Minority stressors, protective factors and mental health outcomes in lesbian, gay and bisexual people in the UK

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ABSTRACT

Two cross-sectional survey studies were conducted to examine the relationships between minority stressors, protective factors and mental health outcomes in lesbian, gay and bisexual people (LGB) in the United Kingdom (UK). A convenience sample of 156 LGB people in the UK participated in Study 1. Multiple regression analyses showed that victimization and sexuality-related identity threat were positively associated with anxiety and that identity resilience, social support and degree of outness were negative correlates; and that rejection was positively associated with depression while identity resilience and social support were negative correlates. In Study 2, based on a convenience sample of 333 gay men, our structural equation model showed that ethnic minority status, lower identity resilience and higher identity threat were associated with greater distress; ethnic minority status was associated with less social support and more internalized homonegativity; being single was associated with less social support and more internalized homonegativity; identity resilience was positively associated with social support and negatively associated with internalized homonegativity; identity threat was associated with less social support and more internalized homonegativity; internalized homonegativity was negatively associated with social support; and social support was negatively associated with distress while internalized homonegativity was positively associated with distress. Findings show differential effects of particular stressors on particular mental health outcomes in LGB people and the significance of promoting identity resilience, social support and degree of outness as protective factors.

Keywords

Minority stress; identity resilience; identity threat; internalized homonegativity; social support; mental health

INTRODUCTION

This article focuses upon the associations between minority stressors, protective factors and mental health outcomes in lesbian gay and bisexual (LGB) people in the United Kingdom (UK). According to minority stress theory (Meyer, 2003), exposure to distal minority stressors, such as rejection, victimization and discrimination, can increase the risk of experiencing proximal stressors, such as sexuality-related identity threat and internalized homonegativity. Collectively, these stressors can precipitate poor mental health in LGB people (Hoy-Ellis & Fredriksen-Goldsen, 2016). Moreover, there is some evidence that the psychological variable of identity resilience and the availability of social support may constitute protective factors (Breakwell, 2021; Jaspal, 2018). Socio-demographic characteristics, such as relationship status and ethnicity, have also been shown to shape psychological wellbeing outcomes, with single LGB people and those of ethnic minority background exhibiting a greater risk of poor mental health (Khanolkar et al., 2022; Whitton et al., 2018). Yet, it is unclear how these potential

stressors and protective factors relate to particular mental health outcomes and how they operate collectively as part of a social psychological system of factors determining psychological health. In two survey studies, we focus on the social psychological determinants of three mental health outcomes: distress, anxiety and depression.

Minority stress and identity processes

The two studies reported in this article are guided by a theoretical framework consisting of minority stress theory (Meyer, 2003) and identity process theory (IPT) (Breakwell, 2015; Jaspal & Breakwell, 2014).

Minority stress theory postulates that, as stigmatized minorities, LGB people are exposed to distal stressors, which are external and directed at them by other people, and proximal stressors, which are internal processes arising primarily through exposure to distal stressors. Exposure to these stressors has been found to undermine mental health (Meyer, 2003). Yet, the theory also posits that factors, such as access to social support, can operate protectively against these stressors and minimize their capacity to undermine mental health (Feinstein et al., 2014). In Study 1, we focus on the associations with anxiety and depression of distal stressors of rejection, victimization and discrimination; the proximal stressors of sexuality-related identity threat; and the protective factors of identity resilience, social support and outness. In Study 2, we focus on the associations with distress of the proximal stressors of sexuality-related identity threat and internalized homonegativity; and the protective factors of identity resilience and social support.

IPT posits that individuals strive to construct an identity that is characterized by feelings of self-esteem, self-efficacy, continuity and positive distinctiveness (Breakwell, 2021). These are referred to as identity principles. When these important principles are challenged by changes in one's social context, such as exposure to minority stressors, the individual experiences identity threat which is harmful for psychological wellbeing. Identity threat is one type of proximal stressor.

Recent developments in IPT have focused upon the concept of identity resilience (Breakwell, Fino & Jaspal, 2022; Breakwell & Jaspal, 2021b). This refers to the individual's subjective perception of their overall combined levels of self-esteem, self-efficacy, continuity and positive distinctiveness. Identity resilience is constructed across the life course and over many domains of identity and social experience. When asked to rate their overall level of identity resilience, an individual is generally able to do so. Given its association with greater coping ability (Breakwell, 2021), identity resilience can be thought of as a protective factor facilitating psychological well-being.

Using IPT and minority stress theory in unison offers a more comprehensive analysis of the reactions of minorities that are stigmatized. IPT emphasizes the need to examine how people exposed to stressors will vary in their response according to their unique identity constitution. It postulates that people will differ significantly in their ability to shield their mental health when experiencing minority stress because they will deploy differing coping strategies. This agentic perspective on responses to minority stress is fundamental to the two studies reported here and leads to our focus upon identity resilience.

Minority stressors

Building upon previous research using minority stress theory (e.g., Feinstein, 2020; Lopes & Jaspal, 2022), our research focuses on the distal stressors of rejection, victimization and discrimination; and the proximal stressors of internalized homonegativity and sexuality-related identity threat.

Distal stressors

Rejection from significant others (e.g., parents, close friends) due to one's sexuality can undermine feelings of belonging which are key to mental health (Moeller et al., 2020). For instance, Puckett et al. (2015) found in sexual minority adults a positive association between parental rejection and current psychological distress. Jaspal, Lopes and Rehman (2021) similarly found that rejection from significant others was positively correlated with psychological distress in their ethnically diverse sample of LGB people.

Victimization tied to one's sexuality ranges from verbal harassment to physical violence (Katz-Wise & Hyde, 2012) and is associated with a range of poor psychological wellbeing outcomes. Mustanski et al. (2017) found that young LGB people who reported steadily high or increasing levels of victimization across a prolonged period were at high risk of depression and post-traumatic stress disorder. Victimization experienced at school has been found to be associated with higher levels of depression and suicidal ideation in adulthood (Russell et al., 2011). Similarly, Hart et al. (2017) found an association between victimization in adolescence and psychological distress in adulthood.

Feeling discriminated against due to one's sexuality can undermine psychological wellbeing. Discrimination can induce both internalizing (mental health) and externalising (substance misuse) disorders for LGB people (Lee et al., 2016). Similarly, Almeida et al. (2009) found that perceived discrimination accounted for greater depressive symptomatology and that it was associated with greater likelihood of self-harm.

Although the specific distal stressors are treated separately in this study, given their distinct characteristics, it is noteworthy that there is some overlap and that they often occur concurrently. Indeed, Sattler and Christiansen (2017) found a correlation between rejection and victimization in their study of gay and bisexual men, both of which related to mental health outcomes.

