The Impact of Internalised Homophobia and Coping Strategies on Psychological Distress Following the Experience of Sexual Prejudice

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Michael Cornish
Student Number: 09212277

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1. Abstract

It is widely accepted that the LGB (Lesbian, gay and bisexual) population have a higher risk of psychological distress compared to their heterosexual counterparts. Meyer (2003) proposed the minority stress model to explain this increased prevalence. This model proposed that the LGB population are subjected to additional stressors due to their minority status which results in the increased psychological distress observed. The purpose of this study was to investigate some of the risk factors proposed by this model, specifically experiences of sexual prejudice, negative internalised beliefs about homosexuality/bisexuality, coping strategies and how these factors interact to influence the development of psychological distress. This study included 542 LGB individuals who completed measures of sexual prejudice, internalised homophobia, coping strategies and current levels of psychological distress using an online survey.

The study found a high prevalence of sexual prejudice within the sample, with 84% of the sample reporting at least one experience of sexual prejudice. 67% reported being verbally abused and 17% reported being physically assaulted. A high number of participants scored above the cut-off for a diagnosis of depression (27%) and anxiety (19%). Regression and path analysis revealed that maladaptive coping had the strongest effect on psychological distress. Sexual prejudice and internalised homophobia, also both had a significant direct impact upon psychological distress, and they were also partially mediated by maladaptive coping. Problem-focused coping was found to be a protective factor with a direct, albeit weak, effect on psychological distress. Problem-focused coping also partially mediated the relationship between sexual prejudice and psychological distress, slightly reducing the negative impact of sexual prejudice. The results suggest that maladaptive coping was the greatest risk factor, out of the ones measured, in the development of psychological distress in the LGB population. The outcomes suggest that clinical psychologists may wish to target their interventions at the development of more adaptive coping strategies, and the reduction of internalised homophobia. They should consider ways to reduce experiences of sexual prejudice by working at a community level to reduce the stigma of homosexuality/bisexuality.

2. Introduction

Sexual orientation refers to the degree of sexual attraction to either men or women. Heterosexuality refers to sexual attraction to members of the opposite sex, homosexuality refers to sexual attraction to members of the same-sex, and bisexuality refers to sexual attraction to both sexes. The causes of same-sex attraction are not entirely understood. One argument is that homosexuality is caused by psychosocial factors. Freud's theory of psychosexual development explains homosexuality as a failure to resolve the Oedipus complex following an absent or hostile father, or an over-protective mother (Wilson & Rahman, 2005). However due to the vagueness and unfalsifiability of this explanation it has largely been discounted. Other theories stem from social learning theory, which states that homosexuality is learnt by the individual. This can be either through seduction from an older homosexual, through being raised by homosexual parents, or being alienated by same-sex peers at a young age. However there is no evidence to support these theories (Wilson & Rahman, 2005). More recent biological theories of homosexuality emphases the role of genetics. Twin studies have found higher concordance rates of homosexuality in monozygotic twins than dizygotic twins (Bailey & Pillard, 1991). Studies exploring the prevalence of homosexuality in families have found that gay males were more likely to have more homosexual relatives on the maternal side of their family, suggesting the potential for a 'gay gene' on the X chromosome (Hamer et al, 1993). However this finding has not been replicated (Bailey et al, 1999). It is generally agreed that genes play some part on the development of sexual orientation, however their contribution is thought to explain less than half of the variance (Wilson & Rahman, 2005), suggesting that perhaps environmental factors still make some contribution.

The prevalence rates of homosexuality and bisexuality are not easy to establish as not all individuals will openly admit their sexual orientation, so most prevalence rates are likely to be an underrepresentation of the true figure. A British survey conducted in 2000 found that 2.6% of men and 2.6% of women reported having homosexual partners in the past 5 years (Johnson et al, 2001). However there may be more homosexual individuals that have not had a partner of the same sex in the past five years that would be overlooked by this statistic. On top of this sexual orientation is not as clear cut as stated above. There are questions as to whether sexual orientation is categorical, for example you are either homosexual or heterosexual, or on some dimensional scale, so that an individual can be exclusively heterosexual or homosexual, or have some degree of bisexuality. Studies exploring this issue have found that male sexual orientation tends to have a bimodal distribution, with most being either exclusively homosexual or exclusively heterosexual with very few being bisexual. However for women the same bimodality exists by to a lesser extent, with higher

rates of bisexuality emerging (Wilson & Rahman, 2005). Homosexuality appears to be consistent across time and culture (Wilson & Rahman, 2005).

Social tolerance for homosexuality was evidenced in ancient Greece and Rome. However, sexual prejudice began to rise as the state of Rome was falling, and through the Middle Ages the dominance of the church lead to homosexuality being viewed as unnatural (Ritter & Terndrup, 2002). This view persisted well into the 20th century. In terms of UK law, homosexuality was illegal until the passage of the Sexual Offences Act 1967. However, despite progress, this new act still had greater restrictions placed on homosexual individuals than for heterosexual individuals until the Sexual Offences Act 2003 was passed equalising the age of consent. Not all countries have the same laws protecting Lesbian, Gay, Bisexual and Transgendered (LGBT) individuals. In some parts of the world homosexuality is still illegal, with some countries still advocating the death penalty for this 'crime' (Ottosson, 2010). It was not until July 2011 when the United Nations backed the rights of LGBT individuals for the first time, and passed a gay rights resolution that called for no discrimination and violence on people regardless of their sexual orientation or gender identity.

Homosexuality was first officially classified as a mental illness in 1952 with its inclusion in the Diagnostic and Statistical Manual of Mental Disorders (DSM; American Psychiatric Association [APA], 1952) as a sociopathic personality disturbance. In the 2nd edition of the DSM, homosexuality was listed as one of the sexual deviations (APA, 1968). At this period various psychologists were beginning to report that there was no difference in psychopathology between heterosexual and homosexual individuals (Ritter & Terndrup, 2002) and the famous work by Alfred Kinsey (1948) indicated that heterosexual and homosexual males were not two discrete populations. These findings along with pressure from gay activists, led to the diagnosis of homosexuality to be removed from the DSM in 1973 (Kutchins & Kirk, 1999). However it included sexual orientation disturbance, which was later replaced by ego-dystonic homosexuality in DSM-III (APA, 1980) which implied that only individuals uncomfortable with their homosexuality had a mental disorder. This diagnosis was removed from the DSM-III-R in 1987 (APA, 1987). The World Health Organisation (WHO) did not remove homosexuality from the International Classification of Diseases (ICD-10) until 1992.

With homosexuality no longer being classified as a mental illness or illegal (at least in the western world), LGBT individuals have seen some progress towards equality. Despite this, throughout the world discrimination against LGBT individuals is still common, and this discrimination unsurprisingly has an impact upon the psychological wellbeing of LGBT individuals.

2.1. Homosexuality and mental health

Prior to its declassification in the DSM, research into homosexuality sought to pathologise Lesbian, Gay and Bisexual (LGB) individuals to justify the position that homosexuality was a mental disorder. Since its declassification, researchers have sought to demonstrate that LGB individuals are no different from their heterosexual counterparts. Researchers argued that the previous studies had flawed methodologies such as using biased samples and generalising findings onto all homosexuals (Meyer, 2003). Some studies subsequently found, using non clinical populations, that generally there was little difference in terms of adjustment and psychological wellbeing between LGB individuals and their heterosexual counterparts (Gonsiorek, 1991).

Recent research into the prevalence of psychological disorders has in fact found that LGB individuals are more likely to develop mental health problems than heterosexual individuals. Cochran, Sullivan and Mays (2003) compared heterosexual individuals to LGB individuals in a randomly selected sample. Using a structured diagnostic interview they found that approximately 30% of LGB participants fulfilled diagnostic criteria for major depression compared to 10-15% of heterosexual participants. Fifteen percent of lesbian participants fulfilled criteria for generalised anxiety disorder compared to 4% of heterosexual women. Approximately 17% of LGB participants fulfilled criteria for panic disorder compared to 4-9% of heterosexual participants and approximately 10% of LGB participants were alcohol dependent compared to approximately 5% of heterosexual participants. More recently, Stonewall (2011) found in their study of over 6000 gay and bisexual men that 13% currently had moderate to severe levels of anxiety and depression, 7% had deliberately harmed themselves in the past year, with this figure rising to 15% for individuals between the ages of 16-24 years. Stonewall's (2008) study of over 6000 lesbian and bisexual women found that 20% had deliberately harmed themselves in the past year, with this rising to about 50% for individuals under the age of 20 years.

Meyer (2003) conducted a meta-analysis of nine studies comparing the prevalence of mood disorders, anxiety disorders and substance dependency in LGB and heterosexual populations. The results of this meta-analysis indicate that LGB individuals are two and a half times more likely to have mental health difficulties at some point during their lives compared to heterosexual individuals. While he comments that these results should be interpreted with caution due to the small sample of studies and inconsistent measures and methodologies, it would suggest a trend for higher prevalence of mental health difficulties in the LGB population. A more recent meta-analysis of 25 studies found that LGB individuals are one and a half times more likely to have depression, anxiety

disorders and substance dependency over a 12 month period, and twice as likely to attempt suicide over their lifetime (King et al, 2008). However, again they reported significant heterogeneity in the studies, and only one of these met all four of their desired quality criteria. Despite this, the consistency found across the studies lends support to the conclusion that mental health is poorer in LGB individuals.

While today the increased prevalence of psychological difficulties in the LGB population is recognised, it is generally agreed that homosexuality/bisexuality is not the cause of psychological distress in itself. Researchers have therefore attempted to find the factors that explain the increased risk found in this population. Understanding the factors that contribute to this risk can help health professionals and policy makers develop services to help reduce the risk of negative mental health outcomes in this population. Researchers have proposed some factors that contribute to the increased risk of psychological distress within the LGB population. The most widely researched of these is the experience of discrimination or sexual prejudice. Other factors that have been used to explain why LGB individuals have higher prevalence of mental health difficulties include the concept of internalised homophobia (societal homophobia that has been internalised, see Section 2.4), and how the individual copes with prejudice (Meyer, 1995, 2003; Syzmanski & Owens, 2008).

2.2. Minority stress

Meyer (2003) proposed the minority stress model to explain how various factors may interact to explain the higher levels of psychological distress in the LGB population. This model proposes that the increased psychological distress in the LGB population is caused by the stigmatising social context in which they live (Meyer, 2003). This stigmatisation leads to frequent experiences of victimisation and prejudice which becomes a chronic stressor, in addition to the general life stressors that everybody faces. This chronic stress from being part of a sexual minority has been referred to as minority stress (Meyer, 1995). Minority stress in this context consists of five factors; experience of discrimination, anticipation of rejection, hiding and concealing sexual identity, internalised homophobia and coping strategies (Meyer, 2003).

Previous research has made the link between circumstances in the environment leading to general stressors (such as bereavement) that can lead to mental health outcomes (Dohrenwend, 2000). These can be either negative outcomes such as depression or positive outcomes such as personal growth. An individual's minority status would interact with other circumstances in their environment (hence the overlap in the model between these boxes in Figure 1). This adds additional stressors to

an individual's life by increasing the risk of discrimination and the threat of abuse, which increases the risk of negative mental health outcomes. An individual's minority status can lead to additional internal minority stress processes. Based on societal and cultural values, an individual may self-denigrate themselves (internalised homophobia), become vigilant and learn to expect rejection, and attempt to conceal their sexual identity. These internal processes again have been associated with negative health outcomes (Meyer, 1995). An individual's coping strategy and use of social support is believed to impact upon the relationship between minority stressors and mental health outcomes. Minority identity is also associated with group solidarity and cohesiveness with the LGB community which may act as a protective factor for psychological distress (Meyer, 2003). This model also explains that the individual's integration or prominence within the LGB community can impact upon the relationship between minority stress and mental health outcomes.

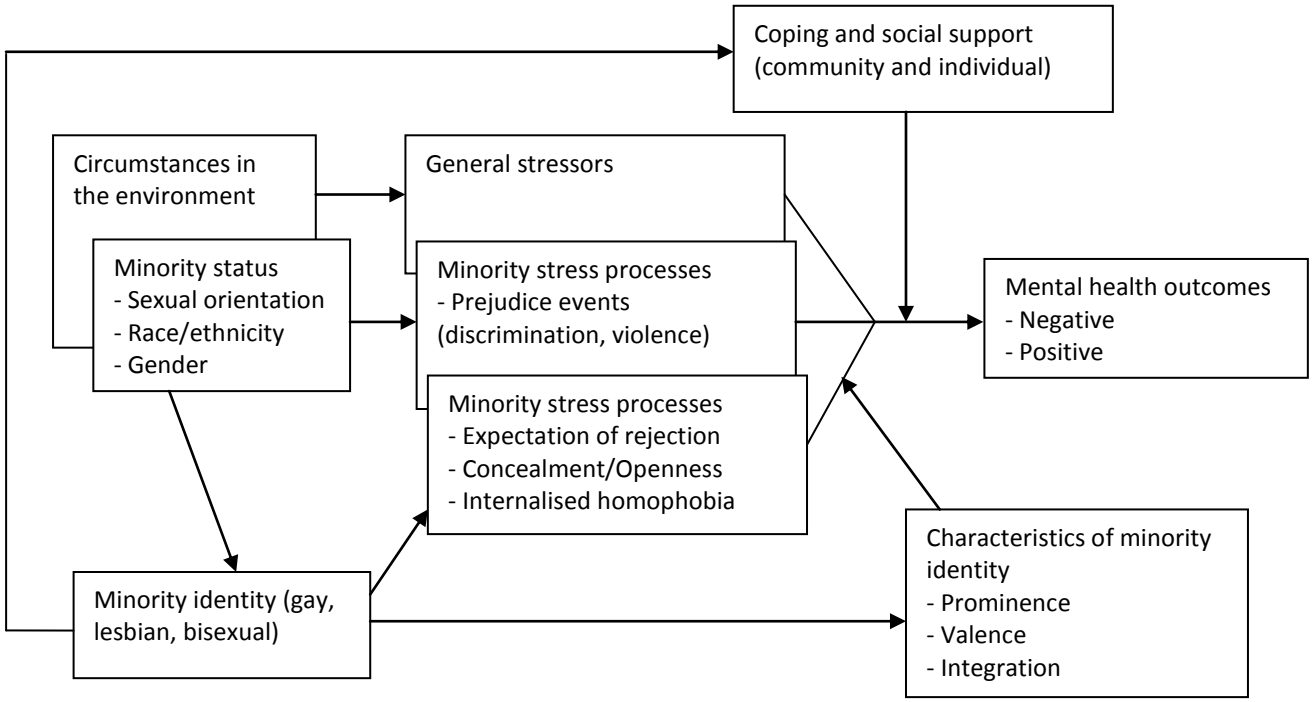

Figure 1. Minority stress model of minority stress processes in LGB populations (Meyer, 2003)

This model would predict that LGB individuals have greater levels of psychological distress than heterosexual individuals because of the additional internal and external stressors that are associated with being a sexual minority. It would further predict that LGB individuals with higher stress levels, for example ones that have experienced greater levels of discrimination/victimisation, or who have higher levels of internalised homophobia would have worse health outcomes than LGB individuals with lower stress levels.

Minority stress theory postulates that being a member of a minority group brings about additional stressors that lead to increased risk of psychological distress. However, if a minority position is stressful then all minority groups should have a higher prevalence of psychological distress than non-minority groups. Mirowsky and Ross (1989) argue that it is economic conditions rather than prejudice and stigmatisation that cause psychological distress among minorities. This would suggest that with higher socio-economic status, minority status would have no negative effect. However, further research has not supported this viewpoint (Meyer, 1995). Studies comparing the rates of psychological disorders between black and white individuals (Warheit, Holzer & Arey, 1975), and between women and men (Schwartz, 1991) have not found such a difference, which casts doubt over the impact of minority status. Some research on black individuals suggests that stigma does not negatively affect self-esteem (Kessler et al, 1994; Twenge & Crocker, 2000) which is inconsistent with the minority stress model. It could be argued that the minority status of LGB individuals is different from that of ethnic minorities who would typically grow up in an environment, with their family, where their minority status would be normalised. While women may experience prejudice, they are less likely to experience being told that their core identity is wrong and immoral. These minority groups are also visible minorities, so do not have to go through the same processes as the LGB population such as 'coming out'[1]. These differences would make the minority experience of the LGB population qualitatively different to other minority groups.

2.3. Sexual prejudice

While today in western society homosexuality is widely accepted, there is still appears to be a significant amount of prejudice towards the LGB community. Sexual prejudice is frequently reported in the LGB literature with studies reporting 66% of LGB individuals experiencing discrimination because of their sexual orientation (Warner et al, 2004). This discrimination can occur from a young age within an individual's family and continues throughout their life, in school, at work and within the community.

2.3.1. Definition of sexual prejudice

Various terms have been suggested to describe the discrimination towards homosexuals, such as '*homophobia'*, '*homonegativity'*, '*heterosexism'* and '*sexual prejudice'*. Obviously there is much overlap between these terms, and throughout the literature these terms are not used consistently

[1] Coming out is a commonly used abbreviation of the term 'coming out of the closet', which refers to the process in which individuals recognise their own homosexuality/bisexuality and disclose this to others. It is a continuous process as with every new person that they meet they will need to 'come out' and disclose their sexual orientation

(Lottes & Grollman, 2010). The most commonly used term to describe this discrimination is 'homophobia'. This term was first coined by Weinberg (1972) and traditionally describes an affective response to LGB individuals, that includes feelings of fear, anxiety, discomfort and any associated behaviours (Lottes & Grollman, 2010). However, as the term phobia implies that a person has an extreme or irrational fear, the term 'homophobia' implies an irrational or extreme fear of homosexuals or homosexuality. Research has demonstrated that individuals who express hostility to LGB individuals do not display the same physiological reactions as individuals with other clinical phobias (Shields & Harriman, 1984). Also a phobia describes a functional and defensive reaction, so the term 'homophobia' does not acknowledge that attitudes towards homosexual individuals can serve other non-defensive functions, such as prejudicial attitudes or cultural values (Shidlo, 1994). The term 'homonegativity' has been suggested as a more useful description as it also encompasses more cognitive elements in the form of negative attitudes towards homosexuality as well as affective and behavioural components (Mayfield, 2001). However, this term focuses on the individual's attitude and ignores cultural and institutional reactions towards homosexuality. Alternatively the term 'heterosexism' has been used to describe the institutional oppression of homosexuals through the ideology that casts heterosexuality as normal and therefore superior to homosexuality (Herek, 2000).

Herek (2000) has suggested the use of the term 'sexual prejudice' as it incorporates all negative attitudes based on sexual orientation and also includes the cultural reactions and the institutional oppression of heterosexism. For the purpose of this paper the term 'sexual prejudice' will be used to describe the experience of prejudice, discrimination and victimisation that LGB individuals encounter because of their sexual identity. This accounts for direct prejudice such as verbal and physical abuse and the subtle forms of heterosexism.

2.3.2.Sexual prejudice in families

Unlike other minorities, who often share their minority status with their family, LGB individuals can experience victimisation within their own families (Hunter, 1992). Balsam, Rothblum and Beauchaine (2005) found that LGB individuals reported more childhood psychological, physical and sexual abuse by their parents or guardian, compared to their heterosexuals siblings. However this link was correlational and not causal. While it may suggest that parents are more abusive to LGB children, it could also suggest that children who have been abused are more likely to grow up to be homosexual/bisexual. Further research has shown that when individuals are open with their sexuality they are at risk of abuse from their own family members, with 41% of gay males reporting

being the victim of intimidation or verbal insults, and with 8% reporting being the victim of physical violence because of their sexuality (Berrill, 1991).

Hillier and Harrison's (2004) study into Australian LGBT youth found that young people were worried that disclosing their sexual preference would bring shame upon their families and feared being rejected by their family and friends. This was particularly prevalent in religious families and in families from ethnic minority backgrounds. This fear is not completely unfounded, as research has found an overrepresentation of LGB youth who are homeless, with estimates ranging from 11-35% (Cochran et al, 2002). Homeless LGB youth are at increased risk of sexual exploitation (Gold, 2005) which would leave them at increased risk of psychological difficulties. One American study has found that negative reactions to a young person 'coming out' are one of the main factors why LGB youth enter the care system (Woronoff et al, 2006). Once the young person has entered the care system the sexual prejudice does not necessarily stop, with a significant number of LGB youth reporting homophobic harassment from foster parents (Juetten & O'Loan, 2007). Even adults experience negative consequences after disclosing their sexuality. DiPlacido's (1998) study found that 18% of lesbian and bisexual women have experienced a disruption to their relationship with their family, within the past year, as a result of their sexual orientation.

2.3.3.Sexual prejudice in schools

In the United Kingdom, approximately 30% of children report being bullied "sometimes" or "more often" (Rivers & Cowie, 2006). Similar rates have been found in the United States of America (Swearer et al, 2008). The prevalence of homophobic bullying[2] of LGB school pupils is much higher, with estimates ranging from 30-58% (River & Cowie, 2006, Maycock et al, 2008). This rises up to 75% for LGB pupils from faith schools (Stonewall, 2007). LGBT youth are three times more likely to be assaulted, and threatened or injured with a weapon and four times more likely to skip school than their heterosexual peers (Swearer at al, 2008). As individuals get older the victimisation continues, with 75% of gay college students reporting receiving verbal abuse and 25% having been threatened with violence (Berrill, 1991).

Even when not necessarily targeted at LGB individuals, homophobic comments are rife in school. Stonewall (2007), an LGB charity group based in the UK, explored homophobic bullying in schools. They found that offensive terms such as 'faggot' and 'dyke' are heard in 80% of schools by teachers.

[2] Homophobic bullying refers to the physical, verbal or psychological abuse directed at an individual because of their actual or their perceived sexuality.

This same study found that 95% of teachers and 97% of pupils hear the terms 'that's so gay' or 'you're so gay' used as a synonym for anything bad. 70% of pupils report hearing these remarks frequently. In this study they also found that less than a quarter of young gay pupils had heard from the school that homophobic bullying was wrong. When this message was communicated, they found homophobic bullying was 60% less likely to occur.

2.3.4.Sexual prejudice at work

The experience of sexual prejudice unfortunately does not end at school. Some early small scale studies suggest that between 25% and 66% of gay employees experience some form of discrimination at work (Croteau, 1996). Sexual prejudice in the workplace can occur in the form of direct prejudice such as telling anti-gay jokes to more subtle indirect prejudice such as making assumptions of heterosexuality. Both direct and indirect forms of prejudice have similar harmful effects in the workplace regardless of the 'outness' of the individual (Waldo, 1999). The experience of sexual prejudice at work has been found to be associated with decreased job satisfaction, increased absenteeism, work withdrawal and stronger intentions to leave employment, as well as high levels of psychological distress, and health complaints (Waldo, 1999).

2.3.5.Sexual prejudice in the community

The most common form of victimisation that LGB individuals experience is verbal harassment and intimidation (Garnet, Herek & Levy, 1990). While most research tends to focus on the more serious criminal acts, such as assault, these debatably less serious, but more common incidents still are reminders to the individual of their minority status and reinforce a perception of inferiority. Garnet, Herek and Levy (1990) argue that verbal abuse can act as a reminder of the ever present threat of violence, and this fear can lead to individuals restricting their day-to-day public behaviours (Berrill, 1990). Research conducted on over 1000 LGB individuals in Ireland has found that up to 80% of LGB individuals have received verbal abuse because of their sexual orientation, 40% have been threatened with violence, and 25% have actually been physical assaulted (Maycock et al, 2008). A similar study in the USA found almost identical results (D'Augelli, 2002) and no was difference found between males and females. In Herek's (2009) study, of over 600 LGB individuals in the United States, 20% had experienced a person or property crime based on their sexual orientation and over 10% had experienced employment or housing discrimination.

The Federal Bureau of Investigation (FBI; 2009) reported that in the USA, 18.5% of all hate crimes were based on sexual-orientation. This was the third most prevalent type of hate crime behind Racial (48.5) and religiously (19.7%) motivated hate crimes. The Association of Chief Police Officers (ACPO, 2009) released figures for the number of hate crimes reported across the UK. Hate crimes motivated by sexual-orientation was the second highest cause of hate crime accounting for 9% of all hate crimes, with race-motivated hate crimes being the most common (83%). However, it is possible that these figures are an underestimate as research suggests that homophobic hate crimes are less likely to be reported to the police (Herek, Cogan & Gillis, 2002; Maycock et al, 2008). Individuals may fear further victimisation after reporting an incident and they may not feel the crimes against them will be taken seriously (Al-Mateen, Lewis & Singh, 1998). LGB individuals may avoid reporting an incident as they may not wish for their sexuality to be revealed if the incident is publicised (Weiss, 1990). Even when a hate crime is reported, institutional prejudice within the justice system, can lead to victims of hate crimes to receive less support than they may need which results in secondary victimisation and the perception of being rejected by the community as well as by the perpetrator of the initial crime (Al-Mateen, Lewis & Singh, 1998).

Levin and McDevitt (1993) reported that gay males are the most frequent victims of thrill motivated hate crimes. The perpetrators of thrill-motivated crimes commit crimes for the sense of 'thrill' associated with it, which can make the victim feel more vulnerable to further attacks. As hate crimes are motivated by an unchangeable part of an individual's identity, the victim may feel that nothing can be done to reduce their vulnerability and develop a sense of hopelessness (McLaughlin, Brilliant & Lang, 1995).

Within the gay community there are also differences between individuals with the amount of prejudice they receive. The risk of violence is greater towards LGB individuals from Black and Minority Ethnic (BME) groups. LGB adolescents are also more frequently victims of violent crime than adults. These findings are probably due to the increased levels of sexual prejudice observed in these communities (Al-Mateen, Lewis & Singh, 1998; Mays, Cochran & Rhue, 1993).

2.3.6.Impact of sexual prejudice on mental health

Studies into stress processes have found that increased stress leads to poorer health outcomes (Dohrenwend, 2000). A large amount of literature has made associations between the prevalence of sexual prejudice and psychological difficulties, which would suggest that the environment of sexual prejudice leads to worse mental health outcomes in LGB individuals.

Because of homophobic bullying over half of LGB pupils report not being able to be themselves at school, and 35% report not feeling safe or accepted at school (Stonewall, 2007). Rivers and Cowie (2006) studied a sample of gay men from the UK and found that homophobic bullying at school is associated with lower school attendance, lower grades and higher rates of psychopathology compared to non-bullied youths. Those who had experienced homophobic bullying, had increased suicidal ideation, with 50% reporting having contemplated suicide and 40% having had engaged in such behaviour at least once. The experience of homophobic bullying can also have long-term negative health consequences. Rivers (2004) found Post-traumatic Stress Disorder (PTSD) symptoms in 17% of adults who had been exposed to prolonged homophobic bullying at school, due to their actual or perceived sexual orientation. Poteat and colleagues (2011) compared heterosexual youth to LGB youth that both had experienced homophobic bullying. They found negative outcomes in both groups, such as reduced sense of school belonging. However the LGB youth had increased risk of suicidality compared to the heterosexual group. This finding lends support to the minority stress model as homophobic bullying feeds into pre-existing internalised homophobia, further denigrating the individual. While still negative, it would not impact upon a heterosexual individual's identity in the same way.

The experience of sexual prejudice at work is associated with negative work attitudes, decreased satisfaction and fewer promotions (Ragins & Cornwell, 2001; Waldo, 1999). Workplace sexual prejudice has also been linked to negative health outcomes and psychological distress in LGB individuals (Smith & Ingram, 2004; Waldo, 1999).

Herek, Gillis and Cogan (1999) found that victims of homophobically motivated hate crimes had a higher prevalence of depression, anxiety, anger and PTSD compared to LGB individuals who were victims of comparable non-homophobically motivated hate crimes. However, they found that LGB individuals were able to experience some forms of abuse without developing significant psychological difficulties. The experiences that were tolerable were the relatively minor forms of harassment or property crime. However serious criminal incidents such as assault and rape had a significant relationship with psychological wellbeing.

As well as numerous psychological difficulties that can arise from being victimised, research also has found that adverse physical and social reactions can arise. Garnets, Herek and Levy (1990) found that following victimisation, LGB individuals can often develop sleep disturbances, headaches, restlessness, bowel difficulties, and deterioration in their personal relationships.

DiPlacido's (1998) study into wellbeing of lesbian and bisexual women however, found that there was no significant relationship between sexual prejudice and psychological or physical health outcomes. However, this study lacked the power to detect such a relationship due to its small sample size of seventeen and therefore within the sample there were very few incidents of significant sexual prejudice. However, some studies have found that despite having more symptoms of negative affect compared to controls, individuals who were bullied at school because of their sexual orientation do not necessarily suffer from lower self-esteem and generally have positive attitudes towards their own sexuality (Rivers, 2001). This may be due to the individual attributing the cause of the incident with the perpetrator's prejudice rather than their own person characteristics (Al-Mateen, Lewis & Singh, 1998) and therefore protecting their own self-esteem and identity.

Given that nearly all LGB individuals report hearing homophobic comments (Stonewall, 2007), a large majority (80%) report being a victim of verbal abuse, and significant number (25%) report being physical assaulted (Maycock et al, 2008), a higher prevalence of mental health difficulties might be expected than has been reported in the literature. This may suggest that other factors are also involved that exacerbate or protect the individual from the distress caused by sexual prejudice.

2.4. Internalised homophobia

Frequently being discriminated against and persistently experiencing victimisation is bound to have an impact upon an individual. Allport (1954) commented that "One's reputation, whether false or true, cannot be hammered, hammered, hammered, into one's head without doing something to one's character" (p.142). The Pew Global Attitude Project (2007) found that 41% of adults in the USA, and 21% of adults in the UK, still believe that homosexuality is wrong and unnatural. In some African countries this figure rose to 98%. LGB individuals are likely to have grown up having this message 'hammered' into them frequently.

Being a victim of a hate crime or experiencing victimisation can change the way that an individual views the world. They may no longer feel the world is safe and predictable and may find it difficult to trust others. They may begin to view themselves as weak and vulnerable, reinforcing a negative self-view (Al-Mateen, Lewis & Singh, 1998). It has been suggested that this particular prejudice against LGB individuals can lead to the development of Internalised homophobia. Internalised homophobia has been defined by Shidlo (1994) as "a set of negative attitudes and affects towards homosexuality

in other persons and towards homosexual features in oneself" (p.178). Meyer and Dean (1998) add that these negative attitudes, directed towards the self, lead to a devaluation of the self and to poor self-regard. Internalised homophobia can operate at both a conscious and unconscious level (Gonsiorek, 1995). Conscious internalised homophobia may be manifested as a belief of the self as being inferior or worthless on account of one's homosexuality. As well as feeling worthless, an individual may experience discomfort around other LGB individuals and actively avoid social situations involving them. Unconscious internalised homophobia is more common and individuals may appear accepting of their homosexuality but engage in subtle self-sabotaging symptoms (Gonsiorek, 1995). Examples of these self-sabotaging behaviours may include tolerating mistreatment from others, abandoning their career or educational goals, having numerous or brief relationships and substance abuse.

2.4.1. Development of internalised homophobia

Compared to other psychological concepts there are not a lot of competing explanations of internalised homophobia (Russell & Bohan, 2006). The dominant explanation stems from a psychoanalytic perspective which explains it as an internalisation of society's pejorative attitudes towards homosexuality. Individuals grow up being told explicitly and implicitly by society that heterosexuality is normal and that homosexuality is abnormal and inferior. These messages are internalised into the individual's own belief system and lead to the development of internalised homophobia. This internalisation can happen long before the individual recognises their own homosexuality (Nicely, 2001). As sexual prejudice is so prevalent in society internalisation of homophobia is viewed as a normal developmental process (Shidlo, 1994). When an LGB individual begins to recognise their own homosexuality, they feel a conflict between their homoerotic desires and their now internalised beliefs. This intrapsychic conflict interferes with the individual's developmental processes (Maylon, 1982). Those who get stuck in this conflict may behave in accordance with heterosexual norms. They may experience validation for this false portrayal of the self and therefore will not experience authentic validation, which perpetuates their view that they are unacceptable as they are (Downs, 2005). Even if this conflict is resolved, following the process of 'coming-out', it is believed that internalised homophobia would not completely abate due to the strength of the early socialisation experience, and the continued exposure to anti-gay attitudes in society (Meyer, 2003).

The process of internalised homophobia has similarities with other forms of prejudice. Allport (1954) explains that all stigmatised individuals have defensive reactions to the prejudice that they

experience, and that this can be either extroverted or introverted. Individuals that display extroverted reactions may have exaggerated or obsessive concern with the stigmatisation, whereas introverted reactions include features recognisable as internalised homophobia, such as self-denigration and identification with the aggressor.

2.4.2.Impact of internalised homophobia

Throughout the literature, internalised homophobia has been linked with various mental health difficulties and other psychosocial issues. Research has found significant correlations between levels of internalised homophobia and depression (DiPlacido, 1998), suicidal ideation and/or behaviour (Meyer, 1995), anxiety and guilt (Meyer & Dean, 1998), borderline personality features (Gonsiorek, 1982), unhelpful coping styles (Nicholson & Long, 1990), Domestic violence (Pharr, 1988), difficulty in intimate relationships and sexual problems (Coleman, Rosser & Strakpo, 1992), and low self-esteem (Nicholson & Long, 1990). Meyer and Dean (1998) proposed that internalised homophobia is associated with a two-to-three fold increase in risk for psychological distress. There is also evidence of strong correlations with risky behaviours such as unsafe sexual practice (Meyer & Dean, 1998; Williamson, 2000), alcoholism and substance abuse (Cabaj, 1989; Meyer & Dean, 1998). While these correlations do not indicate causality they do lend support to the theoretical understanding of internalised homophobia. It makes sense that individuals who believe that they are worthless and inferior are more likely to have lower self-esteem and to be depressed. Internalised homophobia may also undermine any drive to keep themselves safe (Williamson, 2000) which may increase suicidal ideation and risky behaviours.

Prejudice and discrimination can have a powerful impact in the LGB population, because they have cultural meaning and activate a person's internalised homophobia. So a seemingly minor event, such as hearing a homophobic joke, can evoke deep feelings of rejection and fear of violence that could appear disproportionate to the incident that triggered it (Meyer, 1995).

2.4.3.Critique of internalised homophobia

There is no single quality that would be a definite identifier of internalised homophobia, and each quality is context dependent. Therefore, certain attitudes or behaviours may or may not indicate internalised homophobia depending on the context (Russell & Bohan, 2006). It could be argued that the varied and changing indicators of internalised homophobia make operationalising the construct difficult. However, measures have been designed with high levels of construct validity and reliability

such as the Nungesser Homosexual Attitude Inventory (NHAI; Shidlo, 1994). Others have argued that, despite the efforts to remove the stigma from homosexuality, the construct of internalised homophobia can be viewed as a new way to re-pathologise the LGB community and places the problem within the individual rather than in society (Russell & Bohan, 2006). This has lead to many gay-affirmative therapists to target internalised homophobia in the individual and help them to work through this.

2.5. Openness of sexuality

LGB individuals may attempt to hide their sexuality in order to protect themselves from harm, or through shame and guilt (Meyer, 2003). Research into openness of sexuality in LGB individuals has found that concealment of sexual orientation is prevalent (Croteau, 1996). This prevalence is likely to be higher in cultures where homosexuality is less acceptable. In all cultures, LGB individuals may fear physical and psychological harm if they are open with their sexual orientation. Attempting to hide one's sexuality can result in cognitive burden and a preoccupation with trying to hide this secret (Smart & Wegner, 2000). Understandably, research has found that the concealment of one's sexual orientation is an important source of stress for LGB individuals (DiPlacido, 1998).

Concealing one's sexual orientation can lead to adverse psychological and physical health outcomes (Meyer, 2003) and worse job-related outcomes (Waldo, 1999). LGB individuals who conceal their sexual orientation are not only at risk from increased psychological distress, but also are much less likely to access support from the LGB community or receive the benefit of affiliation with other stigmatised individuals (Meyer, 2003).

2.6. Coping

Folkman and Lazarus (1980) describe coping as thoughts and behaviours that an individual uses to reduce stress and moderate its emotional impact. One of the most influential theories of coping is the transactional theory of coping (Lazarus & Folkman, 1984). This theory proposes that stress consists of the appraisal of a threat, the appraisal of how to respond, then the execution of this response (the coping strategy). The type of coping strategy that an individual chooses is situational specific and this choice is dependent on individual variables and the context in which the difficulty occurs. For example, if the situation is ambiguous the individual may be more likely to utilise strategies such as seeking more information, or if the individual has low self-efficacy in their ability to solve the problem they may give up trying to manage the difficulty.

From Lazarus and Folkman's (1984) early work, two major types of coping strategies were identified. These were problem-focused coping and emotion-focused coping. Problem-focused coping strategies focus on the external situations and attempt to reduce distress by problem solving, taking control and doing something to alter the source of the stress (Carver, Scheier & Weintraub, 1989). Examples of problem-focused coping include planning, taking direct action, weighing up pros and cons or seeking assistance. Emotion-focused coping strategies are focused on internal emotional states and attempt to reduce or manage the emotional distress that is caused by or is associated with the stressful situation (Carver, Scheier & Weintraub, 1989). Examples of emotion-focused coping include denial, positive reinterpretation of events or seeking social support. Problem-focused coping has been found to be most adaptive when people think something constructive can be done to change the source of stress, whereas emotion-focused coping has been found to be most adaptive when the source of stress cannot be changed and must be endured. This has been referred to in the literature as the goodness-of-fit hypothesis (Zakowski, Hall, Klein & Baum, 2001). Previous research has found no significant correlation between these two coping styles, which suggest that they are distinct constructs as oppose to opposite ends of a single continuum (Fleishman & Fogel, 1994). Individuals would tend to engage in both of these styles of coping, often simultaneously, and they may impact upon each other (Carver & Scheier, 1994). Rukholm and Viverais (1983) found that when an individual experiences very high levels of distress they need to manage this emotion prior to being able to make use of problem-solving strategies. Managing emotional distress can help an individual to focus on problem-solving and similarly, using problem-focused coping can reduce the threat and therefore the level of emotional distress a person experiences.

