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Hostile-World Scenario, Control & Emotional Distress

The association between the hostile-world scenario, perceived control and emotional distress among gay men and lesbians

Ora Nakash PhD\textsuperscript{a,}\textsuperscript{*}, Maayan Nagar MA\textsuperscript{a}, Matan Zisman BA\textsuperscript{a}, Reut Bloom BA\textsuperscript{a}, Geva Shenkman PhD\textsuperscript{a}\textsuperscript{b}

\textsuperscript{a}Baruch Ivcher School of Psychology, Interdisciplinary Center (IDC), Herzliya, Israel

\textsuperscript{b}Sheba Medical Center, Tel Hashomer, Israel

\textsuperscript{*}Correspondence: Ora Nakash, Baruch Ivcher School of Psychology, Interdisciplinary Center (IDC) Herzliya, P.O.Box 167, Herzliya, 46150, Israel. Email address: onakash@idc.ac.il; Tel.: 972-9-9602888; Fax: 972-9-9602845.

Abstract

We examined the moderating role perceived control plays in the relationship between hostile-world scenarios unique to gay men and lesbians, and emotional distress. A convenience sample of Israeli gay (n = 56) and lesbian (n = 42) participants who were recruited online through snowball sampling completed questionnaires examining emotional distress, perceived control and hostile-world themes unique to the gay and lesbian communities. The hostile-world scenario was significantly and positively associated with emotional distress. Additionally, only among lesbians, perceived control moderated the relationship between the hostile-world scenario and emotional distress. Perceived control may provide a protective factor against the effect of hostile-world scenarios on emotional distress among lesbians.
Keywords

hostile-world scenario, gay, lesbian, perceived control, emotional distress
Members of the gay and lesbian communities, similar to members of other minority groups, tend to be exposed to chronic stress and discrimination stemming from social stigma in a predominantly heterosexual society (Meyer, 1995). According to Meyer (2003), minority stress, described as psychological stress arising from belonging to a disadvantaged social group is defined by four factors: the internalization of homophobia, stigmas, prejudice and concealing sexual identity. The persistent conflict between the individual’s culture, needs and experiences and the social structures and norms may be emotionally exhausting. For example, gay married men often struggle with the absence of social institutions that support them through the process of establishing family life, contrary to heterosexual married couples, who are part of the dominant group in society (Meyer, 2003).

Minority stress can have aversive mental health consequences to the gay and lesbian individuals (King et al., 2008; Lea, de Wit, & Reynolds, 2014), with studies documenting increased prevalence of mood and anxiety disorders (Cochran, Sullivan, & Mays, 2003; Emily Rothman, Sullivan, Keyes, & Boehmer, 2012; Shenkman & Shmotkin, 2010); alcohol and substance abuse (Cochran, Ackerman, Mays, & Ross, 2004; Green & Feinstein, 2012; Emily F Rothman et al., 2012); sexual risk behaviors (Dudley, Rostosky, Korfhage, & Zimmerman, 2004) and suicide attempts (Haas et al., 2010; Remafedi, 2002) among gays and lesbians relative to their heterosexual counterparts.

Recent studies have also documented that the hostile-world scenario, mental manifestations of the world as being hostile to the physical and mental integrity of the person, is
more severe among minorities that suffer from stigma, including members of the gay and lesbian communities (Shenkman & Shmotkin, 2013, 2016).

The hostile-world scenarios include representations of distress that are often fed by beliefs about potential disasters and pain (Shmotkin, 2005). These representations function as an evaluative system that consistently scans for potential negative situations, or alternatively, for even more catastrophic situations after a negative situation already occurs. According to Shmotkin’s model (2005), subjective well-being and the hostile-world scenario are conceived as reciprocally regulatory systems allowing individuals to constitute a favorable psychological environment despite the threats that normally persist in their lives. When the hostile-world scenario acts in an adaptive manner, it fosters vigilance and caution to maintain the individual’s sense of security and adjustment. Yet, when the hostile-world scenario acts in an extreme manner, it activates a hypervigilance in a seemingly catastrophic world and leads to a preoccupation with the negative life events (Shmotkin & Shrira, 2012).