Proximal stressors

Internalized homonegativity refers to "the individual's direction of negative social attitudes [about their sexual orientation] toward the self" and reflects negative evaluation of one's sexuality and consequential internal identity conflict (Meyer & Dean, 1998, p. 161). Internalized homonegativity may arise as a response to sexuality-related identity threat as the individual seeks to make subsequent modifications to their identity (Maatouk & Jaspal, 2022). Internalized homonegativity has also been found to be associated with poor mental health outcomes (Williamson, 2000). There is evidence that it is also associated with greater psychological distress (Breakwell & Jaspal, 2021a; Kaysen et al., 2014).

Sexuality-related identity threat arises when an individual perceives their feelings of self-esteem, self-efficacy, continuity and positive distinctiveness to be curtailed as a result of their sexuality (Breakwell & Jaspal, 2021a). Breakwell and Jaspal (2021a) found sexuality-related identity threat and distress to be positively correlated. In the present cross-sectional studies, we focus on identity threat precipitated specifically in response to thinking about one's sexuality. Individuals are able to assess the extent to which their feelings of self-esteem, self-efficacy, continuity and positive distinctiveness are diminished after thinking about particular aspects of their lives and experiences, e.g., their sexuality or a significant coming out experience (e.g., Breakwell & Jaspal, 2021a). Such sexuality-related identity threat can be considered a proximal stressor, since it is a subjective, internal response to stigma

associated with their sexuality (Meyer, 2003). In our studies, it is conceptualized as a predictor of poor mental health. We predict that, as a proximal stressor, sexuality-related identity threat will be positively associated with distress, depression and anxiety.

Protective factors

In this article, we examine the significance of identity resilience, social support and degree of outness as possible protective factors against poor mental health.

Identity resilience

Earlier, we described how IPT links greater identity resilience to lower distress (Breakwell & Jaspal, 2021a) and to increased access to adaptive, sustainable coping strategies (Jaspal, Assi & Maatouk, 2022) when one is exposed to minority stressors. Therefore, we hypothesized that identity resilience should be associated with greater access to social support, lower internalized homonegativity, and lower depression, anxiety and distress.

Outness

LGB people vary in the extent to which they disclose their sexual orientation to other people, that is, they vary in their degree of "outness". Being out can facilitate feelings of identity authenticity, self-acceptance and a positive overall sense of self (Ragins, 2004). Furthermore, coming out may increase access to social support and to more affirmative images of one's sexuality (Sommantico, De Rosa & Parrello, 2018). Degree of outness has been found to be positively associated with self-esteem (Whitman & Nadal, 2015) and negatively associated with depressive symptoms (Legate et al., 2012) among LGB people. However, outness could potentially represent a risk too since it may provide greater opportunity for exposure to discrimination and victimization. As this risk may be counterbalanced by the advantages of outness, degree of outness is hypothesized to be associated with better mental health outcomes.

Social support

Acquiring social support is one of the most adaptive, sustainable strategies that can be deployed in response to stressors and there is much evidence of its positive association with psychological wellbeing (e.g., Jaspal, 2018). McDonald (2018) found that decreased access to social support was associated with poor mental health outcomes, including depression, anxiety, shame, and substance misuse (see also Puckett et al., 2015). Furthermore, in their study of sexual minority youths, Wilkerson et al. (2017) found that increased access to social support was inversely associated with depressive symptomatology but positively associated with self-esteem and adaptive coping ability. It is therefore hypothesized to be protective against depression, anxiety, and distress.

Socio-demographic characteristics as potential risk and protective factors

Socio-demographic characteristics, such as relationship status and ethnicity, may operate as either risk or protective factors in the context of mental health. They may determine the extent to which minority stressors and other protective factors affect wellbeing outcomes in LGB people. In Study 2, we focus upon relationship status (single vs. partnered) and ethnicity (White British vs. ethnic minority) as predictors of distress.

Relationship status

Being in a relationship can provide social, psychological and emotional benefits. In their study of lesbian women, Whitton et al. (2020) found that being romantically involved was associated with fewer depressive and anxiety symptoms than being single. In a study of an ethnically diverse sample of LGB people, Whitton et al. (2018) found that being in a relationship was generally associated with better psychological wellbeing outcomes. Being romantically involved was associated with greater access to social support, which in turn is protective against distress. The romantically involved also tend to report lower levels of internalized homonegativity, since being in a relationship can facilitate feelings of self-acceptance (Liang & Huang, 2021). The association between relationship status and distress is mediated by both social support and internalized homonegativity.

Ethnic minority background

LGB people of ethnic minority background in the UK report challenges in assimilating and accommodating their sexuality in their overall sense of identity (e.g., Jaspal, 2018). Jaspal, Lopes and Rehman (2021) found that LGB people of ethnic minority backgrounds were at higher risk of depressive symptomatology and had higher levels of exposure to minority stressors, compared to White British LGB people. Furthermore, in their qualitative study, Khanolkar et al. (2022) found poorer psychological wellbeing, a lack of appropriate mental health support, and evidence of discrimination from within the LGB community. It can therefore be hypothesized that ethnic minority LGB people will report higher distress than White British LGB people. However, understanding this relationship is key. Given that ethnic minority LGB people exhibit greater sexual orientation concealment motivation (Jaspal et al., 2021), it is likely that they will report lower access to social support, itself a protective factor. Furthermore, Jaspal et al. (2021) found that ethnic minority LGB people reported greater internalized homonegativity than White British people, which may mediate the relationship between ethnicity and distress.

STUDY 1

This study focuses on the associations between distal and proximal minority stressors, protective factors and the mental health variables of depression and anxiety in a sample of 156 LGB people in the UK.

Hypotheses

1. The distal stressors of rejection, victimization and discrimination will be positive predictors of the variance of depression and anxiety.
2. The proximal stressor of sexuality-related identity threat will be a positive predictor of the variance of depression and anxiety.
3. The protective factors of identity resilience, outness to the world and social support will be negative predictors of the variance of depression and anxiety.

Method

Design and procedure

A cross-sectional survey study focusing on mental health outcomes among LGB people was conducted. Participants provided socio-demographic data, including their age, sex, gender identity, sexual orientation, ethnicity, level of education, income, and

relationship status. They then completed measures of identity resilience, social support, outness, sexuality-related identity threat, discrimination, rejection, victimization, depression and anxiety.

Participants

There were two eligibility criteria: (1) being aged 18 or over and (2) self-identifying as LGB. A sample of 156 participants was recruited - 89 through social media platforms, and 67 through the University's student participant recruitment scheme, SONA. Participants' ages ranged from 18 to 57 years (*M*=26.62, *SD*=7.37). Table 1 provides a full overview of participants' socio-demographic characteristics.

Insert Table 1 here

Measures

Identity Resilience

The Identity Resilience Index (IRI) (Breakwell, Fino & Jaspal, 2022) was used to measure identity resilience. The IRI comprises of 16 items across 4 factors; self-esteem, self-efficacy, continuity, and positive distinctiveness, scored on a 5-point Likert scale (1=strongly disagree to 5=strongly agree). Example item: "On the whole, I am satisfied with myself". Total scores are calculated by summing up all 16 items, with possible scores ranging from 16 to 80. A higher score indicates greater identity resilience, α=0.82.