Not all coping strategies are considered functional (Carver & Schier, 1994). Self-blame, wishful thinking, mental disengagement and behavioural avoidance are examples of strategies people use to reduce emotional distress. While some of these strategies may in fact be helpful in reducing the distress in the moment, and therefore could be considered an effective short-term strategy, they do not solve the problem so the initial distress is likely to return. Emotion-focused coping has therefore been proposed to be either active or avoidant (Holahan & Moos, 1987). Active-emotional coping can be viewed as a way to reduce feelings of distress by attempting to reduce the emotion, such as seeking emotional support, or reframing the situation in a more positive way. Alternatively, avoidant-emotional coping can be viewed as a strategy to reduce distress by avoiding the emotion, such as self-distraction, substance use or denial. This has been given various labels in the literature such as avoidance-emotional coping (Schnider, Elhai & Gray, 2007), maladaptive coping (Meyer, 2001; Yates et al 2011), or avoidance coping (Nahlén & Saboonchi, 2010, Vitaliano et al, 1985).

Throughout the literature there has not been consistency in the number of coping styles measured or even what they are. Some studies measure just two styles and break them down into positive and negative coping styles (Meyer, 2001; Szymanski & Owens, 2008), whereas others use the three types indicated above (Schnider, Elhai & Gray, 2007; Yates et al, 2011) and others have separated the styles out further separating seeking social support as separate from emotion-focused coping (Hunter & Boyle, 2004; Nahlén & Saboonchi, 2010). Despite difference all the studies into coping appear to agree that coping strategies can either be functional or dysfunctional and either aimed to solve the problem that is causing the distress or manage the distress that the problem is causing.

2.6.1.Impact of coping strategies

Research suggests that the type of coping style used can impact upon our psychological well-being. Problem-focused coping has been found to be associated with better psychological health for emergency department staff than individuals that used maladaptive coping styles (Yates et al, 2007). Soldiers in the Lebanon war were found to have less symptoms of PTSD following the use of problem-focused coping compared to emotion-focused coping (Solomon, Mikulincer & Flum, 1988). However, women who were at increased risk of hereditary ovarian cancer, that used more emotion-focused coping, were better off in the long-term than those who used problem-focused coping (Fang et al, 2006). However in this case, as the women were predisposed medically, the problem was unsolvable, so problem-focused coping understandable was less helpful, as the goodness-of-fit hypothesis would predict. Penley, Tomaka and Wiebe (2002) conducted a meta-analysis on 34 studies, investigating the impact that coping strategies have on physical and psychological health outcomes. They found that generally problem-focused coping was positively correlated with better physical and psychological health outcomes, whereas avoidance coping was negatively correlated with health outcomes. However they did find that seeking social support, which can be classified as both a problem-focused and emotion-focused strategy, had no relationship to psychological wellbeing.

In terms of managing racial discrimination, Noh and Kaspar (2003) found that problem-focused coping (which included personal confrontation, taking formal action and seeking social support) was more effective in reducing the impact of perceived discrimination than maladaptive coping strategies (passive acceptance and emotional distraction) in Korean immigrants living in Canada.

2.6.2.Coping with minority stress

There appears to be little research conducted on the specific coping strategies LGB individuals use to overcome discrimination. Most research has focused on group-level coping such as group solidarity and cohesiveness and affiliation with other LGB individuals (Meyer, 2003). One study that did focus on personal coping strategies was conducted by Szymanski and Owens (2008). They conducted an online survey of 334 lesbian and bisexual women and found that avoidant coping has a direct effect on psychological distress as well as partially mediating the relationship between internalised homophobia and psychological distress. Other studies have tended to focus on specific maladaptive coping strategies such as alcohol consumption which has been found to have a positive relationship with experiences of sexual prejudice (DiPlacido, 1998; Nicholoson & Long, 1990).

Generally research into coping with sexual prejudice has found that family, friends, the LGB community and schools/workplaces can be a source of support and a protective factor against psychological distress (Maycock et al, 2008; Strommen, 1989). This affiliation and social support appears to reduce the negative impact of stress (Miller & Major, 2000). However, a high percentage of children remain silent about being homophobically bullied. Only 50% of individuals who are bullied 'several times a week' report telling someone (Rivers & Cowie, 2006). Even those who did disclose that they were being bullied were still likely to withhold the nature of the bullying, particularly when disclosing to a parent. Newman and colleagues (2005) found that men who reported having a perception of low support and social isolation during childhood bullying experiences, experienced enduring symptom severity as a result. As the LGB population are less likely to seek support from homophobic bullying, they are more likely to experience enduring symptoms. Research into adulthood demonstrates a similar finding of a lack of disclosure of victimisation. A recent report investigating homophobic and transphobic hate crimes in London, found that most hate crimes go unreported (Gay and Lesbian Anti-Violence and Policing Group; GALOP, 2009). Reasons for not reporting homophobic hate crimes include, concerns about police bias and of public disclosure of their sexual orientation (Herek, Cogan & Gillis, 2002). As well as the additional support that an individual may receive following the disclosure of a hate-crime, pressing charges against the perpetrator of a hate crime can also lead to a reduction of the victim's symptoms by giving a route to channel vengeance and retaliation (Al-Mateen, Lewis & Singh, 1998).

Whether LGB individuals access group-level resources depends on individual personality traits (Meyer, 2003). Individuals with high levels of internalised homophobia may choose not to access group-level resources (particular those targeted at LGB individuals) and therefore may be less likely

to effectively cope with general or minority stressors. Nicholoson and Long's (1990) study with HIV positive gay men, found that internalised homophobia had a positive correlation with use of avoidant coping strategies, and that a positive attitude towards their homosexuality was associated with proactive coping strategies. Syzmanski and Owens (2008) found that internalised homophobia had a positive correlation with avoidant coping strategies (denial, behavioural disengagement and mental disengagement) and a negative correlation with problem-focused coping strategies (Active coping, planning, suppression).

2.7. Rationale for project

The research described above suggests that the minority stressors of sexual prejudice, internalised homophobia and personal coping strategies impact upon psychological distress. As society is evolving, attitudes towards homosexuality also evolve. Homosexuality had become more accepted in the UK over recent years, so this study aims firstly to explore the prevalence rates of sexual prejudice in this sample. The study also aimed to replicate findings that sexual prejudice, internalised homophobia and the use of different coping strategies are risk factors for the development of psychological distress.

Previous research has been criticised for assuming the homogeneity of the LGB community (Kuyper & Fokkema, 2011; Meyer, 2003), and either includes all LGB individuals as one homogenous group or only investigates one gender. In this study both men and women will be investigated in order to allow comparisons between the groups and explore differences between how minority stressors affect the different genders.

Despite the large amount of research demonstrating the link between minority stressors and psychological distress, there has been little focus on the potential mediating roles of the variables, and how these variables interact to contribute towards psychological distress (Poteat et al, 2011). Mediating variables address why or how one variable predicts another (Frazier, Tix & Barron, 2004). For example, if internalised homophobia was a mediating variable then it would mean that following sexual prejudice, one's level of internalised homophobia would increase, which then leads to increased psychological distress. Individuals therefore become distressed after experiencing prejudice, because of internalised homophobia. This study also aimed to investigate the mediating effects of internalised homophobia and coping strategies between sexual prejudice and psychological distress. Having a greater understanding of how these variables interact would guide psychological interventions and help clinicians to support LGB clients more effectively through stressful experiences, particularly experiences of sexual prejudice. It may also point to wider societal

issues that need addressing, and highlight individuals who may be underrepresented within services. This could lead to services targeting specific groups who may be at risk of psychological distress.

2.7.1.Research questions

Following from the existing literature, it was hypothesised:

1. That the experience of sexual prejudice would be a risk factor and positively related to rates of psychological distress.
2. That internalised negative attitudes towards homosexuality would be a risk factor and positively related to rates of psychological distress.
3. That the use of problem-focused and emotion-focused coping strategies would be protective factors, and would therefore be negatively related to psychological distress. Whereas the use of maladaptive coping would be a risk factor and would therefore be positive related to psychological distress.
4. That with increased experience of sexual prejudice individuals would receive more messages that their sexual identity is 'wrong' or 'bad' and therefore have increased levels of internalised homophobia.
5. That coping strategies and internalised homophobia would mediate the relationship between experiences of sexual prejudice and psychological distress. With higher levels of internalised homophobia and maladaptive coping amplifying the effect of sexual prejudice on psychological distress and higher levels of problem-focused and emotion-focused coping reducing this effect.

3. Method

3.1. Design

The present study used a cross-sectional, non-experimental research design involving a survey of the LGB community. The survey explored retrospective experiences of sexual prejudice and explored current beliefs, coping behaviours and mood states. Retrospective accounts are subject to contamination by future experiences, reconstructed memories and would be affected by recall bias. While these potential biases were acknowledged, a prospective study into this phenomenon would not have been possible within the time-limited nature of this research. Rivers (2001) found good levels of test-retest reliability of the recollection of homophobic bullying experiences from school suggesting that this area could be studied retrospectively.

Web-based surveys are often used to study groups of people who may feel stigmatised offline (Wright, 2005) and therefore may be discouraged from participating in face-to-face research. LGB individuals often express concern about disclosing their sexual orientation publicly (Herek, Cogan & Gillis, 2002), and as the internet is a good way to recruit a hard-to-reach population (Meyer & Wilson, 2009) a web-based survey was selected as the most appropriate method of data collection. Research has shown that results from internet studies are consistent with findings from traditional paper and pen studies, and demographics of internet LGB studies also compare well to data from national LGB samples (Szymanski & Owens, 2008).

The use of an automated web survey, (Bristol Online Survey, BOS) aided in the design of the questionnaire and ensured that necessary questions were completed by sending participants a reminder to complete missing responses and therefore minimising incomplete responses.

3.2. Measures

The survey was broken down into six sections. These sections were; demographic information, which included questions about sexuality and relationships; experience of sexual prejudice; coping strategies; psychological distress; internalised homophobia and responses to homophobia. The questionnaire pack consisted of pre-existing measures and questionnaires designed for the purpose of this study. The survey was estimated to take 25 minutes to complete. Copies of the measures have been presented in Appendices 7.4 to 7.11.

3.2.1.Demographic information

This survey started with basic demographic questions, including age, gender, ethnicity, nationality, religion, employment status and educational level (Appendix 7.4). Participants were then presented with questions about their sexuality, covering their sexual orientation, their 'coming out' and about their relationships. This section was finished with questions about their openness with their sexual orientation. Using a 4-point likert scale (1 = 'not out at all' to 4 = 'out to everyone') they were asked to rate how open they were with their sexual orientation within their family, at work/college and in general. Measuring openness in this way is similar to Frost and Meyer's (2009) measure of 'outness' which was found to have good construct validity and high levels of internal consistency (α=0.84).

3.2.2.Experience of sexual prejudice

Participants were asked about their experience of sexual prejudice in two ways. They were asked directly whether they had ever been a victim of sexual prejudice, answering simply 'yes 'or 'no'. They were also asked to complete a novel measure of sexual prejudice. As there are no standardised measures of an individual's experience of victimisation and discrimination based on their sexual orientation, a questionnaire was designed for the purpose of this study (see Appendix 7.5). The questions on this measure were adapted from the findings from Rivers (2001) study into the types of bullying LGBT children experience at school, and the measure of prejudicial experiences from Noh and Kasper's (2003) study into ethnic minorities. Some extreme items were also added, such as being assaulted with a weapon, along with other items such as being refused service in a restaurant/hotel/etc.

In this measure Participants were given a list of 16 situations (e.g. 'had something thrown at you', 'been called a "fag", "dyke" or other derogatory term') and asked to indicate whether they 'had been a victim', 'been a witness', if they 'know a victim' or if they had 'no experience' of the situations. They were given scores of 3, 2, 1 and 0 respectively. They were scored in this way as it was assumed that someone who is the direct victim of a homophobic incident is more likely to be affected by this than by someone who just witnessed, or was told about this incident. They were informed that they could select multiple options if, for example they had been a victim of an assault and had also witnessed someone else being assaulted. For six of these situations, their scores were doubled to 6, 4, 2 and 0 to account for the severity of these incidents. Although severity is subjective and relative to the individual, it was decided by the researcher, in agreement with the supervisors, that the more physically violent incidents, such as 'been victim of assault with a weapon', and the

ones with explicit threats of violence, such as 'received death threats', were more severe incidents and their scores were weighted accordingly. The scoring for this measure can be seen in Appendix 7.15. A higher total score would indicate that the individual has experienced a greater number of incidents, experienced more severe incidents, or been more directly victimised than someone with a lower score.

It was decided to include options for indirect experiences of sexual prejudice because even individuals who are not directly the victim may still be receiving negative messages about homosexuality from the incident (Craig & Waldo, 1996). For example witnessing an incident could still lead to the development of the belief that homosexuality/bisexuality is inferior to heterosexuality, or they may begin to believe that they themselves could be at risk from homophobia in future.

3.2.3.Coping strategies

Individual coping styles were assessed using the Brief COPE (Carver, 1997). This measure is a shortened version of the COPE inventory (Carver et al, 1989) which has been designed based on the existing literature on coping (Lazarus & Folkman, 1984) and Carver and Scheier's (1990) model of behaviour self-regulation. This self-report questionnaire measures a broad range of coping responses which have an explicit basis in theory.

The COPE inventory consists of 60-items that describe different ways that individuals may cope with a given situation. The participant is asked to rate the extent that they agree with each statement using a 4-point likert scale (1 = 'I haven't been doing this at all' to 4 = 'I've been doing this a lot'). The COPE inventory comprises of 15 conceptually different subscales which describe different ways of coping. The Brief COPE was designed as an abbreviated version of the COPE. This questionnaire consists of only 28-items and 14 subscales (two items per scale). In the Brief COPE two of the scales that made up the COPE inventory were omitted (Restraint Coping and Suppression of Competing Activities) and one scale added (Self Blame) in line with advances in the research into coping (Carver, 1997). The 14 subscales that make up the Brief COPE are; Acceptance, Active coping, Behavioural disengagement, Denial, Humour, Planning, Positive reframing, Religious coping, Self-distraction, Self-blame, Substance use, Use of emotional support, Use of instrumental support and Venting. The Brief COPE can be seen in Appendix 7.6.

The Brief COPE has been validated to use with the general population and the internal reliabilities of the 14 subscales range from α=0.50-0.90 (Carver, 1997). The COPE inventory and the Brief COPE have been used with individuals from a range of settings, including individuals in health settings (Nahlén & Saboonchi, 2010), individuals with severe mental illness (Meyer, 2001), in individuals with autism (Benson, 2010), following traumatic loss (Schnider, Elhai & Gray, 2007) and within the LGBT population (Szymanski & Owens, 2008) It demonstrates similar levels of reliability across these settings. It has also been found to be equally reliable and valid across cultures (Yusoff, Low & Yip, 2010). The Brief COPE was chosen to use in this study as opposed to the full COPE inventory due to its brevity while still remaining within acceptable levels of internal reliability.

Due to the large number of subscales in the Brief COPE, various studies have combined the 14 subscales into the theoretical constructs of problem-focused and emotion-focused coping and found high levels of internal reliability (α=0.75-0.81; MacDonald, 2011). Yates and colleague (2011) also combined the Brief COPE subscales into three subscales. They classified the active coping, planning and use of instrumental support subscales as 'problem-focused coping'; acceptance, humour, positive reframing, religion, self-distraction and use of emotional support as 'emotion-focused coping'; and behavioural disengagement, denial, self-blame, substance use and venting as 'maladaptive coping'. High levels of internal reliability has been found when combining the COPE subscales into three constructs as describe above; problem-focused coping α=0.80, active emotion-focused coping α=0.81, and for avoidant emotion-focused coping α=0.88 (Schnider, Elhai & Gray, 2007).

In this current study the internal reliability on the 14 subscales on the Brief COPE ranged from α=0.60-0.92, indicating acceptable to excellent levels of internal reliability for the subscales in the LGB population (see Appendix 7.14). Using the classification used by Yates and colleagues (2011) the 14 subscales were combined into three coping styles. The internal reliability of these coping styles was good (Problem-focused coping, α=0.86; Emotion-focused coping, α=0.81; Maladaptive coping, α=0.80).

3.2.4. Psychological distress

To measure current levels of psychological distress, screening tools for depression, anxiety and trauma were utilised. Depression, anxiety and trauma are frequently reported in the literature to be long-term consequences of sexual prejudice (Herek, Gillis & Cogan, 1999; Meyer, 2003; Rivers, 2004).

3.2.4.1. Trauma

To measure for symptoms of trauma, the Impact of Events Scale-Revised (IES-R; Weiss & Marmar, 1997) was administered. The IES-R is a 22-item self-report, questionnaire that has been designed based on the DSM-IV criteria for Post-Traumatic Stress Disorder and measures the subjective response to a traumatic event. Participants are asked to think about a traumatic experience and then asked to rate the extent they had experienced a list of statements over the past seven days because of this traumatic event. In this study they were asked to think about their previous experiences of sexual prejudice. Items are rated on a 5-point likert scale (0 = 'Not at all' to 4 = 'Extremely'). The items that make up the IES-R can be seen in Appendix 7.7. The IES-R gives a total subjective stress score, with higher values indicating higher levels of subjective stress. It also gives three subscales for intrusions (e.g. intrusive thoughts, nightmares, imagery, etc), avoidance (e.g. avoiding feelings/situation, numbing of responses, etc) and hyperarousal (e.g. anger, hypervigilance, difficulty concentrating, etc). The score for these three subscales are obtained by calculating the mean score of the items that make up each subscale. Again a higher score indicates higher levels of symptomology for the subscale.

The IES-R has been found to have high levels of internal reliability α=0.80-0.91 and test-retest reliability (Weiss & Marmar, 1997). In the present study the IES-R was found to have a total score internal reliability of α=0.95. High levels of internal reliability were also found in the three subscales, Intrusions (α=0.91), Avoidance (α=0.86) and Hyperactivity (α=0.86).

3.2.4.2. Depression

Symptoms of depression were measured using the Patient Health Questionnaire nine-item depression scale (PHQ-9; Kroenke, Spitzer & Williams, 2001). In this measure, participants are asked to rate how often they have experienced each of the nine DSM-IV criteria for depression on a 4-point likert scale (1 = 'Not at all' to 4 = 'Nearly every day') over the past two weeks. The scores are totalled to give an overall score for depression with higher scores indicating high depression symptomology.

The PHQ-9 has been used extensively within the National Health Service (Clark et al, 2009) and has been validated for use with the general population (Martin, Rief, Klaiberg & Braehler, 2006). The PHQ-9 has high levels of internal reliability (α=0.89; Kroenke, Spitzer & Williams, 2001) and concurrent validity with the Beck's Depression Inventory (Löwe et al, 2004). It has also been found to

have good sensitivity (88%) and specificity (88%) for major depressive disorder at a cut off score of 10 (Kroenke, Spitzer & Williams, 2001). The PHQ-9 was chosen over other screening measures for depression for its brevity while maintaining high levels of reliability and validity. In the current study there were high levels of internal reliability for the PHQ-9 (α=0.90).

3.2.4.3. Anxiety

Symptoms of anxiety were measured using the 7-item Patient Health Questionnaire Generalised Anxiety Disorder Scale (GAD-7; Spitzer, Kroenke, Williams & Löwe, 2006). The GAD-7 is a self-report measure to identify symptoms of generalised anxiety disorder, based on the DSM-IV criteria. Similarly to the PHQ-9, participants are asked to rate how often they have experienced each of the seven item using a 4-point likert scale (1='Not at all' to 4='Nearly every day') over the past two weeks. Scores are totalled to give an overall anxiety score, with a score of 10 or greater to indicate the probable presence of generalised anxiety disorder. The PHQ-9 and the GAD-7 can be seen in Appendix 7.8.

The GAD-7 has been found to have excellent levels of internal consistency (α=0.92) and good convergent validity with the Beck's Anxiety Inventory (*r*=0.72; Spitzer, Kroenke, Williams & Löwe, 2006). It has also been validated for use in the general population (Löwe et al, 2008). In the current study there were high levels of internal reliability for the GAD-7 (α=0.92).

3.2.5.Internalised homophobia

Internalised homophobia was measured using an adapted version of the Shidlo (1994) text revision of the Nungesser Homosexual Attitude Inventory (RHAI). The RHAI was designed to measure three subscales of an individual's internalised homophobia; attitudes towards their own sexuality, the 'self' subscale (e.g. 'I am proud to be part of the gay community'), attitudes towards homosexuality in others and in general, the 'other' subscale (e.g. 'homosexuality is not as satisfying as heterosexuality') and attitudes towards disclosure of sexual orientation, the 'disclosure' subscale (e.g. 'I am afraid that people will harass me if I come out more publicly'). Participants were given a list of 37-items and asked to rate the extent they agree with each one using a 5-point likert scale (0='strongly disagree' to 4='strongly agree'). Seventeen items employ reverse scoring. Higher scores indicate higher levels of internalised homophobia. The RHAI has had more extreme items added to it (e.g. 'I've tried killing myself because I couldn't accept my homosexuality') to improve content validity, and omitted items that conceptually confound with other variables (e.g. 'Adult homosexual

males who have sex with boys under eighteen years of age should be punished by law'). The RHAI is the most frequently used measure of internalized homophobia (Rivers, 2004), has good construct validity and good internal consistency (α= 0.91; Shidlo, 1994).

For the current study several items in the RHAI were reworded to make it also applicable to lesbians, and bisexual individuals, as has been done in previous research (Rivers & Cowie, 2006). This syntactical change in the current study still produced high internal consistency of α=0.91 for the total internalised homophobia score and ranged between α=0.71-0.86 for the three subscales.

3.2.6.Responses to sexual prejudice

The final section sought to find out how individuals responded to their experience of sexual prejudice (see Appendix 7.10). Questions in this section asked about who, if anyone, did participants disclose their experiences of sexual prejudice to, and how easy this was to do. Participants were asked about their knowledge of the support that is available to them following experiences of sexual prejudice. Open questions explored the reasons for not disclosing their experiences, and what helped participants to overcome any negative experiences. This section finished with a few questions about the survey, such as time it took and how easy or difficult it was to complete. They were also given the space to give feedback about the survey (See Appendix 7.11).

3.3. Recruitment

The LGB population is difficult to sample for several reasons. LGB individuals are stigmatised and therefore may be reluctant to disclose their sexual identity to researchers. Also LGB individuals may apply a number of identity labels to themselves, or none at all (Meyer & Wilson, 2009). Because of these factors and the invisibility of the LGB community, it is difficult to obtain a random sample. Convenience and snowball sampling are more commonly used to recruit LGB participants (Smith & Ingram, 2004), and this was deemed to be the most appropriate sampling method for this study.

Participants were recruited through the internet from a non-clinical population of self-identified lesbian, gay or bisexual individuals. Participants were recruited through a number of different methods to increase the representativeness of the sample. The procedures used to recruit participants were based on published suggestions for internet-based research (Michalak & Szabo, 1998; Schmidt, 1997). The administrator of various University LGBT groups across the country was contacted via email and asked to forward on information about the study to the members of their

mailing list. A copy of this email can be seen in Appendix 7.1. This email was also sent to various other online LGBT communities, such as LGBT charities, LGBT support and social groups, LGBT-chat forums and other LGBT web-based discussion groups. Again the advert asked for the survey to be distributed to mailing lists and staff groups and circulated to any other known LGBT individuals where possible. All the contact details for these groups were found through an internet search engine. The social-networking website Facebook was also used to recruit participants. A systematic search was conducted on Facebook LGBT groups and information about the survey and the hyperlink to the survey was posted into these groups' pages, or the administrator was contacted to post the information themselves. Also LGBT individuals known to the researcher were recruited via Facebook and were encourage to participate and to distribute the survey further. A list of all the groups contacted can be seen in Appendix 7.2.

It was decided to advertise the survey to general LGBT groups in order to reach as representative a sample as possible. Also, more specific groups on homophobia and discrimination were approached as it was assumed individual members of these groups would have a greater interest in the topic and this would predict a higher response rate (Schmidt, 1997). LGBT individuals from ethnic minorities are underrepresented in LGBT research (Fish, 2000). For this reason, to increase the representativeness of the sample, some purposive recruitment was conducted, by targeting LGBT groups for Black and Asian individuals.

In total 136 LGBT organisations were contacted. In the spirit of snowball sampling, at the end of the study participants were encouraged to pass on the details of the survey. As a result of the snowballing recruitment strategy the researcher was informed about a further 5 adverts being placed in various online LGBT forums, and 8 adverts were placed in electronic newsletters (e.g. the Southwark LGBT Network Newsletter, and the London College of Clinical Hypnosis newsletter).

The survey was only intended for individuals over 18 years of age and for those who identified themselves LGB, so heterosexual individuals were also not asked to participate, and any that did were filtered out of the analysis.

3.3.1. Power calculation and sensitivity analysis

As many participants would be recruited as possible in the hope that this would maximise the representativeness of the dataset. Nevertheless a power calculation was conducted to determine the minimum sample size required to detect an effect size correlation of interest. Since the nature of

this research is likely to reveal modest rather than strong relationships, a small to medium effect size correlation of *r*=0.15 was still regarded as an empirical result of theoretical interest. A power calculation revealed that a sample size of N=459 would be required to detect this correlation with an alpha error of 5% (two-tailed) and a very high level of statistical power of 90%.

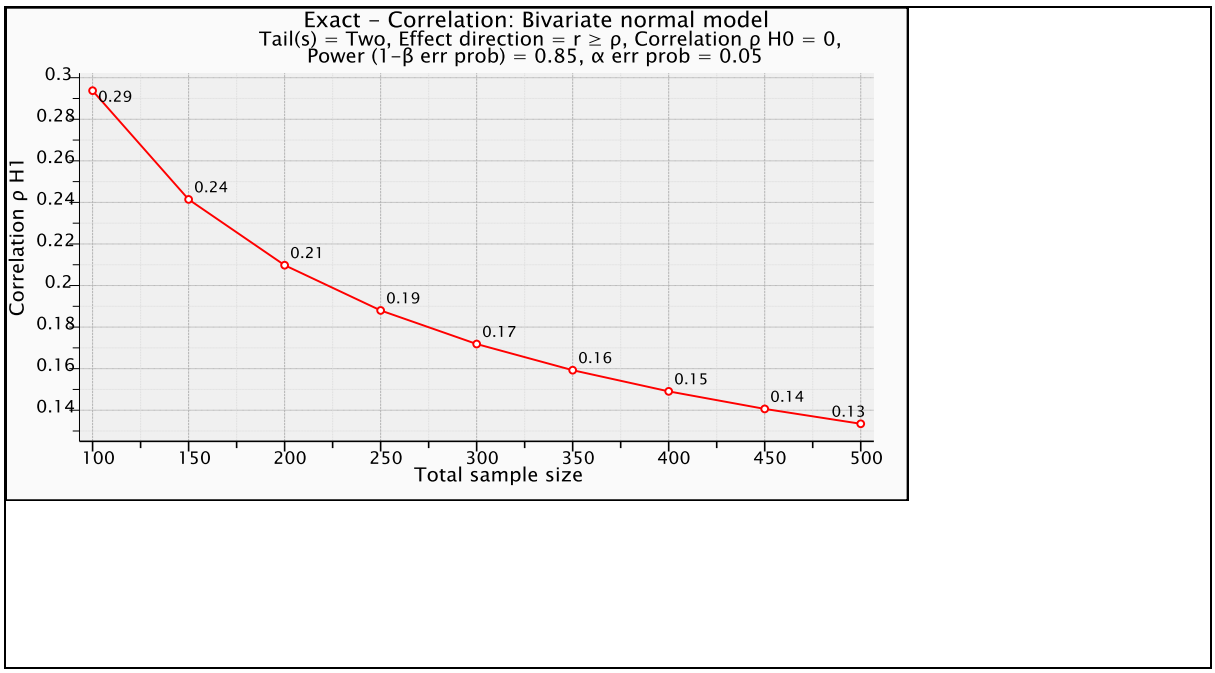

Figure 2. Result of a sensitivity analysis displaying effect size correlations to be discovered depending on sample size

In addition, a sensitivity analysis was carried out to reveal the samples sizes required to discover a range of effect size correlations with an alpha error of 5% and a power of 85%. This was done to reveal the sensitivity of the new survey in detecting effect size correlations of interest, should the sample size as calculated above (i.e. N=459) not have materialised by the end of the recruitment period. As is apparent from Figure 2, even with a sample size of only 300 the survey would still have sufficient power (i.e. 1-*β*=0.85) to discover a very modest effect size correlation of *r*=0.17 (two-tailed).

3.4. Procedures

Once recruited, participants were directed to a webpage giving the initial information about the research, details about confidentiality and consent, and contact details of the researcher (See Appendix 7.3). They were informed that by continuing past this point they were consenting to participate, but that their participation was voluntary and that they could withdraw from the study at any time. Following this they were taken to a filter page that clarified that they were aged 18

years or over before starting the survey. Each section of the survey was presented in a fixed order, and each section was presented across one or two web pages for ease of completion.

Upon completion of the survey, participants were directed to a final debriefing page (see Appendix 7.12), thanking them for participating and explaining the purpose of the research in further detail. They were also given the researcher's contact details again should they have any questions or comments about the research. They were given the option of requesting a summary of the research findings by emailing the researcher with their contact details. This was to ensure that their details could not be matched to their questionnaire responses. On this webpage they were also presented with a list of organisations, and their contact details, which could help support them should the participants feel the need to talk to someone about any of the issues raised in the survey (see Appendix 7.13).

3.5. Ethical issues

Participants were informed that by continuing past the first page they are consenting to participate, so informed consent was implied by beginning the survey. To maintain confidentiality, no identifiable information was collected on the database. It was recognised that this research topic has the potential to be distressing for some individuals. Some of the questions are asking people to relive potentially traumatic memories, and some asked about suicidal ideation. Participants therefore may be left feeling vulnerable, which may present a risk issue. In an attempt to manage this risk, participants were informed of the nature of the study beforehand with the risks of participating highlighted. They were also informed that should they feel distressed upon completion of the study that contact details of services and agencies, that can offer further support (such as PACE the mental health charity for LGBT individuals), will be provided at the end of the survey. Measures of mood administered in this survey may indicate the presence of a mood disorder in a participant. Due to the nature of online surveys and the anonymity of the participants in this study, individuals whose scores indicate the probable presence of a mood disorder will not be identifiable so follow-up contact would be impossible. To manage this, on the debriefing page, individuals are encouraged to contact their GP or one of the organisations listed if they feel low in mood or would like someone to talk to about their difficulties or experiences.

Ethical approval for this study was obtained from the School of Psychology Ethics Committee, University of Hertfordshire (Reference PSY/09/11/MC; See Appendix 7.16).

4. Results

This section will begin with a description of participant characteristics, which will explore the demographic details of the sample as well as details about their sexuality. Following this, a description of the potential predictor variables, experiences of sexual prejudice, coping strategies and internalised homophobia, will be presented, with a comparison between gender and sexuality groups. The dependent variables, depression, anxiety and trauma will be then presented with a principal component analysis of an overall psychological distress index.

More in-depth statistical analyses will be reported to address the studies main hypotheses. This will include a multiple regression analysis investigating the predictors of psychological distress, and the impact that gender and sexuality may have on these predictors. This will be followed by an exploration of additional variables and their relationship on the study's key variables. Finally a path analysis exploring the overall direct and indirect effects of the different variables on psychological distress will be presented.

4.1. Response rate

Due to the method of recruitment the response rate of people that completed the survey from those that saw the advert is unknown. A total of 792 individuals started the survey online. One of these individuals (<1%) described being under the age of 18 years so did not continue. In order to have comparable data for each individual, 248 participants (31%) were excluded from the dataset for not completing the survey and therefore having incomplete data. Of the remaining 543 individuals, one participant (<1%) identified as heterosexual so was excluded from the dataset leaving a total of 542 participants. In total, 250 individuals (32%) were excluded from the dataset (See Figure 3).

4.2. Participant characteristics

4.2.1. Age and gender

The age of the participants ranged from 18 to 68 years, with a mean age of 27.2 years (*SD*=10.3). One individual was excluded from this statistic as they reported their age to be 254 years. There

Figure 3. Flow chart describing how the final sample size was determined

were no significant differences between the ages of the three gender groups $F(2,538)=1.18$, $p>0.05$. However, as there were less transgendered individuals in the sample they were more normally distributed and had a smaller range of ages (See Table 1).

Table 1. Demographic details of the age and gender of participants

	Frequency	Percentage	Age (years)				
			Range	*Mean*	*SD*	*Median*	*Skewness*
Male	333	62%	18 – 68	27.7	10.6	23	1.7
Female	202	37%	18 – 67	26.3[3]	9.8	23	1.7
Transgender	7	1%	18 – 41	27.4	9.5	24	0.8
Total	*542*	*100%*	*18 – 68*	*27.2*	*10.3*	*23*	*1.7*

4.2.2. Ethnicity, nationality and religion

As can be seen from Table 2, the majority of participants were White British (66%), followed by White other (26%).

[3] As one participant reported their age as 254 years they were excluded from the calculation towards the mean age of this group, leaving the sample size as n=201.

Table 2. Ethnicity of the participants

	Frequency	Percentage
White British	355	65%
White Other	139	26%
Asian	17	3%
Black	16	3%
Mixed race	5	1%
Other	10	2%
Total	*542*	*100%*

Participants had various nationalities from across the world, however the large majority were from the United Kingdom (N=389, 72%). Other participants came from the USA, (N=45, 8%), Ireland (N=19, 4%), Canada (N=11, 2%), Italy (N=11, 2%), Australia (N=7, 1%) France (N=7, 1%) and Germany (N=5, 1%). The remaining 48 participants (11%) came from elsewhere across the globe. A breakdown of nationalities can be seen in Appendix 7.17.

Half of the participants reported themselves to be atheist or to have no religious beliefs (See Table 3). Catholicism was the most prevalent religious denomination in this study (N=62, 11%).

Table 3. Religious denomination of the participants

	Frequency	Percentage
None/Atheist	272	50%
Agnostic	82	15%
Catholic	62	11%
Protestant	57	10%
Other Christian denomination	14	3%
Spiritual	11	2%
Jewish	8	2%
Pagan/Wiccan	8	2%
Muslim	7	1%
Buddhist	6	1%
Sikh	1	<1%
Other[4]	14	3%
Total	*542*	*100%*

4.2.3.Employment and educational level

As can been seen in Table 4, the majority of participants were either in full-time education (N=263, 46%) or in full-time work (N=180, 33%).

[4] The 'other' religious denomination category consists of, African Methodist Episcopal, Experimental Igtheist, Free thinking, Humanist, Quaker, Mormon, Scientific-spiritualist, Taoist or a combination of religions, such as Jewish/atheist and Quaker/Pagan/Atheist.

Table 4. Employment status of the participants

	Frequency	Percentage
Full-time studying	263	49%
Full-time employed	180	33%
Part-time employed	26	5%
Unemployed	23	4%
Part-time studying and part-time employed	19	3%
Retired	7	1%
Part-time studying	5	1%
Part-time studying and full-time employed	5	1%
Self-employed	5	1%
Full-time studying and full-time employed	3	1%
Full-time studying and part-time employed	1	<1%
Other[5]	5	1%
Total	*542*	*100%*

The sample population were highly educated, with 69% (N=373) having a degree level education and only 6% (N=32) of the participants having less than a college level education (See Table 5).

Table 5. Level of education attainment of the participants

	Frequency	Percentage
University (Undergraduate level)	243	45%
College/6th Form	137	25%
University (Postgraduate level)	130	24%
High school	30	6%
None	2	<1%
Total	*542*	*100%*

4.2.4.Sexuality

The majority of the sample (N=427, 79%) reported that they were homosexual (Gay male or lesbian). Ninety-nine individuals (18%) reported that they were bisexual. In this sample men were more likely to report being homosexual, and women were more likely to report being bisexual. Very few of the sample reported being unsure about their sexuality (See Table 6).

Table 6. Sexual orientation of the participants

	Males	Females	Transgendered	Total
Homosexual (Gay male/Lesbian)	305 (92%)	121 (60%)	1 (14%)	427 (79%)
Bisexual	24 (7%)	72 (36%)	3 (43%)	99 (18%)
Unsure	4 (1%)	9 (4%)	3 (43%)	16 (3%)
Total	333 (100%)	202 (100%)	7 (100%)	542 (100%)

As the transgendered sample was very small in this study (N=7) comparisons between this group and the males and females would be problematic, so they were excluded from further analysis. For the

[5] The 'other' responses were, currently not working due to illness (n=3), volunteering (n=1) and currently suspended from work (n=1).

same reason, individuals who classified themselves as 'unsure' of their sexuality were also excluded. This left 522 participants in the remaining analysis. The results exploring the age at which participants first recognised their sexual orientation can be seen in Appendix 7.18.

4.2.4.1. Openness

There was a significant difference between the ages at which males and females first disclosed their sexual orientation, or 'came out', $\chi^2(4)=18.14$, $p<0.01$. Females were more likely to come out before the age of 16 years, than males, but males were more likely to come out between the ages of 16 and 20 years. After the age of 20 years there was no significant difference between males and females first disclosing their sexuality (See Table 7).

Table 7. Age when participants first 'came out'

	Males	Females	Total
Under 10 years	2 (1%)	2 (1%)	4 (1%)
10 – 15 years	35 (11%)	45(23%)	84 (16%)
16 – 20 years	195 (59%)	91 (47%)	286 (55%)
21 – 30 years	62 (19%)	34 (18%)	96 (18%)
31 – 40 years	8 (2%)	8 (4%)	16 (3%)
41 – 50 years	3 (1%)	3 (2%)	6 (1%)
Over 50 years	1 (<1%)	0 (0%)	1 (<1%)
Not out yet	23 (7%)	10 (5%)	33 (6%)
Total	329 (100%)	193 (100%)	522 (100%)

There was a significant difference in the age at which homosexual and bisexual individuals came out about their sexuality, $\chi^2(4)=21.74$, $p<0.001$. Bisexual individuals were more likely to 'come out' under the age of 16, whereas homosexual individuals were more likely to come out between the ages of 16 and 20 years. Bisexual individuals were also more likely to have not have 'come out' yet (See Table 8).