Members of gay and lesbian communities may be prone to extreme hostile-world scenarios due to their increased exposure to negative life events. These negative events include difficulties in self-acceptance of one’s sexual orientation (Martin, 1982), a feeling of defectiveness and unsuitability to the environment due to homophobic and hetero-sexist social norms (Herdt, 1989; L. A. King & Noelle, 2005; Plummer, 1989), lack of family support (D’Augelli, Hershberger, & Pilkington, 1998; Remafedi, 1987; Rotheram-Borus, Hunter, & Rosario, 1994; Strommen, 1989), lack of social and perceived social support (Doty, Willoughby, Lindahl, & Malik, 2010; Friedman, Koeske, Silvestre, Korr, & Sites, 2006; Wright & Perry, 2006), abusive and harmful
treatment by peers and family members (Finkelhor & Dzuiba-Leatherman, 1994; Garofalo, Wolf, Kessel, Palfrey, & DuRant, 1998; Harry, 1989; Hunter, 1990; Russell, Franz, & Driscoll, 2001; Willoughby, Doty, & Malik, 2008) as well as increased risk of exposure to violence, including sexual abuse (Berrill, 1990; Bradford, Ryan, & Rothblum, 1994). Other adversities include fear of being infected with HIV after practicing unprotected sexual activity (Kegeles, Hayes, & Coates, 1996; Rosario, Schrimshaw, & Hunter, 2006; Silvestre et al., 1993), internalization of homophobia (Ryan & Futterman, 1998), involvement in relationships that do not receive government legitimization and therefore are not entitled to the rights granted to heterosexual couples (Herek, 2006) and workplace discrimination (Kimmel & Sang, 1995). Despite the ongoing advances in the rights of LGBT persons throughout the Western world, this population continues to cope with stigmatization, stereotyping, homophobia, heterosexism, discrimination, and violence (Moradi et al., 2010; Nadal et al., 2011; Emily Faith Rothman, Exner, & Baughman, 2011; Tilcsik, 2011).

In recent studies, Shenkman and Shmotkin (2013, 2016) identified unique themes within the hostile-world scenario framework characterizing lesbian and gay adolescents and young adults. Compared to heterosexuals, gay men and lesbians were more concerned with hostile-world scenario themes of victimization (by crime and discrimination), lack of social and family support, poor health condition, disrupted relationships, and aging. Therefore, the hostile-world scenario, which represents a meaningful structure of stress factors, may be more severe among minority groups, including members of the gay and lesbian communities. Israel, where the current study was conducted, is contradictory concerning the hostile-world scenarios as they pertain to the gay and lesbian population. On the one hand, Israel presents a patriarchal culture,
which sustains masculine stereotypes, alongside the values promoted by the Jewish religion that disapproves of sexual orientations other than heterosexuality (Kaplan, 1999; Sion & Ben-Ari, 2009). Thus, homophobic attitudes are highly prevalent in Israel (Pizmony-Levy, Kama, Shilo, & Lavee, 2008), and gay marriage or surrogacy services for gay men, within the boundaries of Israel, are not legally permitted. It is also important to mention that only in 1988 did the Israeli Knesset repeal the British Mandate’s rule that made homosexuality a criminal offence (Shokeid, 2003), thus the societal climate, in which most study participants and their environments grew up in, considered LGB identity as criminal, pathological and sinful. Also, being a gay man or a lesbian does not preclude one from military service (which in Israel is mandatory at the age 18), yet LGB populations are particularly targeted by bullying and harassment during military service (Shilo, Pizmony-Levy, Kama, Lavee, & Pinhassi, 2006). On the other hand, legislation has been advanced to protect gay and lesbian rights and liberal approaches in the secular parts of Israel appear to be considerably enlightened by Western standards (Kama, 2011). These clashing approaches in Israeli society may create particular burden and confusion among gay men and lesbians (Shenkman & Shmotkin, 2010). Although, perceptions and expectations of negative life events characterized by a unique hostile-world scenario were significantly associated with emotional distress among gays and lesbians in previous research (Cochran et al., 2004; Cochran et al., 2003; Dudley et al., 2004; Remafedi, 2002), the role of psychological variables, such as perceived control, in moderating this relationship remains unexplored.

Perceived control refers to the extent to which the individual feels that he has control over his life (Thompson et al., 2006). Consistent findings have documented that decline in perceived control following exposure to negative life events is associated with elevated
emotional distress, while maintenance of high sense of control is positively related to psychological adjustment (Frazier, Mortensen, & Steward, 2005). For example, Thompson et al. (2006) found that among the general population in the United States, following the terrorist attacks of September 11, 2001, higher perceived control was associated with lower reports of emotional distress. Similarly, among women who had survived sexual assault, increased sense of perceived control during the process of recovery was related to lower emotional distress (Frazier et al., 2005; Walsh & Bruce, 2011).

