reduced suicide risk. Additionally, it will identify both risk and protective factors, provide data that may help develop prevention strategies, and contribute to understanding the phenomenon of suicide among Portuguese LGBT+ youth. The final goal is to generate a positive impact, aiming to improve the well-being of LGBT+ youth and promote the mental health of the community.

1.1 Suicidal Behaviour

Suicidal behaviour refers to a spectrum of thoughts and actions involving self-inflicted harm with the intent to end one's life. It encompasses a continuum of phenomena that vary in method (for example, overdose, firearms, hanging), lethality (degree of medical severity), result (fatal or non-fatal), and intentionality (the determination to act to achieve a desired goal), yet they remain conceptually interconnected (14,15). It includes both fatal (suicide) and non-fatal behaviours, such as suicidal ideation, planning, and suicide attempts. These may range from highly lethal acts with low probability of survival to lower lethality behaviours where the likelihood of rescue or survival is higher (15).

1.1.1 Suicide

Suicide is defined as a deliberate, conscious, and intentional act of self-inflicted harm that results in death, often perceived as the best or only solution to escape unbearable circumstances. It represents the most severe outcome on the suicidal continuum and is characterized by the individual's clear intention to end their own life, which distinguishes it from accidental deaths or non-suicidal self-injury (NSSI). Assessing intent is complex, as it requires understanding an individual's awareness, volition, and planning (15,16).

Suicide is a multifactorial phenomenon and a major global health concern, particularly among adolescents and young adults. Within this demographic, LGBT+ youth represent a disproportionately affected group, reporting higher rates of suicidal ideation, attempts, and self-injurious behaviours compared to their heterosexual and cisgender peers (17,18). Attempts often occur at younger ages and are shaped by chronic minority stress, discrimination, trauma, and limited social or family support (19). Furthermore, LGBT+ adolescents are less likely to

seek help before attempting suicide, often due to fears of homophobic or transphobic responses, including within healthcare environments (17).

1.1.2 Suicidal Ideation

Suicidal ideation refers to thoughts about self-harm or dying, ranging from passive contemplations such as wishing to be dead, to active consideration and planning of a suicide attempt. It is one of the strongest predictors of suicide behaviour, making its early recognition crucial for prevention and timely intervention (6). These thoughts often vary in intensity and frequency and are typically accompanied by emotional distress, hopelessness, and feelings of entrapment (6,14,15). Among LGBT+ youth, suicidal ideation is strongly linked to experiences of stigma, discrimination, rejection, and identity invalidation. Importantly, many adolescents experiencing ideation do not disclose these thoughts out of fear of being misunderstood, judged, or stigmatized, which further complicates access to appropriate support and clinical care (17).

1.1.3 Suicide Attempts

Suicide attempts are self-inflicted behaviours carried out with at least some intent to end one's life. Attempts vary in method, lethality, and outcome. Unlike NSSI, which serves functions such as emotional regulation or self-punishment without the desire to die, suicide attempts reflect an underlying wish to escape unbearable pain through death (14,15,20).

The medical consequences of an attempt can range from no harm to minor injury, to near-lethal outcomes or death, and depend on factors such as the chosen method, the degree of harm caused, and the timeliness of medical intervention (21). The term "completed suicide" has been used by some researchers, however, it is redundant, since suicide, by definition, is fatal (14,21).

Some acts may be carefully premeditated, while others occur impulsively during moments of crisis. Attempts may fail due to miscalculation, physical resilience, or interruption by others (22,23). A prior suicide attempt remains one of the most robust predictors of future suicidal behaviour, as it indicates both unresolved psychological distress and a lowered psychological barrier toward self-harm (24).

1.1.4 Non-Suicidal Self-Injury

Non-suicidal self-injury refers to the deliberate destruction or alteration of the body tissue without the intention of ending one's life. Although distinct from suicidal behaviour in terms of intent, NSSI is often used as a coping strategy to manage overwhelming emotions. Individuals may engage in NSSI to regulate tension, relieve psychological pressure, interrupt a dissociative state, distract from suicidal thoughts, or as a form of self-punishment (25,26).

Over time, repeated engagement in NSSI can reduce sensitivity to physical pain and increase the capability for suicide, thereby elevating the risk of future suicide attempts. Among LGBT+ youth, rates of NSSI are significantly higher than in the general population, often due to their additional risk for negative mental health due to their experiences of prejudice and discrimination for example (27).

1.1.5 Suicidal Planning and Communication

Additional constructs in suicidology are suicidal planning and suicidal communication. Suicidal planning is a stage that involves concrete steps or preparations towards a suicide attempt, such as acquiring the means, writing notes, or selecting a time or location. Planning signifies a progression from ideation to actionable intent and is a strong predictor of future attempts. Planning is often concealed due to fear of discovery or interventions perceived as punitive rather than supportive (15,21,28).

Suicidal communication includes verbal and non-verbal cues that an individual may give indicating distress or suicidal intent, such as statements of hopelessness, artwork with death-related themes, or behavioural changes. Some individuals, for example, may begin arranging belongings, giving away possessions, laying out clothes neatly, or showing unusual calmness or generosity before an attempt (29).

1.2 Risk factors

A comprehensive understanding of the multifaceted risk factors underlying suicidal behaviour is vital for developing preventative interventions, particularly among LGBT+ youth, who are disproportionately affected. These risks are not isolated, intersectionality shows how overlapping forms of marginalization, such as homophobia, transphobia, racism, disability, and economic disadvantage,

combine to produce a compounded burden greater than any single factor alone (30–32).

1.2.1 Biological and Psychological Risk Factors

Biological risk factors include age, sex, gender, and genetic predisposition, which interact with environmental and psychological stressors, amplifying vulnerability to suicidal behaviour.

Adolescence and young adulthood are particularly high-risk stages, marked by reactivity, impulsivity, and susceptibility to stress, all of which increase the likelihood of suicidal ideation and behaviours. Risk also varies by sex and gender differences, with AFAB individuals showing higher rates of ideation and non-fatal attempts, whereas AMAB are more likely to die by suicide, often due to the use of more lethal means (33,34). Non-cisgender youth face unique risks, partly due to gender dysphoria and related stressors (33,35,36).

Psychological risk factors encompass a range of internal processes and experiences that increase vulnerability to suicidal behaviour. These include cognitive patterns, personality traits, and individual life history (9).

Depressive and anxiety disorders, PTSD, C-PTSD (37,38), bipolar disorder (18), borderline personality traits (14,15), along with cognitive factors such as hopelessness, entrapment and burdensomeness, trauma history, and personality traits like impulsivity and perfectionism, are all correlated with increased suicidality (9,39–41).

1.2.2 Social and Environmental Risk Factors

Social and environmental risk factors refer to interpersonal relationships and community contexts. These include family dynamics, peer interactions, school climate, and neighbourhood safety.

Family rejection is one of the strongest and well-documented predictors of suicide attempts among LGBT+ youth. Research shows that LGBT+ individuals who face high levels of familial rejection during adolescence are over eight times more likely to attempt suicide compared to those who experienced acceptance (42–44).

Bullying and invisibility, in schools or media particularly when based on sexual orientation or gender identity (45,46), combined with a lack of affirming mentors and adults, contribute to isolation and weakened belongingness (29,47,48).

Exposure to suicide in peers or community members can act as a behavioural model for vulnerable individuals, especially among adolescents and marginalized groups (49–52).

1.2.3 Sociocultural and Structural Risk Factors

Sociocultural risk factors reflect broader societal influences that shape collective attitudes, cultural norms and institutional structures, all of which have a significant effect on mental health and susceptibility to suicidal behaviour. These include discriminatory ideologies, rigid gender norms, and the marginalisation of non-normative identities (53,54). Cultural and religious condemnation of LGBT+ identities also contributes to stigma and feelings of shame (55,56).

Structural barriers in healthcare, especially access to gender-affirming treatments or excessive psychological evaluations, further obstruct timely and affirming care, reinforcing stigma and distress (57–59).

1.2.4 Emerging and Situational Risk Factors

Situational risk factors are immediate or circumstantial stressors that can provoke or escalate suicidal behaviour. These include bereavement, academic failures, homelessness, financial insecurity, and lack of access to basic needs such as food, safety, and healthcare (60–62).

Access to means that enable suicide is another key situational factor. Suicidal acts are often impulsive, and the availability of lethal means can transform transient ideation into lethal action (63).

Emerging risk factors reflect societal and global changes that increasingly affect youth mental health. This includes political backlash, climate anxiety, and crises like COVID-19 (64,65).

1.3 Gender and Sex

Understanding the roles of gender and sex is fundamental to exploring how these constructs shape individual experiences, influence mental health, and ultimately relate to suicidal behaviours. Although distinct, gender and sex are interrelated factors that intersect with biological, psychological and sociocultural dynamics.

Sex refers to the biological attributes that distinguish individuals as male, female, or intersex, based on factors such as chromosomes, hormonal profiles and external reproductive anatomy (66).

Gender refers to the social and cultural roles, behaviours, expectations, and norms assigned to individuals based on their perceived sex. It encompasses both gender identity, one's internal understanding and self-conception as male, female, both, neither, somewhere along the gender spectrum, or an intertwining of various identities, and gender expression, the outward presentation of one's gender through appearance, behaviour, and social interactions. Gender expression may or may not conform to prevailing social expectations (66).

Transgender and gender-diverse individuals are those whose gender identity does not align with the sex they were assigned at birth. This umbrella category includes trans men (also referred to as FTM) and trans women (also referred to as MTF), while also encompassing a wide spectrum of gender experiences beyond the binary notions of male and female, such as nonbinary, genderqueer, or agender identities. In contrast, people whose gender identity aligns with their assigned sex at birth are referred to as cisgender (67).