In this study participants tended to be 'out'[6] with everyone in their family (See Table 9). A chi squared analysis indicates a significant difference between the openness of the males and females, $\chi^2(3)=9.01$, $p<0.05$. This difference was found between the extent that males and females were 'out to some people' in their family. Females were more likely to be only 'out' to some people in their family compared to males. There was no statistical difference between the openness of males and females at work, $\chi^2(3)=5.44$, $p=0.142$, or in general, $\chi^2(3)=1.87$, $p=0.599$.

[6] Being 'out' refers to having disclosed your sexuality to someone.

Table 8. Comparison of sexuality groups and the age participants first 'came out'

	Homosexual	Bisexual	Total
Under 10 years	3 (1%)	1 (1%)	4 (1%)
10 – 15 years	58 (14%)	22 (23%)	80 (15%)
16 – 20 years	243 (57%)	43 (45%)	286 (55%)
21 – 30 years	82 (19%)	14 (14%)	96 (18%)
31 – 40 years	15 (3%)	1 (1%)	16 (3%)
41 – 50 years	5 (1%)	1 (1%)	6 (1%)
Over 50 years	1 (<1%)	0 (0%)	1 (<1%)
Not out yet	19 (5%)	14 (15%)	33 (6%)
Total	426 (100%)	96 (100%)	522 (100%)

Overall, very few people reported that 'in general' they were not out at all (N=16, 3%). However more participants indicated that they were not out at all to their family (N=75, 14%) and at their work/college (N=33, 6%), which indicates that even if individuals were generally open with their sexuality, they may still hide this from their family, work colleagues and peers at college/university.

Table 9. Openness of sexual orientation

		Males	Females	Total
Openness with family	Not out at all	51 (16%)	24 (12%)	75 (14%)
	Out to some people	78 (24%)	69 (36%)	147 (28%)
	Out to most people	74 (23%)	40 (21%)	114 (22%)
	Out to everyone	126 (38%)	60 (31%)	186 (36%)
	Total	329 (100%)	193 (100%)	522 (100%)
Openness with work colleague or college and university peers	Not out at all	23 (7%)	10 (5%)	33 (6%)
	Out to some people	61 (19%)	51 (26%)	112 (22%)
	Out to most people	77 (23%)	47 (24%)	124 (24%)
	Out to everyone	168 (51%)	85 (44%)	253 (48%)
	Total	329 (100%)	193 (100%)	522 (100%)
Openness in general	Not out at all	10 (3%)	6 (3%)	16 (3%)
	Out to some people	70 (21%)	51 (26%)	121 (23%)
	Out to most people	146 (44%)	81 (42%)	227 (43%)
	Out to everyone	103 (31%)	55 (29%)	158 (30%)
	Total	329 (100%)	193 (100%)	522 (100%)

The results of who participants have reported 'coming out' to, can be seen in Appendix 7.19.

4.2.5.Relationship status

Just under half of the sample (45%, N=237) reported currently being in a relationship (see Table 10). There was a significant difference between males and females, $\chi^2(2)=7.90$, $p<0.05$, with females being significantly more likely to be in a relationship than males. There was no significant difference in the relationship status between homosexual and bisexual individuals, $\chi^2(2)=1.07$, $p=0.586$.

Table 10. Relationship status of the participants

	Males	Females	Total
Currently in a relationship	134 (41%)	103 (54%)	237 (45%)
Not currently in a relationship	185 (56%)	86 (45%)	271 (52%)
Unsure	10 (3%)	4 (2%)	14 (3%)
Total	329 (100%)	193 (100%)	522 (100%)

Of those who reported being in a relationship, one did not indicate how long their relationship had been, and five did not indicate the quality of their relationship. 65% of participants that were currently in a relationship were in a relationship that had lasted over one year, with 23% being in a relationship that had lasted over five years. There was no significant difference between the length of relationships between the male and female participants, $\chi^2(8)=3.38$, $p=0.908$, or between homosexual and bisexual participants, $\chi^2(8)=4.05$, $p=0.853$. Nearly all participants reported that the quality of their relationship was either good or very good (96%), and less than 5% of those in a relationship indicated that their relationship was 'not so good' or 'bad'. There was no significant difference between males and females in relationship quality, $\chi^2(3)=1.350$, $p=0.717$, or between homosexual and bisexual individuals, $\chi^2(6)=1.547$, $p=0.671$. A breakdown of the length and quality of participants' relationships can be seen in Appendix 7.20.

4.3. Sexual prejudice

4.3.1. Prevalence rates

From the novel measure of experiences of sexual prejudice, 441 participants (84%) indicated that they had been a victim of at least one of the 16 situations. Only 13 participants (3%) reported having had no experience of any of the situations listed. The most common types of sexual prejudice experienced were being called a derogatory term, in which 347 participants (67%) reported being a victim of, followed by receiving verbal abuse (63%, N=331). 91 participants (17%) had been physically assaulted, with 17 (3%) of these individuals needing hospital attention as a result. 45 participants (9%) had been sexual assaulted and 29 (6%) had received death threats. 122 participants (23%) felt that they had been treated unfairly at work or at college because of their sexual orientation. Over two thirds of the sample (N=362, 69%) had been witness to a homophobic joke, and 40% of the sample had witnessed somebody else being called a derogatory term (N=211) or being verbally abused (N=208) because of their sexuality. In this sample 167 participants (32%) knew someone who had been physically assaulted because of their sexuality and 89 participants (17%) knew someone who required hospital attention as a result of a physical assault. The frequency

of the participants that have experience various situations of sexual prejudice can be seen in Appendix 7.21.

A total score of sexual prejudice was calculated for each of the participants, and the mean total score was calculated as 22.6 (SD=17.9). There was a slight positive correlation between age and experiences of psychological distress, r=0.11, p<0.05, which suggests that older participants have had greater experiences of sexual prejudice, than younger participants. As can be seen in Table 11, the mean total score for sexual prejudice was very similar for males and females, and the difference between them was insignificant, t(520)=-0.19, p=0.849. The homosexual group had a higher mean score than the bisexual group indicating that they have experienced more sexual prejudice. However this difference was not statistically significant, t(191.5)=1.44, p=0.076.

Table 11. Descriptive statistics of the experience of sexual prejudice scores by gender and sexual orientation

		N	Min	Max	Mean	SD	Median	Skewness	Kurtosis
Total	Males	329	0	103	22.5	17.9	18	1.4	2.3
	Females	193	0	108	22.8	18.0	19	1.6	3.4
	Homosexuals	426	0	108	23.1	18.8	18	1.4	2.4
	Bisexuals	96	0	65	20.2	13.3	18	0.9	0.6
	Total	522	0	108	22.6	17.9	18	1.5	2.7

In the alternative, more direct, measure of sexual prejudice the majority of participants (65%, N=338) indicated that 'yes' they had experienced sexual prejudice. Males tended to report less experience of sexual prejudice (62%, N=203) compared to females (70%, N=140). However, a chi-squared analysis found that this difference was not quite statistically significant, $\chi^2(1)=3.62$, p=0.057. There was no significant difference, $\chi^2(1)=0.84$, p=0.471, between homosexual (65%, N=275) and bisexual (66% N=63) individuals. In the sample, 198 individuals (38%) further reported being "very troubled, or upset" by their experience of homophobia.

4.3.2. Disclosure of sexual prejudice

The 338 individuals who reported that they had experienced sexual prejudice were asked questions on what they did following this. The most common person to report experiences of sexual prejudice to was a friend (N=263, 78%) followed by a parent or family member (N=75, 22%). Only 44 participants (13%) reported their experience to either the police, to Crimestoppers or reported the incident online. Appendix 7.22 gives a further breakdown of who the participants reported experiences of sexual prejudice to. A chi-squared analysis indicated that there was no significant

difference between males and females in who they disclosed their experience of sexual prejudice to, with the exception of telling a friend. Females were more likely to tell a friend than males, $\chi^2(1)=5.73$, $p<0.05$. When comparing the difference between homosexual and bisexual individuals, in who they disclosed experiences of sexual prejudice to, again there was little significance difference between them. The exceptions to this were that bisexual individuals were less likely to report sexual prejudice to their boss/manager, $\chi^2(1)=5.65$, $p<0.05$, or to the police, $\chi^2(1)=7.54$, $p=0.01$.

The total number of different people or organisations that the participants had disclosed their experiences of sexual prejudice to, was totalled (See Table 12). There was no significant difference between the gender groups and the number of people that they told about their experiences of sexual prejudice, $\chi^2(4)=3.72$, $p=0.445$. Also there was no significant difference between homosexual and bisexual participants in the number of people they disclosed their experiences to, $\chi^2(4)=8.10$, $p=0.088$.

Table 12. Total number of people/groups/places disclosed sexual prejudice to

	Males	Females	Total
0	35 (17%)	17 (13%)	52 (15%)
1	92 (45%)	61 (45%)	153 (45%)
2	39 (19%)	36 (27%)	75 (22%)
3	17 (8%)	11 (8%)	28 (8%)
4 and over	20 (10%)	10 (7%)	30 (9%)
Total	203 (100%)	135 (100%)	338 (100%)

Out of the 338 people who had experience sexual prejudice, 286 (85%) indicated that they had told at least one person about their experiences. These individuals were asked how easy and helpful it was to tell someone (Table 13 and 14). Of these, four (1%) individuals did not indicate how easy it was to tell someone and two (1%) did not indicate how helpful it was to tell somebody.

Table 13. Ease of disclosure of sexual prejudice

	Males	Females	Total
Very easy	32 (19%)	17 (15%)	49 (17%)
Easy	50 (30%)	37 (32%)	87 (31%)
Not sure	26 (16%)	15 (12%)	41 (14%)
Hard	47 (29%)	40 (36%)	87 (31%)
Very hard	10 (6%)	8 (7%)	18 (6%)
Total	165 (100%)	117 (100%)	282 (100%)

Nearly half of those who disclosed their experience of sexual prejudice (N=136, 48%) found it easy or very easy to tell someone, whereas 37% (N=105) found it hard or very hard to tell someone. A chi-squared analysis found that there was no significant difference between genders $\chi^2(4)=2.16$, $p=0.706$, or between homosexual and bisexual individuals, $\chi^2(4)=8.82$, $p=0.066$.

Table 14. Helpfulness of disclosure of sexual prejudice

	Males	Females	Total
Very helpful	35 (21%)	12 (10%)	47 (17%)
Helpful	83 (50%)	59 (50%)	142 (50%)
Not sure	31 (19%)	28 (24%)	59 (21%)
Unhelpful	12 (7%)	15 (13%)	27 (10%)
Very unhelpful	5 (3%)	4 (3%)	9 (3%)
Total	166 (100%)	118 (100%)	284 (100%)

Over two thirds of the sample (N=189, 67%) found that telling someone about their experience of sexual prejudice was helpful or very helpful. Only 13% (N=36) found disclosure unhelpful or very unhelpful. A chi-squared analysis found that there was no significant difference between genders, $\chi^2(4)=8.03$, $p=0.091$, or between homosexual and bisexual individuals, $\chi^2(4)=3.26$, $p=0.515$. However there was a trend for males to find disclosure more helpful than females.

Further results exploring participant's future intentions to report experiences of sexual prejudice can be seen in Appendix 7.23.

4.4. Coping strategies

Individuals were only asked to complete this section if they had had some experience of sexual prejudice. Despite only 13 individuals reporting no experience of any of the situations listed in Question 17 (See Appendix 7.5), 39 individuals (7%) did not complete this section. Individuals who missed less than three of the items that make up the coping subscales had missing items replaced with the overall item median value. Four individuals (1%) missed out more than two items from the problem-focused and the emotion-focused coping subscales, and five (1%) individuals missed out more than two items from the maladaptive coping subscale, and therefore were exclude from this analysis. This left 479 individuals with scores for the problem-focused and emotion-focused coping scales and 478 individuals for the maladaptive coping scale. Descriptive statistics of coping scores can be seen in Table 15 and a boxplot of the coping scores can be seen in Figure 4.

The mean score for problem-focused coping was 11.8 (SD=4.5), for emotion-focused coping was 23.9 (SD=6.7) and for maladaptive coping was 15.6 (SD=5.0). There was no significant difference between males and females in their scores for problem-focused coping, $t(477)=-1.60$, two-tailed $p=0.109$, or for emotion-focused coping, $t(477)=-1.69$, two-tailed $p=0.091$. However there was a significant difference between males and females in terms of maladaptive coping scores, $t(476)=-2.04$, two-

tailed $p<0.05$, with females scoring higher for maladaptive coping (M=16.2, SD=5.4) than males (M=15.3, SD=4.8).

Table 15. Descriptive statistics of coping scores

Measure		N	Min	Max	Mean	SD	Median	Skewness	Kurtosis
Problem-focused coping	Males	300	6	24	11.6	4.5	11	0.6	-0.4
	Females	179	6	24	12.3	4.6	12	0.4	-0.8
	Total	479	6	24	11.8	4.5	11	0.5	-0.6
Emotion-focused coping	Males	300	12	40	23.5	6.6	23	0.3	-0.6
	Females	179	12	48	24.6	6.9	24	0.3	0.1
	Total	479	12	48	23.9	6.7	24	0.3	-0.3
Maladaptive coping	Males	300	10	36	15.3	4.8	14	1.1	0.9
	Females	178	10	38	16.2	5.4	15	1.2	1.5
	Total	478	10	38	15.6	5.0	14	1.2	1.3

Independent sample *t*-tests found that there was no significant difference between the homosexual and bisexual groups in their scores for problem-focused coping, $t(477)=1.33$, two-tailed $p=0.185$, for emotion-focused coping, $t(477)=0.35$, two-tailed $p=0.729$ or maladaptive coping scores, $t(476)=-1.10$, two-tailed $p=0.270$. A breakdown of descriptive statistics for the sexuality groups can be seen in Appendix 7.24.

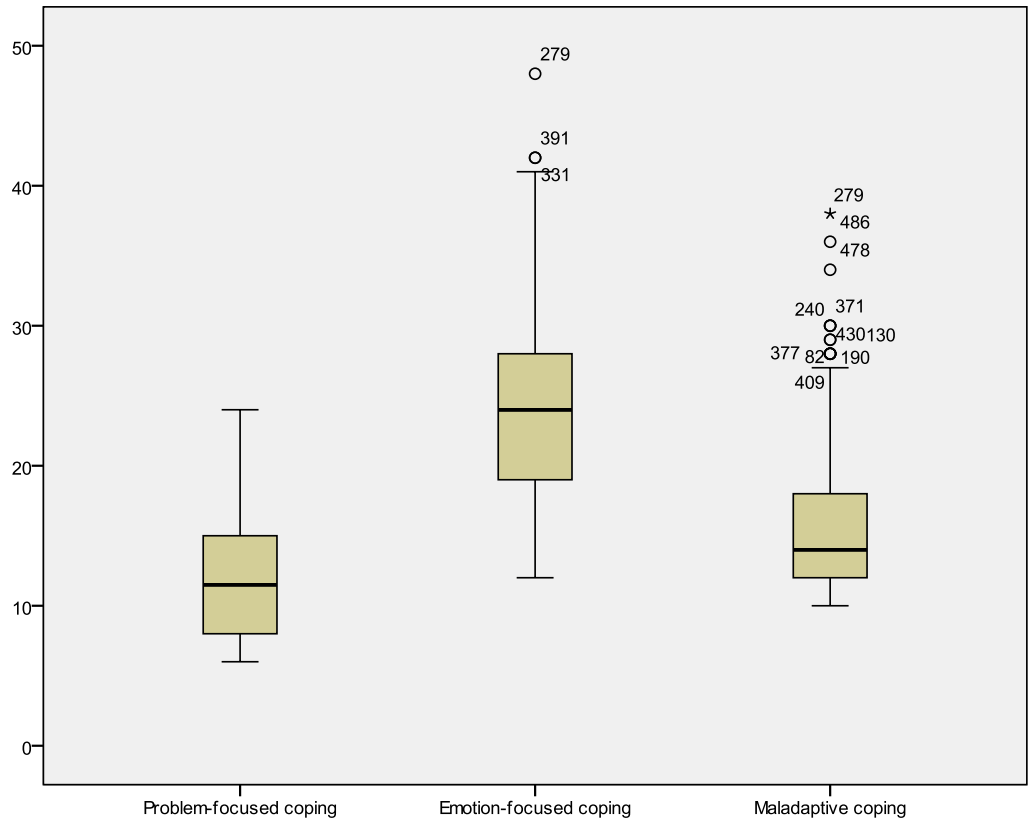

Figure 4. Boxplots of problem-focused, emotion-focused and maladaptive coping scores.

There was a moderate positive relationship between all three coping variables (See Table 16 or scatter diagrams in Appendix 7.24), suggesting that individuals are likely to use a variety of different coping strategies when experiencing sexual prejudice, and that they are not mutually exclusive.

Table 16. Correlation matrix for the coping measures

	Problem-focused coping	Emotion-focused coping
Problem-focused coping	-	-
Emotion-focused coping	0.63*	-
Maladaptive coping	0.39*	0.50*

* $p<0.001$

4.5. Internalised homophobia

The mean score for internalised homophobia in the sample was 72.6 (SD=20.1), as seen in Table 17. There was no correlation found between internalised homophobia and age, r=-0.07, p=0.139. An independent-sample t-test found that the mean internalised homophobia score for males (M=74.3, SD=20.3) was significantly higher, $t(520)$=2.50, two-tailed $p<0.05$, than the mean score for females (M=69.8, SD=19.4). An independent-sample t-test found no significant difference between the mean internalised homophobia scores for the homosexual and bisexual group, $t(520)$=-1.35, two-tailed p=0.177.

Table 17. Descriptive statistics of internalised homophobia scores

	N	Min	Max	Mean	SD	Median	Skewness	Kurtosis
Males	329	40	134	74.3	20.3	70	0.8	0.2
Females	193	41	138	69.8	19.4	65	0.9	0.5
Homosexuals	426	40	138	72.1	20.3	67	0.9	0.3
Bisexuals	96	46	127	75.1	19.1	72	0.7	-0.1
Total	*522*	*40*	*138*	*72.6*	*20.1*	*69*	*0.8*	*0.2*

Descriptive statistics for the internalised homophobia subscales are shown in Table 18. All three measures were significantly correlated (see Table 19) with correlation coefficients ranging from r=0.42 to r=0.62.

Table 18. Descriptive statistics of the internalised homophobia subscales

	N	Min	Max	Mean	SD	Median	Skewness	Kurtosis
Internalised homophobia: Self	522	15	66	28.8	9.2	26	1.03	0.85
Internalised homophobia: Other	522	9	43	15.5	5.0	14	1.20	2.63
Internalised homophobia: Disclosure	522	13	64	28.3	9.8	26.5	0.72	0.21

To confirm the validity of using the internalised homophobia total score a principal component analysis was conducted which found that three subscale could be combined into one summary variable of internalised homophobia, and therefore the internalised homophobia total score will be used as a key variable in further analysis (See Appendix 7.25).

Table 19. Correlation matrix for the three subscales of internalised homophobia

	1. Self	2. Other	3. Disclosure
1. Internalised homophobia: Self	-	-	-
2. Internalised homophobia: Other	0.48*	-	-
3. Internalised homophobia: Disclosure	0.62*	0.42*	-

* $p<0.001$

4.6. Psychological distress

4.6.1.Trauma

The 198 participants (38%) that reported that they had been 'very troubled or upset' by their experience of sexual prejudice were asked to complete the IES-R. Participants that had left out less than three items had their missing scores median-replaced to allow for a total IES-R score to be calculated. 192 participants (37%) reported that they had not been 'very troubled or upset' by their experience of homophobia and 78 participants (15%) reported that they were unsure. 54 participants (10%) did not answer this question. Those that did not complete the IES-R were assumed to have no trauma as a result of sexual prejudice and therefore their scores were recorded as a zero to indicate no trauma symptoms. Descriptive statistics and a breakdown of IES-R scores by gender and sexual orientation can be seen in Table 20.

Table 20. Descriptive statistics of IES-R scores

	Measure	N	Min	Max	Mean	SD	Median	Skewness	Kurtosis
IES-R	Males	329	0	80	8.3	15.1	0	1.8	2.5
	Females	193	0	69	8.6	15.2	0	1.9	2.9
	Homosexuals	426	0	80	8.8	13.4	0	1.8	2.4
	Bisexuals	96	0	61	6.8	15.1	0	2.2	4.3
	Total	*522*	*0*	*80*	*8.4*	*15.1*	*0*	*1.8*	*2.6*

The mean score for the IES-R in the sample was 8.4 (SD=15.1). Independent-sample *t*-tests indicate that there was not a significant difference between males and females, $t(520)=-0.18$, two-tailed $p=0.858$, or between homosexual and bisexual individuals, $t(520)=1.20$, two-tailed $p=0.230$, in IES-R scores.

Descriptive statistics for the IES-R subscales is shown in Table 21. The mean scores are the same, indicating that in this sample one type of trauma symptom was not more prevalent than the others.

Table 21. Descriptive statistics of the IES-R sub-scores

	N	Min	Max	Mean	SD	Median	Skewness	Kurtosis
Intrusion	522	0	3.4	0.4	0.7	0	2.1	3.7
Avoidance	522	0	3.8	0.4	0.7	0	1.8	2.3
Hyperactivity	522	0	4.0	0.4	0.7	0	2.2	4.4

A principal component analysis (See Appendix 7.26) confirms that the three subscales converge into one overall factor, supporting the use of the total trauma score in the calculation of an overall psychological distress index (See Section 4.6.4).

4.6.2.Depression

The mean score for depression in the sample was 6.6 (SD=6.1). As can be seen in Table 22, females had a higher mean depression score than males, and the bisexual group had a higher mean score than the homosexual group. An independent-sample *t*-test found that the mean depression score for females (M=7.5, SD=5.8) was significantly higher, $t(520)=-2.57$, two-tailed $p<0.05$, than the mean depression score for males (M=6.1, SD=5.8). There was also an overall significant difference between the mean depression scores between the sexuality groups. Because the variances of the two groups were significantly unequal, $F=4.03$, $p<0.05$, a *t*-test for unequal variance was used. The mean depression score for the homosexual group (M=6.2, SD=5.9) was significantly lower, $t(129.6)=-2.83$, two-tailed $p<0.01$, than the mean depression score for the bisexual group (M=8.3, SD=6.7).

Table 22. Descriptive statistics of PHQ-9 scores

Measure		N	Min	Max	Mean	SD	Median	Skewness	Kurtosis
PHQ-9	Males	329	0	26	6.1	5.8	5	1.1	0.9
	Females	193	0	27	7.5	6.4	6	1.0	0.3
	Homosexuals	426	0	27	6.2	5.9	5	1.1	0.8
	Bisexuals	96	0	27	8.3	6.7	6	0.9	0.0
	Total	*522*	*0*	*27*	*6.6*	*6.1*	*5*	*1.1*	*0.6*

Using the score of 10 (suggested by Kroenke, Spitzer & Williams, 2001) as the cut-off to indicated probable depression, the groups were split into a depressed and non-depressed group. 149 (27%) individuals met this criterion for probable depression. A higher proportion of females and bisexual individuals fell into the depressed group than males and homosexual individuals (See Table 23). A chi-squared analysis indicated a significant difference between gender and depression, $\chi^2(1)=3.88$,

$p<0.05$, with females more likely to score over the cut-off for probable depression than males. There was also a significant difference between homosexual and bisexual individuals and their scores for depression, $\chi^2(1)=5.82$, $p<0.05$, with bisexual individuals more likely to score over the cut-off for probable depression than homosexual individuals.

Table 23. Frequencies of participants meeting the criteria for depression

	Depressed	Not depressed	Total
Males	78 (24%)	251 (76%)	329 (100%)
Females	61 (32%)	132 (68%)	193 (100%)
Homosexuals	104 (24%)	322 (76%)	426 (100%)
Bisexuals	35 (37%)	61 (64%)	96 (100%)
Total	139 (27%)	383 (73%)	522 (100%)

4.6.3. Anxiety

The mean score for anxiety in the sample was 5.1 (SD=5.3). Similarly to the depression measure, females had a higher mean anxiety score than males and the bisexual group had a higher mean score than the homosexual group (see Table 24). As the variance for males and females was significantly unequal, $F=5.05$, $p<0.05$, a *t*-test for unequal variance was used. This found that the mean anxiety score for females (M=5.9, SD=5.7) was significantly higher, $t(356.6)=-2.62$, two-tailed $p<0.01$, than the mean anxiety score for males (M=4.7, SD=4.9). There was also an overall significant difference between the mean depression scores between the sexuality groups. Again, because the unequal variances, $F=4.03$, $p<0.05$, a *t*-test for unequal variance was used. The mean anxiety score for the homosexual group (M=4.9, SD=5.1) was significantly lower, $t(130.5)=-2.03$, two-tailed $p<0.05$, than the mean anxiety score for the bisexual group (M=6.2, SD=5.8).

Table 24. Descriptive statistics of GAD-7 scores

Measure		N	Min	Max	Mean	SD	Median	Skewness	Kurtosis
GAD-7	Males	329	0	21	4.7	4.9	3	1.1	0.5
	Females	193	0	21	5.9	5.7	4	1.0	0.1
	Homosexuals	426	0	21	4.9	5.1	3	1.2	0.7
	Bisexuals	96	0	21	6.2	5.8	4	0.8	-0.4
	Total	*522*	*0*	*21*	*5.1*	*5.3*	*4*	*1.1*	*0.5*

Using the score of 10 (suggested by Spitzer, Kroenke, Williams & Löwe, 2006) as the cut off to indicated probable anxiety, the groups were split into an anxious and a non-anxious group. 101 (19%) participants met this criterion for probable anxiety. A higher proportion of females fell into the anxious group than males (see Table 25). A chi-squared analysis indicated a significant difference between genders, $\chi^2(1)=4.91$, $p<0.05$, with females more likely to score over the cut-off, indicating

probable anxiety, than males. Again more bisexual individuals scored above the cut-off for anxiety than homosexual individuals. A chi-squared analysis indicated that bisexual individuals are more likely to score over the cut-off, indicating probable anxiety, than homosexuals, $\chi^2(1)=7.27$, $p<0.01$.

Table 25. Frequencies of participants meeting the criteria for anxiety

	Anxious	Not anxious	Total
Males	54 (16%)	275 (84%)	329 (100%)
Females	47 (24%)	146 (76%)	193 (100%)
Homosexuals	73 (17%)	353 (83%)	426 (100%)
Bisexuals	28 (29%)	68 (71%)	96 (100%)
Total	101 (19%)	421 (81%)	522 (100%)

4.6.4.Creating an overall psychological distress index

Three measures were used to measure psychological distress in this study (PHQ-9, GAD-7 and IES-R). A principal component analysis was conducted, with no rotation, to investigate whether these three variables could be summarised into a single factor, to give an overall score for psychological distress in the sample. All three measures were significantly correlated (see Table 26) with correlation coefficients ranging from $r=0.32$ to $r=0.80$. The Kaiser-Meyer-Oklin value was 0.58, and Barlett's test of Sphericity was significant, $p<0.001$, supporting the factorability of the correlation matrix.

Table 26. Correlation matrix for the three measures of psychological distress (N=522)

	Depression (PHQ-9)	Anxiety (GAD-7)	Trauma (IES-R)
Depression	-	-	-
Anxiety	0.80*	-	-
Trauma	0.32*	0.35*	-

* $p<0.001$

The principal component analysis produced only one component with an eigenvalue above one (eigenvalue=2.02), which accounted for 67% of the variance. The scree plot of the eigenvalues from this analysis (See Figure 5) confirmed the presence of only one factor. All the items loaded strongly on to this one factor (See Table 27).

Table 27. Principal component analysis loadings for the PHQ-9, GAD-7 and IES-R.

Measure	Component loading
Anxiety (GAD-7)	0.92
Depression (PHQ-9)	0.91
Trauma (IES-R)	0.60

The results of the principal component analysis indicated that there was good convergent validity between the PHQ-9, the GAD-7 and the IES-R. It suggested that these three variables could be combined into one summary variable that measures participants' overall level of psychological

distress. This index was used as the main measure of psychological distress in the rest of the analysis. The factor score for this psychological distress index was computed for each individual.

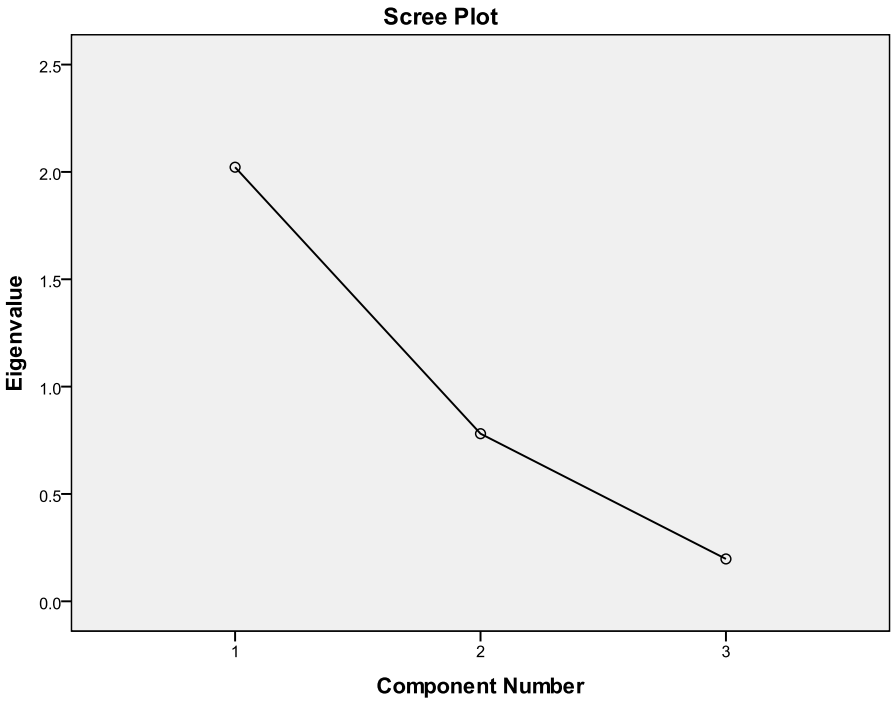

Figure 5. Scree plot of eigenvalues for the principal component analysis on the PHQ-9, GAD-7 and IES-R

The descriptive statistics for this overall psychological distress index can be seen in Table 28. As with the individual measures, the mean score for females on this new psychological distress index (M=0.1, SD=1.0) was significantly higher, $t(520)=-2.44$, $p<0.05$, than the mean score for males (M=-0.1, SD=1.0). The mean score for bisexual individuals (M=0.2, SD=1.1) on this measure was again significantly higher, $t(520)=-2.01$, $p<0.05$, than the mean score for homosexual individuals (M=-0.0, SD=1.0).

Table28. Descriptive statistics of overall psychological distress scores

	N	Min	Max	Mean	SD	Median	Skewness	Kurtosis
Males	329	-1.1	3.9	-0.1	1.0	-0.4	1.2	1.2
Females	193	-1.1	3.8	0.1	1.0	-0.2	1.1	0.8
Homosexuals	426	-1.1	3.9	-0.0	1.0	-0.3	1.3	1.4
Bisexuals	96	-1.1	3.0	0.2	1.1	-0.2	0.9	-0.1
Total	*522*	*-1.1*	*3.9*	*0.0*	*1.0*	*-0.3*	*1.2*	*1.0*

4.7. Additional variables

As additional data had been collected in the survey, the relationship between additional variables and the study's key variables were investigated. Participants were placed into depressed or non-depressed, and anxious or non-anxious groups based on clinical cut-off scores (See Section 4.5) and the impact of this is explored below. Due to openness of sexual orientation also being a factor in the minority stress model (Meyer, 2003), and research suggesting that reporting experiences of prejudice can reduce psychological distress (Al-Mateen, Lewis & Singh, 1998) these variables were also investigated.

4.7.1. Diagnoses of Depression and Anxiety

The PHQ-9 and GAD-7 measures give clinical cut-off scores to indicate cases of probable depression or anxiety. To further explore the relationship that the key variables have over psychological distress, those who scored above the cut off for these two measures were compared against those who scored below this cut-off. The mean scores for the key variables for the depressed and anxious groups can be seen in Table 29.

Table 29. Mean and SD between depressed and anxious groups for the key variables

		Overall Sexual prejudice	Internalised homophobia	Problem-focused coping	Emotion-focused coping	Maladaptive coping
Depressed group	N	139	139	131	131	131
	Mean	1.23	79.55	11.92	24.81	19.11
	SD	0.91	21.34	4.32	6.66	5.88
Non-depressed group	N	383	383	348	348	348
	Mean	-0.44	70.10	11.81	23.61	14.31
	SD	0.56	18.98	4.61	6.69	3.90
Effect size	*d*	2.21	0.47	-	-	0.96
Anxious group	N	101	101	94	94	94
	Mean	1.54	81.14	12.13	25.47	19.82
	SD	0.82	20.80	4.52	6.88	5.99
Non-anxious group	N	421	421	385	385	385
	Mean	-0.37	70.57	11.77	23.57	14.60
	SD	0.61	19.35	4.53	6.60	4.14
Effect size	*d*	2.64	0.53	-	0.28	1.01
Total	N	522	522	479	479	479
	Mean	0.00	72.62	11.84	23.94	15.63
	SD	1.00	20.06	4.53	6.70	5.00

Independent sample *t*-tests found that compared to the non-depressed group, the depressed group had significantly higher scores for overall sexual prejudice, $t(177.6)=-20.23$, $p<0.001$, $d=2.21$, internalised homophobia, $t(220.1)=-4.60$, $p<0.001$, $d=0.47$, and maladaptive coping, $t(520)=-10.32$,

p<0.001, *d*=0.96. Compared to the non-anxious group, the anxious group had significantly higher levels of overall sexual prejudice, *t*(127.2)=-21.91, *p*<0.001, *d*=2.64, internalised homophobia, *t*(520)=-4.86, *p*<0.001, *d*=0.53, emotion-focused coping, *t*(477)=-2.48, *p*<0.05 and maladaptive coping, t(477)=-9.95, *p*<0.001, *d*=1.01.

Problem-focused coping scores did not differ between either the depressed and non-depressed groups, *t*(477)=-0.23, *p*=0.820, or between the anxious and non-anxious groups, *t*(477)=-0.69, *p*=0.491. Emotion-focused coping scores did not differ between the depressed and non-depressed groups, *t*(477)=-1.75, *p*=0.081.

4.7.2. Openness

Openness was significantly related to overall levels of sexual prejudice, *F*(3,518)=6.92, *p*<0.001, η^2=0.04, and internalised homophobia, *F*(3,518)=75.35, *p*<0.001, η^2=0.30. From the group means in Table 30, it is clear that the more open a person is with their sexuality, the higher their score for sexual prejudice is and the lower their score for internalised homophobia will be.

Table 30. Mean and SD between levels of openness for the key variables

		Overall Sexual prejudice	Internalised homophobia	Problem-focused coping	Emotion-focused coping	Maladaptive coping	Psychological distress
Not out at all	N	16	16	13	13	13	16
	Mean	12.63	106.25	8.77	19.62	14.62	0.34
	SD	12.01	19.11	2.74	4.43	5.62	1.12
Out to some people	N	121	121	111	111	111	121
	Mean	17.94	86.75	11.59	24.46	16.19	0.12
	SD	13.93	19.18	4.57	6.71	5.25	1.00
Out to most people	N	227	227	212	212	211	227
	Mean	23.21	70.64	11.96	24.01	15.73	-0.00
	SD	17.32	16.77	4.75	6.56	4.86	1.04
Out to everyone	N	158	158	143	143	143	158
	Mean	26.27	61.22	12.13	23.82	15.13	-0.13
	SD	20.72	14.44	4.75	6.97	4.96	1.04
Effect size	η^2	4%	30%	2%	-	-	1%
Total	N	522	522	479	479	479	522
	Mean	22.59	72.62	11.84	23.94	15.63	0.00
	SD	17.91	20.06	4.53	6.70	5.00	1.00

While there was no significant relationship between openness of sexuality and the mean scores for the psychological distress index, *F*(3,518)=2.19, *p*=0.086, η^2=0.01, or problem-focused coping, *F*(3,475)=2.37, *p*=0.070, η^2=0.02, there was a trend for those who were most open to have lower scores of psychological distress and to use more problem-focused coping strategies. There was no

significant relationship between openness of sexuality and emotion-focused coping scores, $F(3,475)=2.07$, $p=0.104$, or maladaptive coping scores, $F(3,474)=1.16$, $p=0.326$.

4.7.3. Disclosure of experiences of sexual prejudice

There was a significant relationship between the number of people/organisations experiences of sexual prejudice were disclosed to, and the overall amount of sexual prejudice a person had experienced, $F(4,517)=41.86$, $p<0.001$, $\eta^2=0.25$. This however, may be explained by an individual with more experiences of sexual prejudice having more opportunities to tell someone. There was also a significant difference between the mean scores of both problem-focused coping, $F(4,474)=8.19$, $p<0.001$, $\eta^2=0.07$, and emotion-focused coping $F(4,474)=5.29$, $p<0.001$, $\eta^2=0.04$, and the number of people experiences of sexual prejudice were disclosed to. The mean scores shown in Table 31, indicate that the more people that experiences are disclosed to, the more use of problem-focused and emotion-focused coping an individual uses. This is understandable as disclosure of experiences can be viewed as both a problem-focused and an emotion-focused coping strategy.