Among members of socially disadvantaged groups, such as ethnic minorities and immigrants, perceived control serves as a moderating variable in the relationship between negative life events such as exposure to discrimination and emotional distress (Moradi & Hasan, 2004). For example, Lincoln, Chatters and Taylor (2003) reported that among African-American adults, perceived control was a moderating factor in the relationship between negative experiences including interpersonal relationships with family members and symptoms of depression. Similarly, perceived control and other variables such as belief in a fair world served as moderator in the association between exposure to discrimination related to sexual orientation and mental health (Fischer & Bolton Holz, 2010).

In sum, past research has consistently documented the negative association between perceived control and emotional distress. Additionally, in the context of the gay and lesbian communities, studies have shown that a higher sense of perceived control is generally related to improved psychological adjustment and well-being (Anderson, 1998; Binks, 1993; Hostetler, 2012; Isikoff, 1983). In the current study we investigated the role of perceived control in the relationship
between exposure to negative life events, in the context of the hostile-world scenarios and emotional distress among gay men and lesbians.

We hypothesized that perceived control will moderate the association between the hostile-world scenario unique to the gay and lesbian communities (composed of themes related to victimization, lack of social and family support, poor health condition, disrupted relationships, and aging) and emotional distress.

**Method**

**Participants**

A convenience sample of $N = 98$ (56 gay men and 42 lesbians) participants were included in the study. All participants were Native Hebrew speaking Israelis, with ages ranging from 20 to 47 years ($M = 27.5$, $SD = 6.0$). Participants reported average of 13.1 years of formal education ($SD = 2.1$). A majority of participants were single (71.4%), with lower than annual average salary (67.4%). All participants self-identified as gay or lesbian and a majority of participants reported being “out of the closet” (75.3%). Majority of participants were born in Israel (91.8%).

**Measures**

*Socio-demographic questionnaire*

A self-report questionnaire was used to collect the following socio-demographic information: gender, age, country of birth Israel/other), family status (single/living with partner/married/separated), year of formal education and income (much below average/below average/average/above average/much above average).
Sexual Orientation Scale (Kinsey, Pomeroy, Martin, & Gebhard, 1953) This one item scale was used to assess self-defined sexual orientation. Participants were asked to rate their sexual orientation on a continuum 1- mainly homosexual/lesbian to 6-mainly heterosexual.

The Hostile-World Scenario (HWS) Questionnaire (Shmotkin, 2005) This questionnaire was designed to measure the imagining of actual or potential self-perceived threats to one’s life or integrity (Shmotkin, 2005). The measure consists of 72 items distilled from in-depth interviews focusing on beliefs concerning hostile-world scenarios. The items depict critical threats to the individual’s life conditions (health, significant relationships, work and economic status) as well as possible encounters with harsh events (war, terrorism, crime, disasters) and life outcomes (aging and death). In a recent study, Shenkman and Shmotkin (2013), identified specific threats that were more characteristic of the HWS among young gay men and lesbians compared with matched controls. Out of 72 items comprising general HWS questionnaires, 25 items were of high relevancy to the LGB population (see Shenkman & Shmotkin, 2013). In the current study, we used only these 25 items representing themes that were found to most prevalent among gay and lesbian adolescents and young adults (Shenkman & Shmotkin, 2013). Items indicated either a negative engagement with hostile-world scenario representations (e.g., “I often think about my own death”) or a positive engagement with hostile-world scenario representations (e.g., “I am not afraid of growing old”). Each item was rated on a 5-points Likert-scale ranging from 1 (“strongly disagree”) to 5 (“strongly agree”). Participants’ responses were summed into a single overall score, with higher scores indicating a more extreme hostile-world scenario. The current questionnaire was previously found in a gay male/lesbian population sample to have high reliability and validity (Shenkman & Shmotkin, 2013). In the current study, internal reliability
for this measure was good (Cronbach’s $\alpha = .72$). The HWS questionnaire has been used in multiple studies with a range of ages and proved to have satisfactory reliability and validity characteristics. For further uses of the HWS Questionnaire, see for example Shrira, Palgi, Ben-Ezra, & Shmotkin (2011).

*Perceived Control (Savla et al., 2013)* This questionnaire assesses the psychosocial resource of perceived control. Perceived control was constructed based on the mean of a 5-item scale combining two personal mastery items (e.g., “I can do just about anything I really set my mind to”) and three perceived constraints items (e.g., “There is little I can do to change the important things in my life“). Each item was rated on a 7-points Likert-scale ranging from 1 (“strongly agree”) to 7 (“strongly disagree”). Selected items were reverse-coded so that the higher score represented greater sense of perceived control. The current questionnaire was previously found to have high reliability and validity (Savla et al., 2013). In the current study, internal reliability for this measure was good (Cronbach’s $\alpha = .72$).