Sexual orientation refers to an individual's pattern of emotional, romantic, or sexual attraction to others. This includes monosexual identities, where people are attracted to one sex or gender, such as heterosexuality (attraction to a different gender) and homosexuality (attraction to the same gender), plurisexual identities, such as bisexuality (attraction to more than one gender), and other sexualities such as asexuality (little to no sexual attraction) (68,69).

1.4 LGBT+ Community

The term LGBT+ is an umbrella term that includes lesbian, gay, bisexual, transgender, and other identities such as queer, intersex, asexual, pansexual, and nonbinary, ensuring inclusivity and recognition of the diversity within SGM (66,70,71).

These identities exist in tension with cis-heteronormativity, a pervasive system that assumes cisgender identity and heterosexuality as the default and most legitimate forms of existence. Specifically, cisnormativity presumes that an individual's gender identity and expression align with their sex assigned at birth, while heteronormativity presumes heterosexuality as the only legitimate orientation (72–76).

This system reinforces privilege for cisgender heterosexual individuals and marginalizes SGM through exclusion, discrimination, and stigma. For instance, despite legal advances such as same-sex marriage in Portugal, many LGBT+

individuals still avoid public displays of affection, like holding hands with their partner, out of fear of prejudice or harassment (75,77–80).

LGBT+ individuals frequently encounter discrimination and rejection across key contexts such as family, healthcare, and education, which undermines identity development, self-concept, belonging, and interpersonal relationships (73,75,81–83). These experiences, rooted in cis-heteronormativity, also have a profound impact on mental health, SGM face elevated rates of depression, anxiety, and suicidal ideation due to constant stigma and the pathologization of non-cisgender and non-heterosexual identities. The lack of social acceptance reinforces isolation, diminishes self-esteem, and increases psychological vulnerability (84,85).

1.5 Minority Stress Theory and Sexual and Gender Minorities

One of the leading theories explaining the influence of prejudice on mental and physical health in minority groups, such as the LGBT+ community, is the Minority Stress Theory (MST), developed by Ilan H. Meyer (86–90). This theory posits that minority populations are exposed to unique, chronic stressors that increase vulnerability to adverse outcomes, including suicidal behaviours (91–93).

For SGM, these stressors include discrimination, family rejection, prejudice, victimization, and oppression (10,94). Such experiences often lead to concealment of one's identity and the internalization of stigma, such as homophobia, biphobia, or transphobia, which can further intensify psychological distress (92,95).

Adolescents and young adults are especially vulnerable, as this developmental stage already involves high psychological demands that can become overwhelming when compounded by minority stress (12,96–99). Consequently, LGBT+ youth are at a significantly higher risk of suicidal behaviour, even after accounting for other established risk factors such as mental health disorders or family history of suicide attempts (92,98,100).

MST distinguishes between distal stressors (external forces such as victimization, prejudice, rejection, or discriminatory policies) and proximal stressors (internal processes such as concealment of identity, internalized stigma, and expectation of rejection) (75,88,92,101,102). Both contribute to negative mental health outcomes such as anxiety, depression, and suicidality (70,91,103), and physical health disparities, including higher rates of conditions such as tendonitis, sexually transmitted infections, hypertension, flu and cancer (103,104).

Table 1. Impacts of Cis-heteronormativity on Different Facets of Society

Aspect	Impact
Mental Health	Higher rates of depression and anxiety disorders, and suicidal ideation (92,99)
Family and Relationships	Reinforced traditional family structures; rejection from closed ones (105-108)
Healthcare	Pathologization of non-cisgender and non-heterosexual identities (84,85)
Education	Lack of representation of LGBT+ identities in policies (72,74,109)
Workplace	Exclusion and discrimination against LGBT+ individuals (110-112)
Media and Representation	Erasure or misrepresentation of LGBT+ identities in media and public disclosure (77,113,114)

These examples presented in Table 1 illustrate how cis-heteronormativity and minority stressors permeate multiple domains of life, reinforcing inequalities and compounding psychological distress. Understanding these dynamics through the lens of MST is crucial for framing suicide prevention strategies that address not only individual risk factors but also the broader social and structural determinants affecting LGBT+ youth.

While MST situates the roots of distress in chronic stigma and social inequalities, it does not fully explain how these stressors translate into suicidal behaviour. To address this, the ITS offers a complementary framework that specifies the interpersonal and cognitive mechanisms linking minority stress to suicidality.

1.6 Interpersonal Theory of Suicide

The Interpersonal Theory of Suicide (ITS), developed by Thomas Joiner, explains how individuals may progress from suicidal ideation to suicidal behaviour by identifying three converging components: perceived burdensomeness, thwarted belongingness, and acquired capability for suicide (115–117).

Perceived burdensomeness refers to an individual's belief that their existence imposes strain and burden on others, often reinforcing the idea that one's death would be more valuable than one's life (118). Thwarted Belongingness describes a pervasive sense of social alienation, isolation, or disconnection from meaningful relationships, such as family and friends, which amplifies psychological distress (115). These two interpersonal constructs are primarily linked to suicidal desire and, consequently, to suicidal ideation. However, lethal suicidal behaviour, is only possible when they combine with the third component, acquired capability for suicide (117).

Acquired capability for suicide reflects the development of high pain tolerance and a diminished fear of death. It is attained through repeated exposure to painful or fear-inducing experiences that desensitize the individual and lower the natural aversion to self-harm. This process can be facilitated by childhood trauma (115), witnessing traumatic events (119), sexual and physical abuse (116,119), engagement in self-harm such as NSSI (47,115,118), and substance abuse or dependence (120). Figure 1 further illustrates how the presence of acquired capability is necessary for suicidal ideation to transition into lethal action.

According to ITS, suicide risk is highest when all three components, perceived burdensomeness, thwarted belongingness, and acquired capability, are present simultaneously. Individuals who experience only the first two may develop suicidal ideation but are less likely to act on it compared to those who also possess acquired capability, which are more likely to make lethal suicide attempts (121,122).

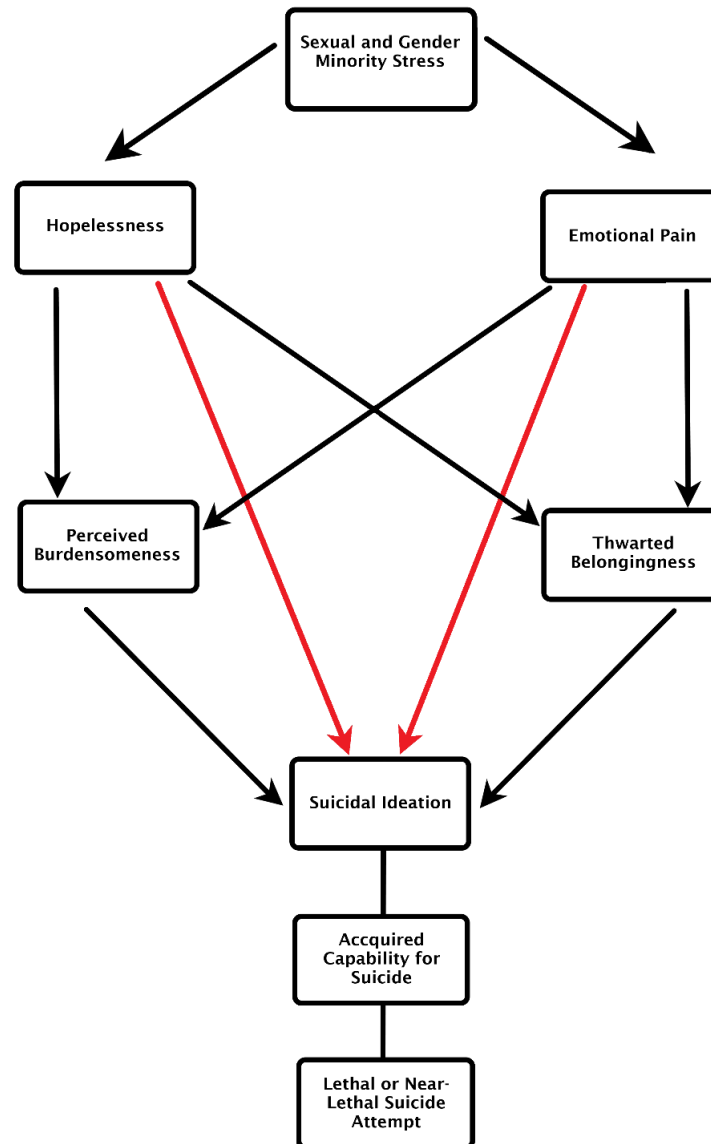


Figure 1. Illustration on how perceived burdensomeness and thwarted belongingness mediate the relationship between emotional pain, hopelessness, and suicidal ideation. This model incorporates both psychological risk factors and acquired capability of suicide, emphasizing the transition from suicidal thoughts to potential lethal action. Red Arrows represent potential direct effects from emotional pain and hopelessness on suicidal ideation. Black Arrows indicate indirect (mediated) pathways. This model is framed within the MST, highlighting how sexual and gender minority stress can exacerbate these processes. Based on Chu et al. (119), Van Orden et al. (47) and Fulginiti et al. (117).