Table 31. Mean and SD between disclosure rates of sexual prejudice for the key variables

		Overall Sexual prejudice	Internalised homophobia	Problem-focused coping	Emotion-focused coping	Maladaptive coping	Psychological distress
Told no-one	N	229	229	191	191	191	229
	Mean	14.98	73.78	10.83	22.55	15.03	-0.09
	SD	13.53	20.76	4.35	6.99	5.50	0.94
Told 1 person	N	160	160	157	157	157	160
	Mean	24.54	73.98	11.82	24.13	15.81	0.00
	SD	15.89	19.84	4.33	6.41	4.49	1.01
Told 2 people	N	75	75	74	74	73	75
	Mean	26.16	70.04	13.07	26.16	16.16	0.11
	SD	15.25	19.62	4.32	5.77	4.90	1.08
Told 3 people	N	28	28	28	28	28	28
	Mean	35.68	69.54	12.18	23.86	15.71	-0.04
	SD	26.24	19.75	5.05	6.13	4.33	0.82
Told 4 people or more	N	30	30	29	29	29	30
	Mean	49.20	65.83	15.17	26.41	17.17	0.41
	SD	20.77	15.49	4.57	6.97	4.80	1.28
Effect size	η^2	25%	-	7%	4%	-	-
Total	N	522	522	479	479	478	522
	Mean	22.59	72.62	11.84	23.94	15.63	0.00
	SD	17.91	20.06	4.53	6.69	5.00	1.00

There was no significant difference between the number of people experiences were disclosure to and maladaptive coping scores, $F(4,473)=1.65$, $p=0.160$, or overall levels of psychological distress. While the mean scores in Table 31 show a trend for lower internalised homophobia scores with increased disclosure, this trend does not reach statistical significance, $F(4,517)=1.72$, $p=0.145$.

4.8. Multiple regression analysis

4.8.1. Predicting psychological distress

To address the main research hypothesis, and to explore the extent that psychological distress is predicted by the experience of sexual prejudice, internalised homophobia and the use of coping strategies, a multiple regression analysis was conducted. Additional variables were also included that, from the literature, were reported to have an association with the development of psychological distress. A backward elimination procedure was used to identify unreliable predictors and to determine the best-fitting model, where each predictor has a significant and unique contribution to the predictive power of the model with respect to the dependent variable psychological distress.

Scatterplots of the relationships between each of the key variables and psychological distress (see Appendix 7.27) show approximately linear relationships, and correlation coefficients of these relationships are shown in Table 32 below. A correlation coefficients below r=0.3 is considered a weak effect size, between r=0.3 to r=0.5 is considered a medium effect size and above r=0.5 is considered to be a strong effect size (Cohen et al, 2002). All the key variables had a significant, some albeit weak, correlation with psychological distress. As a result all these variables were included in the multiple regression analysis.

Table 32. Correlation between predictor variables and psychological distress

	Psychological distress index	
	Correlation (r)	Significance (p)
Sexual prejudice (N=522)	0.27	0.000
Internalised homophobia (N=522)	0.32	0.000
Problem-focused coping (N=479)	0.12	0.010
Emotion-focused coping (N=479)	0.21	0.000
Maladaptive coping (N=478)	0.58	0.000
Openness with sexuality (N=522)	-0.11	0.012
Disclosure (N=522)	0.12	0.008

The result of the multiple regression analysis suggested that the best fitting model did not include emotion-focused coping, openness or disclosure. The final model therefore indicated that, combined, maladaptive coping, internalised homophobia, experiences of sexual prejudice and problem-focused coping, significantly predict 39% of the variance of the psychological distress scores (adj. R^2=0.39, F(4,473)=76.24, p<0.001). Table 33 shows that maladaptive coping made the largest

unique contribution to the model (β=0.55), followed by internalised homophobia (β=0.18), then sexual prejudice (β=0.13), then finally problem-focused coping (β=-0.12).

Table 33. Backwards multiple regression of predictors of psychological distress (only significant predictors are included) (N=478)

						95% CI for *B*	
	B	SE *(B)*	β	*t*	*p*	Lower	Upper
Maladaptive coping	0.11	0.01	0.55	13.08	0.000	0.09	0.13
Internalised homophobia	0.01	0.00	0.18	4.85	0.000	0.01	0.01
Sexual prejudice	0.01	0.00	0.13	3.47	0.001	0.00	0.01
Problem-focused coping	-0.03	0.01	-0.12	-2.92	0.004	-0.04	-0.01

This analysis indicates that maladaptive coping was the strongest predictor of psychological distress. It is also worth noting that while problem-focused coping had a positive, but relatively weak, correlation with psychological distress, when the other predictors were taken into account in this multiple regression model, problem-focused coping produced a slight negative predictive effect, suggesting that it might be a protective factor for psychological distress as predicted by the study's hypothesis. However this is difficult to establish due to multicollinearity of the predictors. This collinearity was largely caused by the correlation between the coping scales.

4.8.2.Moderating effects of gender and sexuality

While not being a specific aim of the study, as there was found to be a significant difference between the mean scores of males and females and between homosexuals and bisexuals on their psychological distress scores, it was decided to conduct further multiple regression analysis to see whether gender or sexuality moderates the regression model.

In terms of gender, for males, a multiple regression analysis, using backwards elimination, found that the model that best fitted onto psychological distress scores did not include emotion-focused coping, problem-focused coping, openness or disclosure. Therefore this model only used maladaptive coping, internalised homophobia and experiences of sexual prejudice, and found these combined to significantly predict 40% of the variance of the psychological distress scores (adj. R^2=0.40, $F(3,296)=64.34$, $p<0.001$). For females, the multiple regression analysis, again using backwards elimination, found that the model that best fitted onto psychological distress scores excluded emotion-focused coping, openness and disclosure. Therefore this model used maladaptive coping, internalised homophobia, experiences of sexual prejudice and problem-focused coping, and found these combined to significantly predict 39% of the variance of the psychological distress

scores (adj. R^2=0.39, F(4,173)=27.55, p<0.001). Table 34 shows that maladaptive coping was the strongest predictor of psychological distress for both males (β=0.49) and females (β=0.56).

Table 34. Backwards multiple regression of predictors of psychological distress for males and females (only significant predictors are included) (N=478)

							95% CI for *B*	
		B	SE *(B)*	β	*t*	*p*	Lower	Upper
Males	Maladaptive coping	0.10	0.01	0.49	9.47	0.000	0.08	0.12
	Internalised homophobia	0.01	0.00	0.21	4.37	0.000	0.01	0.02
	Sexual prejudice	0.01	0.00	0.13	2.67	0.008	0.00	0.01
Females	Maladaptive coping	0.11	0.01	0.56	8.40	0.000	0.08	0.14
	Internalised homophobia	0.01	0.00	0.20	3.32	0.001	0.00	0.02
	Sexual prejudice	0.01	0.00	0.13	2.05	0.042	0.00	0.02
	Problem-focused coping	-0.04	0.02	-0.18	-2.67	0.008	-0.07	-0.01

In terms of sexuality, for homosexual individuals, a multiple regression analysis, using backwards elimination, found that the model that best fitted onto psychological distress scores did not include emotion-focused coping, openness or disclosure. Therefore this model used maladaptive coping, internalised homophobia, experiences of sexual prejudice and problem-focused coping, and found these combined to significantly predict 40% of the variance of the psychological distress scores (adj. R^2=0.40, F(4,385)=66.43, p<0.001). For bisexual individuals, the multiple regression analysis, again using backwards elimination, found that the model that best fitted onto psychological distress only included maladaptive coping and excluded, internalised homophobia, experiences of sexual prejudice, emotion-focused coping, problem-focused coping, openness and disclosure. This model was found to predict 36% of the variance of the psychological distress scores (adj. R^2=0.36, F(1,86)=49.50, p<0.001). Table 35 shows that maladaptive coping is again the strongest predictor of psychological distress for homosexual individuals (β=0.51) and the only significant and unique predictor for bisexual individuals (β=0.60).

Table 35. Backwards multiple regression of predictors of psychological distress for homosexual and bisexual individuals (only significant predictors are included) (N=478)

							95% CI for *B*	
		B	SE *(B)*	β	*t*	*p*	Lower	Upper
Homosexuals	Maladaptive coping	0.10	0.01	0.51	11.01	0.000	0.08	0.12
	Internalised homophobia	0.01	0.00	0.23	5.43	0.000	0.01	0.02
	Sexual prejudice	0.01	0.00	0.17	4.12	0.000	0.01	0.01
	Problem-focused coping	-0.03	0.01	-0.12	-2.77	0.006	-0.05	-0.01
Bisexuals	Maladaptive coping	0.13	0.02	0.60	7.04	0.000	0.09	0.16

The amount of variance explained by each of these four models was similar indicating that gender and sexuality do not moderate the effect of the predictors on psychological distress. Even when considering gender or sexuality subgroups, maladaptive coping remains the strongest unique

predictor (and for bisexual individuals the only significant predictor) of psychological distress. The fact that different factors were eliminated between the groups is likely to be a result of smaller sample sizes, particularly for the bisexual group.

4.9. Path analysis

4.9.1. A path analysis to investigate coping and internalised homophobia as mediators

The multiple regression analysis above has identified past experiences of sexual prejudice, internalised homophobia and coping as important predictors of present psychological distress. Maladaptive coping turned out to be by far the strongest predictor in the model for psychological distress (β=0.55) and thus can be interpreted as a considerable risk factor. By contrast, the effect of problem-focused coping as a potential protective factor preventing the development of psychological distress was rather modest (β=-0.12). Although these variables have been measured using a cross-sectional design limiting the investigation of cause-effect relationships, it can be argued on theoretical grounds that coping represents a psychological process in response to a perceived threat, challenge or difficult task, all of which are likely to cause stress and thus require purposeful efforts and actions to successfully deal with the situation or the problem (Lazarus & Folkman, 1984). Consequently, coping represents a classic 'mediator variable' explaining how an independent or 'antecedent' variable is affecting a dependent or 'consequent' variable.

4.9.2. Testing a full mediation model

In the context of the present research, the amount of sexual prejudice experienced was regarded as a cumulative measure of negative and threatening situations that an individual experiences because of their sexual orientation. It was hypothesised that experiences of sexual prejudice would trigger off a coping response which in turn would determine the amount of actual psychological distress as a consequence of sexual prejudice. This hypothesis therefore suggests that any harmful effects of sexual prejudice on mental health are entirely dependent on how successful relevant coping activities will be and therefore represents a full mediation hypothesis (hypothesis 1). Furthermore, it was also assumed that the experience of sexual prejudice would amplify existing internalised homophobia, and that internalised homophobia itself would cause psychological distress (hypothesis 2). This hypothesis is therefore also a full mediation hypothesis.

A path analysis was conducted in LISREL 8.80 to test these two hypotheses using a covariance matrix (N=478) as data input matrix and ML estimation. The correlation matrix of the variables concerned is presented in Table 36. The first model (M1) to be tested was specified with sexual prejudice as the only antecedent or exogenous variable, internalised homophobia, maladaptive coping and problem-focused coping as three mediators and psychological distress as the final consequent variable in the model. Because problem-focused and maladaptive coping are substantially correlated due to tapping the same construct, the disturbance terms of these two variables were allowed to be correlated to reflect this fact.

Table 36. Correlation matrix of the five variables in the path analysis (N=478)

	1	2	3	4
1. Total Sexual Prejudice	-			
2. Problem Focused Coping	0.28**	-		
3. Maladaptive Coping	0.29**	0.39**	-	
4. Internalised Homophobia	-0.07	-0.09*	0.23**	-
5. Overall Psychological Distress	0.24**	0.12**	0.58**	0.31**

**p<0.01 *p<0.05

The goodness of fit test for this model M1 suggested that it fitted the covariance matrix poorly and should therefore be rejected, $\chi^2(3)=58.5$, $p<0.0001$, with the fit indices RMSEA=0.20, AGFI=0.77, NFI=0.85 all confirming that this was a poor fitting model. The standardised parameter estimates of this model are presented in Figure 6.

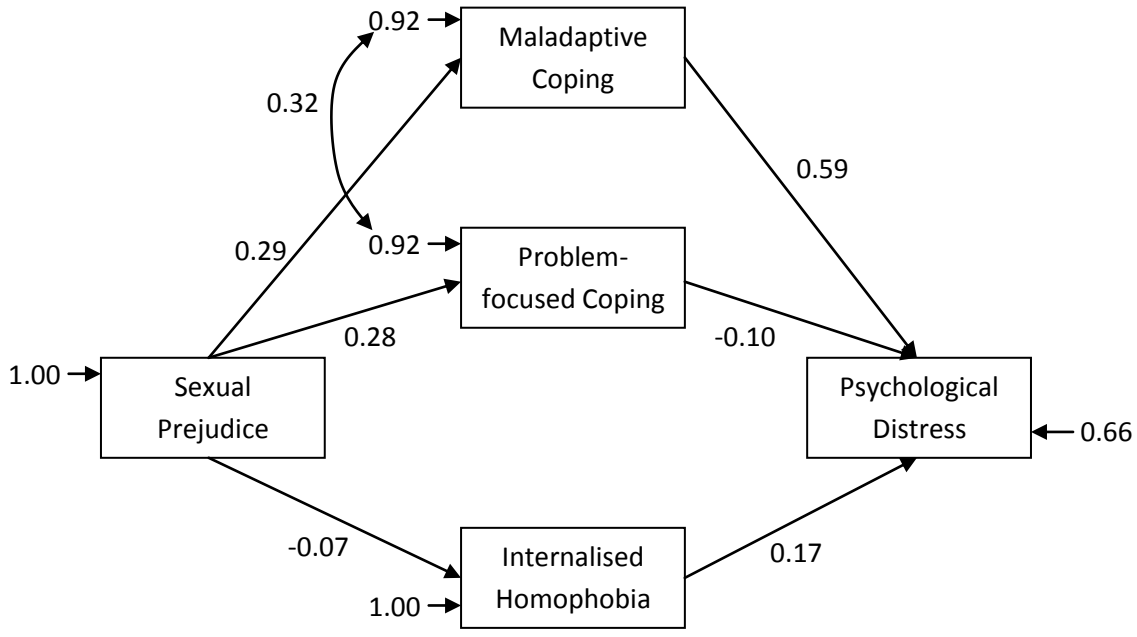

Figure 6. A full-mediation path model (M1) of the effect of sexual prejudice on psychological distress (N=478)

All path coefficients of this model were statistically highly significant (p<0.001) except for the path from sexual prejudice to internalised homophobia. This path can therefore be removed from the model, and consequently hypothesis 2 stating that sexual prejudice increased psychological distress via internalised homophobia was disconfirmed. This finding also disconfirms the study's fourth hypothesis that stated that sexual prejudice contributes to the amount of internalised homophobia that an individual has.

4.9.3. Testing a partial mediation model

In order to improve the model fit a partial mediation model (M2) was specified which allowed a direct effect of sexual prejudice on psychological distress and also had the insignificant path from sexual prejudice on internalised homophobia removed. Since one path was removed, but a new path was added to the model, it still had 3 degrees of freedom. The goodness of fit test for model M2 indicated some improvement, but the model was clearly rejected nonetheless, $\chi^2(3)=48.9$, p<0.001, with the fit indices RMSEA=0.18, AGFI=0.80, NFI=0.88 all indicating that further improvements are required. All path coefficients in this model were statistically significant (p<0.001) though.

The next model (M3) added two paths from internalised homophobia to problem-focused and maladaptive coping respectively leaving only one degree of freedom. This re-specification seemed justified as internalised homophobia itself can be defined as the experience or awareness of internal conflicts as well as anxiety and fear of social rejection because of one's sexual orientation. These kind of internal conflicts are likely to provoke psychological stress which then requires coping efforts. The goodness of fit test for model M3 was very good, $\chi^2(1)=2.37$, p=0.12, with all fit indices suggesting that this model fitted the observed covariance's very well, RMSEA=0.054, AGFI=0.97, NFI=0.99. However, the path coefficient from internalised homophobia to problem-focused coping was very small (β=-0.07) and statistically insignificant (p>0.10) and therefore removed from the model resulting in a final model (M4). The goodness of fit test for model M4 still clearly suggested it was acceptable, $\chi^2(2)=5.23$, p=0.07, and all fit indices reached recommended benchmark values, RMSEA=0.058, AGFI=0.97, NFI=0.99; the highest standardised residual was -2.28. The results for the path coefficients of model M4 are displayed in Figure 7.

Several comments are worth making. The model explains 40% of the variance in present psychological distress which is a considerable amount. The percentage of explained variance in problem-focused coping by sexual prejudice is modest (8%), whereas 16% of the variance in maladaptive coping is determined by sexual prejudice and internalised homophobia together; a

substantial amount. Because sexual prejudice and internalised homophobia are uncorrelated, their impact on the endogenous variables in the model is independent of each other. Interestingly though, both involve maladaptive coping as an important mediator in their causal pathway towards psychological distress, whereas problem-focused coping is a mediating variable only for sexual prejudice.

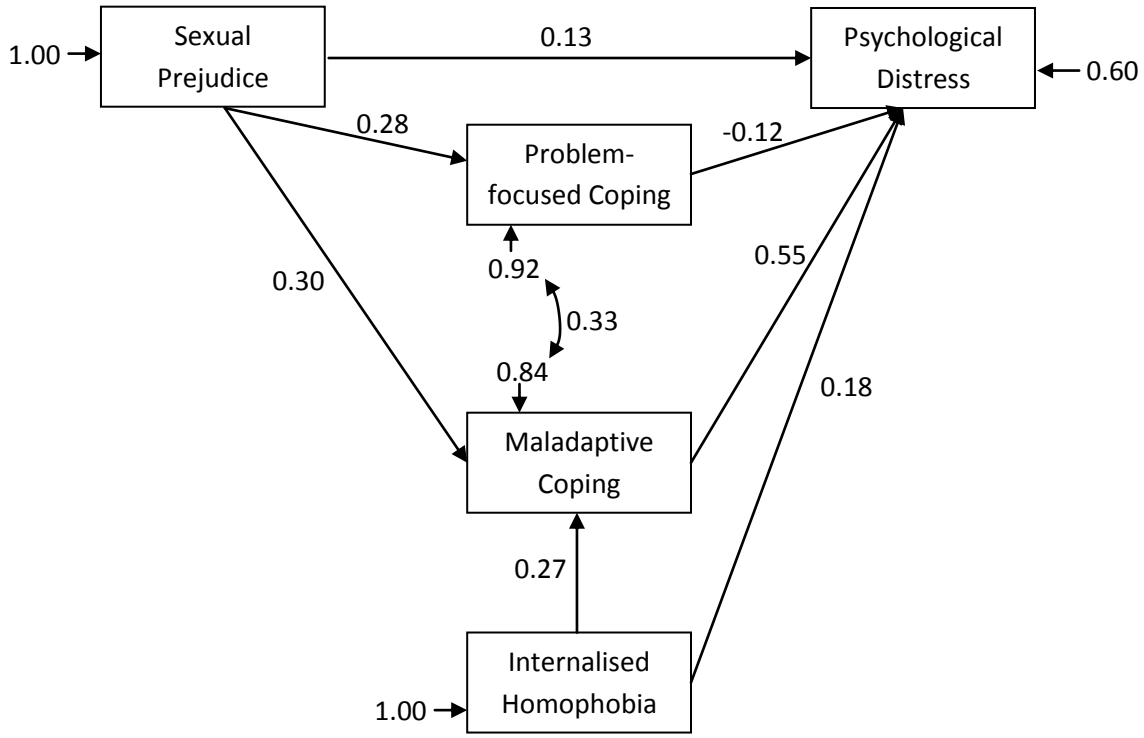

Figure 7. A partial-mediation path model (M4) of the effects of sexual prejudice and internalised homophobia on psychological distress (N = 478)

A path analysis enables the breakdown of the overall impact of an antecedent on a consequent variable into a direct and indirect effect (Kline, 2005) and these two types of effects can be added up to a total effect. The results for this kind of 'effect analysis' for psychological distress are displayed in Table 37. As is evident, by far the strongest direct effect on psychological distress emanates from maladaptive coping. The total effect for internalised homophobia is slightly higher than the one for sexual prejudice. On closer inspection, it is apparent that both antecedent variables sexual prejudice and internalised homophobia affect psychological distress indirectly almost to the same extent as they affect it directly (see Table 37). This underlines the importance of maladaptive coping as an important mediator variable. On the other hand, the importance of problem-focused coping in preventing psychological distress is rather limited. Its own direct effect is small (β=-0.12) and the indirect effect from sexual prejudice via problem-focused coping to psychological distress even smaller (IE=-0.03).

Table 37. Results of the effect analysis for model M4

Causal route		Direct effect	Indirect effect	Total effect
Sexual prejudice	→ Psychological distress	0.13 (50%)	0.13 (50%)	0.26 (100%)
Internalised homophobia	→ Psychological distress	0.18 (55%)	0.15 (45%)	0.33 (100%)
Maladaptive coping	→ Psychological distress	0.55 (100%)	-	0.55 (100%)
Problem-focused coping	→ Psychological distress	-0.12 (100%)	-	-0.12 (100%)

Note: all indirect effects are statistically significant p<0.001

4.9.4. Adding to the path analysis

The initial multiple regression analysis found that disclosing experiences of sexual prejudice and the openness of someone's sexuality did not add a unique contribution to the path model when other variables were controlled for. However, it was considered whether these two variables were still protective factors of psychological distress, with their relationship being fully mediated by internalised homophobia or coping strategies, which they had been found to correlate with. To establish this, first the relationship between these two variables and the dependant variable, psychological distress, needed to be established. These two variables were inputted into a separate multiple regression analysis which found that both made a unique contribution, and significantly predicted 3% of the variance of the psychological distress scores (adj. R^2=0.03, $F(2,519)=7.992$, $p<0.001$). While, as expected, openness of sexuality was found to be a protective factor and reduced psychological distress (See Table 38), disclosing experiences of sexual prejudice did not. In fact, it appeared to contribute to psychological distress. It is possible that the person/people, who the experiences are disclosed to, do not react well leading to the exacerbation of psychological distress. However it is possible that disclosure of experiences is still a mediating variable between the actual experiences of sexual prejudice and development of psychological distress. It would follow that the more experiences of sexual prejudice a person has experienced the more opportunities that an individual has to disclose them.

Table 38. Backwards multiple regression of openness and disclosure of experiences on psychological distress (N=522)

						95% CI for *B*	
	B	SE *(B)*	β	*t*	*p*	Lower	Upper
Openness	-0.17	0.06	-0.14	-3.16	0.002	-0.28	-0.07
Disclosure	0.12	0.04	0.14	3.08	0.002	0.04	0.20

While these two variables were found to be significant risk factors for psychological distress, they only accounted for 3% of the variance in the overall psychological distress index. They were therefore considered to have only a very small impact and so were not investigated further in this study.

5. Discussion

5.1. Overview of the study's aims

LGB individuals are at an increased risk of a number of mental health difficulties (Meyer, 2003). This study aimed to explore some of the factors, particularly the experience of sexual prejudice, internalised homophobia and different coping strategies that contribute to this increased risk. As well as exploring the direct association between psychological distress and both internalised homophobia and coping strategies, the potential mediating roles that these play following individuals experiencing sexual prejudice and developing psychological distress was also investigated.

5.2. Discussion of main findings

In this study 65% of participants reported that they had experienced homophobia and discrimination because of their sexuality. This figure is almost identical to the result of Warner and colleagues' (2004) study, who found that 66% of their sample reported these experiences. When participants were asked about specific situations of sexual prejudice, prevalence rates rose to 84%. One possible explanation for this discrepancy is that some LGB individuals may refuse to identify themselves as victims, therefore not acknowledging that they are a victim of sexual prejudice.

This study found high levels of anxiety and depression within the sample, with 27% scoring above the cut-off for a diagnosis of depression and 19% scoring above the cut-off for a diagnosis of anxiety. Using the same measures (PHQ-9 & GAD-7), a prevalence rate of 9.2% for current depression (Martin et al, 2006), and 5.1% for anxiety (Löwe et al, 2008) was found in the general population. This seems to lend further support to the substantial amount of research that has found that LGB individuals are at a higher risk of developing psychopathology than their heterosexual counterparts (Cochran, Sullivan & Mays, 2003; King et al, 2008; Meyer, 2003). However the results may be due to a possible self-selection bias that may have influenced these results.

5.2.1. Predicting psychological distress

The pattern of results investigating the relationship between experiences of sexual prejudice and psychological distress supported the study's first hypothesis. Results indicated that individuals with higher sexual prejudice scores have significantly higher levels of psychological distress. Although this

association was found to be relatively weak (*r*=0.27), this finding still supports previous research that has established the link between experiences of sexual prejudice and psychological distress (Herek, Gillis & Cogan, 1999; Rivers & Cowie, 2006). This relationship however, still does not establish causality. It would be understandable that experiencing prejudice causes psychological distress, and this fits with the existing literature that has found that negative life experiences cause psychological distress (Downrenwend, 2000). However, this relationship could equally be explained by individuals with higher levels of psychological distress eliciting more sexual prejudice than those with lower levels of psychological distress.

The second hypothesis stated that the negative beliefs an individual holds about their sexual orientation (i.e. internalised homophobia), would also predict psychological distress. The results from this study support this hypothesis as individuals with higher levels of internalised homophobia were found to have higher levels of psychological distress. This relationship produced a medium effect size (*r*=0.32). This finding supports the results of previous research linking these two variables (Meyer & Dean, 1998; Szymanski & Owens, 2008), but again does not establish causality.

The results investigating the impact of differing coping styles on psychological distress partially supported the studies third hypothesis. Problem-focused coping and emotion-focused coping were believed to be protective factors and therefore would be negatively associated with psychological distress. Whereas maladaptive coping was thought to exacerbate psychological distress, and therefore be positively related to psychological distress. The results of this study found that all three coping measures were positively correlated with psychological distress. The strength of this relationship was strong for maladaptive coping (*r*=0.58) but weak for problem-focused coping (*r*=0.12) and emotion-focused coping (*r*=0.21). This result for maladaptive coping is consistent with the hypothesis and with the literature on coping that, finds this style of coping leads to negative outcomes (Penley, Tomaka & Wiebe, 2002; Yates et al, 2007). However, the results for problem-focused and emotion-focused coping initially did not appear to support the hypothesis as they did not have a negative relationship with psychological distress. This initial finding would suggest that they are not protective factors to psychological distress as expected. However, following a multiple regression analysis, when all the other factors are taken into account, problem-focused coping became negatively correlated with psychological distress (See section 5.2.1.1.), implying that this coping style is a protective factor and can help to reduce the risk of psychological distress. This finding supported the study's third hypothesis, and was consistent with the literature on coping (Lazarus & Folkman, 1984). Overall these results were consistent with other studies of coping in minority groups (Noh & Kaspar, 2003) which found that maladaptive coping is less effective in

reducing psychological distress than strategies that would be classified as problem-focused or emotion-focused coping. It is worth noting that maladaptive coping had a much stronger relationship with psychological distress than the other coping strategies, suggesting that this is a stronger predictor of psychological distress than the other two styles of coping.

5.2.1.1. Important predictors of psychological distress

The findings from the multiple regression analysis showed that maladaptive coping, internalised homophobia, experiences of sexual prejudice and problem-focused coping all made significant and unique contributions to a regression model that explained 39% of the variance on the psychological distress index.

As mentioned above, the relationship between problem-focused coping and psychological distress changed in this regression model. It was only when the other predictors were taken into account that the protective effect of problem-focused coping emerged, implying that increased use of problem-focused strategies would be associated with lower levels of psychological distress. This finding supports previous research which has found that problem-focused coping is associated with better psychological health (Penley, Tomaka & Wiebe, 2002; Yates et al, 2007).

Previous research into other minority groups, found that ethnic minority women tend to favour avoidant (or maladaptive) coping strategies when faced with discrimination (Utsey, Ponterotto, Reynolds & Cancelli, 2000). A similar finding was found with sexual minorities in this study with females being more likely to utilise maladaptive coping strategies when faced with sexual prejudice, than males. When the multiple regression analysis for males and females are compared, the models explain a similar amount of variance; however the impact of the variables differs slightly. Maladaptive coping was found to be a stronger predictor of psychological distress in females (β=0.56) than it was in males (β=0.49). This study also found that problem-focused coping did not make a significant unique contribution to the psychological distress of males, whereas it was a significant protective factor for females (β=-0.18). These findings may suggest that coping strategies may be more important in managing psychological distress in females than in males. Internalised homophobia and experiences of sexual prejudice had very similar predictive effects for both males and females.

5.2.1.2. Discussion of path analysis

The multiple regression analysis identified a number of risk factors for psychological distress in the LGB population. To take this analysis further and reveal the importance of the potential mediating variables (i.e. coping strategies and internalised homophobia) a path analysis was conducted. A final path model was developed which was found to explain 40% of the variance of the presence of psychological distress. This model indicated that maladaptive coping had the strongest total effect (0.55), and therefore was the strongest predictor of psychological distress. Internalised homophobia had a stronger direct (0.18) and total effect (0.33) on psychological distress, compared to actual experiences of sexual prejudice (direct effect = 0.13, total effect = 0.26), which indicates that internalised homophobia is a stronger predictor of psychological distress than actual experiences of sexual prejudice.

Coping was found to only partially mediate the relationship between psychological distress and both sexual prejudice and internalised homophobia. Therefore, regardless of how well coping can be controlled, it will not be able to entirely protect an individual from the negative effects of sexual prejudice and internalised homophobia. The effect analysis demonstrated that the direct effect of sexual prejudice on psychological distress was equivalent to its indirect effect via both of the coping variables. This means that for the average participant, following experiences of sexual prejudice, even the most successful intervention at reducing maladaptive coping strategies is only likely to reduce the overall risk of psychological distress by approximately 50%.

This path model, along with the regression analysis, indicates that problem-focused coping is currently less important than maladaptive coping in its contribution to psychological distress. This suggests that the preventive benefits of problem-focused coping strategies do not outweigh the negative influence of maladaptive coping strategies on the development of psychological distress in this model. This finding stresses the importance for psychological therapists to tackle the use of maladaptive coping strategies, and help strengthen individual's ability to use problem-focused coping strategies effectively in order to improve their protective effect. This is discussed further in Section 5.5.

Maladaptive coping appeared to have a considerable mediating effect between the dependant variable, psychological distress, and both sexual prejudice and internalised homophobia. Problem-focused coping on the other hand only had a mediating effect between sexual prejudice and psychological distress. Therefore the potential for problem-focused coping to act as a mediating

protective factor between internalised homophobia and sexual prejudice is currently minimal. This finding implies that in the present sample, the use of problem-focused coping did not reduce the distress caused by the internal conflicts of internalised homophobia, but maladaptive coping amplified this distress. This may highlight the difficulty in actively coping with sexual prejudice and internalised homophobia. It has been argued that coping strategies are not inherently adaptive or maladaptive. Categorising coping strategies in this way may be overly simplistic. Researchers have argued that the effectiveness of coping strategies depends on how well they match the stressful situation (Folkman, Lazarus, Gruen & DeLongis, 1986). The coping research suggest that problem-focused coping strategies are most adaptive when there is a belief that something can be done to change the source of stress (Zakowski et al, 2001). An individual, who is victimised purely because of an unchangeable aspect of their self, is likely to find this experience harder to cope with than other more general stressors. Particularly if they believe that they have no ability to reduce their distress.

Psychometric measures of coping like the COPE make a fundamental assumption that coping strategies are trait characteristics, in that each person has a particular way of coping that they apply to all problems throughout their life. However research has shown that individuals use a combination of different coping strategies for different situations (Carver & Scheier, 1994; Lazarus & Folkman, 1984). Stressful situations are not static events and so individuals need to adapt as the event changes. This means that the individual's coping strategy has to change over time, even on the same problem (Folkman & Lazarus, 1985). These findings suggest that coping strategies are not trait characteristics, so labelling people as users of a particular coping style may not be particularly useful. While this study does not account for the fluid nature of coping strategies, or their suitability in the given situations, the research did still find a relationship between increased use of maladaptive coping strategies, and higher levels of experiences of sexual prejudice and internalised homophobia. When the dynamic nature of coping is controlled, it may be that this relationship becomes stronger. Future research might avoid measuring general coping styles and instead look at the specific strategies that an individual uses to manage their experience of sexual prejudice.

Interestingly the path analysis found no relationship between internalised homophobia and sexual prejudice, which led to this path being dropped from the model, and the study's fourth hypothesis being rejected in favour of the null hypothesis. The fourth hypothesis expected that internalised homophobia develops as a result of negative experiences based on the participant's sexuality (measured in this study as sexual prejudice). This was based on the idea that these prejudicial experiences would lead to the view that it is dangerous and undesirable to be homosexual or bisexual, which in turn would result in higher levels of internalised homophobia. Contrary to this

hypothesis, the results found that there was no association between experiences of sexual prejudice and internalised homophobia. This finding suggests that internalised homophobia develops independently from experiences of sexual prejudice. However there are methodological issues that need consideration. Theories of the development of internalised homophobia suggest that these beliefs are learnt from a young age, usually before the recognition of an individual's sexual orientation (Nicely, 2001). Although not measured in this study, it would be expected that the majority of experiences of sexual prejudice reported by participants occurred after the recognition and/or the disclosure of their sexuality, and therefore after their internalised homophobic beliefs had developed. Therefore a relationship between these variables would not necessarily be expected. This result also conflicts with Meyer's (1995) finding. However this may be explained by the different measure of internalised homophobia that Meyer used (Internalised homophobia scale, Martin & Dean, 1987), which has fewer items, is based specifically on the DSM-III criteria for ego-dystonic homosexuality and therefore lacks the content validity of the RHAI used in the current study (Shidlo, 1994). Meyer's study also used only violent incidents to measure sexual prejudice, whereas the current study included a wider range of sexual prejudice experiences.

While this study used a wider understanding of sexual prejudice than other studies (Meyer, 1995), it still could be argued that the measure of sexual prejudice used in this study lacked construct validity. The concept of sexual prejudice incorporates direct forms of prejudice such as verbal/physical abuse and more subtle forms of discrimination and cultural values. The novel measure used in this study was focused on the more direct forms of sexual prejudice and did not account for cultural or more subtle forms of discrimination. It may be that the more subtle forms of discrimination contribute to the development of internalised homophobia, whereas more direct prejudice does not. Verbal and physical abuse is easier to recognise than the more subtle forms of heterosexism, and as such, it would be easier for the individual to recognise that this behaviour is wrong and unjust. Al-Mateen, Lewis and Singh (1998) comment that in more severe cases of prejudice, such as a verbal or physical assault, the individual may attribute the cause of the incident with the perpetrator's prejudice rather than attributing it to their own characteristics, therefore not reinforcing internalised beliefs that homosexuality is wrong. Whereas subtle heterosexism is not as easy to attribute onto other people's prejudice, so this may be more likely to reinforce internalised homophobic beliefs.

Not only does internalised homophobia directly affect levels of psychological distress, these results suggest that internalised homophobia increases the risk of an individual using maladaptive coping strategies, which in turn results in increased psychological distress. This finding supports the

research of Szymanski and Owens (2008) who also found that avoidant (maladaptive) coping partially mediates the relationship between internalised homophobia and psychological distress.

5.3. Discussion of additional findings

5.3.1. Impact of gender and sexual orientation on minority stress

Throughout this study comparisons were made between males and females. However gender and sexuality are not binary constructs. Within the LGBT community many individuals would not categorise themselves into traditional ideas of gender (i.e. male or females), or sexuality groups (i.e. homosexual or heterosexual) (Meyer & Wilson, 2009). Some individuals may consider themselves to be mainly heterosexual but still have sex with members of the same sex. Some individuals may be attracted to members of the same sex, but not act on these impulses and therefore not identify themselves as a sexual minority (Kuyper & Fokkema, 2011). Some individuals would consider themselves as pansexual/polysexual, or not even define themselves with any label. Others may view their sexuality as fluid which changes over time. There is a similar problem with gender. Male and female doesn't account for the various sexes that people may identify with. For example transgendered individuals may identify themselves as male, female or neither of these.

Previous studies have tended to either explore only gay and bisexual males or lesbian and bisexual females. Therefore a comparison between genders has been difficult. This study's methodology allows such comparisons to be made. Females were found to score significantly higher on the overall psychological stress index, and were found to be significantly more likely to be depressed and anxious than males. There was a trend for females to score lower on internalised homophobia (although this difference was not significant), in line with previous research (Kuyper & Fokkema, 2011), so having increased internalised homophobia does not explain the higher rates of psychological distress in females. On the novel measure of sexual prejudice, females were no more likely to experience sexual prejudice than males, so again this cannot explain the higher levels of distress. They were however, more likely to report that they had experienced victimisation and discrimination, because of their sexuality, than males. Perhaps this acknowledgment of their victim status plays a role in the development of psychological distress. Females were also found to be more likely to use maladaptive coping, which was found to predict psychological distress, so perhaps this contributed to their increased rates of psychological distress.

Bisexual individuals also scored higher than homosexual individuals on both anxiety and depression. However this difference could not be accounted for by increased experiences of sexual prejudice, differing use of coping strategies or by having higher rates of internalised homophobia. There was an overrepresentation of females in the bisexual group and of bisexuals in the female group. It is therefore difficult to establish whether the increased rate of psychological distress in these groups is associated with being female, or being bisexual. Further research could separate out these factors and explore further why females and bisexuals have higher rates of psychological distress.

5.3.2. Impact of openness on minority stress

The extent of an individual's openness, with their sexuality, was found to have a significant relationship with internalised homophobia, with those most open having less internalised homophobia. It is difficult to determine which of these variables cause the other, as it is possible that being open introduces mediating variables such as increased access to the gay community, that may reduce internalised homophobia. Equally plausible is the idea that having lower levels of internalised homophobia makes an individual feel more comfortable being open. It is possible that there is a bidirectional relationship between these variables that could be explored further in future research.