*General Health Questionnaire (GHQ-12; Goldberg, 1978)* This measure includes a 12-item questionnaire that screens for common mental disorders and measures emotional distress. Items are rated on a 4-point Likert scale, ranging from 1 (“always”) to 4 (“never”). Final score was computed by summing all items. Scores range from 12 to 48, with higher scores indicating increased emotional distress. Examples of questions are, “Have you recently been able to manage your problems?” and “Have you recently been able to concentrate on whatever you are doing?.” The current questionnaire was previously found to have high reliability and validity (Goldberg et al., 1997; Kessler & Ustun, 2008; Nakash et al., 2014), and have validated norms across many countries, including Israel. In the current study, internal reliability was good
(Cronbach’s α = .86). This measure has been widely used in different populations, including members of the gay and lesbian communities in England and the US (for example see M. King et al., 2003; M. King & Nazareth, 2006; Leleux-Labarge, Hatton, Goodnight, & Masuda, 2015).

**Procedure**

Participants were recruited through snow-ball sampling using social network websites (Facebook groups of gays and lesbians only). A link to an online survey was sent to participants who volunteered to take part in the study. Participants were free to withdraw from the study at any time. Following the completion of an informed consent form, each participant completed several measures assessing emotional distress, perceived control and the Hostile-World Scenario Questionnaire. Measures were administered in a counterbalanced order to avoid order effect. Finally, participants completed a short socio-demographic questionnaire. All questionnaires were administered in Hebrew, the participants' native language. All study procedures were approved by the ethical committee of the Interdisciplinary Center, Herzliya.

**Results**

**Sample characteristics**

Socio-demographic characteristics of participants by gender are presented in Table 1. There were no significant differences between gay men and lesbians in any of the socio-demographic variables. Significant differences were found in self-definition of sexual orientation, when a majority of men self-identified as “mainly homosexual” whereas among women, approximately half self-identified as “mainly homosexual” and half self-identified as a combination of homo-and heterosexual.
The Association between Hostile-World Scenario, Perceived Control and Emotional Distress

Three independent samples t-tests were computed in order to examine the differences between gay men and lesbians in the hostile-world scenario, perceived control and emotional distress scores. Bonferroni correction for multiple comparisons was applied ($\alpha = 0.015$). Results of the analyses are presented in Table 2. There were no significance differences between men and women on any of the variables examined.

Pearson’s $r$ analyses were computed in order to examine the correlation between the hostile-world scenario, perceived control and emotional distress. Hostile-world scenario was positively correlated with emotional distress ($r(97) = .44, p<.001$), such that higher scores in the hostile-world scenario were associated with higher scores on GHQ-12. Additionally, perceived control was negatively correlated with emotional distress ($r(98) = -.55, p<.001$), such that higher scores in perceived control were associated lower scores on GHQ-12. Finally, the hostile-world scenario was negatively associated with perceived control ($r(97) = -.62, p<.001$), such that higher scores in the hostile-world scenario were associated with lower perceived control.

In order to examine the combined effect of gender, the hostile-world scenario, and perceived control on emotional distress, hierarchical linear regression (four blocks) was computed. Emotional distress was entered as the outcome measure, and gender and sexual orientation (first block), the hostile-world scenario and perceived control (second block), perceived control x gender, hostile-world scenario x perceived control and hostile-world scenario x gender interactions (third block), and the hostile-world scenario x perceived control x gender interaction (fourth block) as predictor variables. The analysis revealed significance results,
predicting 40.8% of the variance in emotional distress. As can be seen in Table 3, participants' scores on perceived control were related to emotional distress, such that higher reports of perceived control were related to lower GHQ-12 scores (partial r = -.44, p < .001). Additionally, the interaction between perceived control and gender was negatively related to GHQ scores (partial r = -.21, p = .05). More importantly, the interaction between gender x the hostile-world scenario x perceived control was positively related to GHQ scores (partial r = .21, p<.05). Estimates from the model are presented in Table 3.