Social support

The Interpersonal Support Evaluation List-12 (ISEL-12) (Cohen et al., 1985) was used to measure perceived social support. The ISEL-12 consists of 12 items scored on a 4-point scale (1=definitely false to 4=definitely true). Example item: "I feel that there is no one I can share my most private worries and fears with". The total score is calculated by summing all 12 items, with possible scores ranging from 12 to 48. A higher score indicates greater perceived social support, α=0.89.

Outness

The sub-scale of Outness to the World of the Outness Inventory (Mohr & Fassinger, 2000) consists of 4 items (e.g., "my new straight friends" and "my work peers") rated on a 7-point scale (1=person definitely does not know about your sexual orientation status, to 7=person definitely knows about your sexual orientation status and it is openly talked about). The total score is calculated by summing all 4 items, with possible scores ranging from 4 to 28. A higher score indicates greater outness, α=0.90.

Rejection

The Rejection Subscale of the LGBT Minority Stress Measure (Outland, 2016) was used to measure rejection. The scale consists of 4 items measured on a 5-point Likert scale (1=never happens to 5=all of the time). Example item: "I brace myself to be treated disrespectfully because I am LGBT". The total score for rejection was calculated by summing the 4 items in that subscale. Possible scores ranged from 4 to 20 with higher scores indicating greater rejection, α=0.90.

Discrimination

The Discrimination Subscale of the LGBT Minority Stress Measure (Outland, 2016) was used to measure discrimination. The scale consists of 4 items measured on a

5-point Likert scale (1=never happens to 5=all of the time). Example item: “I have been excluded from an organization (e.g., a religious group, sports team, etc.) because I am LGBT.” The total score for discrimination was calculated by summing the 4 items in that subscale. Possible scores ranged from 4 to 20 with higher scores indicating greater discrimination, α=0.80.

Victimization

The Victimization Subscale of the LGBT Minority Stress Measure (Outland, 2016) was used to measure victimization. The scale consists of 3 items, using a 5-point Likert scale (1=never happens to 5=all of the time). Example item: “Others have threatened to harm me because I am LGBT.” The total score was calculated by summing the 3 items in that subscale. Possible scores ranged from 3 to 15, with higher scores indicating greater victimisation, α=0.86.

Sexuality-related identity threat

Sexuality-related identity threat was assessed using the Identity Threat Scale (Breakwell & Jaspal, 2021b). Participants were asked to think about their sexuality while completing the 4-item scale, measured on a 5-point Likert scale (1=strongly disagree to 5=strongly agree). Example item: “It makes me feel that my past, present and future are less connected”. The total score for identity threat was calculated by summing the 4 items in the scale. Possible scores ranged from 4 to 20 with higher scores indicating greater sexuality-related identity threat, α=0.84.

Depression

Depression was assessed using the Center for Epidemiologic Studies Depression Scale (CESD-10) (Radloff, 1977; Andresen, Malmgren, Carter, & Patrick, 1994). The CESD-10 has 10 items measured on a 4-point scale (0=not at all to 3=very much so). Example item: “I was bothered by things that usually don't bother me.” The CESD-10 is summed, after reverse scoring two items that measure positive affect, to gain a total score between 0 and 30, α= 0.80.

Anxiety

Anxiety was measured using the 6-item short form of the Spielberger State-Trait anxiety inventory (STAI) (Marteau, & Bekker, 1992). The STAI has 6 items measured on a 4-point scale (1=not at all to 4=very much so). Example item: “I am tense.” Total scores were calculated by summing all 6 items. Possible scores ranged from 3 to 12 with higher scores indicating greater anxiety, α=0.82.

Statistical analyses

SPSS version 20 was used to conduct the analyses. Spearman Rho’s correlations were performed between the continous variables. Benjamini and Hochberg’s (1995) adjusted significance value was used to avoid Type 1 errors. Only adjusted statistically significant correlations are reported. Then, multiple stepwise correlations bootstrapped at 1000 samples with 95% Confidence Intervals (CI) were conducted to examine the associations of the protective factors of social support, identity resilience and outness to the world and of the stressors of sexuality-related identity threat, rejection, discrimination and victimization with the dependent variables of depression and anxiety. Assumptions for this type of analysis also include linearity (Normal Probability Plot), homoscedasticity (Plot of residuals versus predicted value), independence (Durbin-Watson statistic) of residuals, the presence of outliers (Cook's

distance < 1 N = 156) and multicollinearity (Variance Inflation Factor (VIF) < 2). All these assumptions were tested for the purpose of multiple stepwise regressions and no problems were found.

Results

Normality checks

One sample Kolmogorov-Smirnov (K-S) tests were performed to test normality of distributions. Results showed that outness to the world $D(156)=1.61$, $p=.011$; rejection $D(156)=1.44$, $p=.032$; discrimination $D(156)=3.68$, $p<.001$; victimization $D(156)=2.22$, $p<.001$; and depression $D(156)=1.37$, $p=.047$ were all non-normally distributed. Therefore, non-parametric Spearman Rho's tests were conducted.

Descriptive statistics

See Table 2 for an overview of the descriptive statistics.

Insert Table 2 here

Correlations

Table 3 presents an overview of the correlations between the continuous variables in this study.

Insert Table 3 here

Multiple stepwise regression predicting anxiety

Insert Table 4 here

A multiple stepwise regression bootstrapped at 1000 samples was conducted to examine which variables predicted the variance of anxiety (see Table 4). The variables of rejection, discrimination, victimization, sexuality-related identity threat, identity resilience, social support and outness to the world were inserted as predictors, and anxiety was inserted as the dependent variable.

The variables of rejection, discrimination and victimization were entered at Step 1. The model showed that both rejection and discrimination predicted the variance of anxiety with rejection being the strongest.

Then, sexuality-related identity threat was inserted at Step 2. The model then showed that rejection continued to be a significant predictor of anxiety but less strongly than before and that sexuality-related identity threat became the strongest predictor of anxiety.

Identity resilience was inserted in the model at Step 3. The model then showed that identity threat continued to be a statistically significant predictor of anxiety and identity resilience was also a statistically significant predictor of anxiety.

Social support was inserted as a predictor at Step 4. The model showed that when social support was inserted, victimization became a predictor of anxiety followed by identity resilience and sexuality-related identity threat and social support as the most statistically significant predictors of the variance of anxiety.

Finally, at Stage 5, outness to the world was inserted in the model. The final model was the strongest with $R^2=.49$, $F(6,144)=22.07$, $p<.001$. It showed that identity resilience continued to be a statistically significant predictor of anxiety followed by social support. Victimization, sexuality-related identity threat and outness to the world

emerged as the most statistically significant predictors of anxiety. These results partially supported hypotheses 1, 2 and 3.