Openness was also found to have a significant relationship with sexual prejudice, suggesting that individuals who are more open with their sexuality are more likely to experience prejudice. Understandably someone who conceals their sexual orientation is less likely to be a target of victimisation than someone who is more open. While this result may suggest that it is more beneficial for an individual to conceal their sexual orientation in order to reduce the risk of victimisation and discrimination, concealing sexual orientation has also been found to have an adverse affect on psychological wellbeing. Research has found that individuals who conceal their sexual orientation have higher levels of depression and other negative health outcomes (DiPlacido, 1998; Waldo, 1999). The current study found a similar trend in this direction, with more open individuals having lower levels of psychological distress, but this did not reach statistical significance. This negative effect is possibly caused by the pressure of having to hide this secret, and the subsequent stress that this can cause (Smart & Wegner, 2000), as well as the lack of authentic validation one receives from concealing a part of one's identity (Downs, 2005). Following the multiple regression analysis, openness did not offer a unique contribution to psychological distress when the other variables were considered.

Individuals who were more open with their sexuality were more likely to use problem-focused coping, but again this failed to reach statistical significance. It had no relation to emotion-focused coping or maladaptive coping. It has been suggested that being open with one's sexuality increases the accessibility of support and resources in the LGB community (Meyer, 2003), so it would follow that being open increases an individual's opportunity to use more problem-focused coping strategies. It is surprising that emotion-focused coping did not have any relationship with openness, particularly due to the high correlation between this and problem-focused coping. Perhaps this is because emotion-focused coping is more introspective than problem-focused coping, so being open is less important for emotion-focused coping.

5.3.3. Impact of disclosing experiences on minority stress

Al-Mateen, Lewis and Singh (1998) state that individuals who go on to report homophobic hate-crimes have better psychological outcomes. The results of this study do not necessarily support this finding. Telling others about one's experience appears to have no cathartic impact on psychological distress. However, the positive effect of disclosing experiences of sexual prejudice may depend on who is told. It may be that reporting it to the police leads to the satisfaction that something might be done, or specifically telling somebody close such as a friend or a partner could be more cathartic and have a greater impact on reducing distress. It is possible that concealment of sexual orientation can inhibit disclosure of these experiences, as previous literature has suggested (Herek, Cogan & Gillis, 2002), so its impact on psychological distress may be entirely mediated by openness.

Not surprisingly, the amount of people that experiences of sexual prejudice were disclosed to, was significantly related to sexual prejudice. This could be understood as a person who has had more experience of sexual prejudice, has more experiences to report than someone with less experience of prejudice. Disclosure of experiences was also found to be related to both problem-focused and emotion-focused coping. Again this is not a surprising finding as the act of telling someone about your experience of sexual prejudice could be viewed as either a problem-focused or emotion-focused coping strategy depending on the context of the conversation.

5.4. The minority stress model and psychological distress

Meyer (2003) presented the minority stress model to explain the why LGB individuals are at increased risk of psychological distress. This model proposed that LGB individuals are subjected to chronic social stressors related to their minority position, through the stigmatisation of being

homosexual/bisexual. The current study investigated several minority stress processes, and found results that lend support to this minority stress model. This study found high prevalence of incidents of sexual prejudice, and that this had a direct effect on overall psychological distress. This finding is incongruent with the minority resilience hypothesis that proposed that stigma does not negatively impact self-esteem (Twenge & Crocker, 2002) and the findings that other minorities, such as black individuals, do not have higher rates of mental health difficulties. This suggests that sexual prejudice is qualitatively different from other forms of prejudice.

Through the multiple regression analysis and the path analysis, the other variables from the minority stress model, that were measured in this study (internalised homophobia and specific coping strategies), were also found to have a unique, significant and direct effect on overall psychological distress, again lending support for these aspects of the minority stress model. However, openness, while having a significant relationship with psychological distress, in this study did not have a direct, unique and significant contribution towards its development as would have been predicted by the minority stress model. It is possible that openness may still have an indirect effect on psychological distress through other variables.

Minority stress theory theorised that positive coping would act as a stress ameliorating factor. This study found that in terms of personal coping styles, problem-focused coping did act as a protective factor to psychological distress. There was less evidence for the role of emotion-focused coping in this model. While the minority stress model refers to positive coping strategies having a positive effect on psychological distress, it made no explicit reference to the role of maladaptive coping. As this study found that this personal coping style was the strongest predictor of psychological distress in the LGB sample, maladaptive coping should be incorporated into the model as a separate risk factor, independent from the more positive coping strategies.

Minority stress theory hypothesises that because of the double minority status of lesbian and bisexual women (i.e. being both homosexual/bisexual and being female), that they would experience greater prejudice and therefore more minority stress, and therefore be at greater risk of psychological difficulties. To the author's knowledge, very few studies have compared males and females when investigating minority stress. One study that did investigate these differences found that men and women did not differ in terms of their rates of psychological distress (Kuyper & Fokkema, 2011). This current study however, lends support the minority stress model, as the double minority status appears to have significantly increased the risk for females to be anxious and depressed compared to males.

While Meyer (1995, 2003) did not specifically detail the impact of minority stress on bisexual individuals, researchers have suggested that bisexual individuals may be able to buffer the effects of minority stress by retreating into their opposite-sex attraction persona (Kuyper & Fokkema, 2011). Alternatively bisexual individuals may construct different personal identities and that this may influence the impact that sexual prejudice has on them (Herek, Gillis & Cogan, 1999). However in the current study bisexual individuals were found to have increased levels of psychological distress. It may be that the over representation of females in the bisexual group biased this result. However, bisexual individuals sometimes experience the additional prejudice of not having their sexual orientation validated by heterosexual or even homosexual individuals, with people holding beliefs that bisexuality is 'just a transition phase' and therefore not a real sexual identity. This additional minority stressor may explain the increased rates of psychological distress in this group. In this study the differences found between these gender and sexuality groups support the minority stress model as multiple minority identities would lead to increase prejudice and minority stress.

5.5. Clinical relevance of the findings and implication for clinical practice

While the present study focused on the general population of LGB individuals and not a clinical population, the results are still informative and may help psychologists in their therapeutic work with LGB clients who present at mental health services. This study found three main influences on psychological distress in the LGB sample. Psychologists should be aware of the risk that these factors can cause and consider them in clinical formulations. They may also wish to target their interventions at reducing these factors or managing the effect that they cause.

5.5.1. Working therapeutically with LGB clients

The findings of the regression and the path analysis have implications for clinical work with individuals from the LGB population. These analyses suggest that psychological distress can be predicted by an individual experiencing sexual prejudice, having internalised homophobic beliefs, and using maladaptive coping strategies. These findings would suggest three targets for psychological intervention. The first of these would be to help individuals through any traumatic experiences of prejudice or violence. The second target would be to help clients reduce maladaptive coping strategies and maximise problem-focused coping. The third target would be to reduce client's levels of internalised homophobia.

A psychologist should be aware of the potential for distress that certain acts of sexual prejudice can cause. When working with individuals who have experienced sexual prejudice they should be prepared that the client may by traumatised by their experiences, or that previous traumas may be reignited. The psychologist may wish to offer some form of counselling or support to the victim. Or if more appropriate they may signpost the client to sources of victim support. They may wish to discuss with the individual options of reporting the incident to the police, in the case of hate-crimes. Even in cases where the individual has not been victim of a hate-crime but has still experienced discrimination, individual or group psychological therapy may be useful. This work may focus on building up confidence and self-esteem following their experience, and managing the array of emotions that arise (Al-Mateen, Lewis & Singh, 1998). If sexual prejudice is rife within the individual's family, then family therapy may be helpful in order to help the family come to terms with their relative's sexual identity (British Psychological Society; BPS, 2012).

As the results found that internalised homophobia is unrelated to the experience of sexual prejudice, it would be important to assess these negative beliefs when working clinically with any LGB individual, regardless of whether they have experienced prejudice and discrimination or not. Kashubeck-West, Szymanski and Meyer (2008) suggested several ways in which psychologists can help individuals to reduce internalised homophobia. Some of these suggestions include facilitating client's awareness of their internalised homophobia, acknowledging the socio-cultural context and historical sources of their internalised homophobia, exploring the impact that internalised homophobia has had on their lives and challenging internalised homophobia. This can be done using cognitive strategies to challenge these negative beliefs about the self and other LGB individuals. Other ways in which internalised homophobia could be challenged in therapy include, addressing personal attitudes and beliefs about homosexuality/bisexuality and helping to reduce feelings of shame and self-blame that may have resulted from past experiences of prejudice. Gay affirmative therapy is an approach often used working when with LGB individuals in which the minority position is valued as equal to the dominant position, and in which the practice is informed from knowledge of the minority's community and of their issues and their needs (BPS, 2012). This approach is likely to be beneficial in tackling internalised homophobia.

LGB clients could be encouraged to join LGB organisations, local political groups or in other ways, to engage with the LGB community. This has the potential for not only increasing individuals' social support but may reduce levels of internalised homophobia through the development of positive role-models and through positive experiences with other LGB individuals.

When working clinically with LGB individuals who have been victims of sexual prejudice, it is import to consider how the individual attempted to cope with this. This study found that the use of maladaptive coping strategies was the strongest predictor of psychological distress. This would suggest that this should be a key target for psychological work. The use of maladaptive coping should be considered within individual formulations to help explain a LGB client's psychological distress, and it should be an important consideration within psychological interventions. Work may focus on teaching individuals alternative coping strategies. Specific therapeutic approaches, such as Schema Therapy or Cognitive Analytic Therapy (CAT), may be particularly helpful as they target entrenched maladaptive patterns, and relationships that may be reinforcing the use of maladaptive coping strategies such as avoidance.

Depending on the maladaptive coping strategies being used by their client, the psychologist may need to target their client's drug or alcohol use if it is being used as an attempt to cope with their problems, or they may wish to refer their client on to a drug and alcohol service if this would be more appropriate. For individuals who are avoiding their problems or who are in denial about their current difficulties, the psychologist should gently encourage them to face their difficulties and support them in managing them. This research found that problem-focused coping strategies had a slight protective factor, and therefore teaching clients these types of coping strategies would be preferable to emotion-focused coping strategies which, in this study, was found to have no impact on psychological distress in either way. A psychologist may wish to encourage an LGB client to increase their social support network which may open them up to more adaptive coping. The results of this study indicate that decreasing LGB client's levels of internalised homophobia may help to decrease client's use of maladaptive coping strategies and levels psychological distress. So working to reduce a client's level of internalised homophobia may also help them to use more effective coping skills. However, as maladaptive coping only partially mediate the role of sexual prejudice on psychological distress, perfect control over coping would still not guarantee immunity from psychological distress. Another target of the psychologist may therefore be to reduce the frequency of prejudice in society.

5.5.2. Indirect clinical work and implications for community psychology

Community base approaches that aim to reduce societal prejudice are rarely discussed in the literature, or seen in society (Russell & Bohan, 2006). Psychologists typically work directly with individuals in distress, and from this position they are likely to view prejudice as a subjective source of stress that the individual needs to overcome. Their work therefore tends to focus on helping them

to cope with, or to overcome the source of stress (Meyer, 2003). From this perspective psychologists are at risk of viewing their clients as responsible for their difficulties through a deficiency in resilience or coping ability. They are at risk of overlooking the larger cultural and societal oppression placed on the individual, over which they have almost no control (Masten, 2001). Psychologists should be encouraged to work at the community level to reduce oppression over LGB individuals. This could include consultation to voluntary organisations or direct provision of psychological services in community settings.

Psychologists can also work towards changing social and political attitudes that are related to internalised homophobia and the prevalence of sexual prejudice within society, therefore helping clients indirectly through a reduction in societal oppression (Kashubeck-West, Szymanski & Meyer, 2008). Psychologists could work to educate policy makers and organisations about the impact of prejudicial polices on LGB individuals, and help schools to reduce homophobic bullying and to support victims. Working in this way has the long-term potential to change cultural and societal norms about sexuality. LGB individuals who grow up in a society where LGB status has been normalised, would be less likely to experience the negative attitudes towards homosexuality that result in the development of internalised homophobia. They would also be less likely to experience prejudice and discrimination because of their sexuality. The findings of this study suggest that these changes could reduce the levels of psychological distress in the LGB population.

The results of this study would also have relevance to clinical training. Research suggests that sex and sexuality training is inconsistent across clinical psychology training courses (Shaw, Butler & Marriott, 2008). More could be done to help psychologists recognise their own beliefs around sexuality and to acknowledge any biases towards sexual minorities, or hetero-normative thinking that they or other people may express. Programmes have been devised such as 'homoworld' (Butler, 2004) to help illustrate to heterosexual psychologists some of the difficulties and prejudices that homosexual individuals have to experience daily. The BPS (2012) recognises the specific difficulties that this client group has, and has recently released guidelines for working therapeutically with sexual and gender minority clients, which all psychologists should become familiar with to increase their knowledge of this client group and the specific issues that they face.

5.6. Strengths and limitations of the present study

One of the strengths of this study was its sample. The large sample led to the study having a high amount of statistical power. It also increased the heterogeneity of the sample, including both males

and females and participants from across the globe. On top of this efforts were also made to increase the representativeness of the sample by targeting the advert at ethnic minorities and older people.

Due to this study's cross sectional design, there were limitations on the ability to declare the causal relationships between the variables. While this study has proposed that sexual prejudice, internalised homophobia and coping cause psychological distress, it is possible that this causal relationship is reversed and that psychological distress causes increased internalised homophobia, the choice of maladaptive coping strategies and increases reports of sexual prejudice. However this reasoning is unlikely as this would predict a high correlation between the original predictor variables, given that they would have psychological distress as a common underlying cause (Meyer, 1995), which was not the case in this study. Longitudinal research could extend this research and add strength to the proposed causal relationships suggested in this study and the literature.

This study made attempts to create a more valid measure of sexual prejudice by using a range of experiences and weighting some scores according to incident severity. However, the impact of an experience is subjective and would vary between individuals. For some individuals receiving verbal abuse could be equally as damaging as receiving physical abuse. It may also be dependent on where the incident happened or who the perpetrator was. Being verbally abused for being homosexual by one's own mother, at home, while growing up, could be even more damaging than being abused by a stranger on the street in adulthood. This subjectivity could make this method of scoring sexual prejudice less valid. This study relied on self-report data, which can sometimes lead to inaccurate reporting, particularly as experiences of sexual prejudice are subjective and not easy to measure objectively. In some cases it is difficult to know the perpetrator's underlying motive, so some individuals have had experiences of being physically assaulted, for example, but may not have interpreted this as homophobically motivated. Whereas someone may have been in the same situation but assumed it was because of their sexual orientation. For other individuals separating out sexual prejudice from other prejudices may be difficult. For example, some participants may feel that they were victimised because of their racial, ethnic or religious background rather than their sexual orientation.

This measure also did not take into account the frequency of experiences. An individual who has had more frequent experiences of abuse would be expected to be more distressed by their experiences than an individual who has received abuse only the once. However, individuals who have had only a few experiences of sexual prejudice, may be scoring more than individuals who have had repeated

experiences of prejudice. This could lead to the effect of sexual prejudice being minimised and weaken the potential relationship between these variables. This limitation could account for the weak relationship between sexual prejudice and psychological distress in this study.

Measuring experiences or behaviours retrospectively may lead to the addition of memory biases (Penley, Tomaka & Wiebe, 2002). While Rivers (2001) suggests that sexual prejudice could be measured reliably across time, it is possible that some experiences had been forgotten, particularly the more subtle forms of discrimination, which still may impact upon a person's internalised beliefs about homosexuality. For example, people making assumptions that a person is heterosexual. Some forms of heterosexism are so entwined into our culture that they may not even have been recognised initially in order to be remembered.

The method of recruitment introduces some potential bias into the study. Research has found that individuals in the United States who access the internet tend to be younger, have higher socio-economic status and are less likely to be from an ethnic minority (Fox, 2005). While this was an American study, it is possible that the method of recruitment used in the current study could potentially lead to a large section of the LGB community being unrepresented. Gosling and colleagues (2004) however, found that studies employing web-based samples are relatively diverse in terms of gender, age, region and socio-economic status. There was an underrepresentation of the older population in this study, with only 5% being over 50 years of age. This would challenge the generalisability of the study onto the older adult generation. This underrepresentation is likely to be a caused by the recruitment method, as the older population is less likely to access internet-based research. While some efforts were made in this study to target online social groups of older LGB individuals, future research may have an increased emphasis on recruiting from an older population.

A recruitment issue in all LGB studies is accessing the hidden population of LGB individuals who do not take part in research as it has not felt safe to do so (King et al, 2008). Many LGB individuals who are not open with their sexuality may be fearful of other people finding out about their sexual orientation and fear that taking part in research will lead to other people finding out. These individuals tend to have higher levels of internalised homophobia (Herek, Cogan, Gillis & Glunt, 1997). The anonymity of online research minimises the risk of exposure, and in fact there were some participants who reported that they were not 'out' to anyone. It is unlikely that these individuals would have participated in face-to-face research. It is impossible to know for sure how many people are secretly homosexual/bisexual (Meyer & Wilson, 2009), but those who are not open with their sexuality in this study, is likely to be an underrepresentation of the general population.

Minority stress theory assumes that individuals with multiple minorities have additional stressors which would lead to lower levels of psychological wellbeing. In this study the role of gender was considered, but the role of ethnicity as an additional minority stressor was not taken into account during the analysis, which may have impacted upon the results. However, due to the large sample size and the small amount of ethnic minorities in the study, any differences would be unlikely to have had much influence over the overall results.

5.6.1. Areas for further research

One area for further consideration could be to consider the possible role that openness of sexual orientation and disclosing experiences of sexual prejudice have on psychological distress. While this study found they do not offer a unique, direct contribution to its variance when the other variables were controlled; it is still possible that they have an impact that is mediated by other variables. For example, it is possible that being open with one's sexuality could reduce internalised homophobia which in turn has been found to impact upon psychological distress. Other variables could also be considered as additional exogenous variables that impact upon psychological distress indirectly, such as relationship status, or more systemic factors such as parental beliefs about homosexuality.

Due to the scope of the study, there were many aspects of people's experiences that were not able to be included in this study that would be of interest for further research. For example, exploring the source of the discrimination may be interesting, particularly exploring whether the type and quality of the relationship between the victim and perpetrator, mediates the impact of the discrimination on psychological wellbeing. Parental attitudes towards homosexuality prior to the individual 'coming out' may be a strong predictor of internalised homophobia, particularly as research has found that individuals inherit a lot of their attitudes and values from their family of origin (Holtzen & Agresti, 1990). Some individuals within the LGB community may dress differently to traditional gender norms. LGB individuals (and even some heterosexual individuals) may experience discrimination against the way they look. Looking androgynous or too feminine or masculine can lead to further discrimination (Young & Sweeting, 2004) on top of being discriminated against for their sexual orientation. Further research may wish to explore these factors and their impact upon the experience of discrimination. As this study was particularly about the experience of prejudice against LGB individuals, it did not take into account transphobia. The transgendered community experience a specific type of discrimination often in addition to discrimination about their sexual orientation as well. While not possible in this study, further studies may wish to investigate whether internalised

homophobia or coping strategies mediate the relationship between transphobia and psychological distress.

This study found differences between homosexual and bisexual individuals across the minority stress variables. This could lead to the conclusion that homosexual and bisexual individuals have very different experiences of minority stress, such as discrimination. Bisexual individuals may find it easier to integrate into the dominant heterosexual discourse and therefore avoid discrimination, but they may also be discriminated against by both heterosexual and homosexual communities at other times. These differences warrant further exploration.

This study has focused on the risk factors that may contribute to decreased psychological wellbeing within the LGB community. However, despite various studies having found that LGB individuals have a higher risk of psychological difficulties (Cochran, Sullivan & Mays, 2003; Meyer, 2003), Not all LGB individuals do develop mental health problems, and often are no different from their heterosexual counterparts (Gonsiorek, 1991). Future research could focus on resilience and explore factors such as post-traumatic growth and which factors lead to positive outcomes.

This research and other quantitative research have helped to show what factors may impact upon psychological distress in the LGB community. Future research using qualitative methodology could investigate how and why sexual prejudice impacts upon psychological wellbeing and lend further support to the quantitative research on this topic. An exploration of the reasons why individuals use certain coping strategies to manage distress, or why individuals chose to disclose, or not to disclose their experiences of prejudice, could be conducted. This approach would give an opportunity for the LGB community to share their stories and while this would create additional methodological issues, it could highlight new areas of interest.

5.7. Conclusion

Despite progress being made towards equality and LGBT rights, a large proportion of LGB individuals in this study reported that they have experienced prejudice because of their sexual orientation. As a result there were higher rates of depression and anxiety found in this study than in the general population. The minority stress model was used to explain this relationship.

This study lends support to the minority stress model, in that minority stressors, specifically experiences of sexual prejudice, internalised homophobia and personal coping styles, were found to

impact upon psychological distress. Maladaptive coping strategies were found to be the strongest predictor of psychological distress. It was also found that maladaptive coping, partially mediated the relationship between these minority stress processes and psychological distress. Problem-focused coping was found to mediate the relationship between only experiences of sexual prejudice and psychological distress, although this mediating role was weak. These variables were found to account for a large proportion of the variance in psychological distress in the LGB participants in this study.

The findings of this study have clinical implications for psychologists working therapeutically with LGB individuals. In addition to helping the client to manage any traumatising experiences, psychologists may wish to target their interventions at reducing client's use of maladaptive coping strategies and improving their ability to use problem-focused coping. They may also aim to reduce client's levels of internalised homophobia. They also should not forget to challenge cultural and organisational prejudice when encountered in order to reduce the stigma associated with being a sexual minority.

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7. Appendices

7.1. Copy of email advert

Hello <Name of organisation>.

My name is Michael Cornish and I am a postgraduate student at University of Hertfordshire, in the United Kingdom, studying for my Doctorate in Clinical Psychology.

I am conducting some research into the impact of homophobia on psychological well-being. I am looking specifically at how individual attitudes and beliefs about homosexuality can impact upon well-being following some form of victimisation or discrimination based on sexual orientation. This research has full ethical approval from the University of Hertfordshire ethics committee

I am trying to recruit as many people as possible to complete a short online survey asking about their experience of homophobia and general attitudes towards homosexuality. I was wondering if you could help me by passing on this email and encouraging your members of your society to participate in this study?

If you needed to know any further information about the research please feel free to contact me.

The link to the survey is:
http://sdu-surveys.herts.ac.uk/copingwithhomophobia

Thank you

Michael Cornish
Trainee Clinical Psychologist
University of Hertfordshire

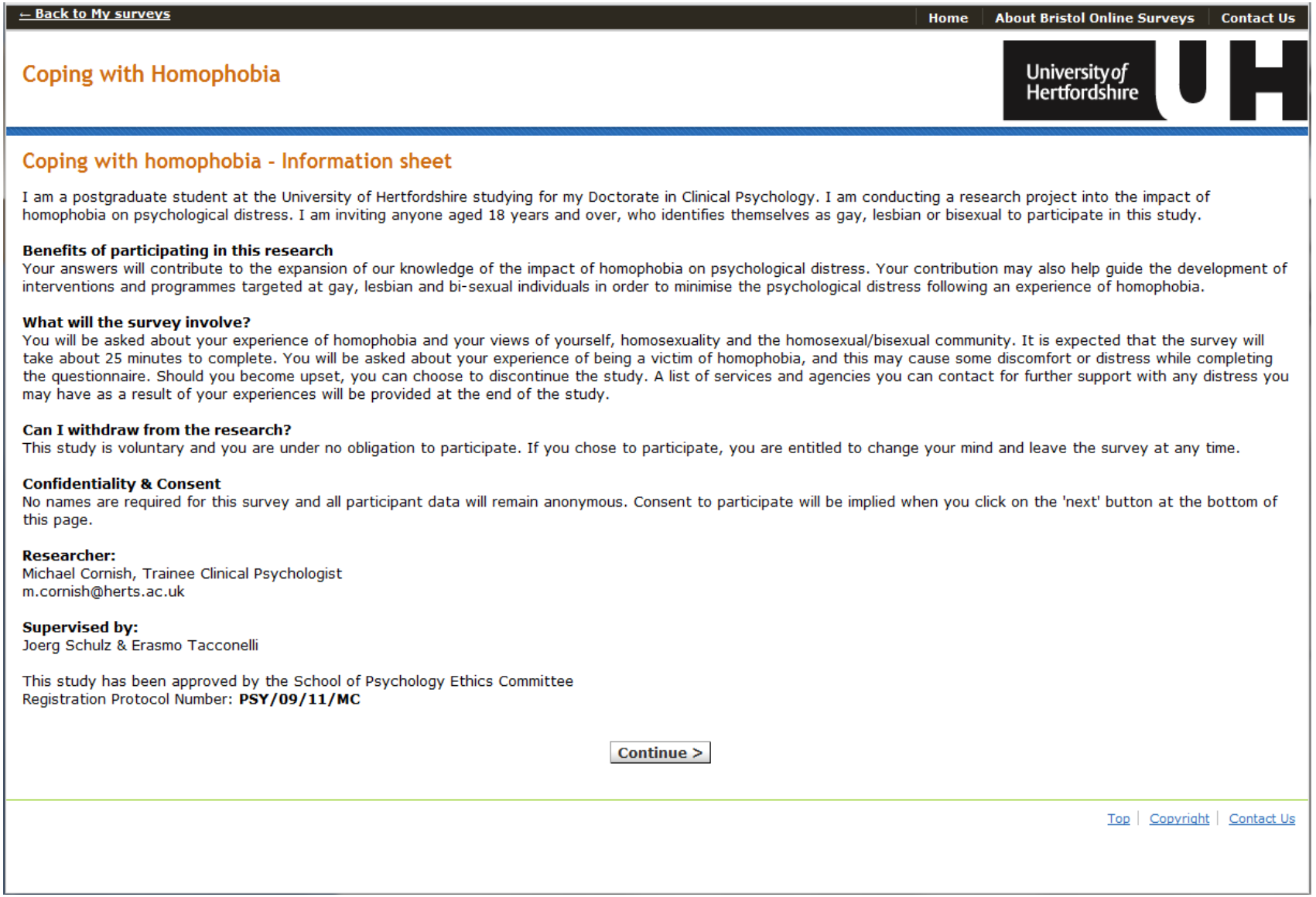
7.2. List of the LGBT groups, organisations and online forums contacted

Name of organisation	Description
Glasgow University LBGT student's association	University LGBT society
St Andrews University LBGT society	University LGBT society
BLOGS LBGT society (Edinburgh University)	University LGBT society
Aberdeen University LGBT society	University LGBT society
University of Strathclyde LGBT group	University LGBT society
Bangor University LGBT society	University LGBT society
Cardiff University LGBT society	University LGBT society
Swansea University LGBT society	University LGBT society
Queens University Belfast LGBT society	University LGBT society
University College Cork LGBT society	University LGBT society
Dublin City University LGBT society	University LGBT society
Dublin Institute of Technology LGBT society	University LGBT society
UCD LGBT society (University College Dublin)	University LGBT society
Trinity College Dublin LGBT society	University LGBT society
National College of Ireland LGBT society	University LGBT society
NUIG LGBT society (National University of Ireland, Galway)	University LGBT society
University of Limerick LGBT society	University LGBT society
National University of Ireland Maynooth LGBT society	University LGBT society
Durham University LGBT association	University LGBT society
Manchester Metropolitan LGBT society	University LGBT society
University of Manchester LGBT society	University LGBT society
Salford University LGBT societies	University LGBT society
Hull University LGBT society	University LGBT society
Lancaster University LGBT society	University LGBT society
UCLAN LGBT society (Central Lancashire)	University LGBT society
Liverpool University LGBT society	University LGBT society
Sheffield Hallam University LGBT society	University LGBT society
Sheffield University LGBT society	University LGBT society
Newcastle University LGBT society	University LGBT society
University of Bradford LGBT society	University LGBT society
Huddersfield University LGBT society	University LGBT society
Leeds University LGBT society	University LGBT society
Leeds Metropolitan University LGBT society	University LGBT society
University of Cambridge LGBT society	University LGBT society
University of Derby LGBT society	University LGBT society
University of Hertfordshire LGBT society	University LGBT society
De Mountfort University LGBT society	University LGBT society
University of Leicester LGBT society	University LGBT society
Loughborough University LGBT societies	University LGBT society
Nottingham Trent University LGBT society	University LGBT society
University of Nottingham LGBT society	University LGBT society
Oxford Brookes University LGBT society	University LGBT society
Keele University LGBT society	University LGBT society
University of Staffordshire LGBT society	University LGBT society
Aston University LGBT society	University LGBT society
University of Birmingham LGBTQ society	University LGBT society
Coventry University LGBT society	University LGBT society
University of Warwick LGBT society	University LGBT society
University of Wolverhampton LGBT society	University LGBT society
University of Southampton LGBT society	University LGBT society
Southampton Solent University LGBT society	University LGBT society

Portsmouth University LGBT society	University LGBT society
Surrey University LGBT society	University LGBT society
Brighton University LGBT society	University LGBT society
University of Sussex LGBT society	University LGBT society
Bournemouth University LGBT society	University LGBT society
FXU LGBT (Falmouth & Exeter)	University LGBT society
Reading University LGBT society	University LGBT society
UWE LGBT society (West England)	University LGBT society
Bath University LGBT society	University LGBT society
University of East London LGBT societies	University LGBT society
London Met University LGBT society	University LGBT society
Queen Mary University LGBT society	University LGBT society
City University LGBT society	University LGBT society
University of Greenwich LGBT society	University LGBT society
Imperial College LGBT society	University LGBT society
UCL LGBT society (University College London)	University LGBT society
London Met University LGBT society	University LGBT society
Middlesex University LGBT society	University LGBT society
Anglia Ruskin University LGBT society	University LGBT society
Kings College London LGBT society	University LGBT society
University of Westminster LGBT society	University LGBT society
Brunel University LGBT society	University LGBT society
Birkbeck College LGBT society	University LGBT society
University of Greenwich LGBT society	University LGBT society
Goldsmiths LGBT society	University LGBT society
Heythrop College LGBT society	University LGBT society
LSE LGBT society (London School of Economics)	University LGBT society
Roehampton LGBT society	University LGBT society
University of East Anglia LGBT society	University LGBT society
University of Chichester LGBT society	University LGBT society
Essex University LGBT society	University LGBT society
Gloucestershire University LGBT society	University LGBT society
Teesside University LGBT society	University LGBT society
York University LGBT society	University LGBT society
UCLA LGBT society (University of California, Los Angles)	University LGBT society
Rainbow UCT (University of Cape Town)	University LGBT society
Dundee University Staff LGBT society	University LGBT staff network
Queens University Belfast staff LGBT society	University LGBT staff network
University College Cork LGBT staff network	University LGBT staff network
Salford University staff LGBT society	University LGBT staff network
University of Cambridge LGBT staff network	University LGBT staff network
Oxford University LGBT staff network	University LGBT staff network
University of Wolverhampton LGBT Staff Network	University LGBT staff network
St Andrews University LBGT alumni association	University LGBT alumni association
Bi Scotland	Scotland's national organisation for bisexuals
Girl Zone Inverness	For lesbians, gay women, bisexual women & T women in the Scottish Highlands Based in Inverness
Glasgay!	Glasgay! is Scotland's annual celebration of queer culture website
Granite Sisters	Granite Sisters is an Aberdeen based social group for lesbians and bisexual women aged 30 or over.
Highland Lesbian Group	Social groups for Lesbians in the Highlands
North East Scotland Gay Group	Social groups for gay men in the North East of Scotland

OLGA	OLGA is a social group for older lesbians
Quest (Glasgow)	Social and support group for lesbian and gay Catholics
Lothian Lesbian Line	Lothian Lesbian Line is a telephone helpline offering support, information, advice and education to women with concerns, or otherwise, about their sexuality.
Diversitay	Scottish LGBT group that focuses on the physical and mental wellbeing of LGBT people
outhouse	Service that offers support and information to the lesbian, gay, bisexual and transgendered people of Essex
GLEN (Gay and Lesbian Equality Network)	GLEN is a policy and strategy focused NGO which aims to deliver ambitious and positive change for lesbian, gay and bisexual people in Ireland
Cara-friend lesbian line	Voluntary counselling, befriending, information, and social space organisation for the LGBT community.
Southwark Lesbian, Gay and Bisexual Women's Group	social group led by Southwark Council's LGBT community development worker
The midmonth club	social group for positive gay men
South London Lesbian Mums Group	A social and support group for lesbian mums and their children
Southward LGBT Network	LGBT forum which works to meet the needs of the LGBT community in key areas, including education, safety in the home, the streets and housing.
Camberwell Gay Book Group	LGBT social group
Dynamo Dykes	London lesbian volleyball team
NOH8	American based campaign aimed to tackle homophobia and promote equality
UK Black Pride	Organisation that promotes unity among LGBT black people of African, Asian, Caribbean, Middle Eastern and Latin American descent.
trikone	Online community for LGBT individuals from South Asia
Somalia gay community network	UK based online community for gay men from Somalia
Naz project London	Service that provides sexual health and HIV prevention and support to selected black and minority ethnic communities in London
Enfield LGBT Network	Community of services to support LGBT individuals in the London borough of Enfield
Barnet LGBT network	Group that aims to combat homophobic and transphobic crime in the borough of Barnet
Silver rainbow	group for older gay people living in Croydon area
GMFA	London based gay men's health charity
London Friend	London based LGBT charity that aims to promote the social, emotional, physical and sexual health and well-being of lesbian, gay, bisexual and trans people, and all those unsure of their sexual orientation or gender identity
LYC London	LYC London is a gay sports club
Our Sister Circle	A worldwide social networking site for lesbians of colour
Outburst UK	A national charitable organisation giving a

	platform, voice and supportive environment to the black LGBT community in the UK
Positive east	East London HIV charity offering support for individuals and communities affected by HIV
Wisethoughts	Delivers services to help address social justice issues and needs of LGBT and black, Asian and minority ethnic communities.
Iraqi LGBT	A UK human rights group supporting Iraqi LGBT individuals
Aurora	Croydon's LGBT police consultation group
Dayenu	Dayenu is Sydney, Australia's Jewish GLBT group
Lesbian and Gay Foundation (LGF)	The LGF is a national charity that campaigns for equality, offers support and develops services for LGBT individuals
PACE	National mental health charity for LGBT individuals
Stonewall	National charity working towards equality and justice for LGBT individuals.
GALOP	London anti-LGBT hate crime charity
Northumbria University LGBT society	University LGBT society Facebook page
York St John LGBT Society	University LGBT society Facebook page
Wipeout homophobia on Facebook	Facebook groups
Against Homophobia	Facebook groups
Stop Homophobia!	Facebook groups
United Against Homophobia	Facebook groups
Homosexuality	Facebook groups
Homosexuality is not a choice, but homophobia is	Facebook groups



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Coping with Homophobia

University of Hertfordshire

Coping with homophobia - Information sheet

I am a postgraduate student at the University of Hertfordshire studying for my Doctorate in Clinical Psychology. I am conducting a research project into the impact of homophobia on psychological distress. I am inviting anyone aged 18 years and over, who identifies themselves as gay, lesbian or bisexual to participate in this study.

Benefits of participating in this research
Your answers will contribute to the expansion of our knowledge of the impact of homophobia on psychological distress. Your contribution may also help guide the development of interventions and programmes targeted at gay, lesbian and bi-sexual individuals in order to minimise the psychological distress following an experience of homophobia.

What will the survey involve?
You will be asked about your experience of homophobia and your views of yourself, homosexuality and the homosexual/bisexual community. It is expected that the survey will take about 25 minutes to complete. You will be asked about your experience of being a victim of homophobia, and this may cause some discomfort or distress while completing the questionnaire. Should you become upset, you can choose to discontinue the study. A list of services and agencies you can contact for further support with any distress you may have as a result of your experiences will be provided at the end of the study.

Can I withdraw from the research?
This study is voluntary and you are under no obligation to participate. If you chose to participate, you are entitled to change your mind and leave the survey at any time.

Confidentiality & Consent
No names are required for this survey and all participant data will remain anonymous. Consent to participate will be implied when you click on the 'next' button at the bottom of this page.