The first two concepts, perceived burdensomeness and thwarted belongingness, are central to ITS, serving as mediator variables. Emotional pain and hopelessness, in this context, act as independent variables, influencing suicidal ideation, the dependent variable. Although emotional pain and hopelessness are important precursors of suicidal ideation, their direct effects (red arrows in Figure 1) are substantially reduced once the mediating role of perceived burdensomeness and thwarted belongingness is considered. In this framework,

interpersonal constructs shape how individuals evaluate their social worth and sense of connectedness, which in turn foster suicidal ideation (47).

At the core of this framework are emotional pain, defined as intense psychological suffering, and hopelessness, the belief that the future holds no possibility for improvement. Research suggests that these constructs rarely lead directly to suicidal ideation, instead, their influence is mediated by interpersonal and cognitive-affective processes of self-worth and social integration (119,123,124).

Importantly, ITS underscores that suicidal ideation alone is insufficient for an attempt, the presence of acquired capability is necessary for ideation to translate into action (125). Within LGBT+ populations, MST helps explain how minority stress intensifies burdensomeness, erodes belonging, and exposes individuals to repeated trauma that builds capability (54,55). Together, these theories highlight the importance of examining the protective factors that may buffer against such risks.

1.7 Protective Factors

Protective factors are characteristics, contexts, and processes that mitigate the effects of risk and reduce the likelihood of suicidal ideation and behaviours, including among LGBT+ youth. They work across multiple levels such as individual, interpersonal, community, and structural, and act as buffers by reducing burdensomeness, enhancing belongingness and limiting the acquisition of suicide capability (17,54,126).

1.7.1 Individual protective factors

At the individual level, protective factors include resilience, self-esteem, and hope, which help individuals manage distress, adapt to challenges, and sustain wellbeing. Resilience, supported by emotional regulation and adaptive coping (12,127,128), together with self-esteem, the internalized perception of one's value and competence (129,130), buffer the effects of minority stress and stigma. Hope, understood as the belief that life holds meaningful possibilities, reduces hopelessness and fosters persistence in life goals (131–133).

1.7.2 Interpersonal protective factors

Interpersonal protective factors consist of supportive relationships and social bonds that foster belonging, validation, and emotional security. These

include acceptance from family, friends, peers, and partners, which can buffer stress, reduce isolation and protect against suicidal ideation.

Safe and affirming family relationships are critical, especially for SGM youth, as rejection or hostility is strongly associated with increased suicidal risk, while acceptance mitigates the harmful effects of minority stress (128,134,135). When family acceptance is absent, chosen families and peer networks provide affirmation and belonging (128,136).

1.7.3 Societal and Structural protective factors

Societal and structural protective factors refer to the broader social, legal, and institutional conditions that promote wellbeing, foster inclusion, and reduce the suicide risk. They shape the environments in which people live, study, and work, influencing both access to resources and perceptions of safety and belonging.

Inclusive schools, (128,137), anti-discrimination laws (138–142), and access to healthcare (143–146) are strongly linked to reduced victimization and improved mental health. Likewise, economic stability, including secure housing, consistent income, and access to education also buffers against suicidality (147–150).

1.7.4 Community, Organizational and Digital Supports

Community and organizational supports represent another key layer of protection, particularly for SGM youth who may lack affirmation in their immediate environments. Engagement with LGBT+ organizations, advocacy groups, and digital platforms provides identity validation and safe spaces (64,151–153). Their protective potential is greatest when outreach is proactive and integrated with families, schools, and healthcare systems, which is an important consideration in the Portuguese context, where visibility and access remain uneven.

1.8 Objectives and Hypotheses

The present study aims to investigate the relationship between contact with LGBT+ organizations and suicide risk among LGBT+ youth in Portugal. Grounded in the ITS and in the MST, the study focuses on understanding whether organizational contact functions as a protective factor in mitigating suicide risk.

The general objective is to examine the association between contact with LGBT+ organizations and suicide risk, measured through the SBQ-R. To achieve this

aim, four specific objectives were defined. First, to describe the sociodemographic and psychosocial characteristics of the sample. Second, to assess the prevalence of anxiety, depression, NSSI, and suicidal risk. Third, to analyse the relationship between organizational contact and suicide risk. Finally, to explore whether contact acts as a protective factor in reducing suicide risk among LGBT+ youth.

Based on these objectives, the following hypotheses were formulated:

H1: LGBT+ youth will report higher levels of depression, anxiety, NSSI and suicide risk compared to non-LGBT+ youth.

In line with previous evidence and with the MST, the disproportionate exposure to stigma, rejection, and discrimination is anticipated to translate into a greater prevalence of psychological distress and self-harming behaviours among LGBT+ participants.

H2: LGBT+ youth who report contact with LGBT+ organizations will report lower suicide risk scores compared to those without contact.

More specifically, it is anticipated that those who engage with such organizations will report lower scores on the SBQ-R, as community connection and organizational support may enhance belongingness, counteract minority stress, and buffer against suicidal ideation and behaviours.

These hypotheses will be addressed, examined and interpreted in the following chapters.

2. Methodology

2.1 Bibliographic Sources

The literature reviewed for this work was collected through searches in databases and publisher platforms including PubMed, NCBI, ScienceDirect, Sage Journals, Taylor & Francis, and Wiley Online Library, as well as national grey literature, including reports and publications from governmental bodies and LGBT+ organizations in Portugal.

Keywords included “Suicidal Behaviours”, “Suicide”, “Suicide risk”, “Suicidal ideation”, “Non-Suicidal Self-Injury”, “Suicide Attempt”, “Mental health”, “LGBT+”, “LGBT+ youth”, “Monosexuality and Plurisexuality”, “Heteronormativity”, “Sexual and Gender Minorities”, “Risk factors”, “Protective factors”, “Discrimination”, “Family support”, “Social support”, “Online support”, “School climates”, “Minority Stress

Theory”, “Interpersonal Theory of Suicide”, “Thwarted belongingness”, “Perceived Burdensomeness”, “Generalized Anxiety Disorder”, “Depression”, “Free Project”, “Portugal”.

It is to be noted that some keywords were applied across multiple chapters of the dissertation, and all references were published within the last 25 years.

2.2 Study Design

This research adopts a quantitative, cross-sectional design based on secondary data analysis from the FREE Project (Family, Relationships, Education and Empowerment). The FREE Project is a European research initiative, with national implementation in Portugal that explores psychological, familial, educational, and health-related dimensions of adolescents and young adults. The project’s design combined standardized psychometric instruments with tailored items addressing the experiences of both the general population and SGM, making it well-suited to studies focused on LGBT+ youth.

The present analysis investigates the relationship between suicide risk and contact with LGBT+ community organizations within the full sample of adolescents and young adults. Two main grouping variables were derived from the dataset: (1) LGBT+ status (LGBT+ vs cisgender heterosexual), based on self-reported sexual orientation and gender identity; and (2) organizational contact (any contact vs no contact). This design allows comparisons across groups in terms of anxiety, depression, NSSI and suicidal risk, while examining whether engagement with affirming community settings may function as a protective factor. Although the data were collected in 2020/2021, the relevance of this approach is reinforced by findings from the FREE Project’s 2022 report, which emphasize the continued importance of institutional and social contexts in shaping the well-being of LGBT+ youth (154).

2.3 Participants

The analytic sample consisted of 1 177 adolescents aged between 14 and 19 years ($M = 16.2$, $SD = 1.25$), all residing in Portugal at the time of data collection. Participants were primarily recruited online through social media platforms, youth organizations, and educational institutions, ensuring broad outreach to diverse youth populations. The survey was available in Portuguese. Informed consent was obtained from all participants, and parental consent was secured for minors in line with ethical requirements.

For analysis, two grouping variables were created and used from self-reported data. The first variable, LGBT+ status, derived from items assessing gender identity and sexual orientation, used to distinguish LGBT+ from their cisgender heterosexual peers. The second was created with the objective of classifying which of the participants had any form of contact with LGBT+ organizations (“contact”) and those who reported none (“no contact”).

In this sample, 47.1% of participants self-identified as LGBT+, and 15.8% reported some degree of contact with LGBT+ organizations. These classifications served as the foundation for comparing groups on anxiety, depression, NSSI, and suicide risk. Detailed demographic characteristics for the full sample and by group are reported in the Results

2.4 Instruments

Anxiety symptoms were measured using the *Generalized Anxiety Disorder 2-item scale* (GAD-2; (155,156)), a brief screening tool derived from the GAD-7 and based on DSM-IV (*Diagnostic and Statistical Manual of Mental Disorders, 4th Edition*) diagnostic criteria. The GAD-2 asked participants to report how often, over the previous two weeks, they experienced two core symptoms of generalized anxiety. Each item was rated on a 4-point scale from 0 (*not at all*) to 3 (*nearly every day*), producing a total score between 0 and 6, with higher scores reflecting greater symptom severity.

Depression symptoms were assessed using the *Patient Health Questionnaire-2* (PHQ-2; (157)), a short screening tool derived from the PHQ-9 and aligned with DSM-IV criteria. The PHQ-2 focused on the two key symptoms of major depression (1) little interest or pleasure in doing things, and (2) feeling down, depressed, or hopeless, over the preceding two weeks. Each item is rated on a 4-point scale from 0 (*not at all*) to 3 (*nearly every day*), with total scores ranging from 0 to 6.

Engagement in NSSI was measured through a single item adapted from Prinstein et al. (158), asking participants how often, in the past 12 months, they had intentionally harmed themselves without the intention to die, for example, cutting, hitting or burning oneself. Responses were given on a 6-point scale ranging from 0 (*never*) to 5 (*once a day*). Higher scores represent more frequent engagement in NSSI behaviours.