Multiple regression predicting depression

Insert Table 5 here

A multiple stepwise regression bootstrapped at 1000 samples was conducted to examine which variables predicted the variance of depression (see Table 5). The variables of rejection, discrimination, victimization, sexuality-related identity threat, identity resilience, social support and outness to the world were inserted as predictors, and depression was inserted as the dependent variable.

The variables of rejection, discrimination and victimization were entered at Step 1. The model showed that only rejection was a statistically significant predictor of depression.

Sexuality-related identity threat was inserted in the model at Step 2. Rejection continued to be the strongest statistically significant predictor of depression followed by sexuality-related identity threat which also emerged as a statistically significant predictor.

Identity resilience was inserted in the model at Step 3. The model showed that only rejection continued to be a statistically significant predictor of depression, while identity resilience became the strongest predictor of depression.

Finally, social support and then outness to the world were entered in the model at Step 4. The final model was statistically significant with R^2=.32, F (4,145)=16.57, p<.001. The final model showed that identity resilience was the strongest predictor of the variance of depression followed by rejection and social support which also emerged as a statistically significant predictor of depression. These results partially supported hypotheses 1, 2 and 3.

STUDY 2

Building upon the previous study, Study 2 focuses upon the associations between the proximal stressors of sexuality-related identity threat (here measured differently) and internalized homonegativity, the protective factors of identity resilience and social support, and the mental health variable of distress in a sample of 333 gay men. According to previous research (Breakwell & Jaspal, 2021a; Maatouk & Jaspal, 2022), homonegativity is a major societal stimulus for threats to psychological health in gay men. It deserves further attention especially in relation to identity resilience. Therefore, in Study 2, we focused only on gay men. The additional socio-demographic characteristic variables of ethnicity (ethnic minority vs. White British) and relationship status (single vs. partnered) were examined as predictors of distress through the mediators of social support and internalized homonegativity.

Hypotheses

1. Ethnicity (ethnic minority vs. White British) should have statistically significant effects on internalized homonegativity, social support and distress, with ethnic minority participants reporting more internalized homonegativity and distress and less access to social support than White British participants.

2. Relationship status should have statistically significant effects on internalized homonegativity, social support and identity resilience, with single people reporting lower social support, less identity resilience and greater internalized homonegativity than partnered people.
3. Ethnicity (ethnic minority vs. White British), identity resilience and identity threat should impact directly and indirectly on the variance of distress through the mediators of internalized homonegativity and social support. Relationship status (single vs. partnered) in turn should only have indirect effects on the variance of distress through the mediators of social support and internalized homonegativity.

a. Ethnic minority participants should report less social support but more internalized homonegativity (compared to White British participants), which will be associated with increased distress. White British participants should in turn report less internalized homonegativity which is associated with increased social support, itself associated with less distress.
b. Single people should report more internalized homonegativity and less social support (compared to partnered individuals) which in turn will be associated with increased distress. Partnered individuals should in turn report less internalized homonegativity and increased social support which will be associated with less distress.
c. Identity resilience should be associated with less internalized homonegativity but more social support thus being associated with less distress.
d. In contrast, sexuality-related identity threat should be associated with increased internalized homonegativity and decreased social support thus being associated with increased distress.

Method

Design and procedure

A cross-sectional survey study focusing on mental health among gay men was conducted. Participants provided socio-demographic data, including their age, sex, gender identity, sexual orientation, ethnicity, level of education, income, and relationship status. They then completed measures of identity resilience, social support, outness, sexuality-related identity threat, internalized homonegativity, and distress.

Participants

An ethnically diverse sample of 333 cisgender gay male participants in the UK was recruited on Prolific (https://wwww.prolific.co), an online participant recruitment platform, in 2020. In the sample, 177 partipants were aged between 18 and 30 (53.2%); 118 participants between 31 and 50 (35.4%) and 38 between 51 and 74 (11.4%). The sole eligibility criteria were being aged 18 or over and self-identifying as gay. Table 6 provides the main characteristics of the participant sample.

Measures

Identity resilience

The Identity Resilience Index (Breakwell, Fino & Jaspal, 2022) was used to measure identity resilience, as in Study 1 (α=0.83).

Social support

The Interpersonal Support Evaluation List-12 (ISEL-12) (Cohen et al., 1985) was used to measure perceived social support, as in Study 1 (α=0.72).

Sexuality-related identity threat

The Identity Threat Scale (Breakwell & Jaspal, 2021b) was used to measure sexuality-related identity threat, as in Study 1. In this study, participants were asked to think about a significant coming out experience to someone who mattered to them while completing the scale. This change was introduced (in contrast to Study 1) in order to focus participants on a significant experience relating to their sexuality rather than their sexuality *per se* (α=0.78).

Internalized homonegativity

The Internalized Homophobia Scale (Herek et al., 2009) comprising 9 items with responses on a 5-point scale (1=not at all true of me to 5=very true of me) was used. Example item: "I wish I weren't gay". A higher score indicated higher internalized homonegativity (α=0.88).

Distress

Four items were used to index the extent to which participants were feeling a variety of emotions indicative of distress immediately after they had described a significant coming out experience (see Breakwell & Jaspal, 2021a). Participants indicated the extent (1=very slightly or not at all to 5=extremely) to which they were at that moment feeling guilty, ashamed, distressed and upset. Ratings of the 4 feelings were summed, and a higher score indicated feeling more distress (α=0.81).

Insert Table 6 here

Statistical analyses

SPSS version 20 and AMOS version 20 were used to conduct the analyses. First, Mann-Whitney analyses with the MonteCarlo method bootstrapped at 10000 samples were conducted to examine the effects of ethnicity (White British vs. ethnic minority) and of relationship status (single vs. partnered) on the proximal stressors of sexuality-related identity threat and internalized homonegativity; on the protective factors of identity resilience and social support; and on the dependent variable of distress. Spearman Rho's correlations were performed to examine associations between the continous variables. Finally, structural equation modeling was conducted. According to Tabachnick and Fidell's (2001) formula for calculating sample size requirements that take into account the number of independent variables: $N > 50 + 8m$ (where m = number of independent variables) indicated that a sample size of 333 was large enough for the number of predictors in the model (four predictors). Mediation analyses using a bias-corrected bootstrap test were conducted as these are powerful even with smaller samples (Fritz & MacKinnon, 2007). The structural equation model was conducted in AMOS, and analyzed the effects of the predictors of ethnicity, relationship status, identity resilience and identity threat, through the mediators of internalized homonegativity and social support, on the variance of distress.

Results

Normality checks

Kolmogorov-Smirnov (K-S) tests were conducted to test the normality of distributions. Results showed that internalized homonegativity $D(333)=3.05$, $p<.001$;

sexuality-related identity threat $D(333)=4.22$ $p<.001$; and distress $D(333)=4.41$, $p<.001$, were all non-normally distributed. Therefore, non-parametric tests were used.

Descriptive statistics

See Table 7 for an overview of the descriptive statistics.