Researcher:
Michael Cornish, Trainee Clinical Psychologist
m.cornish@herts.ac.uk

Supervised by:
Joerg Schulz & Erasmo Tacconelli

This study has been approved by the School of Psychology Ethics Committee
Registration Protocol Number: **PSY/09/11/MC**

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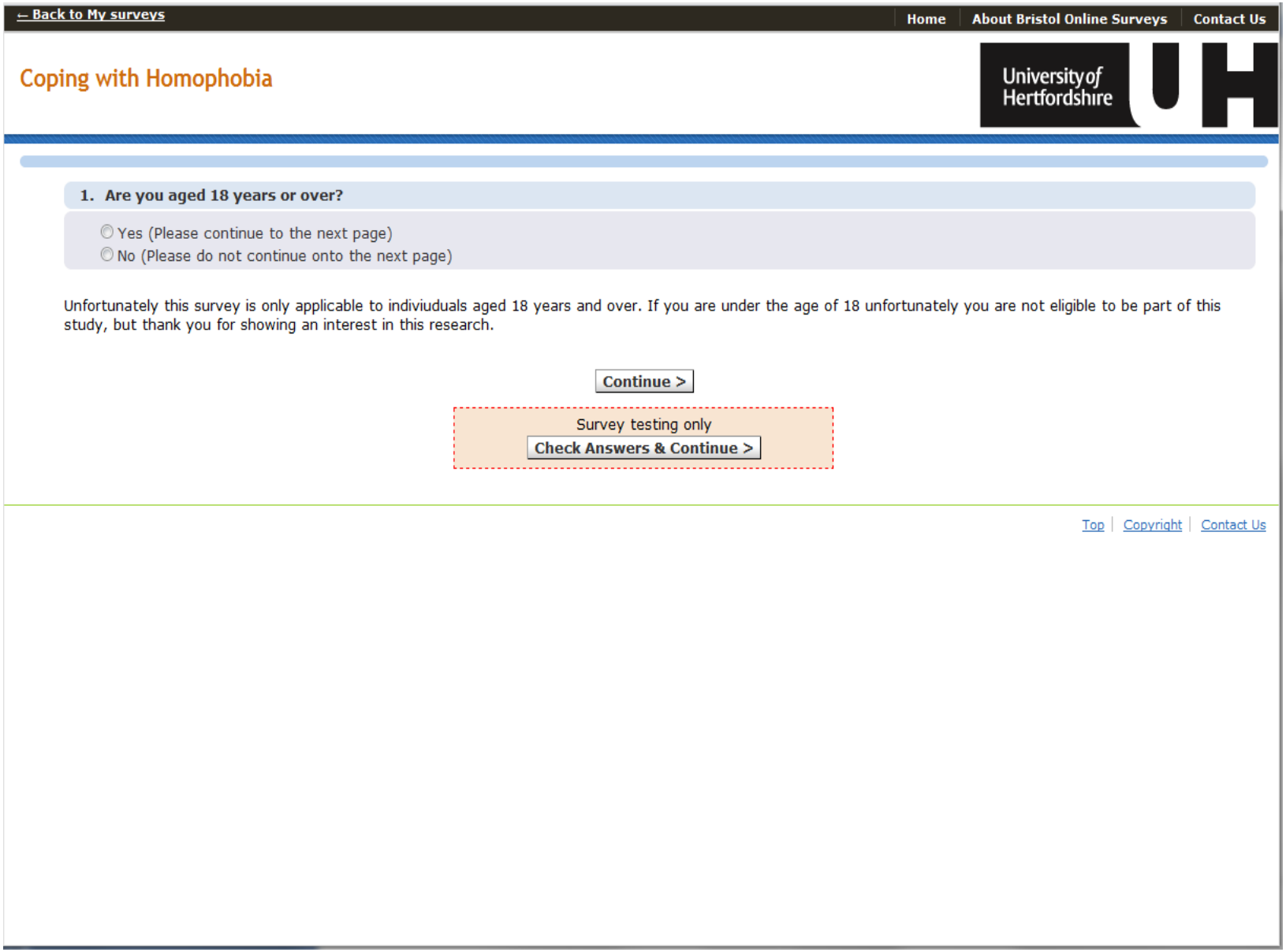
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1. Are you aged 18 years or over?
Yes (Please continue to the next page)
No (Please do not continue onto the next page)
Unfortunately this survey is only applicable to indiviuduals aged 18 years and over. If you are under the age of 18 unfortunately you are not eligible to be part of this study, but thank you for showing an interest in this research.
Continue >
Survey testing only
Check Answers & Continue >
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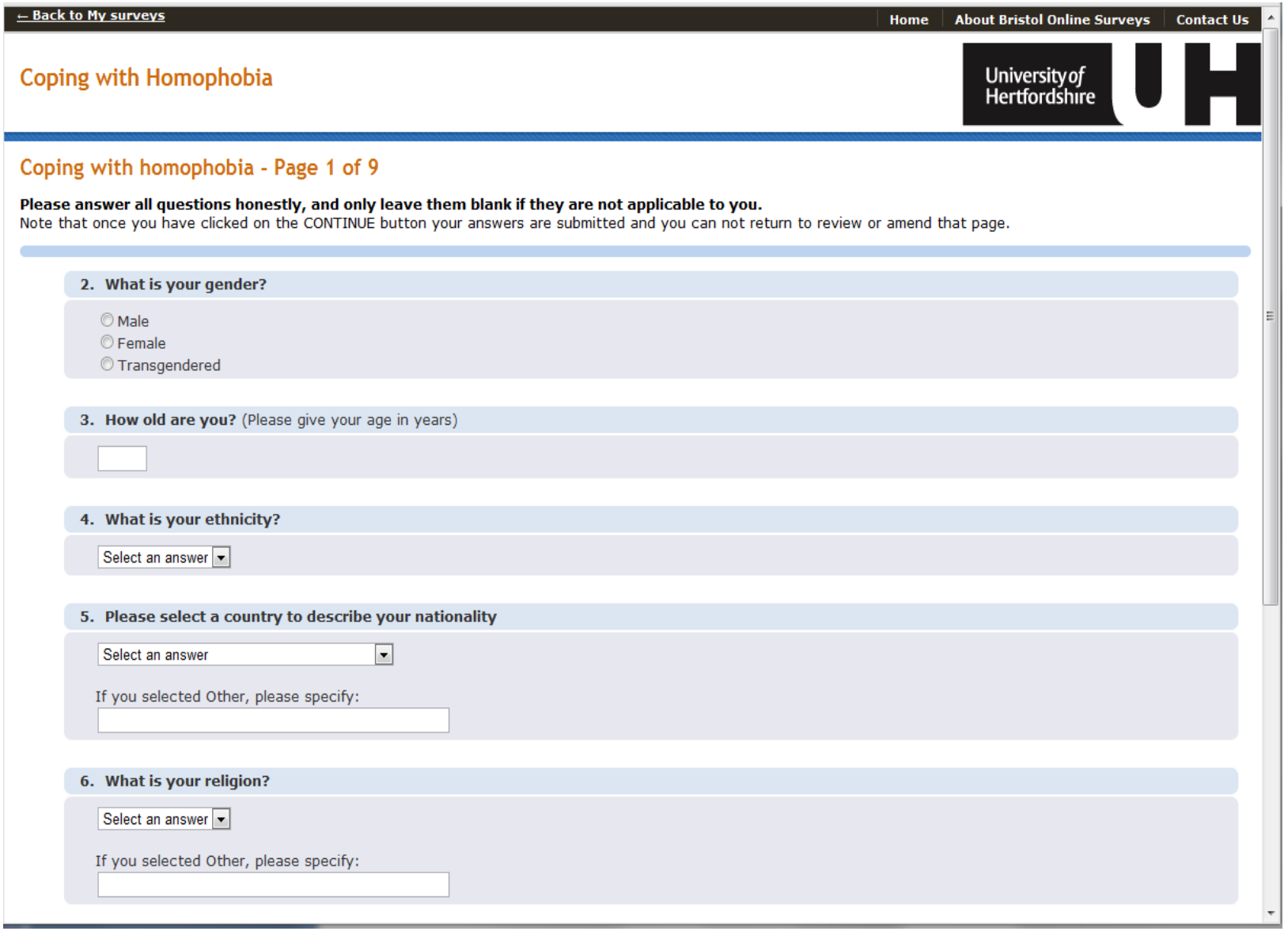

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Please answer all questions honestly, and only leave them blank if they are not applicable to you.
Note that once you have clicked on the CONTINUE button your answers are submitted and you can not return to review or amend that page.

2. What is your gender?

- Male
- Female
- Transgendered

3. How old are you? (Please give your age in years)

4. What is your ethnicity?

Select an answer

5. Please select a country to describe your nationality

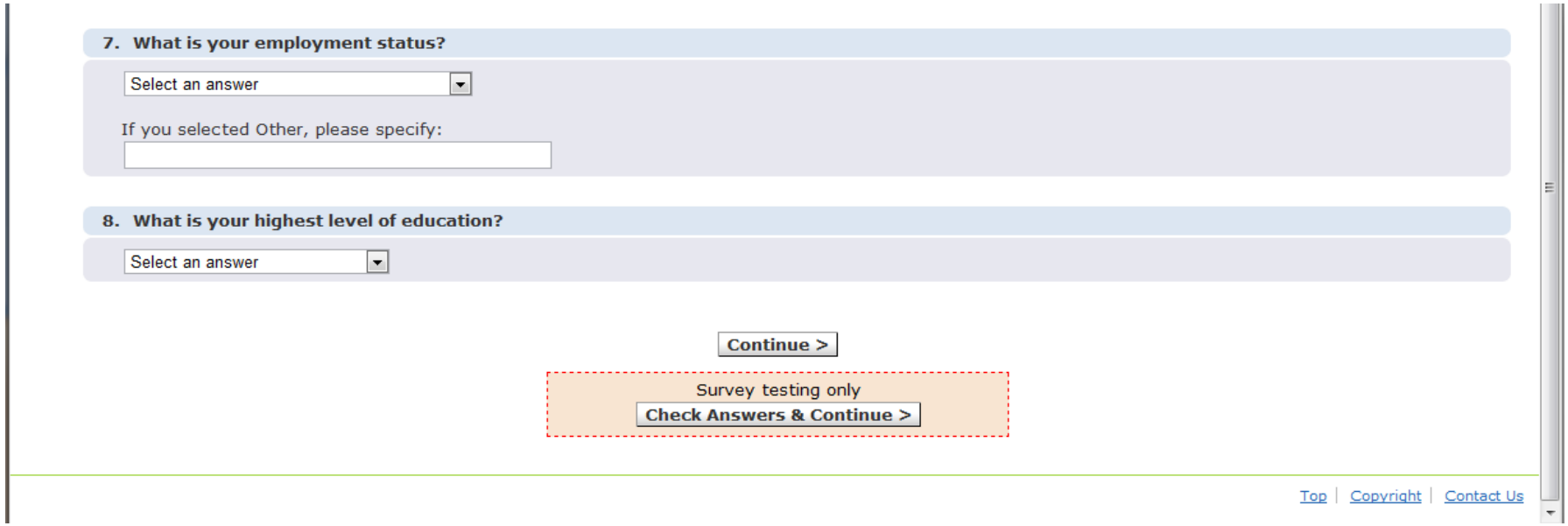
Select an answer

If you selected Other, please specify:

6. What is your religion?

Select an answer

If you selected Other, please specify:


7. What is your employment status?
Select an answer
If you selected Other, please specify:
8. What is your highest level of education?
Select an answer
Continue >
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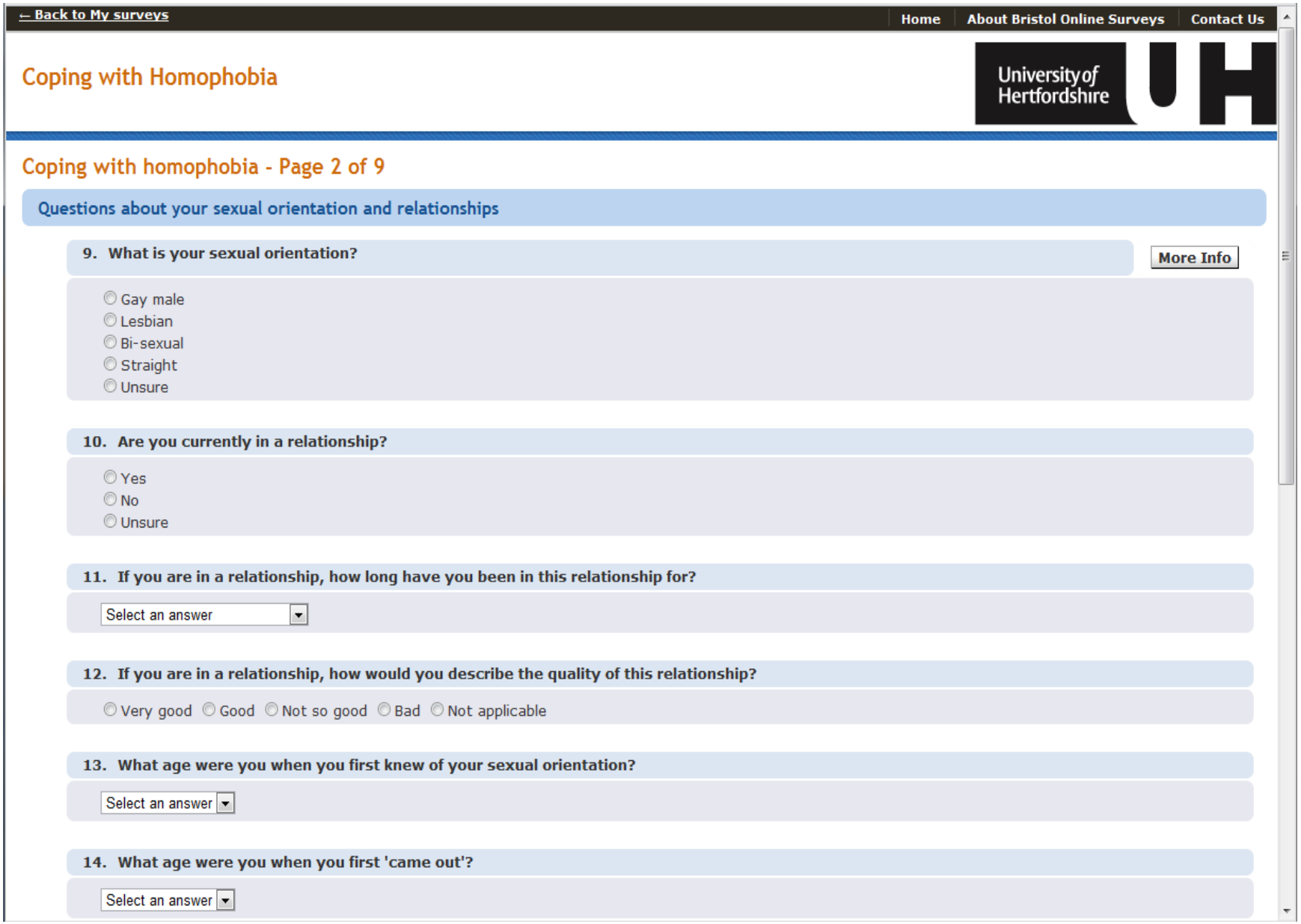
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Questions about your sexual orientation and relationships
9. What is your sexual orientation?
More Info
Gay male
Lesbian
Bi-sexual
Straight
Unsure
10. Are you currently in a relationship?
Yes
No
Unsure
11. If you are in a relationship, how long have you been in this relationship for?
Select an answer
12. If you are in a relationship, how would you describe the quality of this relationship?
Very good
Good
Not so good
Bad
Not applicable
13. What age were you when you first knew of your sexual orientation?
Select an answer
14. What age were you when you first 'came out'?
Select an answer

15. Who knows about your sexual orientation?
(select all that apply)

- ☐ Parents
- ☐ Siblings
- ☐ Children
- ☐ Grandparents
- ☐ Other family members
- ☐ Close friends
- ☐ Other friends
- ☐ Work colleagues
- ☐ Peers at college/University
- ☐ No-one

16. How open are you with your sexual orientation?

	Not out at all	Out to some people	Out to most people	Out to everyone
a. What is the extent of your openness with your sexual orientation **in your family?**	○	○	○	○
b. What is the extent of your openness with your sexual orientation **at work/at college/at Uni?**	○	○	○	○
c. What is the extent of your openness with your sexual orientation **in general?**	○	○	○	○

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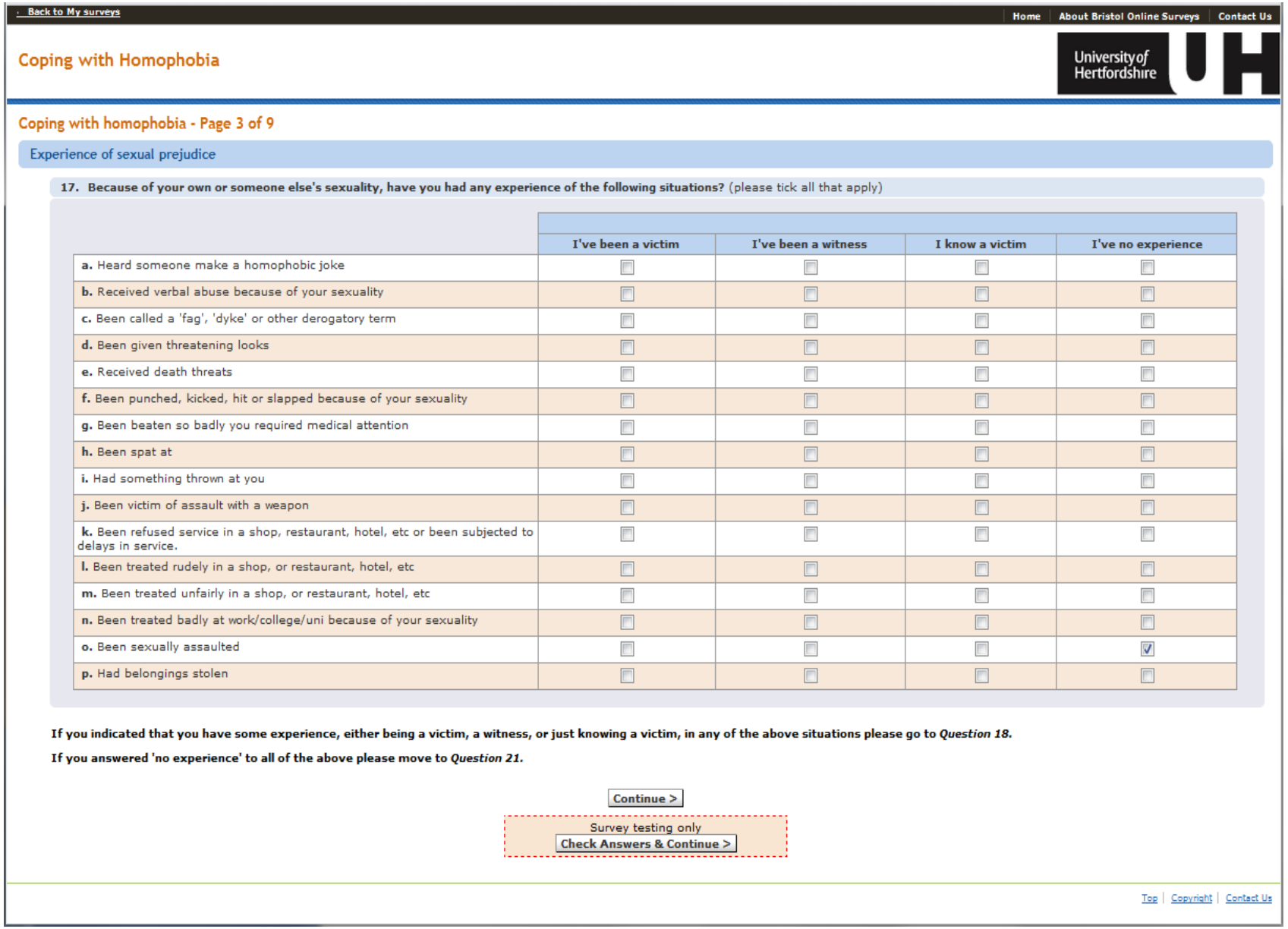

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Experience of sexual prejudice

17. Because of your own or someone else's sexuality, have you had any experience of the following situations? (please tick all that apply)

	I've been a victim	I've been a witness	I know a victim	I've no experience
a. Heard someone make a homophobic joke	☐	☐	☐	☐
b. Received verbal abuse because of your sexuality	☐	☐	☐	☐
c. Been called a 'fag', 'dyke' or other derogatory term	☐	☐	☐	☐
d. Been given threatening looks	☐	☐	☐	☐
e. Received death threats	☐	☐	☐	☐
f. Been punched, kicked, hit or slapped because of your sexuality	☐	☐	☐	☐
g. Been beaten so badly you required medical attention	☐	☐	☐	☐
h. Been spat at	☐	☐	☐	☐
i. Had something thrown at you	☐	☐	☐	☐
j. Been victim of assault with a weapon	☐	☐	☐	☐
k. Been refused service in a shop, restaurant, hotel, etc or been subjected to delays in service.	☐	☐	☐	☐
l. Been treated rudely in a shop, or restaurant, hotel, etc	☐	☐	☐	☐
m. Been treated unfairly in a shop, or restaurant, hotel, etc	☐	☐	☐	☐
n. Been treated badly at work/college/uni because of your sexuality	☐	☐	☐	☐
o. Been sexually assaulted	☐	☐	☐	☑
p. Had belongings stolen	☐	☐	☐	☐

If you indicated that you have some experience, either being a victim, a witness, or just knowing a victim, in any of the above situations please go to *Question 18.*

If you answered 'no experience' to all of the above please move to *Question 21.*

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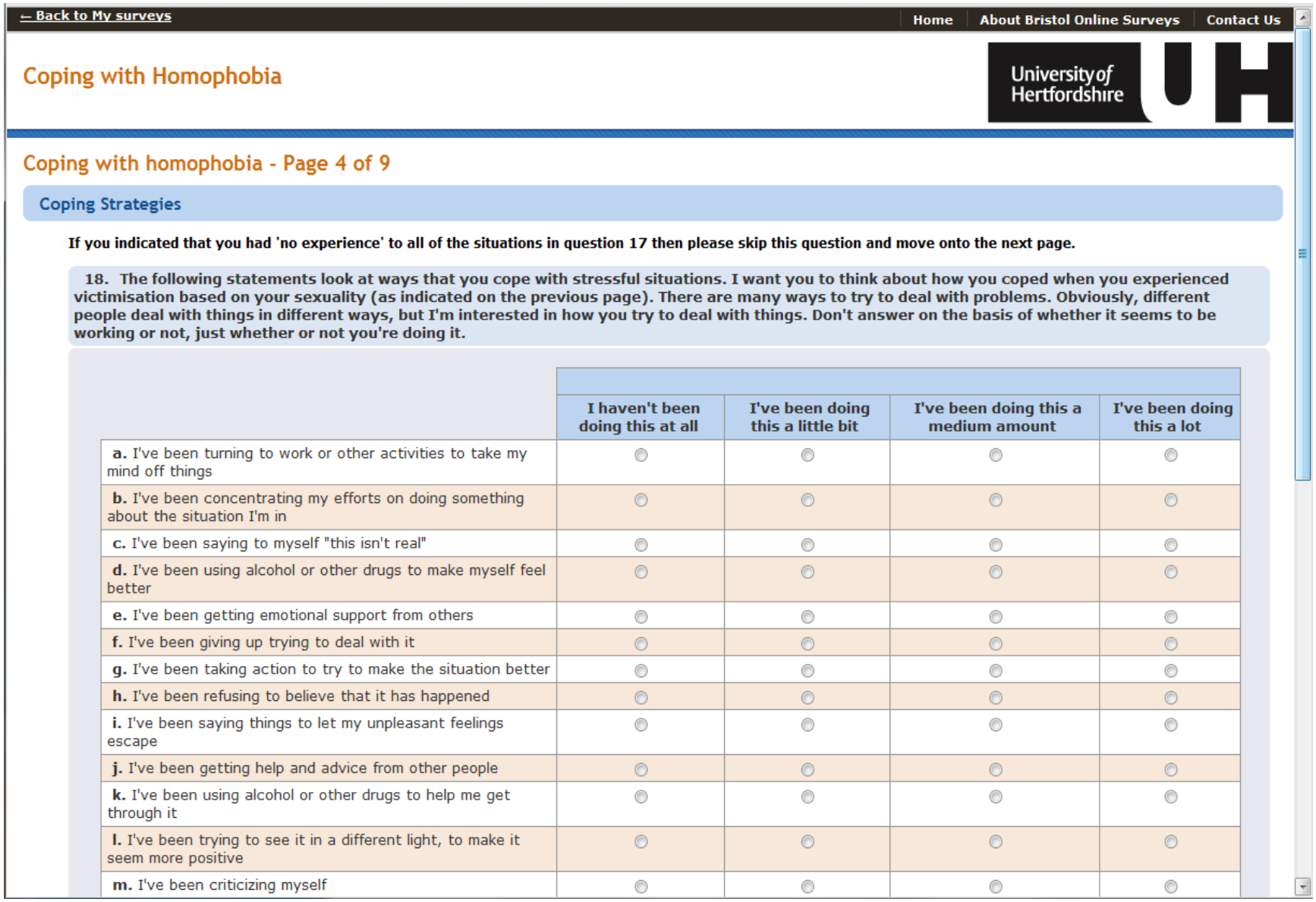

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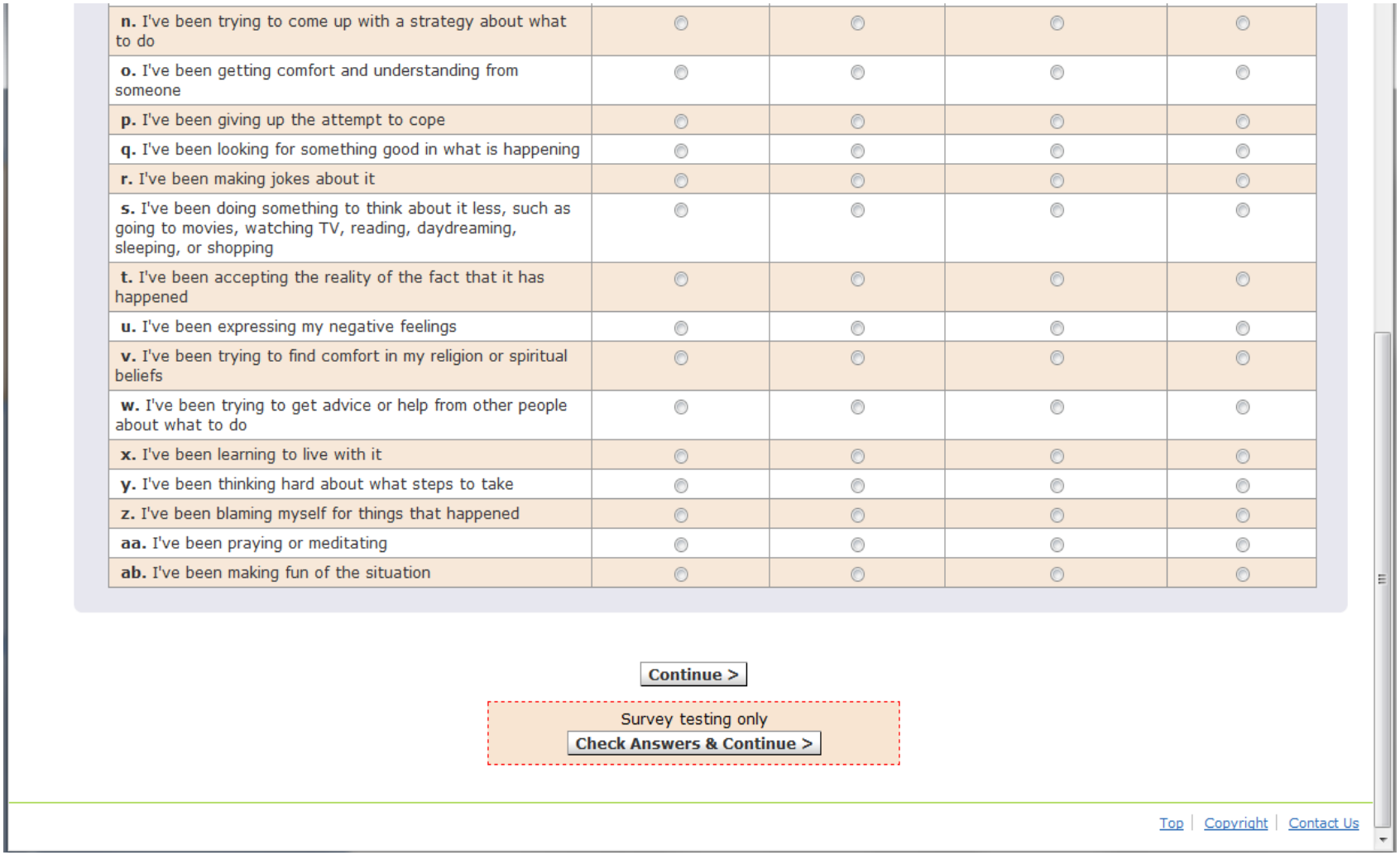
Coping Strategies

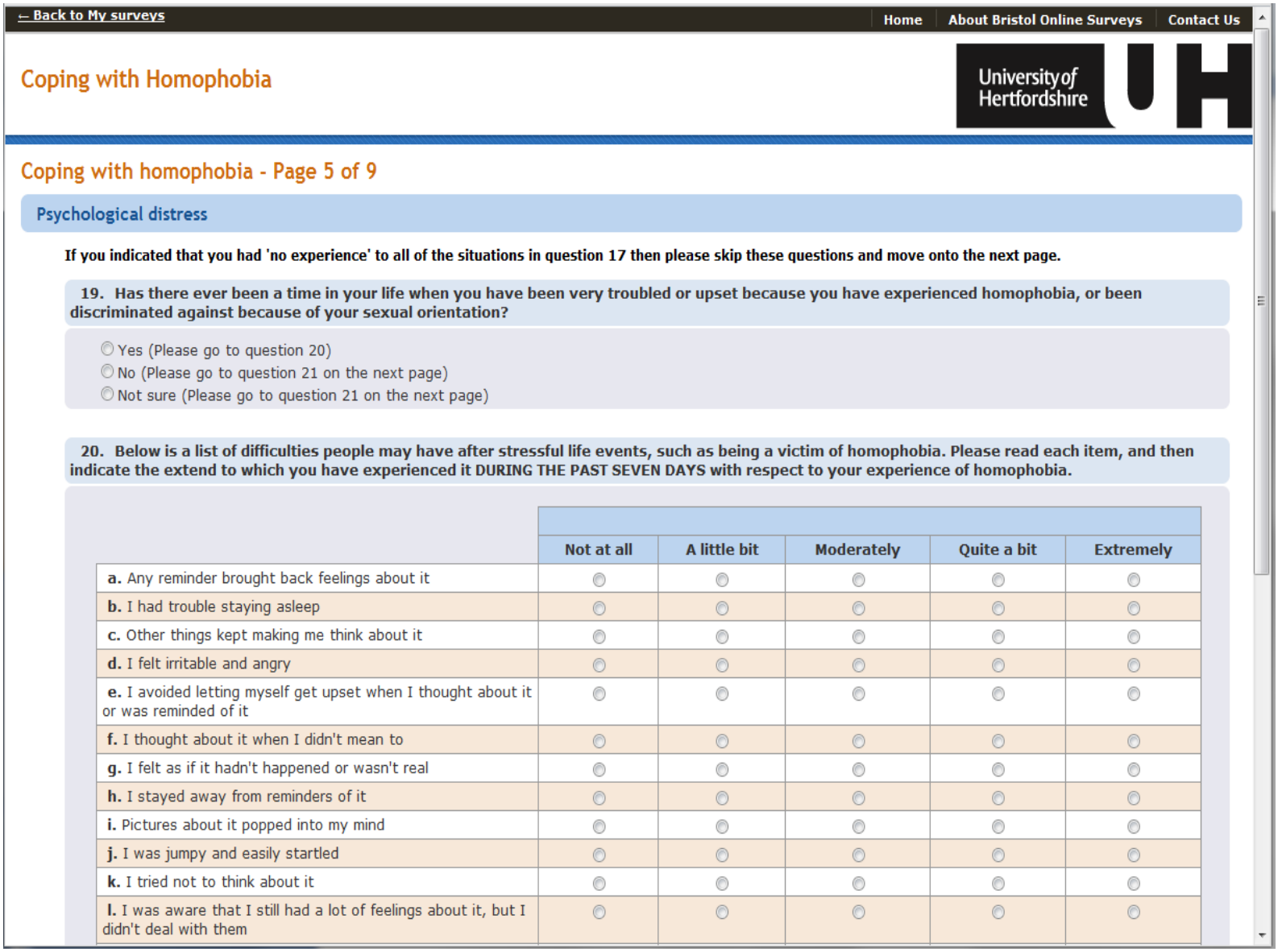
If you indicated that you had 'no experience' to all of the situations in question 17 then please skip this question and move onto the next page.

18. The following statements look at ways that you cope with stressful situations. I want you to think about how you coped when you experienced victimisation based on your sexuality (as indicated on the previous page). There are many ways to try to deal with problems. Obviously, different people deal with things in different ways, but I'm interested in how you try to deal with things. Don't answer on the basis of whether it seems to be working or not, just whether or not you're doing it.

	I haven't been doing this at all	I've been doing this a little bit	I've been doing this a medium amount	I've been doing this a lot
a. I've been turning to work or other activities to take my mind off things	○	○	○	○
b. I've been concentrating my efforts on doing something about the situation I'm in	○	○	○	○
c. I've been saying to myself "this isn't real"	○	○	○	○
d. I've been using alcohol or other drugs to make myself feel better	○	○	○	○
e. I've been getting emotional support from others	○	○	○	○
f. I've been giving up trying to deal with it	○	○	○	○
g. I've been taking action to try to make the situation better	○	○	○	○
h. I've been refusing to believe that it has happened	○	○	○	○
i. I've been saying things to let my unpleasant feelings escape	○	○	○	○
j. I've been getting help and advice from other people	○	○	○	○
k. I've been using alcohol or other drugs to help me get through it	○	○	○	○
l. I've been trying to see it in a different light, to make it seem more positive	○	○	○	○
m. I've been criticizing myself	○	○	○	○



n. I've been trying to come up with a strategy about what to do				
o. I've been getting comfort and understanding from someone				
p. I've been giving up the attempt to cope				
q. I've been looking for something good in what is happening				
r. I've been making jokes about it				
s. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping				
t. I've been accepting the reality of the fact that it has happened				
u. I've been expressing my negative feelings				
v. I've been trying to find comfort in my religion or spiritual beliefs				
w. I've been trying to get advice or help from other people about what to do				
x. I've been learning to live with it				
y. I've been thinking hard about what steps to take				
z. I've been blaming myself for things that happened				
aa. I've been praying or meditating				
ab. I've been making fun of the situation				



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Psychological distress

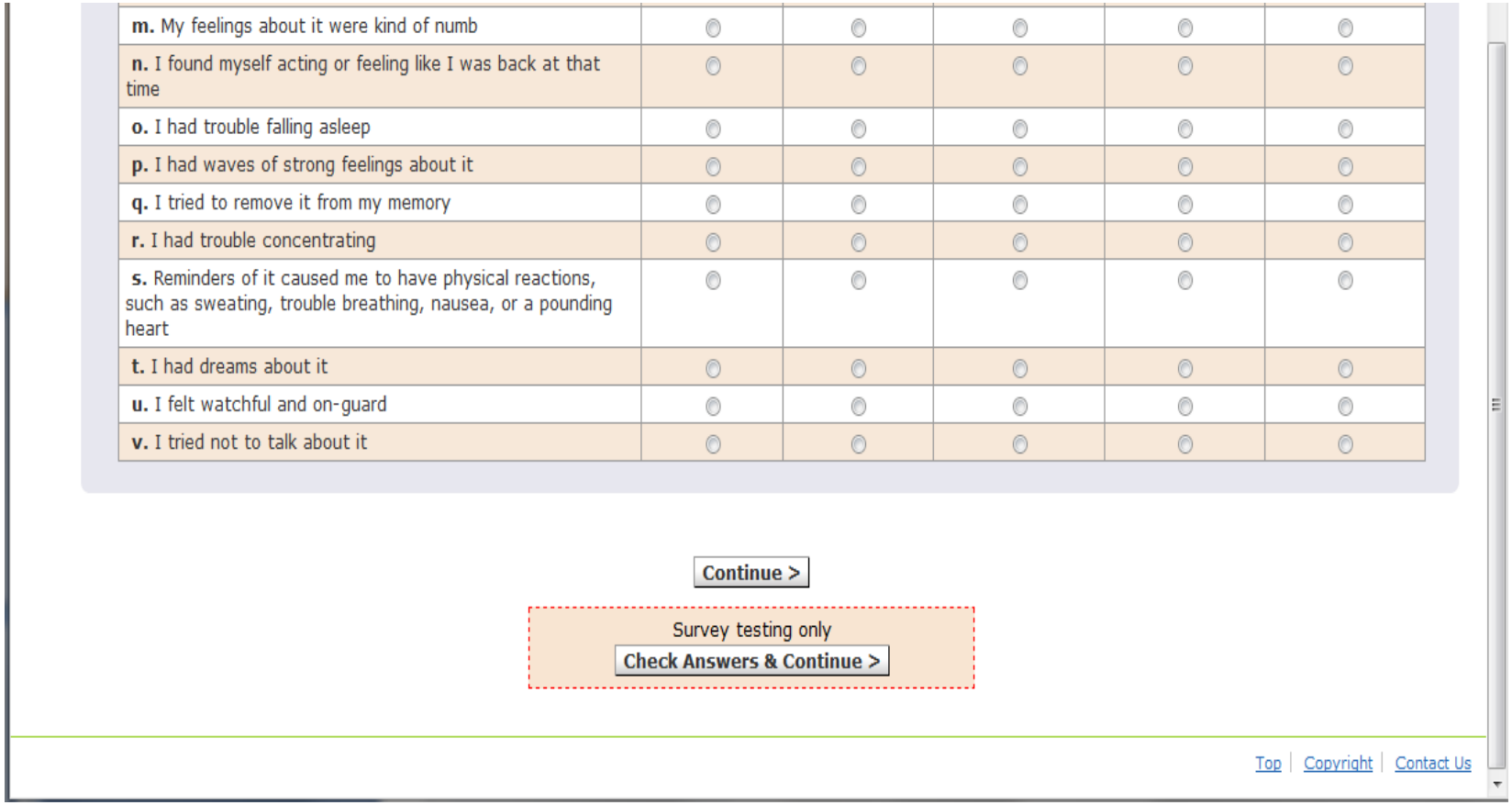
If you indicated that you had 'no experience' to all of the situations in question 17 then please skip these questions and move onto the next page.

19. Has there ever been a time in your life when you have been very troubled or upset because you have experienced homophobia, or been discriminated against because of your sexual orientation?