Suicidal risk (SR) was assessed with the *Suicidal Behaviours Questionnaire-Revised* (SBQ-R) (159), which evaluates (1) lifetime suicidal ideation and/or attempts; (2) frequency of suicidal ideation in the past year; (3) disclosure of suicide attempts to others; and (4) self-perceived likelihood of future suicide attempt. Total scores range from 3 to 18, with 7 or above commonly used as a threshold for elevated risk. Two computed variables were created to classify participants into “low” or “high” suicide risk based on the ≥ 7 cutoff, and a second one representing the continuous SBQ-R score.

Contact with LGBT+ organizations was assessed through items from the FREE Project, which asked participants about their awareness of and involvement in LGBT+ specific community groups or resources. The items covered themes such as familiarity with organizations, perceived usefulness, prior contact, and willingness to seek support. For the purposes of this study, a binary variable was created to distinguish between participants who reported any form of contact and those who reported none.

The FREE Project dataset also included items assessing school climate, perceived discrimination, social support and emotional difficulties. Although these variables were not central to the present analyses, they represent well-established correlates of youth suicidality, particularly among SGM populations. Mentioning their presence highlights the broader contextual factors captured in the dataset that can shape suicide risk, even though the current study focused on anxiety, depression, NSSI, suicidal risk and contact with LGBT+ organizations.

2.5 Procedures

Data were collected between 2020 and 2021 through an online survey platform within the context of the FREE project, enabling participants to complete the questionnaire remotely and anonymously. Recruitment occurred via links disseminated on social media, educational networks, and youth organizations.

Before beginning the survey, all participants received an informed consent form explaining the purpose of the research, the voluntary nature of participation, data confidentiality and their right to withdraw at any time without penalty. For minors, parental or guardian consent was obtained, in line with ethical requirements.

The survey employed branching logic that directed participants to relevant sections, optimizing the user experience while minimizing fatigue. The

questionnaire covered diverse topics including sociodemographic characteristics, school climate, mental health, support structures, and LGBT+ identity. As the FREE Project involved sensitive data such as sexual orientation, gender identity and mental health, all procedures followed GDPR protocols regarding data minimization, transparency and participant rights (160).

The FREE Project was approved by the Ethics Committee of the Faculty of Psychology and Educational Sciences of the University of Porto (see Attachment 1).

2.6 Data Analysis

All analyses were conducted on the full sample ($N = 1177$). Descriptive statistics (frequencies, percentages, means, standard deviations, medians, ranges) were computed to summarize the sample's sociodemographic profile and responses to key study variables. Suicide risk, as measured by the Suicidal Behaviours Questionnaire-Revised (SBQ-R), served as the primary dependent variable.

Participants were categorized according to LGBT+ status (LGBT+ vs cis-hetero) and reported engagement with LGBT+ organizations (contact vs no contact). Group comparisons on categorical scores (LGBT+ status, anxiety, depression, NSSI) were examined using Pearson's Chi-Square test (χ^2 , $df = 1$ for 2×2 tables). Effects sizes were reported using Phi (ϕ), with thresholds of 0.10, 0.30, and 0.50 indicating small, medium and large effects, respectively. For continuous outcomes (SBQ-R total scores), independent-samples t -tests were used, with effect sizes reported as Cohen's d (0.20 = small, 0.50 = medium, 0.80 = large), and 95% confidence intervals (CI). For independent-samples t -test, degrees of freedom (df) were calculated as the total number of valid cases minus two.

All analyses adopted a significance threshold of $p < .05$. Statistical analyses were carried out using IBM SPSS Statistics (version 30).

3. Results

This chapter presents the analyses conducted to test the study's hypotheses. First, the sociodemographic (Section 3.1) followed by the prevalence of anxiety, depression, NSSI, and suicide risk (Section 3.2). Lastly, the relationship between organizational contact and suicide risk (Section 3.3)

3.1 Sociodemographic Characteristics

The final sample comprised 1177 participants, aged between 14 and 19 years old (Table 5 and 6), all residing in Portugal at the time of data collection. Participants self-identified across sexual orientations and gender identities in which 52.9% were cisgender heterosexual and 47.1% were LGBT+ (Tables 2-4). The most frequently reported gender identities (Table 2) were cisgender woman (66.2%) and cisgender man (23.3%), and the most common sexual orientation (Table 3) were heterosexual (53.4%) and bisexual (16.7%). In terms of sex assigned at birth (Table 7), 75.4% were assigned female and 24.6% were assigned male. Most participants (95.2%) were born in Portugal, with 4.8% reporting a different country of birth (Table 8).

Table 2. Gender Identity of the Participants

Gender Identity	N	Percentage %
Cisgender woman	779	66.2
Cisgender man	274	23.3
Transgender woman/MTF	5	0.4
Transgender man/FTM	17	1.4
Nonbinary/Genderqueer	48	4.1
Intersex	4	0.3
Questioning/Not sure	36	3.1
Other	14	1.2
Total	1177	100.0
Cisgender	1053	89.5
Non-cisgender	124	10.5
Total	1177	100.0

This table presents the distribution of participants according to their self-reported gender identity.

Table 3. Sexual Orientation of the Participants

Sexual Orientation	N	Percentage %
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Heterosexual	628	53.4
Lesbian or Gay	107	9.1
Bisexual	196	16.7
Queer	29	2.5
Questioning/Not sure	96	8.2
Asexual	17	1.4
Pansexual	74	6.3
Other	30	2.5
Total	1177	100.0
Heterosexual	628	53.4
Non-heterosexual	549	46.6
Total	1177	100.0

Distribution of participants by self-reported sexual orientation.

Table 4. Combined Sexual Orientation and Gender Identity Categories

Category	N	Percentage %
Heterosexual	628	53.4
Non-heterosexual	549	46.6
Cisgender	1053	89.5
Non-cisgender	124	10.5
Cis-hetero	623	52.9
LGBT+	554	47.1

Summary of the distribution of participants across sexual orientation and gender identity.

Table 5. Descriptive Statistics for Age

N Valid	1156
N Missing	21
Mean	16.22

Median	16.00
Std. Deviation	1.250
Range	5
Minimum	14
Maximum	19

Descriptive statistics for the participants' age. The mean age was 16.22 years (SD = 1.25), with a median of 16 years and a range from 14 to 19 years.

Table 6. Age Distribution by Group (LGBT+ vs Cis-Hetero)

Age	LGBT+	LGBT+ %	Cis-Hetero	Cis-Hetero %
14	48	44.86	59	55.14
15	117	48.35	125	51.65
16	155	53.08	137	46.92
17	149	41.05	214	58.95
18	53	49.07	55	50.93
19	20	45.45	24	54.55
Total	542		614	

Distribution of participants by age, separated into LGBT+ and cis-hetero groups.

Table 7. Sex Assigned at Birth

Sex assigned at Birth	N	%
Masculine	289	24.6
Feminine	888	75.4
Total	1177	100.0

Distribution of the participants according to their sex assigned at birth.

Table 8. Country of Birth

Country of Birth	N	%
Portugal	1119	95.2
Other	57	4.8

Total	1176	100.0
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Distribution of participants according to whether they were born in Portugal.

3.2 Descriptive Statistics for Anxiety, Depression, NSSI and Suicide Risk

3.2.1 Anxiety and LGBT+ Status

The overall prevalence of GAD in the sample is seen in Table 9, with more than half of participants (52.7%) meeting the criteria for GAD.

Table 9. Generalized Anxiety Disorder (GAD) prevalence in the sample

Anxiety Status	N	%
No GAD	553	47.3
GAD	617	52.7
Missing	7	-
Total	1177	100.0

Note: Seven cases were missing data for the anxiety variable and were excluded from the analysis.

Table 10. Prevalence of GAD by LGBT+ Status

Status	No GAD (N, %)	GAD (N, %)	Total (N, %)
Cis-Hetero	342 (55.3)	277 (44.7)	619 (100.0)
LGBT+	211 (38.3)	340 (61.7)	551 (100.0)
Total	553	617	1170 (100.0)

A chi-square test of independence revealed a statistically significant association between LGBT+ status and GAD presence, $X^2(1, N = 1170) = 33.63$, $p < .001$, $\phi = 0.170$. The effect size ($\phi = 0.17$) indicates a small to approaching moderate association (Table 10).

LGBT+ participants were more likely to meet criteria for GAD (61.7%) compared to cis-hetero participants (44.7%). This finding highlights that anxiety was substantially more prevalent among LGBT+ youth in this sample.

3.2.2 Depression and LGBT+ Status

Nearly half of the participants (49.0%) met criteria for major depression, while 51.0% did not (Table 11).

Table 11. Frequency Distribution of Major Depression in the Sample

Depression Status	N	%
No major depression	597	51.0
Major depression	574	49.0
Total	1171	100.0

Note: Data on depression status was missing for 6 participants, reducing the valid sample size to 1,171.

Table 12. Crosstabulation between LGBT+ Status and Depression

Status	No Major Depression (%)	Major Depression (%)	Total
Cis-Hetero	376 (60.7)	243 (39.3)	619
LGBT+	221 (40.0)	331 (60.0)	552
Total	597	574	1171

A chi-square test of independence was conducted to examine the association between being LGBT+ and depression status. The analysis revealed a statistically significant relationship, $X^2(1, N = 1171) = 50.07$, $p < .001$, with a Phi coefficient ($\phi = 0.207$) indicating a small to medium effect size.

LGBT+ participants were more likely to report major depression (60.0%) compared to cis-heterosexual participants (39.3%). These findings show the disproportionate burden of depressive symptoms among LGBT+ youth, consistent with minority stress models emphasizing the impact of stigma and lack of affirming environments.