Insert Table 7 here

Ethnicity (White British vs. ethnic minority) differences in levels of social support, internalized homonegativity and distress

Mann Whitney tests with the MonteCarlo Method bootstrapped at 10000 samples were conducted to examine the effects of ethnicity: White ($N=210$) vs. ethnic minority ($N=123$) on the key variables of this study.

Mann-Whitney tests showed that ethnicity had statistically significant effects on internalized homonegativity [$U=10155,500$, $p=.001$] and on distress [$U=10448,000$, $p=.002$] but not on sexuality-related identity threat [$U=11892,500$, $p=.21$]. Results indicated that ethnic minority participants reported greater internalized homonegativity and distress than White participants (see Table 8).

Mann-Whitney tests also showed that ethnicity had statistically significant effects on social support [$U=10847,500$, $p=.016$] but not on identity resilience [$U=1192,500$, $p=.24$]. Results suggested that White participants reported greater social support than ethnic minority participants. Table 8 shows the means, SDs, effect sizes and 95% CIs for the statistically significant differences between ethnicities. These results fully supported hypothesis 1.

Differences by relationship status (single vs. partnered) in levels of identity resilience, social support and internalized homonegativity

Mann Whitney tests with the MonteCarlo Method bootstrapped at 10000 samples were conducted to examine the effects of relationship status: single ($N=168$) vs. partnered ($N=165$) on the key variables of this study.

Mann-Whitney tests showed that relationship status had statistically significant effects on internalized homonegativity [$U=10962,500$, $p=.001$]; on identity resilience [$U=12103,500$, $p=.045$] and social support [$U=10218,000$, $p<.001$]. Results showed no effect of relationship status on distress [$U=13848,000$, $p=.99$] or sexuality-related identity threat [$U=13188,000$, $p=.43$]. Results thus indicated that single participants reported greater internalized homonegativity and less identity resilience and social support than partnered individuals (see Table 8). These results fully supported hypothesis 2.

Insert Table 8 here

Correlations

Table 9 presents an overview of the correlations between the continuous variables in this study.

Insert Table 9 here

Structural equation model

* Insert Figure 1 here*

A structural equation model with bootstrapped bias corrected 95% Confidence Intervals was conducted to examine the impact of ethnicity (ethnic minority=0 vs. White British= 1); relationship status (single=0 vs. partnered=1); identity resilience and sexuality-related identity threat on the variance of distress through the mediation of social support and internalized homonegativity. The model had a significant Chi-square of 15804, *df*=7, *p*=.027. The goodness of fit indices (Kline, 2005) revealed good model fit: CMIN/ Degrees of Freedom (DF) = 2.258; Comparative Fit Index (CFI) robust = 0.97; Tucker-Lewis Index (TLI) robust = 0.90; Normed Fit Index (NFI) = 0.95; Root Mean Square Error of Approximation (RMSEA) robust = 0.06, so the model was acceptable (see Figure 1).

Results showed being White British was associated with lower distress [*β*=-.11, *SE*=.26, *Boot95%CI* -1.121, -0.089, *p*=.024]. Identity threat was positively associated with distress [*β*=.28, *SE*=.04, *Boot95%CI* 0.144, 0.306, *p*<.001] and identity resilience was negatively associated with distress [*β*=-.12, *SE*=.02, *Boot95%CI* -0.066, -0.057, *p*=.018]. These results supported hypothesis 3.

There were statistically significant mediator pathways between ethnicity -> internalized homonegativity -> distress [*β*=-.038, *SE*=.08, *Boot95%CI* -0.372, -0.057, *p*=.012] and between ethnicity -> internalized homonegativity -> distress [*β*=-.019, *SE*=.06, *Boot95%CI* -0.218, -9.705, *p*=.049]. Being ethnic minority was positively associated with internalized homonegativity [*β*=-.16, *SE*=.69, *Boot95%CI* -3.621, -0.902, *p*=.001] but negatively associated with social support [*β*=.11, *SE*=.80, *Boot95%CI* 0.535, 3.674, *p*=.030]. Then, internalized homonegativity, as a mediator, was negatively associated with social support [*β*=-.14, *SE*=.06, *Boot95%CI* -0.055, -0.135, *p*=.009] but positively associated with distress [*β*=.23, *SE*=.02, *Boot95%CI* 0.055, 0.135, *p*<.001]. Social support, as a mediator, was negatively associated with distress [*β*=-.13, *SE*=.02, *Boot95%CI* -0.098, -0.027, *p*=.009]. These results fully supported hypothesis 3a.

There were also statistically significant mediator pathways between relationship status-> internalized homonegativity -> distress [*β*=.030, *SE*=.07 *Boot95%CI* 0.185, 0.301, *p*=.027] and between relationship status-> social support -> distress [*β*=-.030, *SE*=.07, *Boot95%CI* 0.028, 0.290, *p*=.018]. Being single was positively associated with internalized homonegativity [*β*=-.13, *SE*=.67, *Boot95%CI* 0.371, 2.993, *p*=.011] which in turn was positively associated with distress but negatively associated with social support. Being in a relationship was positively associated with social support [*β*=.19, *SE*=.77, *Boot95%CI* 4.609, 1.583, *p*<.001] and then social support was negatively associated with distress. These results fully supported hypothesis 3b.

There were statistically significant mediator pathways between identity resilience -> internalized homonegativity -> distress [*β*=-.048, *SE*=.005, *Boot95%CI*- 0.024, -0.005, *p*=.002] and between identity resilience -> social support -> distress [*β*=-.048, *SE*=.006, *Boot95%CI*- 0.026, -0.004, *p*=.007]. Identity resilience was negatively associated with internalized homonegativity [*β*=-.20, *SE*=.04, *Boot95%CI* -0.229, -0.079, *p*<.001] but positively associated with social support [*β*=.30, *SE*=.04, *Boot95%CI* 0.198, 0.732, *p*<.001]. Both internalized homonegativity and social support then impacted on the variance of distress. These results fully supported hypothesis 3c.

Finally, there were statistically significant mediator pathways between identity threat -> internalized homonegativity -> distress [β=.076, *SE*=.016, *Boot95%CI* 0.030, 0.096, p<.001] and between identity threat -> social support-> distress [β=.022, *SE*=.009, *Boot95%CI* 0.002, 0.036, p<.001]. Identity threat was positively associated with internalized homonegativity [β=.32, *SE*=.10, *Boot95%CI* 0.459, 0.867, p<.001] and negatively associated with social support [β=-.10, *SE*=.13, *Boot95%CI* -0.592, -0.121, p=.047] which in turn impacted on the variance of distress. These results fully supported hypothesis 3d.

DISCUSSION

In this article, we focus on three distinct mental health outcome variables: depression, anxiety, and distress. Previous research shows these negative outcomes to be prevalent among LGB people due principally to minority stress processes and limited access to effective coping (Wilson & Cariola, 2020; Yarns et al., 2016). Some of the potential risk and protective factors are examined in order to generate evidence about how poor mental health can be prevented among LGB people.