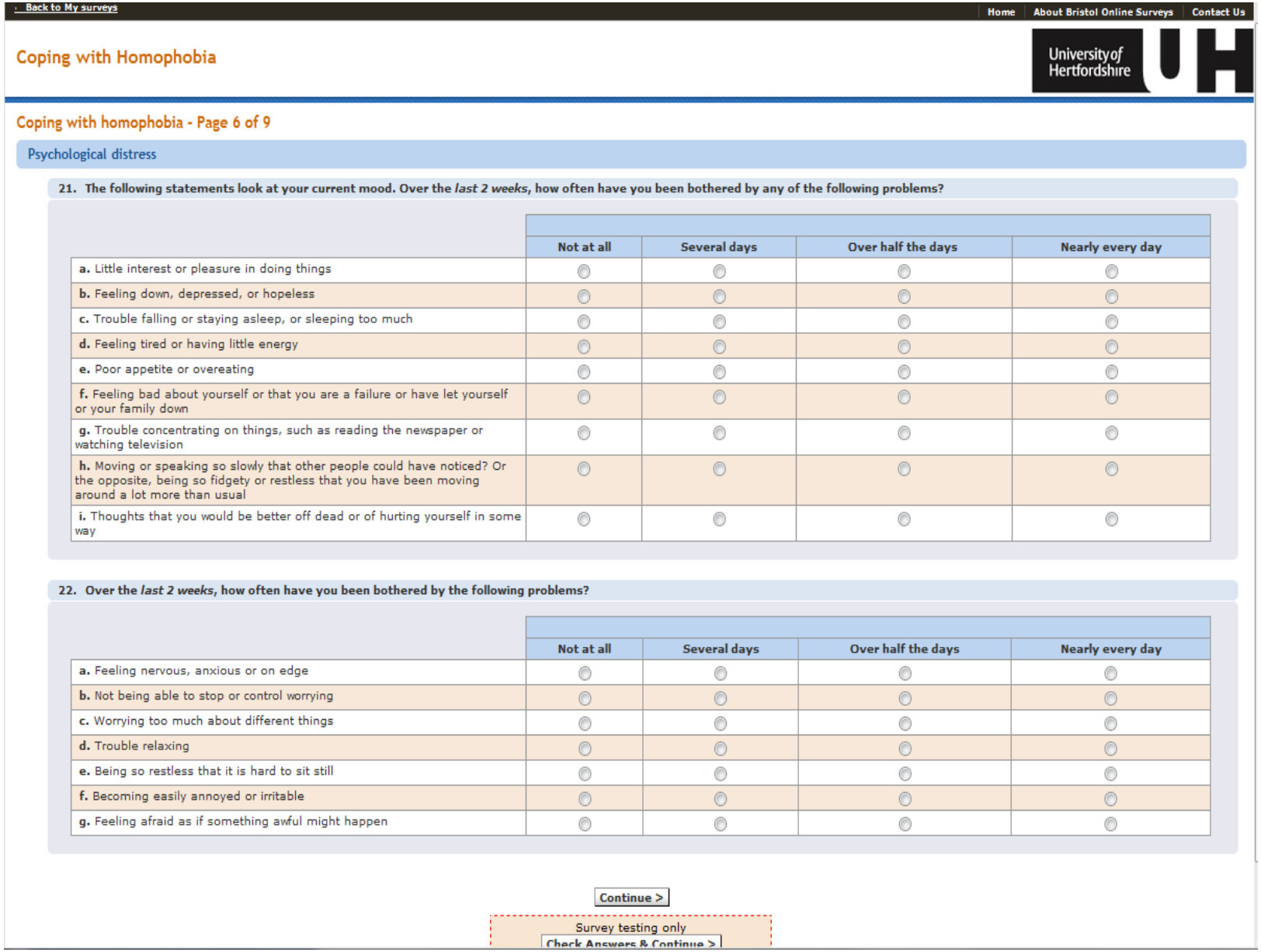
- ○ Yes (Please go to question 20)
- ○ No (Please go to question 21 on the next page)
- ○ Not sure (Please go to question 21 on the next page)

20. Below is a list of difficulties people may have after stressful life events, such as being a victim of homophobia. Please read each item, and then indicate the extend to which you have experienced it DURING THE PAST SEVEN DAYS with respect to your experience of homophobia.

	Not at all	A little bit	Moderately	Quite a bit	Extremely
a. Any reminder brought back feelings about it	○	○	○	○	○
b. I had trouble staying asleep	○	○	○	○	○
c. Other things kept making me think about it	○	○	○	○	○
d. I felt irritable and angry	○	○	○	○	○
e. I avoided letting myself get upset when I thought about it or was reminded of it	○	○	○	○	○
f. I thought about it when I didn't mean to	○	○	○	○	○
g. I felt as if it hadn't happened or wasn't real	○	○	○	○	○
h. I stayed away from reminders of it	○	○	○	○	○
i. Pictures about it popped into my mind	○	○	○	○	○
j. I was jumpy and easily startled	○	○	○	○	○
k. I tried not to think about it	○	○	○	○	○
l. I was aware that I still had a lot of feelings about it, but I didn't deal with them	○	○	○	○	○



m. My feelings about it were kind of numb					
n. I found myself acting or feeling like I was back at that time					
o. I had trouble falling asleep					
p. I had waves of strong feelings about it					
q. I tried to remove it from my memory					
r. I had trouble concentrating					
s. Reminders of it caused me to have physical reactions, such as sweating, trouble breathing, nausea, or a pounding heart					
t. I had dreams about it					
u. I felt watchful and on-guard					
v. I tried not to talk about it					



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Psychological distress

21. The following statements look at your current mood. Over the *last 2 weeks*, how often have you been bothered by any of the following problems?

	Not at all	Several days	Over half the days	Nearly every day
a. Little interest or pleasure in doing things	○	○	○	○
b. Feeling down, depressed, or hopeless	○	○	○	○
c. Trouble falling or staying asleep, or sleeping too much	○	○	○	○
d. Feeling tired or having little energy	○	○	○	○
e. Poor appetite or overeating	○	○	○	○
f. Feeling bad about yourself or that you are a failure or have let yourself or your family down	○	○	○	○
g. Trouble concentrating on things, such as reading the newspaper or watching television	○	○	○	○
h. Moving or speaking so slowly that other people could have noticed? Or the opposite, being so fidgety or restless that you have been moving around a lot more than usual	○	○	○	○
i. Thoughts that you would be better off dead or of hurting yourself in some way	○	○	○	○

22. Over the *last 2 weeks*, how often have you been bothered by the following problems?

	Not at all	Several days	Over half the days	Nearly every day
a. Feeling nervous, anxious or on edge	○	○	○	○
b. Not being able to stop or control worrying	○	○	○	○
c. Worrying too much about different things	○	○	○	○
d. Trouble relaxing	○	○	○	○
e. Being so restless that it is hard to sit still	○	○	○	○
f. Becoming easily annoyed or irritable	○	○	○	○
g. Feeling afraid as if something awful might happen	○	○	○	○

Continue >

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7.9. Shidlo (1994) text revision of the Nungesser Homosexual Attitude Inventory (RHAI) – screenshot of webpage

s. Marriage between Lesbians/Gay men should be legalised	○	○	○	○	○
t. Lesbians/Gay men are overly promiscuous	○	○	○	○	○
u. Most problems that Lesbian/Gay men have have arisen from their status as an oppressed minority, not from their homosexuality	○	○	○	○	○
v. Lesbian/Gay lives are not as fulfilling as heterosexual lives	○	○	○	○	○
w. Children should be taught that being Lesbian/Gay is a normal and healthy way for people to be	○	○	○	○	○
x. Homosexuality is a sexual perversion	○	○	○	○	○
y. I wouldn't mind if my boss knew that I was Lesbian/Gay/Bisexual	○	○	○	○	○
z. When I tell my 'straight' friends about being Lesbian/Gay/Bisexual, I do not worry that they will try to remember things about me that would make me appear to fit the stereotypic Lesbian/Gay man	○	○	○	○	○
aa. When I am sexually attracted to a member of the same sex, I do not mind if someone else knows how I feel	○	○	○	○	○
ab. I would not mind if my neighbours knew that I am Lesbian/Gay/Bisexual	○	○	○	○	○
ac. It is important for me to hide the fact that I am Lesbian/Gay/Bisexual from most people	○	○	○	○	○
ad. If my heterosexual friends knew I was Lesbian/Gay/Bisexual, I would be uncomfortable	○	○	○	○	○
ae. If members from the same sex knew I was Lesbian/Gay/Bisexual, I'm afraid they would begin to avoid me	○	○	○	○	○
af. If it were made public that I am Lesbian/Gay/Bisexual, I would be extremely unhappy	○	○	○	○	○
ag. If my friends knew that I was Lesbian/Gay/Bisexual, I am afraid that many would not want to be friends with me	○	○	○	○	○
ah. If others knew I was Lesbian/Gay/ Bisexual, I wouldn't worry particularly if they saw me as being manly/ effeminate	○	○	○	○	○
ai. When I think about coming out to peers, I am afraid they will pay more attention to my body movements and voice inflections	○	○	○	○	○
aj. I am afraid that people will harass me if I come out more publicly	○	○	○	○	○
ak. When I think about coming out to a heterosexual friend of the same sex, I do not worry that (s)he might watch me to see whether I do things that are considered to be stereotypic of Lesbians/Gay men	○	○	○	○	○

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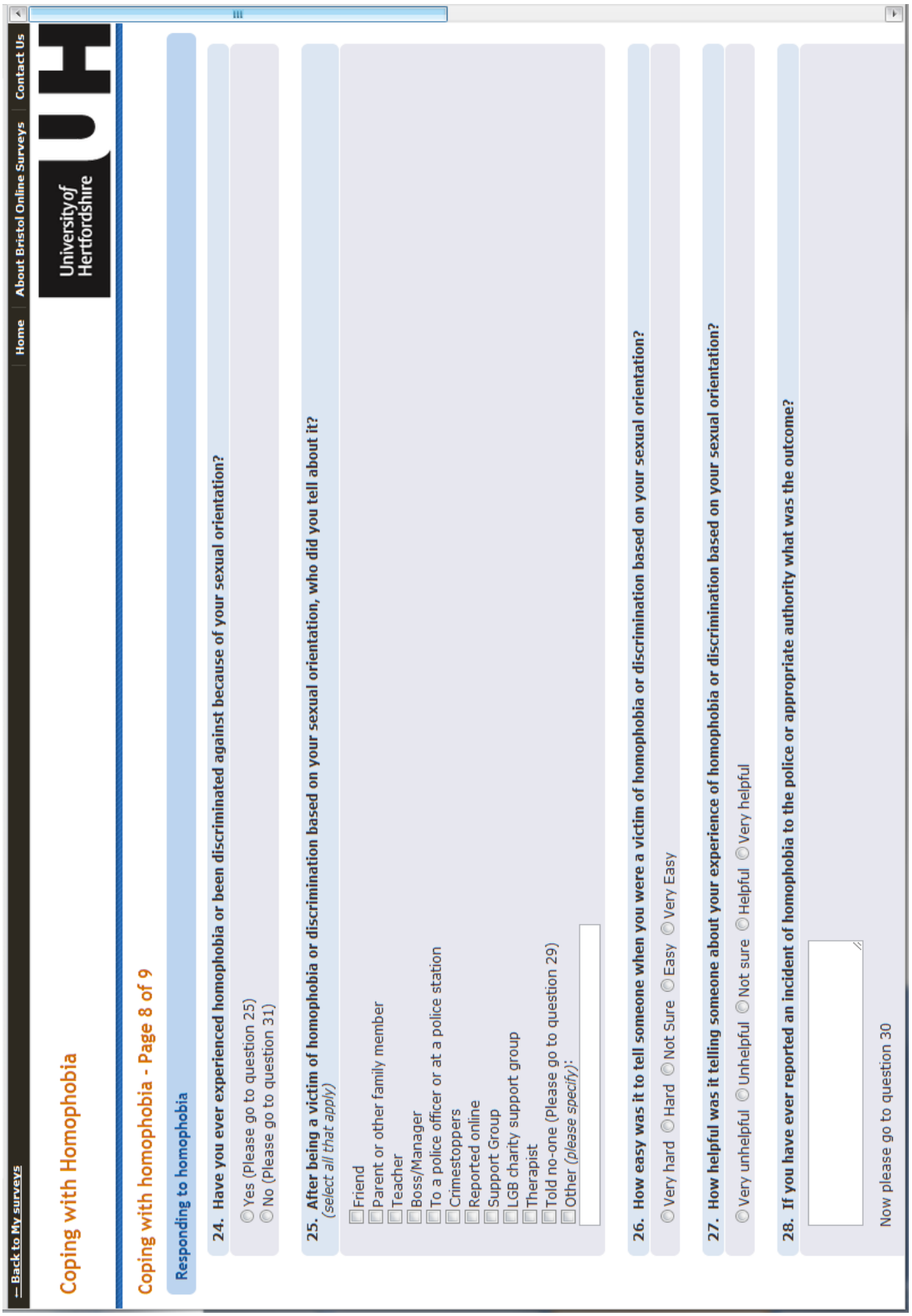
7.10. Responses to homophobia questions – screenshot of webpage



29. If you decided not tell anyone about being a victim of homophobia, or discrimination based on your sexual orientation, why not?

30. If you have been a victim of of homophobia or discrimination based on your sexual orientation in the past, what helped you to overcome it?

31. If you are victim of homophobia in the future do you think you would report the incident?

- Yes
- No
- Not sure

32. In the future, if you were a victim of homophobia, would you know how to report it or who to report it to?

- Yes
- No
- Not sure

If you answered yes to the above question what would you do?

33. In the future would you know how, or where to get support (emotional support rather than legal support) following an experience of homophobia?

- Yes
- No
- Not sure

If you answered yes to the above question where would you go?

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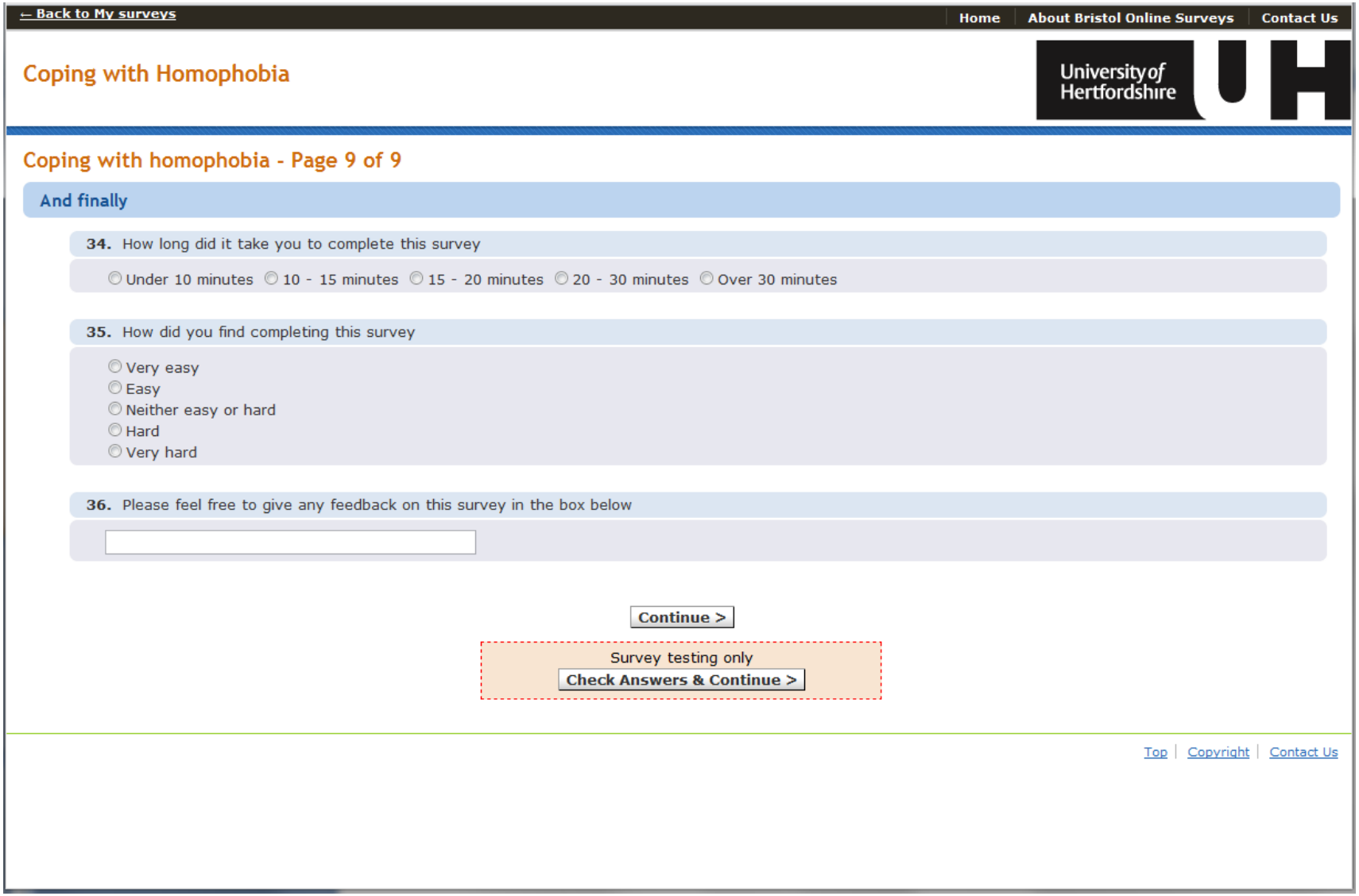
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And finally
34. How long did it take you to complete this survey
Under 10 minutes
10 - 15 minutes
15 - 20 minutes
20 - 30 minutes
Over 30 minutes
35. How did you find completing this survey
Very easy
Easy
Neither easy or hard
Hard
Very hard
36. Please feel free to give any feedback on this survey in the box below
Continue >
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Check Answers & Continue >
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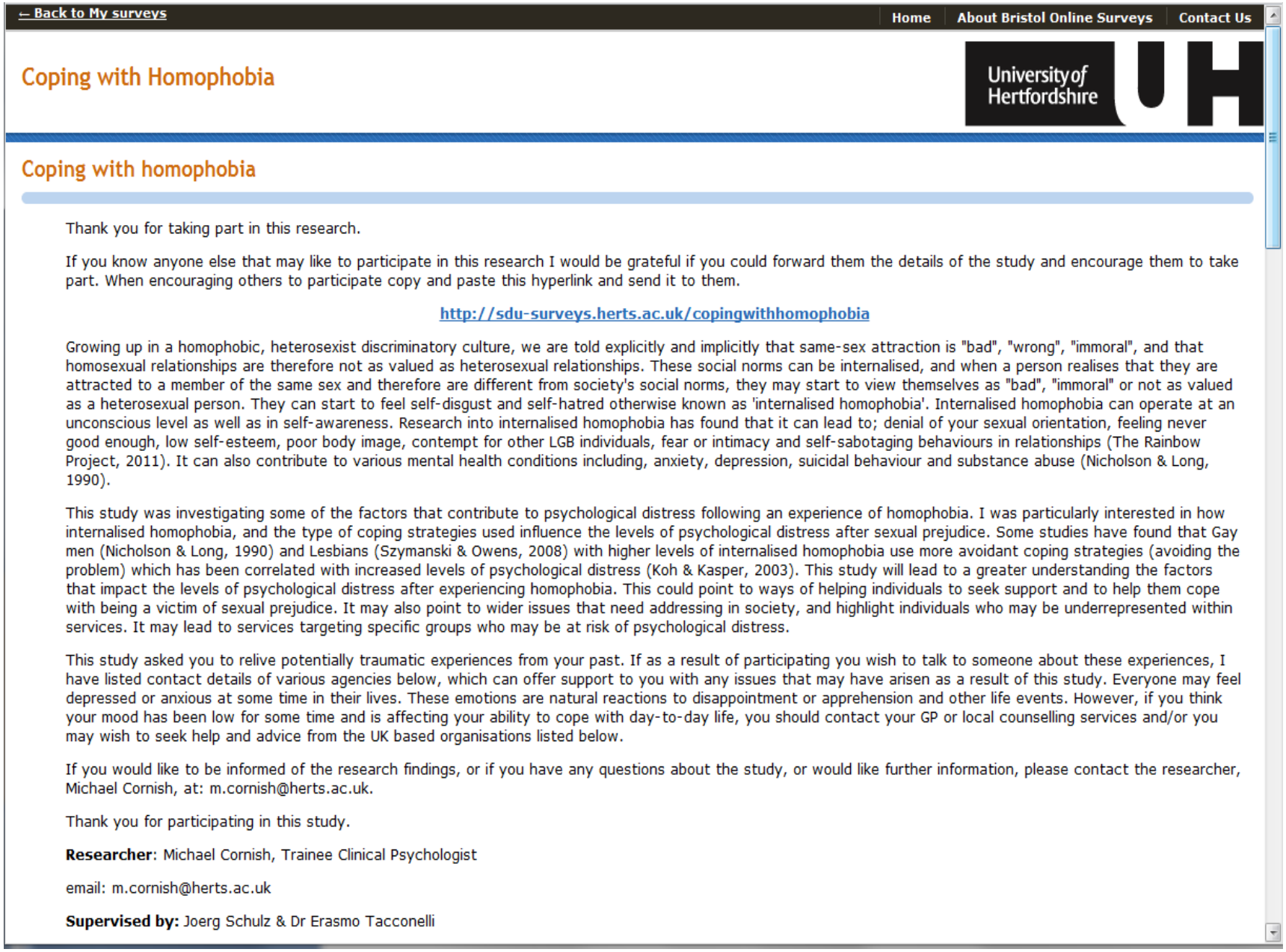

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Coping with Homophobia

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Coping with homophobia

Thank you for taking part in this research.

If you know anyone else that may like to participate in this research I would be grateful if you could forward them the details of the study and encourage them to take part. When encouraging others to participate copy and paste this hyperlink and send it to them.

http://sdu-surveys.herts.ac.uk/copingwithhomophobia

Growing up in a homophobic, heterosexist discriminatory culture, we are told explicitly and implicitly that same-sex attraction is "bad", "wrong", "immoral", and that homosexual relationships are therefore not as valued as heterosexual relationships. These social norms can be internalised, and when a person realises that they are attracted to a member of the same sex and therefore are different from society's social norms, they may start to view themselves as "bad", "immoral" or not as valued as a heterosexual person. They can start to feel self-disgust and self-hatred otherwise known as 'internalised homophobia'. Internalised homophobia can operate at an unconscious level as well as in self-awareness. Research into internalised homophobia has found that it can lead to; denial of your sexual orientation, feeling never good enough, low self-esteem, poor body image, contempt for other LGB individuals, fear or intimacy and self-sabotaging behaviours in relationships (The Rainbow Project, 2011). It can also contribute to various mental health conditions including, anxiety, depression, suicidal behaviour and substance abuse (Nicholson & Long, 1990).

This study was investigating some of the factors that contribute to psychological distress following an experience of homophobia. I was particularly interested in how internalised homophobia, and the type of coping strategies used influence the levels of psychological distress after sexual prejudice. Some studies have found that Gay men (Nicholson & Long, 1990) and Lesbians (Szymanski & Owens, 2008) with higher levels of internalised homophobia use more avoidant coping strategies (avoiding the problem) which has been correlated with increased levels of psychological distress (Koh & Kasper, 2003). This study will lead to a greater understanding the factors that impact the levels of psychological distress after experiencing homophobia. This could point to ways of helping individuals to seek support and to help them cope with being a victim of sexual prejudice. It may also point to wider issues that need addressing in society, and highlight individuals who may be underrepresented within services. It may lead to services targeting specific groups who may be at risk of psychological distress.

This study asked you to relive potentially traumatic experiences from your past. If as a result of participating you wish to talk to someone about these experiences, I have listed contact details of various agencies below, which can offer support to you with any issues that may have arisen as a result of this study. Everyone may feel depressed or anxious at some time in their lives. These emotions are natural reactions to disappointment or apprehension and other life events. However, if you think your mood has been low for some time and is affecting your ability to cope with day-to-day life, you should contact your GP or local counselling services and/or you may wish to seek help and advice from the UK based organisations listed below.

If you would like to be informed of the research findings, or if you have any questions about the study, or would like further information, please contact the researcher, Michael Cornish, at: m.cornish@herts.ac.uk.

Thank you for participating in this study.

Researcher: Michael Cornish, Trainee Clinical Psychologist

email: m.cornish@herts.ac.uk

Supervised by: Joerg Schulz & Dr Erasmo Tacconelli

Below is a list of possible services that can support you should you feel distressed by any of the issues raised by this research.

Mental Health Foundation

Independent organisation that helps people to survive, recover from and prevent mental health problems (This is the biggest website on mental health (and mental illness) in the UK.)

9th floor, Sea Containers House, 20 Upper Ground, London SE1 9QB, Tel: 020 78031100; website: http://www.mentalhealth.org.uk

Stonewall

National charity that works to achieve equality and justice for lesbian, gay men and bisexual people.

Website: http://www.stonewall.org.uk

PACE

London based charity promoting the mental health and emotional wellbeing of the lesbian, gay, bisexual and transgendered community

34 Harthman Road, London, N7 9JL, Website: http://www.pacehealth.org.uk

Samaritans

National organisation offering support to those in distress who feel suicidal or despairing and need someone to talk to.The telephone number of your local branch can be found in the telephone directory.

The 24-hour Helpline: 08457 90 90 90 website: http://www.samaritans.org.uk

Mind

Leading mental health charity in England and Wales. The Mind Infoline offers thousands of callers confidential help on a range of mental health issues.

15-19 Broadway, London E15 4BQ, Helpline: 0300 123 3393, Website: http://www.mind.org.uk

The Lesbian & Gay Foundation

North-west based charity fighting for and support the LGB community. Offers advice, support and information

Tel: 0845 3 30 30 30, Website: http://www.lgf.org.uk

Friends and Families of Lesbian and Gays (FFLAG)

Charity established to support the friends and families of people who identify as lesbian, gay and bisexual

7 York Court, Wilder Street, Bristol, BS2 8HQ, Tel: 01179 429 311, Website: http://www.fflag.org.uk

GALOP

Works to prevent and challenge homophobic and transphobic hate crime in Greater London. Offers a service to report homophobic or transphobic hate crime anonymously.

Helpline: 020 7704 2040, Website: http://www.galop.org.uk

True Vision

Online service to report any type of hate crime. Also has links to local police websites.

Website: http://www.report-it.org.uk

7.13. List of agencies that could offer support – screenshot of webpage

Depression Alliance

Information, support and understanding for people who suffer with depression and for relatives who want to help.

35 Westminster Bridge Road, London SE1 7JB, Tel: 0845 123 23 20; website: http://www.depressionalliance.org/

Fellowship of Depressives Anonymous

A national mutual support group for people suffering from Depression

Box FDA, Self-Help Nottingham, Ormiston House, 32-36 Pelham Street, Nottingham NG1 2EG Tel: 0870 774 4320; website: http://www.depressionanon.co.uk

RELATE

UK's largest and most experienced relationship counselling organisation

Herbert Gray College, Little Church Street, Rugby CV21 3AP, Tel: 0845 456 1310; website: http://www.relate.org.uk

The Rainbow Project

The Rainbow Project is a health organisation that works to improve the physical, mental & emotional health of gay, bisexual and non-heterosexual men in Northern Ireland.

The Rainbow Project, Belfast LGBT Centre, 1sst Floor, 9-13 Waring Street, Belfast, BT1 2DX, Website: http://www.rainbow-project.org

Gay and Lesbian Helplines

Provides information, support and referral services for lesbian, gay men, bisexual, transgendered people and anyone who needs to consider issues around their sexuality.

Brighton & Hove -- 01273 204050

Cymru/Wales -- 0800 840 2069

Gloucestershire -- 01452 306800

Leeds -- 0113 245 3588

London -- 0300 330 0630

Lothian -- 0131 556 4049

Manchester -- 0161 235 8000

Nottingham & Nottinghamshire -- 0115 9348485 or 01623 621515

Oxford -- 01865 726893

Somerset -- 01823 327078

Stoke-on-Trent & North Staffordshire -- 01782 266998

Strathclyde -- 0141 847 0447

References

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7.14. Reliability of Brief COPE subscales in this sample

Table 39. Reliability of the Brief COPE scales in this sample.

Subscale of Brief COPE	Internal Reliability	Number of items
1. Acceptance	α= 0.70	2
2. Active Coping	α=0.75	2
3. Behavioural Disengagement	α=0.61	2
4. Denial	α=0.65	2
5. Humour	α=0.84	2
6. Planning	α=0.78	2
7. Positive Reframing	α=0.73	2
8. Religious Coping	α=0.88	2
9. Self-Distraction	α=0.70	2
10. Self-Blame	α=0.74	2
11. Substance Abuse	α=0.92	2
12. Use of Emotional Support	α=0.82	2
13. Use of Instrumental Support	α=0.81	2
14. Venting	α=0.60	2
Problem-focused coping	α=0.86	6
Emotion-focused coping	α=0.81	12
Maladaptive coping	α=0.80	10

7.15. Weighting of Sexual Prejudice questionnaire

Table 40. Experience of sexual prejudice scale (with weighted scoring)

	I've been a victim	**I've been a witness**	**I know a victim**	**I've no experience**
a. Heard someone make a homophobic joke	☐ (3)	☐ (2)	☐ (1)	☐ (0)
b. Received verbal abuse because of your sexuality	☐ (3)	☐ (2)	☐ (1)	☐ (0)
c. Been called a 'fag', 'dyke' or other derogatory term	☐ (3)	☐ (2)	☐ (1)	☐ (0)
d. Been given threatening looks	☐ (3)	☐ (2)	☐ (1)	☐ (0)
e. Received death threats	☐ **(6)**	☐ **(4)**	☐ **(2)**	☐ **(0)**
f. **Been punched, kicked, hit or slapped because of your sexuality**	☐ **(6)**	☐ **(4)**	☐ **(2)**	☐ **(0)**
g. **Been beaten so badly you required medical attention**	☐ **(6)**	☐ **(4)**	☐ **(2)**	☐ **(0)**
h. Been spat at	☐ (3)	☐ (2)	☐ (1)	☐ (0)
i. **Had something thrown at you**	☐ **(6)**	☐ **(4)**	☐ **(2)**	☐ **(0)**
j. **Been victim of assault with a weapon**	☐ **(6)**	☐ **(4)**	☐ **(2)**	☐ **(0)**
k. Been refused service in a shop, restaurant, hotel, etc or been subjected to delays in service.	☐ (3)	☐ (2)	☐ (1)	☐ (0)
l. Been treated rudely in a shop, or restaurant, hotel, etc	☐ (3)	☐ (2)	☐ (1)	☐ (0)
m. Been treated unfairly in a shop, or restaurant, hotel, etc	☐ (3)	☐ (2)	☐ (1)	☐ (0)
n. Been treated badly at work/college/uni because of your sexuality	☐ (3)	☐ (2)	☐ (1)	☐ (0)
o. **Been sexually assaulted**	☐ **(6)**	☐ **(4)**	☐ **(2)**	☐ **(0)**
p. Had belongings stolen	☐ (3)	☐ (2)	☐ (1)	☐ (0)

Weighted scores are in bold and underlined, and responses and are scored at twice the value to account for the severity of the incidents.

7.16. Ethics Committee Approval

SCHOOL OF PSYCHOLOGY ETHICS COMMITTEE APPROVAL

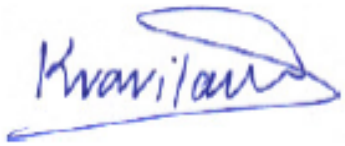
Student Investigator: Michael Cornish

Title of project: The impact of internalised homophobia and coping strategies on psychological distress following the experience of sexual prejudice

Supervisor: Joerg Schulz

Registration Protocol Number: PSY/09/11/MC

The approval for the above research project was granted on 15 September 2011 by the Psychology Ethics Committee under delegated authority from the Ethics Committee of the University of Hertfordshire.
The end date of your study is 30 May 2012.



Signed: **Date: 15 September 2011**

Professor Lia Kvavilashvili
Chair
Psychology Ethics Committee

STATEMENT OF THE SUPERVISOR:

From my discussions with the above student, as far as I can ascertain, s/he has followed the ethics protocol approved for this project.

Signed (supervisor): .....

Date: .....

7.17. Nationalities of the participants

Table 41. Nationality of the participants

Nationality	Frequency	Percent
United Kingdom	372	71.3%
United States	44	8.4%
Ireland	19	3.6%
Canada	11	2.1%
Italy (also Vatican City)	11	2.1%
Australia	7	1.3%
France and French Overseas Depts (DCMS)	7	1.3%
Germany	5	1.0%
Brazil	4	0.8%
Malaysia	3	0.6%
Singapore	3	0.6%
Belgium	2	0.4%
Cyprus	2	0.4%
Netherlands (Holland)	2	0.4%
Sri Lanka (also Ceylon)	2	0.4%
Argentina	1	0.2%
Barbados	1	0.2%
Czech Republic	1	0.2%
Denmark	1	0.2%
Greece	1	0.2%
Isle of Man	1	0.2%
Kenya	1	0.2%
Lebanon	1	0.2%
Lithuania	1	0.2%
Mexico	1	0.2%
New Zealand	1	0.2%
Nicaragua	1	0.2%
Norway	1	0.2%
Philippines	1	0.2%
Poland	1	0.2%
Portugal (also Madeia, Azores)	1	0.2%
Puerto Rico	1	0.2%
Romania	1	0.2%
Russia	1	0.2%
Somalia	1	0.2%
South Africa	1	0.2%
Spain	1	0.2%
Trinidad and Tobago	1	0.2%
Other	5	1.0%
Total	522	100%

7.18. Age at which participants recognised their sexual orientation

Most participants recognised their sexuality before the age of 21 years (See Table 42). Males appeared to first recognise their sexuality earlier than females, with the majority (57%) indicating that they knew of their sexual orientation between the ages of 10 and 15 years. Individuals who recognised their sexual orientation from the age of 21 years and over were combined into one group to allow for a Chi-square analysis to be conducted. This found that there was a significant difference between the ages at which males and females recognised their sexual orientation, $\chi^2(3)=16.98$, $p<0.01$. Males were found to have a tendency to recognise their sexual orientation earlier than females and this difference was significant between the ages of 10-15 years, and women were significantly more likely to recognise their sexual orientation above the age of 21 years than males.

Table 42. Age when participants first knew of sexual orientation

	Males	Females	Total
Under 10 years	58 (18%)	29 (14%)	87(16%)
10 – 15 years	189 (57%)	88 (46%)	277 (53%)
16 – 20 years	68 (21%)	52 (27%)	120 (23%)
21 – 30 years	13 (4%)	21 (11%)	34 (7%)
31 – 40 years	1 (>1%)	0 (0%)	1 (>1%)
41 – 50 years	0 (0%)	2 (1%)	2 (>1%)
Over 50 years	0 (0%)	1 (1%)	1 (>1%)
Total	329 (100%)	193 (100%)	522 (100%)

There was also a difference between the age at which homosexual and bisexual individuals knew of their sexual orientation, However this difference did not quite reach significance levels, $\chi^2(3)=7.75$, $p=0.051$. Again, participants over 21 years of age when they knew of their sexual orientation were grouped into one category. There was a trend for homosexual individuals to recognise their sexual orientation earlier than bisexual individuals (See Table 43).

Table 43. Age when participants first knew of sexual orientation

	Homosexuals	Bisexuals	Total
Under 10 years	72 (17%)	15 (16%)	87 (17%)
10 – 15 years	235 (55%)	42 (44%)	277 (53%)
16 – 20 years	93 (22%)	27 (28%)	120 (23%)
21 – 30 years	23 (5%)	11 (12%)	34 (7%)
31 – 40 years	1 (<1%)	0 (0%)	1 (<1%)
41 – 50 years	2 (1%)	0 (0%)	2 (<1%)
Over 50 years	0 (0%)	1 (1%)	1 (<1%)
Total	426 (100%)	96 (100%)	522 (100%)

7.19. Results of who participants have ‘come out’ to

Table 44 shows the people who the participants reported having 'come out' to. Nearly all participants had come out to their close friends, and a large majority had come out to other friends. Parents were the most common family member individuals came out to, with siblings following. This may reflect that not all participants necessarily have siblings, but all would have had parent/guardians. Due to the age of participants, and the increased difficulties of having or adopting children in homosexual relationships, very few are likely to have children which probably reflects the small number of participants that have come out to their children. There was no significant difference between males and females in who they disclosed their sexual orientation to, with two exceptions. Females were more likely to have disclosed their sexuality to peers at university/college than males, $\chi^2(1)=7.71$, $p<0.01$, whereas males were more likely to have disclosed their sexuality to their grandparents than females, $\chi^2(1)=4.48$, $p<0.05$.

Table 44. Who knows about sexual orientation?

	Males (n=329)	Females (n=193)	Total (n=522)
Close friends	321 (98%)	189 (98%)	510 (98%)
Other friends	261 (80%)	157 (81%)	418 (80%)
Parents	255 (78%)	147 (76%)	402 (77%)
Siblings	242 (74%)	129 (67%)	371(71%)
University/college peers*	216 (66%)	149 (77%)	365 (70%)
Other family members	201 (61%)	110 (57%)	311 (60%)
Work colleagues	194 (59%)	104 (54%)	298 (57%)
Grandparents*	94 (29%)	39 (20%)	133 (26%)
Children	16 (5%)	17 (9%)	33 (6%)
No-one	7 (2%)	1 (1%)	8 (2%)

7.20. Length and quality of participants relationships

Of those who reported being in a relationship, one did not indicate how long their relationship had been, and five did not indicate the quality of their relationship. 65% of participants that were currently in a relationship, were in a relationship that had lasted over 1 year, with 23% being in a relationship that had lasted over 5 years (see Table 45). There was no significant difference between the length of relationships between the male and female participants, $\chi^2(8)=3.38$, $p=0.908$. There was no significant difference in relationship length between homosexual and bisexual participants either, $\chi^2(8)=4.05$, $p=0.853$.

Table 45. Length of relationship of the participants

	Males	Females	Total
Less than 1 month	6 (5%)	4 (4%)	10 (4%)
1 – 3 months	15 (11%)	11 (11%)	26 (11%)
3 – 6 months	9 (7%)	11 (10%)	20 (9%)
6 - 12 months	15 (11%)	10 (10%)	25 (11%)
1 -2 years	30 (23%)	21 (20%)	51 (22%)
2 – 5 years	24 (18%)	24 (23%)	48 (20%)
5 – 10 years	17 (13%)	12 (12%)	29 (12%)
10 – 20 years	11 (8%)	8 (8%)	19 (8%)
Over 20 years	6 (5%)	2 (2%)	8 (3%)
Total	133 (100%)	103 (100%)	236 (100%)

Nearly all participants reported that the quality of their relationship was either good or very good (96%), and less than 5% of those in a relationship indicated that their relationship was ‘not so good’ or ‘bad’ (see Table 46). There was no significant difference between males and females in relationship quality, $\chi^2(3)=1.35$, $p=0.717$. There was also no significant difference in relationship quality between homosexual and bisexual individuals, $\chi^2(6)=1.55$, $p=0.671$.