3.2.3 NSSI and LGBT+ Status

About 34.6% of participants reported engaging in NSSI, while 65.4% did not (Table 13).

Table 13. Prevalence of Non-Suicidal Self-Injury (NSSI)

NSSI Status	Frequency	%
Non-NSSI	770	65.4
NSSI	407	34.6
Total	1177	100.0

Table 14. Crosstabulation of NSSI by LGBT+ Status

NSSI Status	LGBT+ (%)	Cis-Hetero (%)	Total
Non-NSSI	278 (36.1)	492 (63.9)	770
NSSI	276 (67.8)	131 (32.2)	407
Total	554	623	1177

Among these reporting NSSI, the majority were LGBT+ (67.8%), while 32.2 % were cis-hetero. The difference between groups was statistically significant, $\chi^2(1, N = 1177) = 107.46, p < .001, \phi = 0.303$, indicating a medium association between LGBT+ status and engagement in NSSI (Table 14). This pattern aligns with prior research showing that sexual and gender minority youth are at an increased risk for self-injurious behaviours, potentially due to minority stress and related psychosocial factors.

3.2.4 SBQ-R and LGBT+ Status

Table 15. Descriptive Statistics for SBQ-R Total Scores

N Valid	867
N Missing	310
Mean	7.14
Median	6.00
Mode	3

Standard Deviation	4.52
Minimum	3
Maximum	18
Range	15

The mean score for SBQ-R for the sample was 7.14 (SD = 4.52), with scores ranging from 3 to 18 (Table 15). The median score was 6.00, and the most frequent score (mode) was 3. Higher SBQ-R scores reflect greater suicide risk.

Table 16. Frequency Distribution of SBQ-R Total Scores

SBQ-R Score	Frequency	Valid Percent %
3	397	45.8
5	23	2.7
6	28	3.2
7	45	5.2
8	53	6.1
9	44	5.1
10	36	4.2
11	49	5.7
12	46	5.3
13	42	4.8
14	34	3.9
15	34	3.9
16	17	2.0
17	13	1.5
18	6	0.7
Total (Valid)	867	100.0
Missing	310	

Total	1177
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As shown in Table 16 and Figure 2, nearly half of participants (45.8%) obtained the minimum score of 3, suggesting low suicide risk. Other relatively frequent scores included 8 (6.1%), 11 (5.7%) and 7 (5.2%). Only 0.7% of participants reached the maximum score of 18.

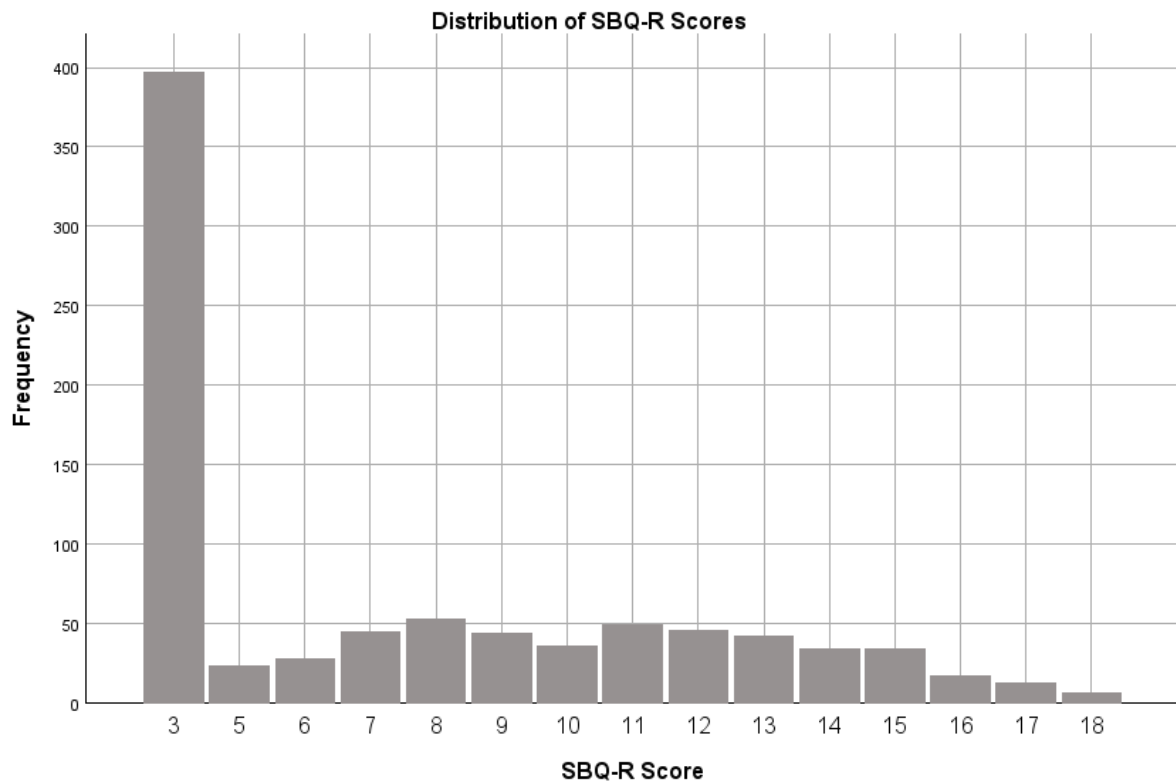


Figure 2. Distribution of SBQ-R total scores among participants (N = 867). The most frequent score was the minimum possible (3), reported by 45.8% of the sample.

Table 17. Suicide Risk (SBQ-R $\geq$ 7) among Participants

Suicide Risk Status	N	Valid Percent %
Low Risk (SBQ-R < 7)	448	51.7
High Risk (SBQ-R $\geq$ 7)	419	48.3
Total (Valid)	867	100.0
Missing	310	

Total	1177
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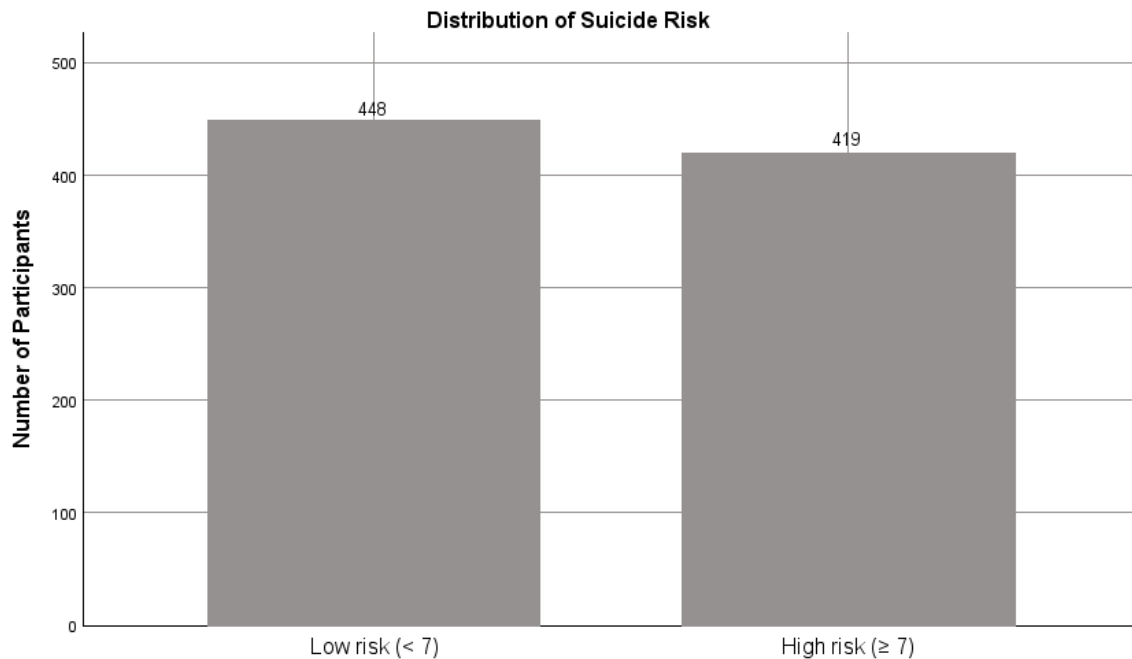


Figure 3. Distribution of Suicide Risk based on SBQ-R (N = 867). A total of 48.3% of participants scored ≥ 7 , indicating high suicide risk.

Using the validated cutoff of ≥ 7 on the SBQ-R, almost half of the participants (48.3%) were classified as being at high suicide risk, while 51.7% fell below this threshold (Table 17 and Figure 3). The near-equal distribution between low- and high-risk groups suggests a substantial prevalence of suicide risk within the sample, highlighting the importance of examining both protective and risk factors.

When suicide risk was analysed by LGBT+ status, significant disparities emerged. As shown in Table 18 and Figure 4, LGBT+ participants were substantially more likely to fall into the high-risk category (67.3%) compared to cis-heterosexual participants (32.7%)

Table 18. Relationship Between LGBT+ Identity and Suicide Risk

Suicide Risk		LGBT+ (N)	LGBT+ %	Cis-Hetero (N)	Cis-Hetero %
Low	Risk	120	26.8	328	73.2
(SBQ-R < 7)					
High	Risk	282	67.3	137	32.7
(SBQ-R ≥ 7)					

Total	402	100.0	465	100.0
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Note: N = 867 valid cases; 310 missing cases excluded.