The multiple regression analyses in Study 1, based on a sample of 156 LGB people, showed that the distal stressor of victimization, but not discrimination or rejection, and the proximal stressor of sexuality-related identity threat were both associated with increased anxiety. Furthermore, identity resilience, degree of outness and social support all appeared to be protective against anxiety. In contrast, only the distal stressor of rejection was associated with increased depression while only identity resilience and social support appeared to be protective against depression.

The structural equation model in Study 2, based on a sample of 333 gay men, showed that identity threat and ethnic minority status were positively associated with distress, while identity resilience appeared to be protective against distress. Moreover, the relationships between being an ethnic minority, being partnered, identity resilience and identity threat and distress were mediated by social support and internalized homonegativity, with single and ethnic minority LGB people reporting limited access to social support and a greater risk of internalized homonegativity.

All in all, the two studies shed light on the distinct psychological consequences of exposure to specific distal and proximal stressors known to be prevalent among LGB people as well as some of the factors that may buffer these effects. Crucially, two socio-demographic characteristics appear to accentuate the risk of poor mental health in LGB people, namely relationship status (i.e., being single) and ethnicity (i.e., being from an ethnic minority background).

Risk factors

Contrary to our hypotheses, the studies showed that distinct distal stressors are associated with anxiety and depression. Victimization was positively associated with anxiety while rejection was positively associated with depression. When controlling for victimization and rejection, discrimination was not significantly associated with depression or anxiety.

Victimization refers to a continuum of negative reactions to one's sexuality, ranging from verbal harassment to physical violence (Garnets et al., 2003). As anxiety consists of excessive worrying about the possible negative outcomes of a potentially threatening situation (DSM- 5, American Psychological Association- APA, 2013), it is understandable that previous experiences of victimization (which are harmful to the individual specifically) should be associated with anxiety symptoms. LGB people may come to feel excessively concerned about the possibility of encountering further harm

as a result of their previous experiences of victimization. They may develop feelings of hypervigilance and increased worry, thus anticipating negative reactions even in response to innocuous events (see Jolley & Jaspal, 2020).

Conversely, depression entails intense feelings of sadness, hopelessness and a sense of personal defeat (Gilbert & Allan, 1998). In contrast to anxiety, depression is not characterized by the "flight or flee" response which is induced by sympathetic nervous system activation (e.g. excessive sweating, panic, heart palpitations, etc.) in anticipation of internal or external threats (e.g., social threats such as victimization by others) (Schmidt et al., 2008), but by thoughts of hopelessness, helplessness and feeling trapped in an unavoidable nefarious situation. Therefore, depression, in contrast to anxiety, is characterized mostly by absence of activity, and as such, by giving up fighting or fleeing a threatening situation and by associated feelings of self-defeat (Gilbert & Allan, 1998).

Since rejection from significant others can occur early on and can create traumatic memories that induce shame, guilt and hopelessness (Negele et al., 2015), this may be associated with the onset of depression in LGB individuals. Essentially, rejection from significant others is extremely painful and can have long-lasting effects on the rejected individual's emotions, cognitions, and relationships (Negele et al., 2015). Humans have a fundamental need to belong – therefore, when one is excluded and rejected by significant others, one may feel unaccepted and lack feelings of belonging. LGB individuals may feel that rejection from significant others due to their sexuality constitutes an enduring non-avoidable social threat, whereas victimization may be more of a sporadic social threat that can be avoided and fought against (Marston, Hare & Allen, 2010). Therefore, rejection by significant others, as a perceived non-avoidable, enduring social threat, may lead LGB individuals to feel defeated and trapped in non-loving and rejecting families, thus predisposing them to feelings of hopelessness and helplessness. This can pave the way to depression.

Other studies have shown discrimination to be associated with both anxiety and depression (Alvarez-Galvez & Rojas-Garcia, 2019; Sosoo, Bernard & Neblett, 2019). The finding that this was no longer associated with depression and anxiety may be explained by the relative significance of rejection and victimization, respectively, for poor mental health. Rejection and victimization are arguably more "personalized" distal stressors, which induce actual harm (either through harassment from other individuals or exclusion from valued groups) and may therefore be construed as relatively more harmful for mental health.

Similarly, the proximal stressor of sexuality-related identity threat was associated with anxiety but not with depression. Identity threat, that is, the perception that one's identity is characterized by less self-esteem, self-efficacy, continuity and positive distinctiveness, has the potential to destabilize the identity structure (Breakwell, 2015). When identity threat arises on the basis of an intrinsic aspect of one's identity, such as one's sexual orientation, this may cause the individual to become anxious and question the evaluation they place on their own identity. This may explain the positive relationship between sexuality-related identity threat and anxiety. Similarly, in Study 2, sexuality-related identity threat (this time, in relation to a significant coming out experience) had a direct positive association with distress and an indirect association through internalized homonegativity. This suggests that sexuality-related identity threat is associated with negative affect, manifested in distress and anxiety, and that it is also associated with the development of a negative identity evaluation manifested in internalized homonegativity (see Maatouk & Jaspal, 2022).

Protective factors

Both identity resilience and social support were inversely associated with depression, anxiety and distress, providing evidence that these variables are likely to be operating protectively. This finding – across three distinct mental health outcomes – is consistent with existing evidence that identity resilience appears to support mental health and to facilitate access to effective and adaptive strategies for coping with psychological adversity (Breakwell, 2021; Jaspal et al., 2022). Crucially, it is not the case that LGB people who report higher identity resilience do not face adversity but rather that they may be better equipped psychologically to cope with such adversity before it can culminate in poor mental health. Similarly, our studies provide further evidence that access to social support is inversely associated with depression, anxiety and distress (McConnell et al., 2005). We did not use a measure of sexuality- or LGB-specific social support but rather one of general interpersonal support during times of need. Having such support to hand during difficult times appears to be protective against poor mental health among LGB people. It would be beneficial to support individuals to build feelings of identity resilience and to develop social support networks.

IPT notes that, although the derivation of social support is an effective and sustainable coping strategy, accessing it can be challenging as the individual risks rejection, involuntary disclosure of their predicament and other negative reactions from those expected to be supportive (Breakwell, 2015). The second study sheds light on the significance of identity resilience as a potential precursor to accessing social support. Indeed, Jaspal et al. (2022) also found that having a more resilient identity was associated with the ability and confidence to seek social support during times of need. Conversely, the negative self-schema of internalized homonegativity may preclude the derivation of social support since individuals may not believe themselves worthy of support and may feel unable to self-disclose and exchange confidences with others due to their own deep-rooted shame in relation to their sexuality (see Maatouk & Jaspal, 2022).