Table 46. Quality of relationship of the participants

	Males	Females	Total
Very good	88 (67%)	71 (71%)	159 (69%)
Good	37 (28%)	26 (26%)	63 (27%)
Not so good	6 (5%)	3 (3%)	9 (4%)
Bad	1 (1%)	0 (0%)	1 (>1%)
Total	132 (100%)	100 (100%)	232 (100%)

7.21. Frequency of experiences of sexual prejudice

Table 47. Frequency and mean scores of sexual prejudice experiences (n=522).

Type of sexual prejudice	Been a victim	Witness someone else be a victim	Know someone who has been a victim	Had no experience of this
Heard a homophobia joke	304 (58%)	362 (69%)	222 (43%)	28 (5%)
Been called a derogatory term	347 (67%)	211 (40%)	216 (41%)	72 (14%)
Received verbal abuse	331 (63%)	208 (40%)	227 (44%)	73 (14%)
Been given threatening looks	213 (41%)	151 (29%)	158 (30%)	188 (36%)
*Been physical assaulted	91 (17%)	43 (8%)	167 (32%)	299 (57%)
*Had something thrown at you	89 (17%)	49 (9%)	84 (16%)	368 (71%)
Been treated unfairly at Work/college	122 (23%)	46 (9%)	94 (18%)	331 (63%)
Been treated rudely by a shop, restaurant, hotel, etc	95 (18%)	45 (9%)	102 (20%)	355 (68%)
*Received death threats	29 (6%)	29 (6%)	77 (15%)	419 (80%)
*Been sexual assaulted	45 (9%)	8 (2%)	61 (12%)	432 (83%)
Been treated unfairly in a shop, restaurant, hotel, etc	70 (13%)	37 (7%)	92 (18%)	382 (73%)
Been refused (or received delayed) service at a shop, restaurant, hotel, etc	55 (11%)	26 (5%)	84 (16%)	400 (77%)
Been spat at	51 (10%)	29 (6%)	77 (15%)	403 (77%)
*Been assaulted so badly you needed medical attention	17 (3%)	11 (2%)	89 (17%)	432 (83%)
Had belongings stolen	48 (9%)	10 (2%)	51 (10%)	445 (85%)
*Been physical attacked with a weapon	9 (2%)	4 (1%)	50 (10%)	471 (90%)
Total weighted mean score (SD)	*12.6 (11.1)*	*5.4 (6.0)*	*4.6 (5.0)*	- [7]

NB: The * symbol indicates the six situations that have been weighted to account for the subjective severity of these situations.

[7] As this group has no experience of sexual prejudice, no total weighted score was calculated.

7.22. Breakdown of the people or organisations that experiences of sexual prejudice were reported to.

Table 48. People experiences of homophobia were disclosed to by gender

	Males (n=203)	Females (n=135)	Total (n=338)
Friend	149 (73%)	114 (84%)	263 (78%)
Parent or family member	44 (22%)	31 (23%)	75 (22%)
No-one	37 (18%)	17 (13%)	54 (16%)
Teacher	25 (12%)	10 (7%)	35 (10%)
Therapist	17 (8%)	14 (10%)	31 (9%)
Police	21 (10%)	9 (7%)	30 (9%)
Boss/manager	16 (8%)	7 (5%)	23 (7%)
LGBT charity/organisation	15 (7%)	4 (3%)	19 (6%)
Support group	10 (5%)	3 (2%)	13 (4%)
Reported online	6 (3%)	2 (2%)	8 (2%)
Partner	2 (1%)	6 (4%)	8 (2%)
Crimestoppers	0 (0%)	1 (1%)	1 (<1%)
Other[8]	9 (4%)	7 (5%)	16 (5%)

A chi-squared analysis indicated that there was no significant difference between males and females in who they disclosed their experience of sexual prejudice to, with the exception of telling a friend. Females were more likely to tell a friend than males, $\chi^2(1)=5.73$, $p<0.05$.

Table 49. People experiences of homophobia were disclosed to by sexuality

	Homosexuals (n=275)	Bisexuals (n=63)	Total (n=338)
Friend	215 (78%)	48 (76%)	263 (78%)
Parent or family member	66 (24%)	9 (14%)	75 (22%)
No-one	43 (16%)	11 (18%)	54 (16%)
Teacher	29 (11%)	6 (10%)	35 (10%)
Therapist	25 (9%)	6 (10%)	31 (9%)
Police	30 (11%)	0 (0%)	30 (9%)
Boss/manager	23 (8%)	0 (0%)	23 (7%)
LGBT charity/organisation	18 (7%)	1 (2%)	19 (6%)
Support group	12 (4%)	1 (2%)	13 (4%)
Reported online	7 (3%)	1 (2%)	8 (2%)
Partner	4 (1%)	4 (6%)	8 (2%)
Crimestoppers	1 (<1%)	0 (0%)	1 (<1%)
Other	12 (4%)	4 (6%)	16 (5%)

When comparing the difference between homosexual and bisexual individuals, in who they disclosed experiences of sexual prejudice to, again there was little significance difference between them. The exceptions to this were that bisexual individuals were less likely to report sexual prejudice to their boss/manager, $\chi^2(1)=5.65$, $p<0.05$, or to the police, $\chi^2(1)=7.54$, $p<0.01$.

[8] The other responses included; reporting it to the establishment owner of where the incident took place (n=2), telling a friend's parent (n=1), telling other people present (n=1), telling the person who discriminated (n=1) or telling a union representative (n=1). 13 participants indicated 'other' but did not give further details who this was.

7.23. Descriptive results of future intentions to respond to sexual prejudice

All participants were asked to give their views on how they may react to any future sexual prejudice they experience. Less than half of the sample (42%) indicated that they would report sexual prejudice in the future if they were to experience it. Only 10% of the sample however said that they would not report it (see Table 50).

Table 50. Q31. Would you report sexual prejudice in the future?

	Yes	No	Not sure	Total
Males	143 (44%)	31 (9%)	155 (47%)	329 (100%)
Females	75 (39%)	23 (12%)	95 (50%)	193 (100%)
Homosexuals	195 (46%)	34 (8%)	197 (46%)	426 (100%)
Bisexuals	23 (24%)	20 (21%)	53 (55%)	96 (100%)
Total	218 (42%)	54 (10%)	250 (48%)	522 (100%)

There was no significant difference between genders, $\chi^2(2)=1.46$, $p=0.481$, in terms of intention to report sexual prejudice in the future. However there was a significant difference between homosexual and bisexual individuals, $\chi^2(2)=22.75$, $p<0.001$, with homosexual participants having higher intentions of reporting future sexual prejudice than bisexual participants.

Table 51. Q32. Would you know how to report sexual prejudice in the future?

	Yes	No	Not sure	Total
Males	151 (46%)	75 (23%)	103 (31%)	329 (100%)
Females	65 (34%)	59 (31%)	69 (36%)	193 (100%)
Homosexuals	190 (45%)	102 (24%)	134 (31%)	426 (100%)
Bisexuals	26 (27%)	32 (33%)	38 (40%)	96 (100%)
Total	216 (41%)	134 (26%)	172 (33%)	522 (100%)

There was a significant association between gender and knowing how to report sexual prejudice in the future, $\chi^2(2)=7.98$, $p<0.05$. Males were more aware of how to report a homophobic incident than females (see Table 51). This significant association was also found between homosexual and bisexual individuals, $\chi^2(2)=10.07$, $p<0.01$, with homosexuals having higher knowledge of how to report sexual prejudice than bisexual individuals.

Table 52. Q33. Would you know how to get support after sexual prejudice?

	Yes	No	Not sure	Total
Males	180 (55%)	64 (20%)	85 (26%)	329 (100%)
Females	111 (58%)	47 (24%)	35 (18%)	193 (100%)
Homosexuals	237 (56%)	88 (21%)	101 (24%)	426 (100%)
Bisexuals	54 (56%)	23 (24%)	19 (20%)	96 (100%)
Total	291 (56%)	111 (21%)	120 (23%)	522 (100%)

There was no statistical difference between the observed and expected frequency for gender, $\chi^2(2)=4.68$, $p=0.096$, or sexuality, $\chi^2(2)=0.93$, $p=0.628$, in their knowledge of where to get psychological support from after experiencing sexual prejudice.

7.24. Descriptive statistics of the coping styles by sexuality group and Scatterplots of the correlation between the coping styles

Independent sample *t*-tests found that there was no significant difference between the homosexual and bisexual groups in their scores for problem-focused coping, $t(477)=1.327$, two-tailed $p=0.185$, for emotion-focused coping, $t(477)=0.346$, two-tailed $p=0.729$ or maladaptive coping scores, $t(476)=-1.103$, two-tailed $p=0.270$.

Table 53. Descriptive statistics of coping scores by sexuality group

Measure		N	Min	Max	Mean	SD	Median	Skewness	Kurtosis
Problem-focused coping	Homosexuals	391	6	24	11.97	4.62	12	0.51	-0.57
	Bisexuals	88	6	21	11.26	4.05	10.5	0.37	-0.95
	Total	479	6	24	11.84	4.53	11	0.51	-0.57
Emotion-focused coping	Homosexuals	391	12	48	23.99	6.62	24	0.28	-0.23
	Bisexuals	88	12	42	23.72	7.05	23	0.37	-0.53
	Total	479	12	48	23.94	6.70	24	0.30	-0.30
Maladaptive coping	Homosexuals	390	10	38	15.51	5.00	14	1.20	1.57
	Bisexuals	88	10	30	16.16	5.04	15	0.95	0.38
	Total	478	10	38	15.63	5.00	14	1.15	1.30

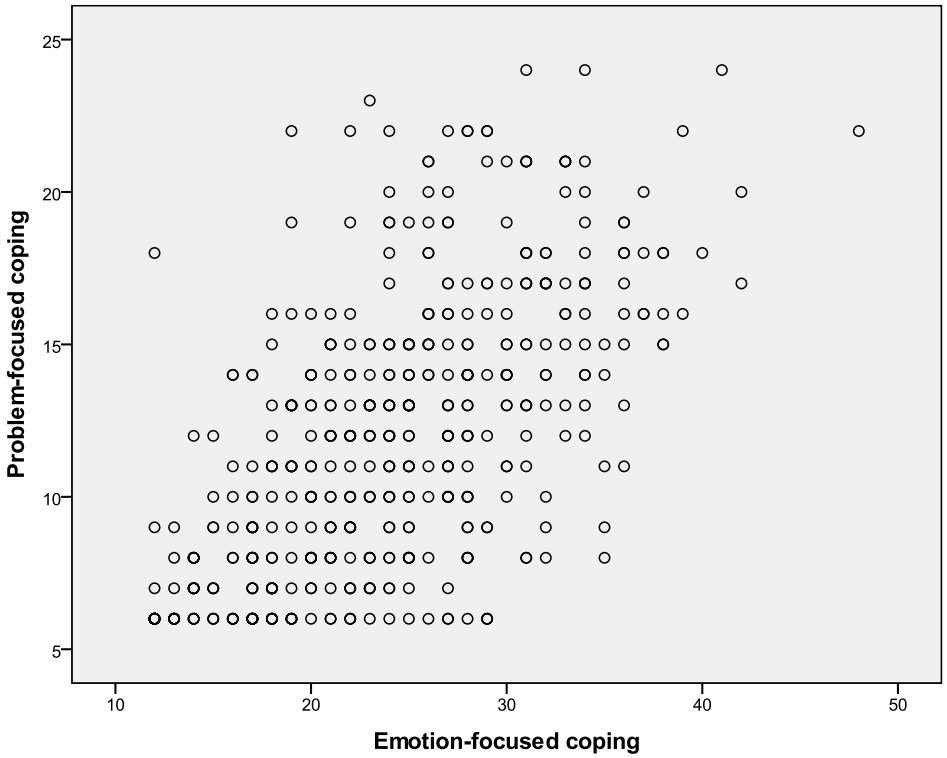


Figure 8. Scatterplot of the relationship between problem-focused coping and emotion-focused coping (n=479).

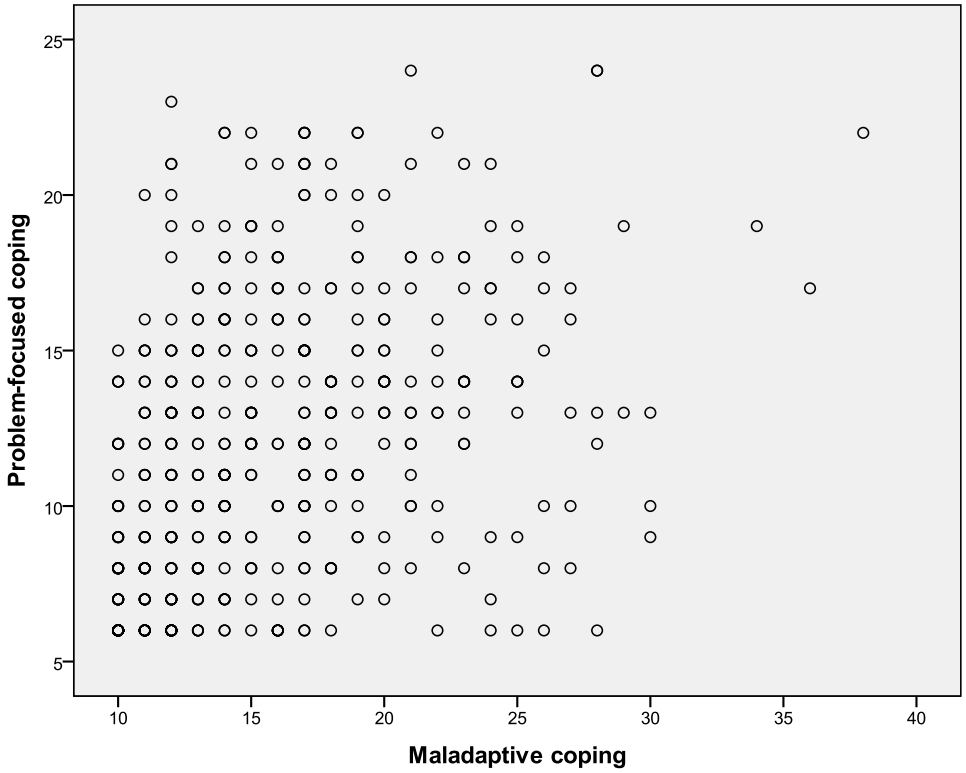


Figure 9. Scatterplot of the relationship between problem-focused coping and maladaptive coping (n=478).

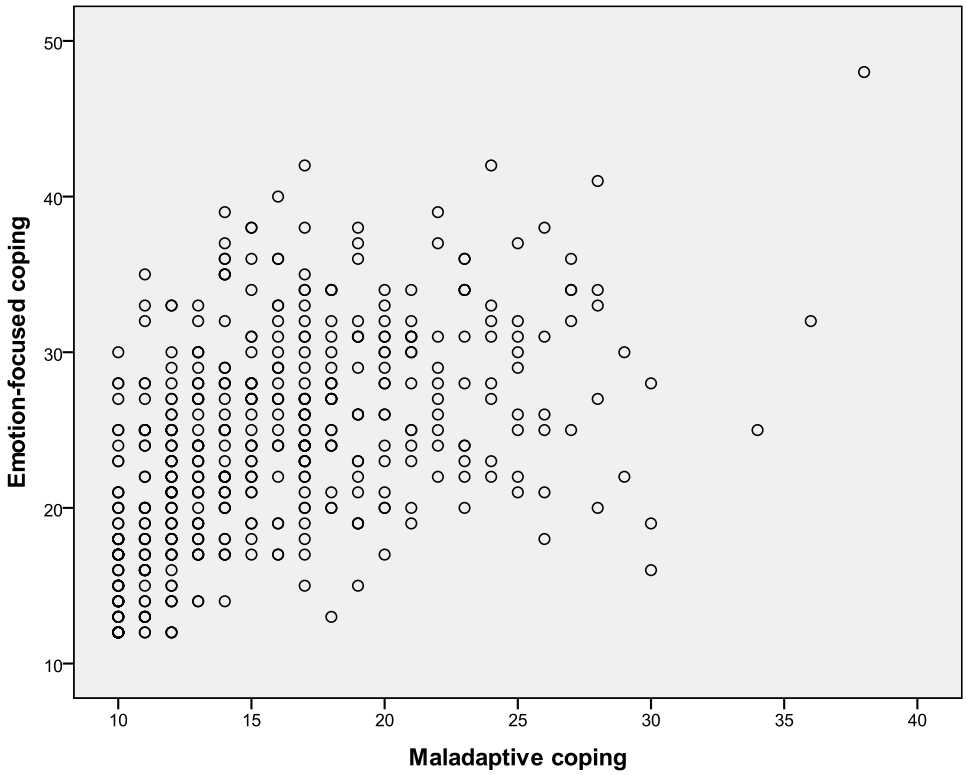


Figure 10. Scatterplot of the relationship between emotion-focused coping and maladaptive coping (n=478).

7.25. Principal component analysis of internalised homophobia subscales

To confirm the validity of using the internalised homophobia total score as oppose to the three subscales separately, a principal component analysis was conducted on these three subscales to see if they converge into one total score. The Kaiser-Meyer-Oklin value was 0.66, and Barlett's test of Sphericity was significant, $p<0.001$, supporting the factorability of the correlation matrix, and that this was not an identity matrix.

The principal component analysis produced only one component with an eigenvalue above one (eigenvalue=2.01), which accounted for 67% of the variance. The scree plot of the eigenvalues from this analysis (See Figure 11) confirmed the presence of only one factor. All the items loaded strongly on to this one factor (See Table 54).

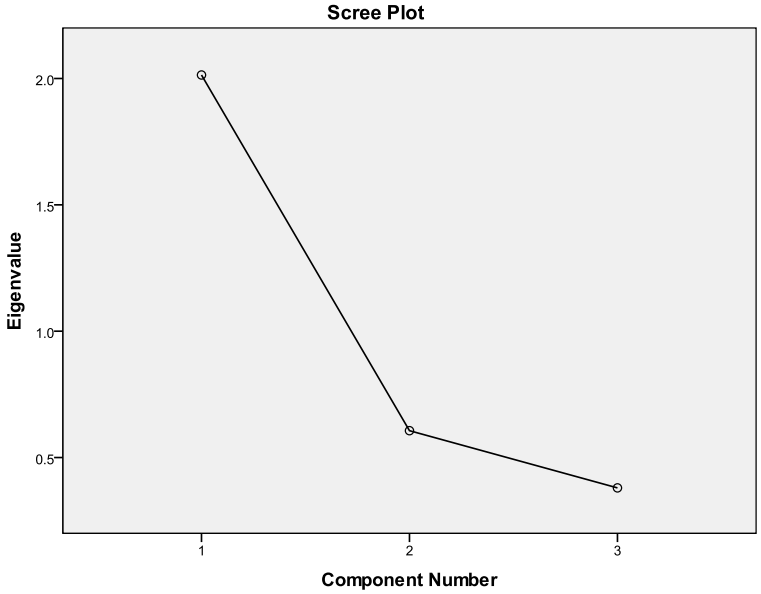


Figure 11. Scree plot of eigenvalues for the principal component analysis on the IH subscales

Table 54. Principal component analysis loadings for the internalised homophobia subscales.

Measure	Component loading
Internalised homophobia: Self	0.86
Internalised homophobia: Other	0.84
Internalised homophobia: Disclosure	0.75

The results of the principal component analysis indicate that there was good convergent validity between the three internalised homophobia subscales. It confirms that these three variables could be combined into one summary variable of internalised homophobia, and therefore the internalised homophobia total score will be used as a key variable in further analysis.

7.26. Principal component analysis of the Impact of Events-Revised (IES-R) subscales

To confirm the validity of using the total score for IES-R as oppose to the three subscales separately, a principal component analysis was conducted to confirm that the subscales converge into one total score. All three measures were highly correlated (see Table 55) with correlation coefficients ranging from r=0.81 to r=0.89. The Kaiser-Meyer-Oklin value was 0.75, and Barlett's test of Sphericity was significant, p<0.001, supporting the factorability of the correlation matrix.

Table 55. Correlation matrix for the three subscales of the IES-R

	Intrusion	Avoidance	Hyperactivity
Intrusion	-	-	-
Avoidance	0.83*	-	-
Hyperactivity	0.89*	0.81*	-

* p<0.001

The principal component analysis produced only one component with an eigenvalue above 1 (eigenvalue=2.68), which accounted for 89% of the variance. The scree plot of the eigenvalues from this analysis (See Figure 12) confirmed the presence of only one factor. All the items loaded strongly on to this one factor (See Table 56).

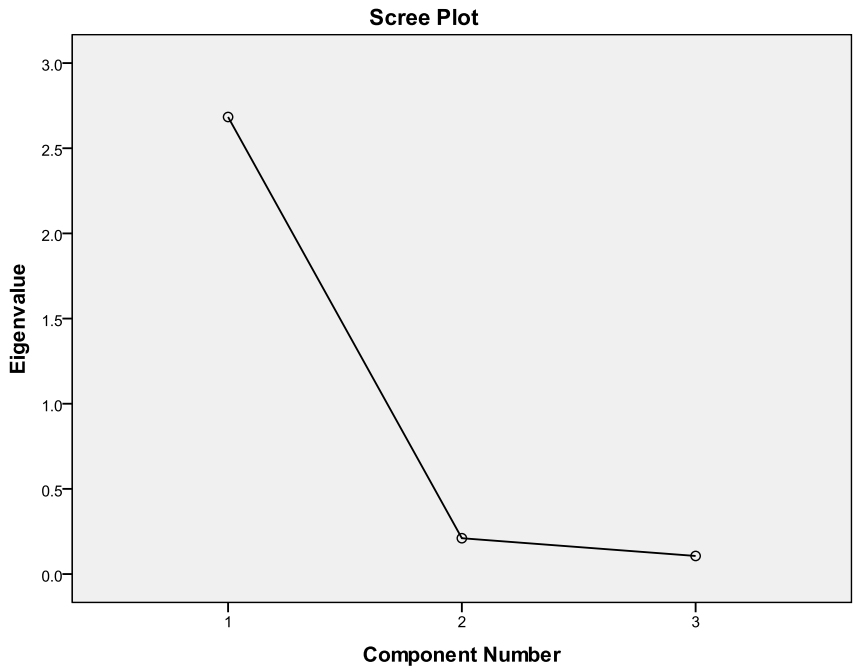


Figure 12. Scree plot of eigenvalues for the principal component analysis on the IES-R subscales

Table 56. Principal component analysis loadings for the IES-R subscales.

Measure	Component loading
Intrusion	0.96
Avoidance	0.93
Hyperactivity	0.95

The results of the principal component analysis indicate that there was good convergent validity between the three IES-R subscales. It suggested that these three variables could be combined into one summary variable that measures participants' overall level of trauma, and therefore the IES-R total score will be used as a key variable in further analysis.

7.27. Scatterplots of key variables against psychological distress

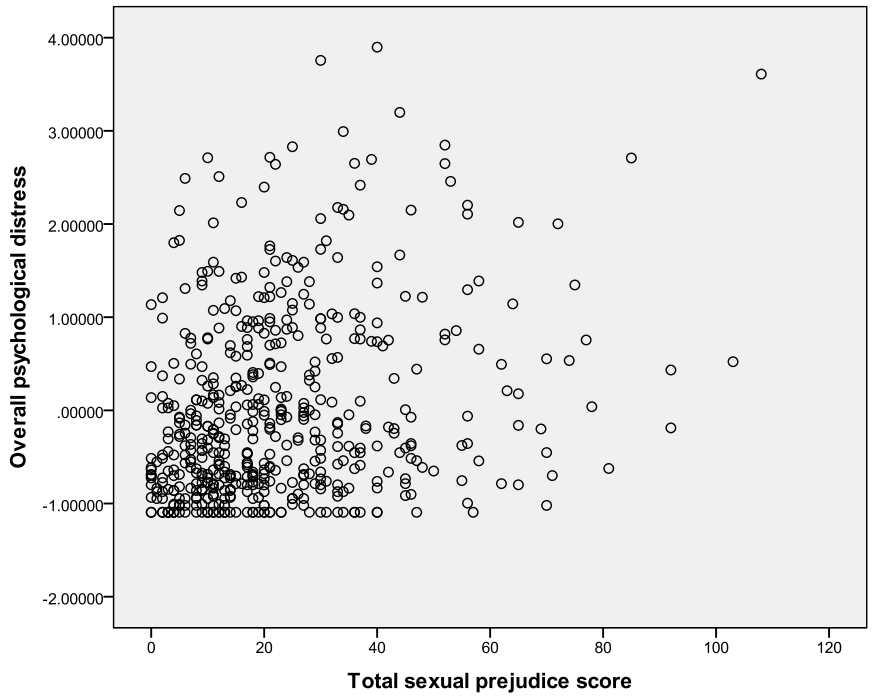


Figure 13. Scatterplot of the relationship between sexual prejudice and psychological distress

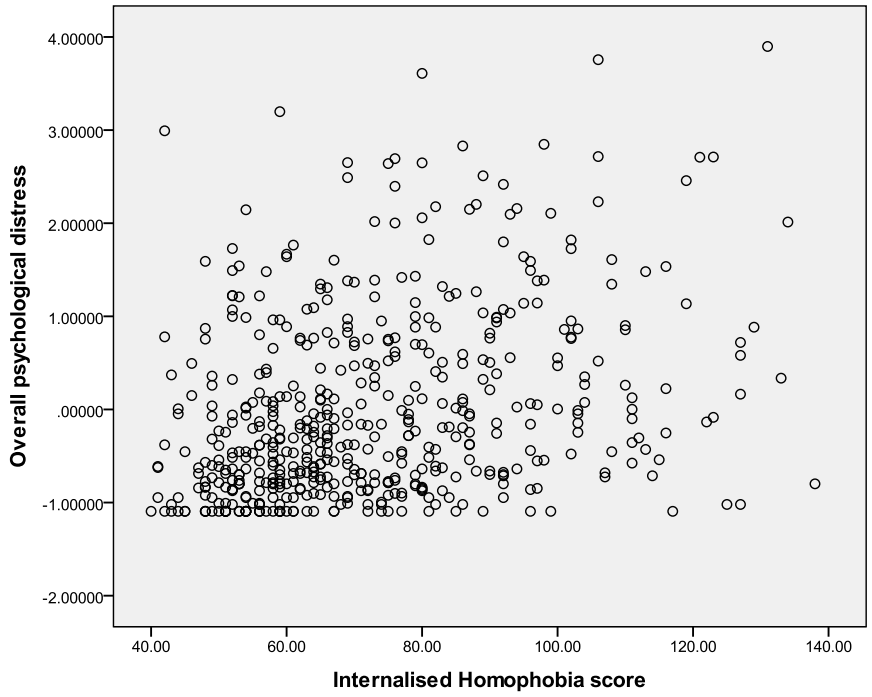


Figure 14. Scatterplot of the relationship between internalised homophobia and psychological distress

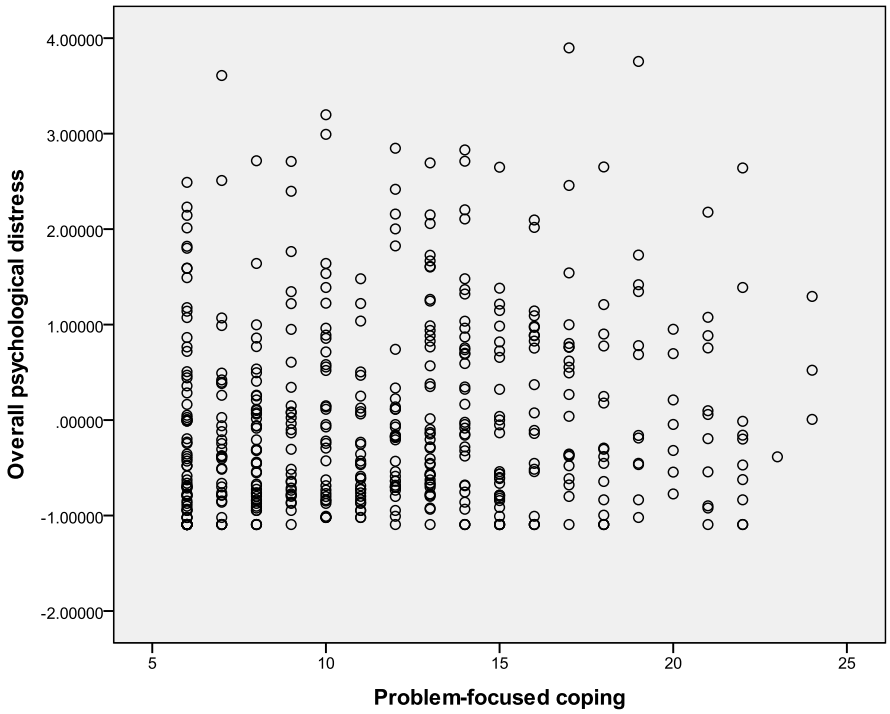


Figure 15. Scatterplot of the relationship between problem-focused coping and psychological distress

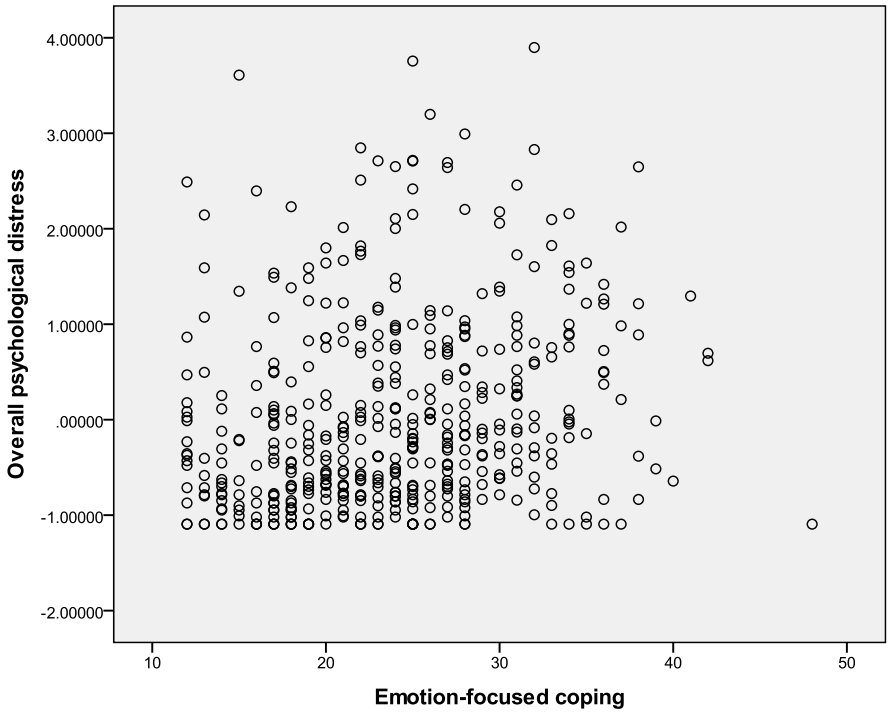


Figure 16. Scatterplot of the relationship between emotion-focused coping and psychological distress

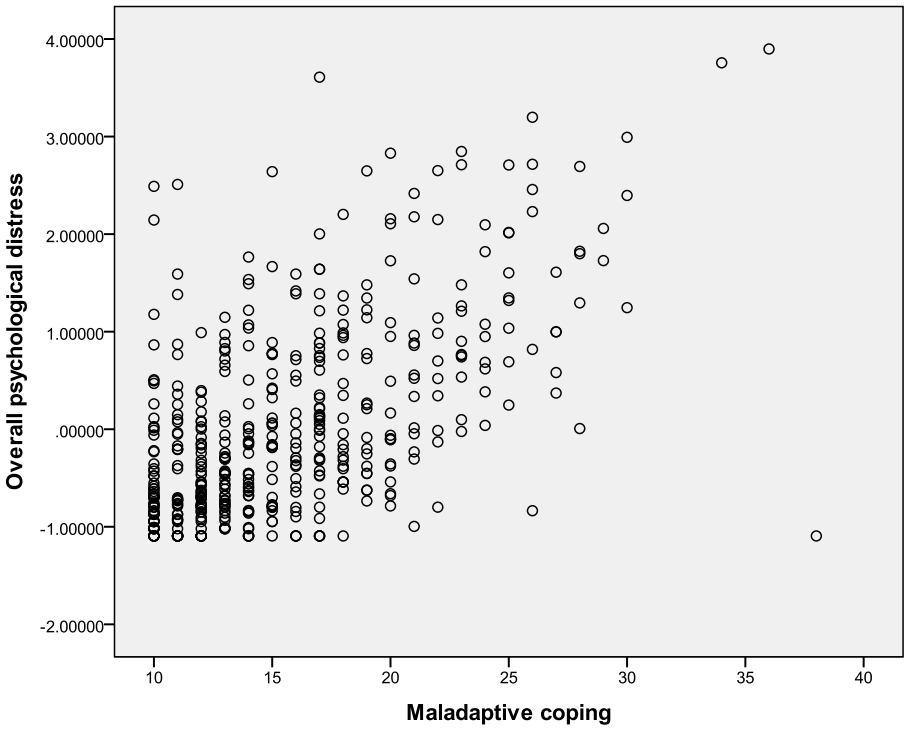


Figure 17. Scatterplot of the relationship between maladaptive coping and psychological distress

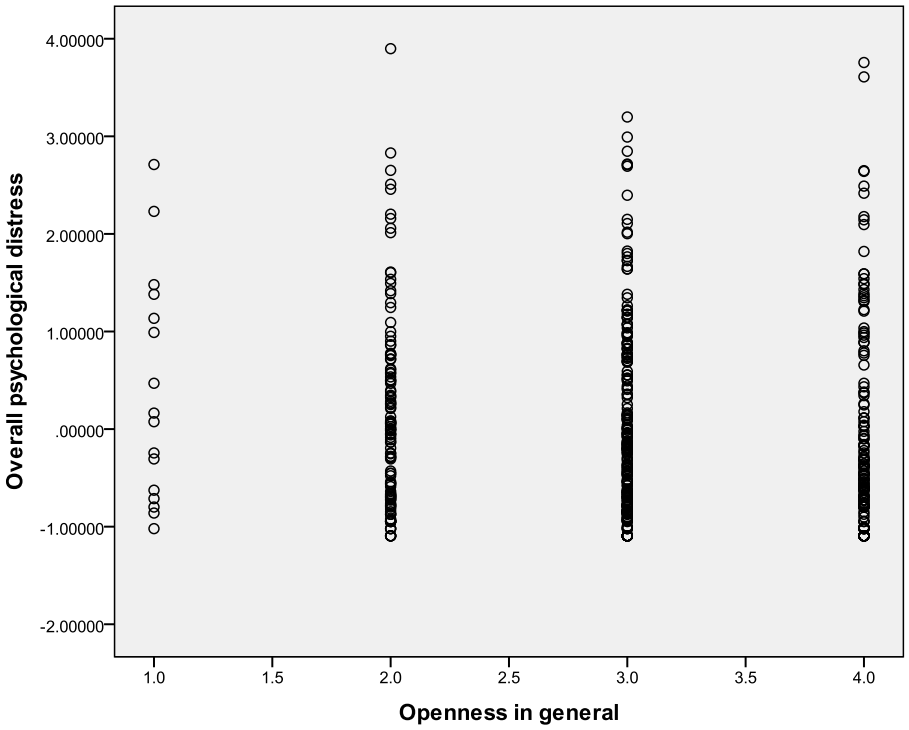


Figure 18. Scatterplot of the relationship between openness and psychological distress

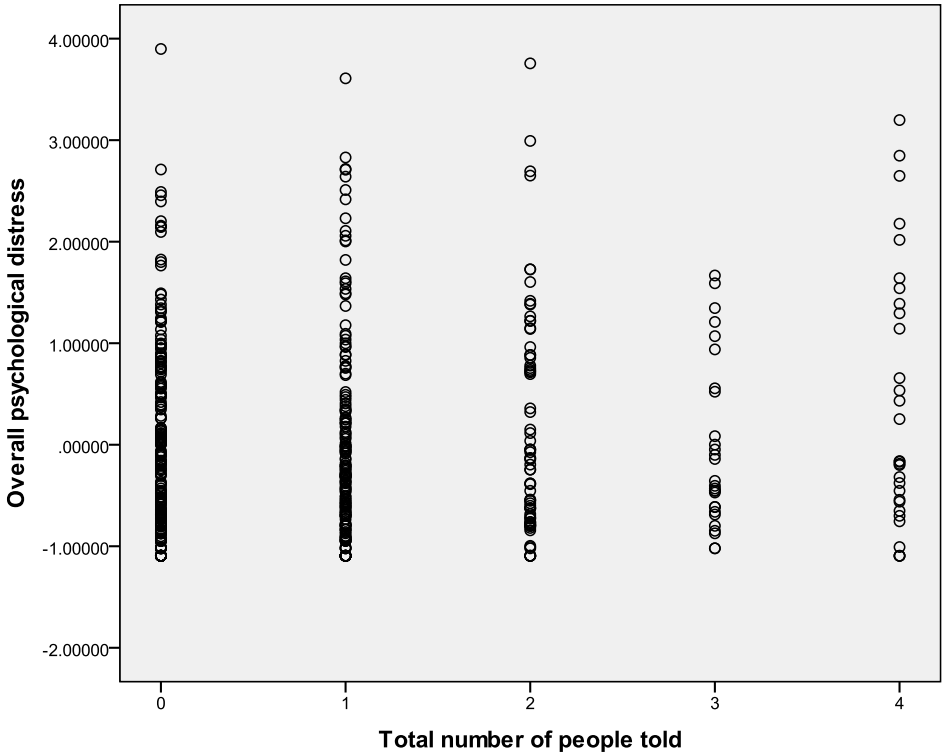


Figure 19. Scatterplot of the relationship between disclosure and psychological distress