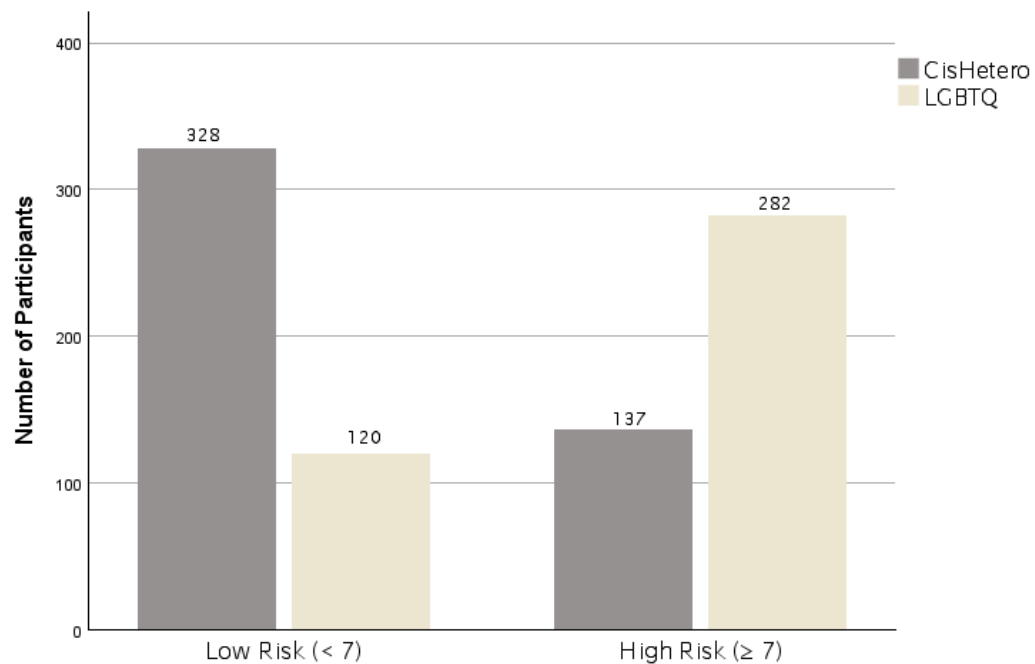


Figure 4. Distribution of Suicide Risk by LGBT+ Status

Table 19. Chi-Square Test of Association Between Suicide Risk and LGBT+ Status

Test	Value	df	N	p	Phi (φ)
Pearson	142.927	1	867	<0.001	0.406
Chi-Square					

The chi-square test confirmed a statistically significant association between LGBT+ status and suicide risk, $X^2(1, N = 867) = 142.93$, $p < .001$, with Phi coefficient of $\phi = 0.406$ (Table 19). This indicates a medium to large effect size, suggesting that LGBT+ identity is strongly associated with elevated suicide risk in this sample.

3.3 Contact with LGBT+ Organizations and Suicide Risk

To test the second main hypothesis (H2), participants were categorized based on their reported awareness of or any contact with LGBT+ organizations. Those who indicated at least minimal awareness or involvement were classified into the “Contact” group, while the remainder were placed in the “No Contact” group.

Table 20. Distribution of Participants by Contact with LGBT+ Organizations

Contact Status	Frequency	Percent %
No contact	991	84.2
Contact	186	15.8
Total	1177	100.0

Only 15.8% of the sample reported any contact with LGBT+ organizations, while the majority (84.2%) reported none (Table 20), making the contact group a relatively small subgroup compared to the non-contact group.

3.3.1 Relationship Between Contact with LGBT+ Organizations and Suicide Risk

A chi-square test of independence was conducted to examine the association between contact with LGBT+ organizations and suicide risk, using the clinical cutoff of 7 on the SBQ-R scale (Table 22).

Table 21. Association Between Contact with LGBT+ Organizations and Suicide Risk (SBQ-R ≥ 7)

Suicide Risk	No contact (%)	Contact (%)	Total
Low suicide risk	395 (88.2)	53 (11.8)	448
High suicide risk	330 (78.8)	89 (21.2)	419
Total	725	142	867

Table 22. Chi-square Test of Association Between Suicide Risk and Contact with LGBT+ Organizations

Test	Value	df	N	p	Phi
Pearson Chi-Square	14.000 ^a	1	867	<.001	0.127

Linear-by-Linear Association	13.984	1	<.001
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a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 68.63.

The analysis revealed a statistical association between contact with LGBT+ organizations and suicide risk, $X^2(1, N = 867) = 14.00, p < .001, \phi = 0.127$. Participants who reported contact were more likely to be classified as high risk (21.2%) compared to those without contact (11.8%) (Table 21). While statistically significant, the effect size was small, suggesting that the association, though reliable, is modest.

3.3.2 SBQ-R Scores and Contact with LGBT+ Organizations

Table 23 presents the distribution of SBQ-R scores according to reported contact with LGBT+ organizations. Scores ranged from 3 to 18, with lower values indicating minimal suicidal ideation or behaviour, and higher values reflecting greater severity.

Table 23. Distribution of SBQ-R Scores by Contact with LGBT+ Organizations

SBQ-R Scores	No Contact	Contact	Total
3	350	47	397
5	20	3	23
6	25	3	28
7	39	6	45
8	44	9	53
9	39	5	44
10	25	11	36
11	38	11	49
12	35	11	46
13	30	12	42
14	24	10	34

15	36	8	34
16	13	4	17
17	12	1	13
18	5	1	6
Total	725	142	867

Participants without contact were heavily represented in the lowest SBQ-R score categories, in particular score 3, while those with contact showed a slightly higher proportions in mid-to high score categories.

Table 24 presents the mean SBQ-R scores for each group. Participants who reported contact with LGBT+ organizations had a higher mean score compared to those without contact.

Table 24. Mean SBQ-R Scores by Contact with LGBT+ Organizations

Group	N	Mean SBQ-R (M)	Std. Deviation (SD)
No contact	725	6.87	4.46
Contact	142	8.53	4.61

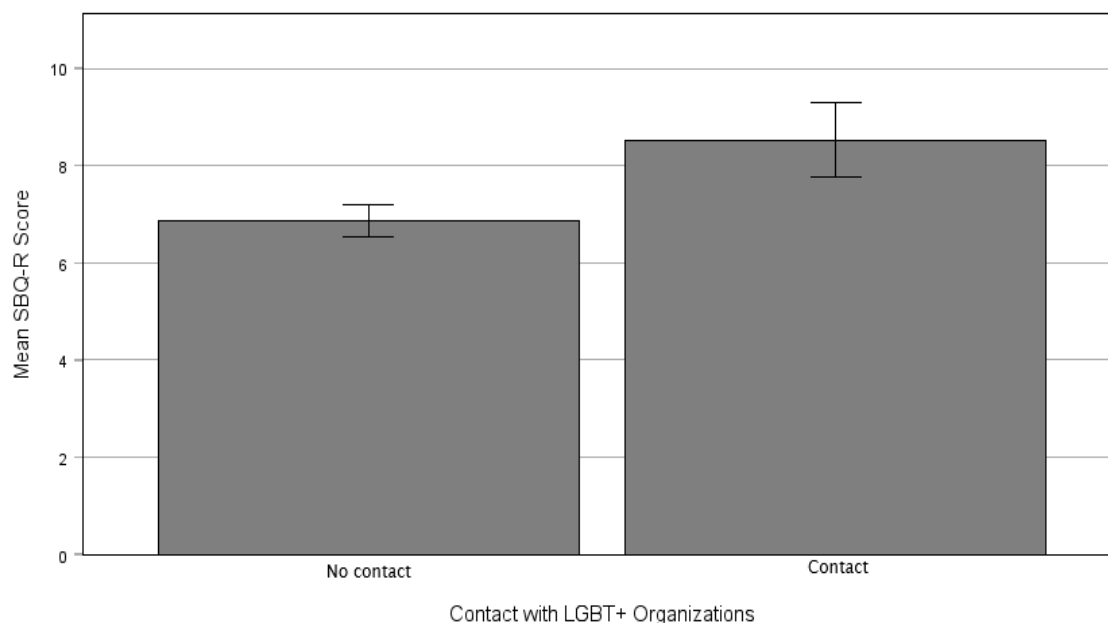
Independent-samples *t*-test results (Table 25) confirmed that this difference was statistically significant.

*Table 25. Independent-Samples *t*-test for SBQ-R scores by LGBT+ Organizations*

<i>t</i>(df)	<i>p</i>-value	Mean Difference	95% CI	Cohen's <i>d</i>
-4.03 (865)	<.001	-1.66	[-2.46, -0.85]	-0.37

*Note: Degrees of freedom (df) for the independent samples *t*-test, in this case due to the two independent groups, is calculated as $N_{total} - 2$. In this analysis, the total number of participants was 867, resulting in $867 - 2 = 865$.*

Figure 5 provides a visual comparison, showing higher mean SBQ-R scores among participants with contact with LGBT+ organizations.



Error Bars: ± 2 SE

Figure 5. Mean suicide risk scores (SBQ-R) among youth with and without contact with LGBT+ organizations. Error bars represent ± 2 standard error. Participants with contact scored significantly higher on suicide risk ($M = 8.53$, $SD = 4.61$) compared to those without contact ($M = 6.87$, $SD = 4.46$); $t(865) = -4.03$, $p < .001$, $d = -0.37$.

Youth with no contact ($M = 6.87$, $SD = 4.46$) scored significantly lower on suicide risk than those with contact ($M = 8.53$, $SD = 4.61$) (Table 24), $t(865) = -4.03$, $p < .001$, $d = -0.37$ (Table 25). The effect size was small-to-moderate, suggesting that although the difference was not large, it was statistically robust and clinically meaningful.