Finally, degree of outness about one's sexuality was found to be associated with anxiety but not depression in Study 1. LGB individuals who have already come out may feel less concerned and less worried about other people's reactions, decreasing the risk of anxiety. This may of course enable people to acquire social support thereby alleviating anxious symptoms (Sommantico, De Rosa & Parrello, 2018) andfacilitating a sense of identity authenticity (Ragins, 2004). Conversely, LGB people who have not come out yet may feel constantly worried about what others will think and anticipate social threats from coming out in the future, thereby increasing hypervigilance for social threats and inducing anxiety. Degree of outness may be a protective factor against anxiety, since the mental health outcome constitutes an active response to anticipation of social threat. However, it may not be sufficient to protect against depression.

Who is most at risk?

Having identified some of the prime risk and protective factors for poor mental health among LGB people in Study 1, we conducted a second study of gay men that also included two socio-demographic characteristics, namely relationship status and ethnicity, as predictors of distress. Consistent with our hypotheses, the results showed that ethnic minority gay men reported greater internalized homonegativity and greater distress than White British gay men. They conversely reported lower access to social support than White British people. Much research (see Jaspal, 2020) has shown that,

due to multi-faceted minority stress on the basis of both sexuality and ethnicity, ethnic minority LGB people may experience higher levels of exposure to distal stressors (e.g., discrimination), a higher likelihood of developing proximal stressors (e.g., internalizing the homonegativity that they encounter), lower perception that they can rely on others for social support and, thus, a higher risk of poor mental health.

The results of Study 2 indicated that single people reported greater internalized homonegativity and lower access to social support than those who were partnered, that is, in any type of romantic relationship. Due to the absence of existing evidence, we did not predict a direct effect of relationship status on distress but, through decreased social support and increased internalized homonegativity, single people did indeed appear to be at risk of distress. The preliminary finding will need to be explored in greater detail. Gay men who are in a relationship appear to be better positioned to access social support, presumably from their significant other but also from the additional social networks that being in a relationship can provide. Furthermore, they report less internalized homonegativity than those who are single perhaps because their relationship can serve to validate their identity and, through their relationship, they may be exposed to more positive images of their sexuality (Whitton et al., 2018). Yet, it must also be acknowledged that LGB people with higher internalized homonegativity are in turn less likely to seek a same-sex romantic relationship and, if they do, the relationship is at risk of breakdown (Frost & Meyer, 2009; Jaspal, 2015). Future research will need to establish the direction of the relationship between relationship status and internalized homonegativity. Relationship satisfaction will be key (Randall & Bodenmann, 2017).

Yet, our research suggests that gay men in the UK with an ethnic minority background and those who are single appear to be at higher risk of poor mental health than those who are White British and partnered, respectively.

Limitations

This study has several limitations which should be addressed in future research. First, future research should consider additional distal and proximal stressors (e.g., subtle microaggressions and, in the case of ethnic minorities, racism). Second, the category "ethnic minority" was used in this study due to relatively small numbers of each ethnic minority group which precluded analyses by specific ethnic group. Although there was an effect of the dichotomous categorical variable of ethnicity (White British vs. ethnic minority), future research should examine differences between specific ethnic minority groups, such as British South Asians and Black Caribbeans, to identify those groups at highest risk of poor mental health and how to intervene effectively. Third, future research should examine specific relationship types (e.g., married, cohabiting, being in a non-monogamous relationship) as well as relationship quality. Fourth, the conclusions drawn in this article are based on cross-sectional survey data which do not enable us to ascertain causation. The results should be triangulated using experimental and longitudinal research designs. Fourth, although we did not examine sex or gender differences in our models as this was not the focus of our studies, this would be beneficial for future research. Fifth, unlike Study 1, the sample of Study 2 included only gay men. Future research also should focus on other sexual minority groups, such as lesbian women and bisexual people. Finally, although the measures of depression, anxiety and distress are well-established and have good reliability, there is merit in using other measures, which are not reliant on self-report data (e.g., psychophysiological measures), to validate this research.

Conclusions

These studies attempt to bridge minority stress theory and IPT and, in doing so, highlight the psychological risks associated with sexuality-related identity threat and the psychological opportunities offered by developing a resilient identity in the face of adversity. IPT can shed light on the mechanisms through which particular minority stressors precipitate poor mental health and how their operation can be curtailed. More specifically, the studies show that particular distal stressors are associated with distinct mental health outcomes and that the common proximal stressor of sexuality-related identity threat is associated with anxiety and distress but not depression. Across both studies and all three indicators of mental health, the factors of identity resilience and social support appear to be protective. Crucially, the results suggest that people of ethnic minority background and those who report being single appear to be at higher risk of poor mental health, especially due to their limited access to social support and higher internalized homonegativity. Incidentally, higher internalized homonegativity was associated with lower social support.

It is recommended that psychotherapists acknowledge that experiences of victimization may increase the risk of anxiety and distress while those of rejection may accentuate the risk of depression in LGB clients. Acknowledging this may enable psychotherapists to accurately assess the risk of specific psychological disorders and to explore targeted treatment options for clients reporting exposure to particular stressors during consultations. The significance of sexuality-related identity threat in relation to poor mental health is evident in both studies and therefore assisting clients to retain adequate levels of the identity principles in the face of minority stressors would be valuable.

The clear protective role performed by both identity resilience and social support and, in the case of anxiety only, degree of outness, has important implications for psychotherapeutic practice. Psychotherapists may work with clients to build feelings of identity resilience perhaps by focusing their attention on events, experiences and behaviors that bolster feelings of self-esteem, self-efficacy, continuity and positive distinctiveness. Identity resilience is not an end in itself but it is one route to greater efficacy in coping with stressors. Psychotherapists may also find it useful to support clients to develop access to robust social support through engagement with social networks tailored to particular subgroups of LGB people. Psychotherapists may develop with patients manifesting anxiety, in particular, a roadmap for coming out in ways that are deemed to be safe, beneficial and conducive to affirmative responses. Yet, these individual psychotherapeutic interventions can be successful only if we continue to challenge homonegativity in society which, as Meyer (2015) shows, underpins, sustains, and feeds all the minority stressors examined in this article.

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Competing interests

The Authors have no competing interests to declare.

Ethics approval

These studies received ethics approval from Nottingham Trent University's Schools of Business, Law and Social Sciences Ethics Committee.

Consent

Participants received a detailed participant information sheet, an online consent form and a full debrief after completing the study. They provided consent to participate and for the results to be published.