A chi-square test further examined the association between contact with LGBT+ organizations and the full range of SBQ-R score categories (Table 26). The results indicated a significant association, $\chi^2(14) = 27.85$, $p = 0.015$, $\phi = 0.179$, as well as a strong linear-by-linear association, $\chi^2(1) = 15.94$, $p < .001$. These findings indicate that participants with contact were significantly more likely to fall into higher suicide risk categories, with both the mean score comparison (Table 24) and chi-square distribution (Table 26) analyses converging on this pattern.

Table 26. Chi-square Test of Association Between Contact with LGBT+ Organizations and SBQ-R Score Categories

Test	Value	df	N	p	Phi
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Pearson Chi-Square	27.848a	14	867	0.015	0.179
Linear-by-Linear Association	15.942	1		<.001	

5 cells (16.7%) have expected count less than 5. The minimum expected count is 0.98. Note: The chi-square assumption regarding expected cell counts was slightly violated with 5 cells (16.7%) having expected counts less than 5 (minimum expected cell count = 0.98). Given the large sample, the test remains robust, and results should be interpreted with caution but are still considered valid.

While contact with LGBT+ organizations might be expected to function as a protective factor, the results suggest a more complex relationship.

Additional descriptive analysis (Appendix 1) further underscores the limited nature of engagement. Only 5.1% of participants answered the frequency-of-use item, and among these, 73.3% reported never attending, 20.0% rarely, 3.3% a few times per year, and 3.3% once or twice per month. Regarding membership, only 0.3% reported belonging to an LGBT+ school group, while 0.6% explicitly reported not belonging, the remainder being non applicable/missing. At the city level, just two participants reported belonging to an LGBT+ organization (3.9% of valid responses).

Further descriptive results are provided in Appendix 2, focusing specifically on suicidal ideation and behaviours. These items cover lifetime thoughts or attempts, recurrence of suicidal ideation in the past year, and perceived likelihood of a future attempt. Across all items, LGBT+ youth reported higher rates of suicidal planning, attempts, and expectations of future risk compared to cis-heterosexual peers.

Discussion

The present study aimed to confirm if the LGBT+ participants in this sample reported higher prevalence of mental health difficulties (H1), and whether contact with LGBT+ organizations was associated with lower suicide risk among LGBT+ youth in Portugal (H2).

Findings in relation to H1 confirmed that LGBT+ youth in this study reported higher rates of anxiety, depression, NSSI, and suicide risk compared to non-LGBT+

participants. This mirrors findings from international literature showing that SGM youth consistently present poorer mental health outcomes (161). In the Portuguese context, these results align with evidence that LGBT+ adolescents face increased victimization and limited access to affirming support systems (162).

For H2, it was hypothesized that individuals with greater contact or knowledge of LGBT+ organizations would report lower levels of suicide ideation and behaviour, given the potential protective role of community belonging, social support and identity affirmation. Contrary to this expectation, the findings indicated that participants who reported contact with LGBT+ organizations did not show significantly reduced levels of suicide risk. In some comparisons, contact was even associated with higher reported distress. Rather than reflecting a straightforward protective effect, this pattern suggests that contact with LGBT+ organizations may function more as a marker of pre-existing distress, with individuals reaching out only after difficulties have escalated to a critical point. This interpretation is consistent with research showing that help-seeking behaviours among adolescents frequently occur during acute phases of vulnerability rather than in earlier stages of distress (163,164). Broader evidence indicates that mental health service contact often happens shortly before suicide, suggesting that individuals tend to seek help at advanced stages rather than earlier in its development (165). In the Portuguese context, where LGBT+ organizations often operate with limited resources, visibility and outreach capacity, their impact may therefore be more remedial than preventive.

The descriptive findings from the additional organizational contact items (Appendix 1) further contextualize these results. Only a very small proportion of participants reported any regular engagement, with most indicating that they never or only rarely accessed LGBT+ youth groups, and practically none reporting belonging in school or city-level organizations. While part of this pattern may reflect the uneven availability of such resources across regions, it is also likely shaped by stigma-related barriers. Fear of disclosure, internalized stigma, and concerns about safety may discourage engagement even when organizations are present. At the same time, low levels of formal involvement do not necessarily imply an absence of support, as some youth may already rely on other sources of support like family, friends, or even digital communities.

Complementing this, the descriptive results on suicidal ideation and behaviours (Appendix 2) provide a more detailed picture of the elevated suicide

risk observed in this sample. Clear disparities emerged between LGBT+ and cis-heterosexual participants, with LGBT+ youth disproportionately reporting lifetime suicidal thoughts and attempts, more frequent ideation over the past year, and greater expectations of a future attempt. These patterns suggest not only higher vulnerability but also a persistence of risk that may extend beyond immediate crises. Together, Appendices 1 and 2 highlight both the scarcity of protective engagement opportunities and the severity of suicidal distress among LGBT+ youth, which may help explain why organizational contact did not consistently emerge as a protective factor in this study.

From a theoretical perspective, the findings can be framed through the ITS and the MST. According to ITS, suicide risk emerges from interplay of thwarted belongingness, perceived burdensomeness, and acquired capability (29,47). LGBT+ organizations are expected to buffer risk primarily by reducing thwarted belongingness, offering affirmation and community. However, if contact occurs mainly during periods of crisis, their potential impact on belongingness may arrive too late to counteract entrenched perceptions of burdensomeness or accumulated capability for self-harm. Moreover, the buffering effects of organizational involvement may not be sufficiently strong within a short span of time to offset other persistent suicide risks, such as family rejection or lack of supportive networks. As noted previously, research has consistently demonstrated that family rejection is among the strongest predictors of suicidal behaviour in LGBT+ youth (43). This underscores that both the timing and the intensity of engagement are critical determinants of whether organizational contact can translate into meaningful effects.

MST provides a complementary framework, emphasizing the role of both distal stressors like discrimination and prejudice, and proximal stressors such as internalized stigma and concealment, in shaping mental health outcomes (55,166). In contexts with limited structural protections, distal stressors may remain so pervasive that the buffering potential of community contact is weakened. Additionally, if organizations are small or under-resourced, their ability to reduce proximal stressors may be limited to those already willing and able to access them. Thus, rather than functioning as a broad preventive buffer, organizational contact may instead reflect a last resort coping strategy for individuals whose stress burden has already surpassed manageable thresholds.

Taken together, the ITS and MST frameworks highlight that the effectiveness of community-based supports depends not only on their existence, but also on their timing, accessibility, and integration with broader structural protections.

While international literature has frequently highlighted the protective role of LGBT+ organizations, the Portuguese context may help explain why these effects did not emerge strongly in the present study. Although Portugal has progressive legal protections for SGM, social stigma and victimization remain prevalent, particularly in schools (167,168). Access to LGBT+ organizations is also uneven, with most being concentrated in large urban areas, leaving many youth without consistent opportunities for early engagement. For young people in smaller towns or rural regions, lack of visibility and fear of disclosure may delay help-seeking until crises have already developed. These contextual barriers likely contribute to the reactive rather than preventive nature of organizational contact observed in this study.

This finding also contrasts with several international studies that emphasize community connectedness as a buffer against suicidality. For example, Poteat et al. (169) and Marx et al. (170) reported that participation in Gay-Straight Alliances, also known as Gender-Sexuality Alliances (school-based organizations designed to create safe and supportive environments for LGBT+ youth and their allies) was associated with reduced victimization and improved mental health outcomes, while Fulginiti et al. (117) demonstrated that engagement in LGBT+ community organizations could lower the risk of suicidal ideation. The absence of a similar protective association in the present study suggests that contextual factors such as delayed access, limited outreach and societal stigma in Portugal may shape the timing and impact of organizational contact. This underscores the importance of situating protective processes within specific cultural and structural environments when interpreting their effectiveness.

Implications for Prevention and Practice

Interpreted through both the ITS and MST, the present findings underscore the importance of situating suicide strategies for LGBT+ youth within a multi-level framework that integrates individual, interpersonal, community and structural dimensions. Although organizational contact did not demonstrate the hypothesized protective effect in this study, the results suggest that contact may often occur at points of heightened vulnerability. This indicates that prevention

efforts should prioritize earlier engagement, ensuring that LGBT+ youth have access to affirming supports before crises escalate.

Schools are critical sites for suicide prevention, as they are often the first structured environments where LGBT+ youth encounter affirmation or rejection. Interventions such as inclusive curricula and anti-bullying policies foster belongingness and reduce victimization, thereby decreasing suicidal ideation (169,170).

At family level, parental and caregiver acceptance remains critical. Research has consistently demonstrated that family rejection significantly raises suicide risk, whereas supportive caregiving is a robust protective factor (43,171). Prevention programs should therefore incorporate family education and interventions aimed at strengthening affirming communication and reducing rejection.

LGBT+ organizations provide vital safe spaces, access to mental health resources, identity validation, resource navigation and advocacy for LGBT+ youth (172,173). Their protective potential may be greatest when outreach occurs proactively rather than reactively, and when their efforts are integrated with broader networks of family, school and healthcare support.

Despite high rates of psychological distress, LGBT+ youth often encounter barriers to accessing healthcare, including stigma, cost and a lack of affirming providers (163,174). Effective prevention requires expanding access to affirming and culturally responsive mental health services for LGBT+ youth, which is essential for avoiding progression toward suicidal behaviours.

Finally, at structural level, policy frameworks play a critical role in shaping protective environments. National anti-discrimination protections, legal recognition of LGBT+ identities, and supportive national mental health strategies can create environments in which community organizations operate more effectively (93,175).