Data

The data are available on Brighton Research Data, the University of Brighton's data repository, at the following link: https://researchdata.brighton.ac.uk/id/eprint/293

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Table 1: Sample socio-demographic statistics of Study 1

Demographic variable		**Frequency (*N*)**	**Percentage (%)**
Sex	Male	62	31.6%
	Female	130	66.3%
	Other	4	2%
Gender	Male	43	28%
	Female	75	48%
	Non-binary/Third gender	29	19%
	Other	8	5%
	Prefer not to say	1	0.1%
Ethnicity	White/White British	125	82%
	Asian/Asian British	11	7.2%
	Black/African/Caribbean	4	3%
	Mixed/Multiple	8	5.2%
	Other/Prefer to self-identify	5	3.3%
Sexual orientation	Lesbian	30	19.2%
	Gay	30	19.2%
	Bisexual	67	43%
	Other	27	17.3%
	Prefer not to say	2	1.3%

Table 2. Descriptive statistics for the key variables of Study 1

	M	*SD*	*Minimum*	*Maximum*
Identity resilience	51.53	8.88	26	79
Social support	35.91	7.86	13	48
Degree of outness to the world	13.85	7.39	2	28
Rejection	9.24	4.24	4	20
Discrimination	5.55	2.52	3	15
Victimization	5.73	2.75	3	13
Sexuality-related identity threat	9.03	3.99	3	20
Depression	19.52	6.66	8	33
Anxiety	13.50	4.03	6	23

Table 3. Correlations between the key variables of Study 1

	1	2	3	4	5	6	7	8	9
1. Identity resilience									
2. Social support	.39**								
3. Degree of outness to the world	.32**	.44**							
4. Rejection	-.27**	-.26**	-.31**						
5. Discrimination	-.04	-.09	.08	.41**					
6. Victimization	-.17*	-.12	.13	.62**	.58**				
7. Sexuality-related identity threat	-.27**	-.24**	-.24**	.43**	.37**	.31**			
8. Depression	-.42**	-.38**	-.30**	.34**	.21*	.25**	29**		
9. Anxiety	-.43**	-.48**	-.43**	.42**	.27**	.31**	.45**	.53**	

*p<.050
**p<.005

Table 4. Multiple stepwise regression with rejection, discrimination and victimization, sexuality-related identity threat, identity resilience, social support and outness to the world as predictors of the variance of anxiety

		R^2	*F*	*p*	*β*	*t*	*p*	*Bootstrapped 95% CI*
Model 1		.20	17.67	.000				
Rejection					.32	3.58	.000	.180, .434
Victimization					.18	2.02	.045	.251, .535
Model 2		.30	20.26	.000				
Rejection					.20	2.31	.023	.042, .322
Victimization					.13	1.57	.12	.127, .458
Sexuality-related	*identity*				.35	4.53	.000	.196, .498
threat								
Model 3		.39	21.91	.000				
Rejection					.14	1.71	.090	-.003, .255
Victimization					.13	1.65	.10	.121, .463
Sexuality-related	*identity*				.29	3.87	.000	.143, .438
threat								
Identity resilience					-.31	-4.37	.000	-.201, -.080
Model 4		.45	22.66	.000				
Rejection					.09	1.05	.30	-.055, .206
Victimization					.15	1.99	.049	.129, .490
Sexuality-related	*identity*				.26	3.59	.000	.127, .404
threat								
Identity resilience					-.21	-2.89	.004	-.161, -.015
Social support					-.29	-4.02	.000	-.225, -.085
Model 5		.49	22.07	.000				
Rejection					-.008	-.097	.92	-.164, .117
Victimization					.26	3.24	.002	.268, .668
Sexuality-related	*identity*				.23	3.38	.001	.104, .383
threat								
Identity resilience					-.16	-2.19	.030	-.135, .004

Social support					-.22	-2.89	.003	-.183, -.043
Degree of outness to the world					-.26	-3.31	.001	-.210, -.088

Table 5. Multiple stepwise regression with rejection, discrimination and victimization, sexuality-related identity threat, identity resilience, social support and outness to the world as predictors of the variance of depression

		R^2	*F*	*p*	*β*	*t*	*p*	*Bootstrapped 95% CI*
Model 1		.15	26.31	.000				
Rejection					.39	5.13	.000	.392, .834
Model 2		.18	15.66	.000				
Rejection					.32	3.86	.000	.203, .706
Sexuality-related identity threat					.17	2.09	.038	.263, .581
Model 3		.29	19.31	.000				
Rejection					.25	3.18	.002	.112, .604
Sexuality-related identity threat					.10	1.27	.21	.082, .445
Identity resilience					-.35	-4.69	.000	-.389, -.145
Model 4		.32	16.57	.000				
Rejection					.22	2.77	.006	.052, .519
Sexuality-related identity threat					.08	1.02	.31	.027, .388
Identity resilience					-.28	-3.60	.000	-.333, -.064
Social support					-.20	-2.50	.014	-.293, -.129

Table 6. Socio-demographic characteristics of the sample of Study 2

Demographic variable		**Frequency (*N*)**	**Percentage (%)**
Religion	No Religion	248	74.5%
	Christianity	59	7.7%
	Judaism	7	2.1%
	Hinduism	2	0.6%
	Islam	7	2.1%
	Sikhism	1	0.3%
	Other	9	2.7%
Ethnicity	White British	210	63.1%
	South Asian	52	15.6%
	Black African	6	1.8%
	Black Caribbean	8	2.4%
	Mixed (White/Black)	26	7.8%
	Mixed (White/Asian)	22	6.6%
	Mixed Other	1	0.4%
	White Other	8	2.4%

Table 7. Descriptive statistics for the key variables of Study 2

	M	*SD*	*Minimum*	*Maximum*
Identity resilience	52.89	8.79	20	74
Internalized homonegativity	15.56	6.80	9	41
Sexuality-related identity threat	6.63	3.22	4	19
Distress	5.95	2.68	4	15
Social support	36.23	7.84	12	48
Categorical Variables				
Ethnicity	*White*	*Ethnic minority*		
	210 (63.1%)	123 (36.9%)		
Relationship status	*Single*	*Partnered*		
	168 (50.5%)	165 (49.5%)		

Table 8. Means, SDs, effect sizes and 95% CI for the differences between White and ethnic minority participants and between single and partnered participants

	White British *N*=210		**Ethnic minority *N*=123**		**Common Language Effect Sizes**	**95% CI**
	M	*SD*	*M*	*SD*		
Internalized homonegativity	14.64	6.25	17.13	7.41	0.61	0.153, 0.602
Distress	5.59	2.39	6.56	3.04	0.60	0.149, 0.598
Social support	37.01	7.65	36.32	8.02	0.53	-0.311, 0.134
	Single *N*=168		**Partnered *N*=165**			
	M	*SD*	*M*	*SD*		
Identity resilience	52.10	8.39	53.69	9.13	0.55	-0.034, 0.397
Social support	34.36	8.31	38.13	6.86	0.64	0.276, 0.712
Internalized homonegativity	16.65	7.12	14.45	6.29	0.59	-0.544, -0.111

Table 9. Correlations for the key variables of Study 2

	1	2	3	4	5
1. Identity resilience					
2. Social support	.37**				
3. Internalized homonegativity	-.22**	-.32**			
4. Sexuality-related identity threat	-.14*	-.21**	.32**		
5. Distress	-.24**	-.31**	.35**	.35**	

*p<.050
**p<.005

Figure 1. Structural equation model with ethnicity, relationship status, identity resilience and sexuality-related identity threat as predictors of the variance of distress through the mediators of social support and internalized homonegativity