These implications highlight that effective suicide prevention for LGBT+ youth requires a multi-layered framework of early and sustained support. Such strategies are necessary not only to prevent crises but also to cultivate environments in which LGBT+ youth can thrive.

Study Limitations

While this study offers valuable insights into the relationship between organizational contact and suicide risk among LGBT+ youth in Portugal, several limitations must be acknowledged.

First, the cross-sectional design does not allow for causal inferences. Although associations were observed between organizational contact, psychological distress, and suicide risk, it is not possible to determine temporal sequencing or directionality. Longitudinal designs would be needed to clarify whether engagement with LGBT+ organizations can reduce risk over time or whether young people seek out such resources primarily when already in crisis.

Second, the study relied on self-report data collected through an online survey. While this method increases accessibility, responses may be affected by recall bias, underreporting of sensitive experiences, or social desirability. Moreover, the psychological measures such as anxiety and depression were screening tools rather than clinical diagnostic instruments, which limits the precision of inferences.

Third, although the FREE Project provided access to a large national sample, the number of participants reporting active organizational engagement was very small. This limited statistical power to detect potential protective effects and restricted the possibility of subgroup analyses. In addition, the items used to measure organizational contact were brief and may not fully capture the quality, intensity, or long-term impact of involvement.

Fourth, while the sample was broad, it may not be fully representative of all LGBT+ youth in Portugal. The online format and self-selection could have favoured participation from individuals with greater internet access or stronger interest in LGBT + issues, while youth in rural areas or with fewer connections to supportive networks may have been underrepresented.

Finally, the study was restricted to quantitative data, which limits the exploration of nuanced processes such as the subjective meaning of organizational involvement or contextual factors like school climate or family acceptance.

Future Research

Recognizing the studies limitations, future research should investigate how the timing, accessibility, and mechanisms of engagement with LGBT+ organizations

shape their potential protective effects. Longitudinal studies could clarify whether early and sustained engagement reduce suicide risk more effectively than contact initiated as last resort.

In addition, mixed-methods designs that combine survey data with qualitative approaches could both capture the subjective meaning of organizational involvement and explore why some youth seek out LGBT+ groups while others do not, as well as how these diverse experiences influence outcomes.

Further studies should also examine the mechanisms through which organizational contact may buffer suicide risk, such as enhancing belonging, reducing stigma or strengthening coping skills, while identifying moderators like family rejection, peer victimization and comorbid health difficulties that may condition these effects.

Finally, research should evaluate intervention strategies that allow organizations to shift from being primarily reactive to preventive support. Partnerships with schools, expanded digital outreach, and targeted efforts for rural or underserved regions may enhance their reach. Structural and policy contexts also warrant attention, as national funding, legal protections and public attitudes play a critical role in shaping the capacity of organizations to safeguard LGBT+ youth. In Portugal specifically, where LGBT+ organizations remain concentrated in large urban areas and stigma persists in school environments, research should also consider geographic inequities and educational contexts. By integrating these perspectives, future research can provide essential evidence to guide both organizational practice and broader suicide behaviour prevention strategies.

Conclusion

This study investigated whether LGBT+ youth in Portugal reported higher levels of mental health difficulties (H1) and whether contact with LGBT+ organizations was associated with reduced suicide risk (H2). Consistent with international and national literature, H1 was confirmed, as LGBT+ participants reported significantly higher rates of anxiety, depression, NSSI, and suicidal behaviours. Contrary to expectations, H2 was not supported, organizational contact did not consistently emerge as a protective factor. In fact, in some cases, it was linked to higher distress, suggesting that engagement may often occur in response to crises rather than as an early preventive measure.

These findings underscore the complexity of protective factors in suicide prevention. Although LGBT+ organizations provide affirmation, support, and safe spaces, their protective role appears to be constrained by timing, accessibility, and the broader social context. Strengthening their preventive capacity requires earlier outreach, stronger integrations with families, schools, and healthcare systems, and greater visibility beyond urban centers.

Overall, this study contributes to understanding suicide risk and protective mechanisms among LGBT+ youth in Portugal, highlighting both the promise and the constraints of organizational contact. Rather than being dismissed as secondary, these organizations should be recognized as one component within a wider network of protective factors. Their benefits cannot be assumed but must be actively fostered and supported within the Portuguese context to maximize their preventive potential. By situating these findings within the field of Legal Medicine, this work underscores the importance of addressing suicide not only as a public health challenge but also as a matter with direct relevance for forensic and clinical practice.

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Appendices

Appendix 1

The following tables (Tables 27, 28 and 29) present supplementary descriptive results regarding participants' contact with LGBT+ organizations. These variables were not included in the main analyses but help contextualize the limited levels of organizational engagement observed in the sample.

Table 27. Frequency of reliance on LGBT+ youth Organizations

Response	Frequency	Percent %	Valid Percent %	Cumulative Percent %
Never	44	3.7	73.3	73.3
Rarely	12	1.0	20.0	93.3
A few times per year	2	0.2	3.3	96.7
Once or twice per month	2	0.2	3.3	100
Total	60	5.1	100	
Missing	1117	94.9		
Grand Total	1177	100		

The majority of participants (73.3%) reported never attending LGBT+ youth groups, with only 1.4% of the total sample indicating any level of engagement.

Table 28. Belonging to an LGBT+ group at school

Response	Frequency	Percent %	Valid Percent %
Yes	3	0.3	33.3
No	6	0.6	66.7
Total	9	0.9	100
Missing	1168	99.1	
Grand Total	1177	100	

Almost all participants (99.1%) reported not belonging to an LGBT+ group at school, with only 0.3% indicating membership.

Table 29. Belonging to an LGBT+ group in one's city

Response	Frequency	Percent %	Valid Percent
Yes	2	0.2	3.9
No	49	4.2	96.1
Total	51	4.3	100
Missing	1126	95.7	
Grand Total	1177	100	

At the city level, only 0.2% of participants reported belonging to an LGBT+ group, while 4.2% reported non-membership.

Appendix 2

This appendix presents supplementary descriptive data on individual items related to suicidal ideation and behaviours, complementing the main analyses conducted with the SBQ-R. The tables provide distributions of responses for lifetime experiences of suicidal thoughts and attempts (Table 30), frequency of ideation in the past year (Table 31), and perceived likelihood of future attempts (Table 32), arranged by LGBT+ and cis-hetero participants. These results offer a more detailed view of the specific patterns underlying the elevated suicide risk observed among LGBT+ youth.

Table 30. Lifetime suicidal thoughts or attempts by LGBT status

Response	LGBT+ Participants N (%)	Cis-Hetero Participants N (%)	Total
Never	104 (26.2)	293 (73.8)	397
Had a fleeting thought	179 (46.9)	203 (53.1)	382
Had a plan to suicide, at least	93 (60.4)	61 (39.6)	154

once, but didn't do it			
Had a plan to suicide, at least once, and really wanted to die	85 (74.6)	29 (25.4)	114
Attempted suicide, but didn't wanna die	28 (71.8)	11 (28.2)	39
Attempted suicide and wanted to die	46 (88.5)	6 (11.5)	52
Total	535 (47.0)	603 (53.0)	1138

Note: 39 cases missing.

More severe outcomes (planning and attempts) were disproportionately reported by LGBT+ participants.

Table 31. Frequency of suicidal ideation in the past year by LGBT status

Responses	LGBT+ Participants N (%)	Cis-Hetero Participants N (%)	Total
Never	238 (35.6)	431 (64.4)	669
Once	62 (48.1)	67 (51.9)	129
Twice	63 (52.5)	57 (47.5)	120
3-4 times	55 (66.3)	28 (33.7)	83
5 or more	124 (82.1)	27 (17.9)	151
Total	542 (47.0)	610 (53.0)	1152

Note: 25 cases missing.

LGBT+ participants reported more persistent and recurrent ideation (3-4 times or more) compared to cis-heterosexual peers. With over 80% of those who had suicidal thoughts five or more times identifying as LGBT+

Table 32. Perceived likelihood of a future suicide attempt by LGBT status

Responses	LGBT+ Participants N (%)	Cis-Hetero Participants N (%)	Total
Never	16 (32.0)	34 (68.0)	50
No probability	36 (48.6)	38 (51.4)	74
Very unlikely	62 (63.9)	35 (36.1)	97
Unlikely	73 (64.6)	40 (35.4)	113
Probably	75 (75.8)	24 (24.2)	99
Very likely	22 (91.7)	2 (8.3)	24
Most likely	17 (89.5)	2 (10.5)	19
Total	301 (63.2)	175 (36.8)	476

Note: 701 cases missing.

Higher probabilities of a future attempt were predominantly reported by LGBT+ participants, reinforcing patterns of elevated ideation and planning.

Attachments

Attachment 1



COMISSÃO DE ÉTICA

PARECER (Refª 2020/06-1)

A Comissão de Ética (CE) da Faculdade de Psicologia e de Ciências da Educação da Universidade do Porto, tendo examinado os documentos referentes ao projeto “**A cross-national study on risk and protective factors for minority stress, mental health and school achievement among lesbian, gay, bisexual, transgender, queer and questioning students.**”, apresentado pelo **Doutor Jorge Gato**, emite um **parecer favorável** à realização da pesquisa.

Parecer favorável

A CE é favorável à realização do projeto apresentado e recomenda a observação dos seguintes aspetos:

Prever no consentimento informado a possibilidade de os participantes solicitarem informação sobre os resultados globais dos estudos.

Uma vez que é pedida a identificação da escola, deve ser acautelado o anonimato da mesma.

FPCEUP, 05 de junho de

2020 A Presidente,

Profª. Carlinda Leite