In order to examine the source of the triple interaction two hierarchical linear regressions were computed separately for men and women. In both regressions emotional distress was entered as the outcome measure, and sexual orientation (first block), the hostile-world scenario, perceived control (second block), and the hostile-world scenario x perceived control interaction (third block) were entered as predictor variables. For women the third block explained a significant increase in variance in emotional distress, $\Delta R^2 = .06$, $F(1, 37) = 4.55$, $p < .05$, indicating a moderating effect for perceived control in the relationship between the hostile-world scenario and emotional distress. The unstandardized simple slope for women participants 1 SD below the mean of perceived control was -4.0, and the unstandardized simple slope for women participants 1 SD above the mean of perceived control was 2.9 (see Figure 1).

For men, the third block did not significantly contribute to the variance in emotional distress, $\Delta R^2 = .01$, $F(1, 50) = .39$, ns. Thus, perceived control was not a significant moderator in the relationship between the hostile-world scenario and emotional distress among gay men. The unstandardized simple slope for men participants 1 SD below the mean of perceived control was
4.3, and the unstandardized simple slope for men participants 1 SD above the mean of perceived control was 2.1 (see Figure 2).

**Discussion**

In the current study we investigated the role of perceived control in the relationship between hostile-world scenarios unique to members of the gay and lesbian communities, and emotional distress. Our results showed that the hostile-world scenarios were significantly associated with emotional distress. Among gays and lesbians who reported more extreme themes of a unique hostile-world scenario higher levels of emotional distress were also documented. This finding corroborates past research which showed that compared to heterosexuals, members of the gay and lesbian communities have a higher prevalence of emotional distress (Cochran et al., 2004; Cochran et al., 2003; Dudley et al., 2004; Remafedi, 2002). It further expands this literature to show that hostile-world scenarios are associated with the level of emotional distress reported.

Moreover, our findings indicate that among lesbians, perceived control had a significant effect on the relationship between the hostile-world scenario and emotional distress. Among women who reported low hostile-world scenario, perceived control significantly affected levels of emotional distress, such that higher perceived control was associated with lower emotional distress. Among women who reported higher levels of hostile-world scenario there was no significant association between perceived control and emotional distress. Thus, perceived control may provide a resilience factor against the effect of the hostile-world scenario on emotional distress among lesbians who report lower levels of hostile-world scenario. Interestingly, no
significant moderation effect of perceived control on the relationship between the hostile-world scenario and emotional distress was observed among gay men.

Based on the minority stress theory, it is conceivable that individuals in doubly oppressed groups (such as lesbians) will experience additional psychological stress beyond that which is experienced by individuals who are members of a single oppressed group (based on either gender or sexual orientation). This double jeopardy (Ferraro & Farmer, 1996) may explain our finding regarding gender differences in the impact of perceived control on the relationship between the hostile-world scenario and emotional distress.

Another possible explanation for this moderation effect, found only among lesbians, relates to the intersection between gender role socialization, depression vulnerability, and sexual orientation. It seems that catastrophic anticipations and gloomy thinking mainly characterize young lesbians while themes of victimization and health concerns mainly characterize young gay men (Shenkman & Shmotkin, 2013, 2016). These catastrophic anticipations among lesbians along with established epidemiologic findings that mark women in general as more vulnerable to depression than men (Kessler, 2003), portray the possible importance of perceived control as a meaningful player within the association between the hostile-world scenario and emotional distress. Gender role socialization may even augment the importance of perceived control in this complex interplay as society may socialize women to experience less sense of control compared to men.

Another explanation relates to gender differences in perceived control. Previous research is equivocal regarding gender differences in perceived control, with several studies indicating that women report lower levels of perceived control than do men (e.g. Frenkel, 1995; Turner &
Roszell, 1994), however, studies of perceived control over specific domains such as physical well-being (Wallhagen, Strawbridge, Kaplan, & Cohen, 1994) and mental health (Heubeck, Tausch, & Mayer, 1995) reported no significant gender differences. It has been suggested that this relationship may be due to socialization processes that teach women to be more passive than men, putting them at a disadvantage in asserting themselves in their relationships with others. However, it is also possible that women’s lower socioeconomic status and relative power disadvantage in many economic, political, and social spheres have contributed to lower perceptions of control for women than for men (Bullers, 2001). Due to cultural norms of patriarchy in Israeli society, it is possible that men in our study reported higher perceived control than they actually had, while women may have done the opposite. Future studies should assess perceived control using behavioral tasks rather than self-report measures, and prospectively examine sense of control and its effects on mood.

These findings are in line with past research showing that among minority groups, perceived control moderates the relationship between negative life events and emotional distress (Fischer & Bolton Holz, 2010; Lincoln et al., 2003; Moradi & Hasan, 2004). Furthermore, although high perceived control was generally related to better psychological adjustment among members of the gay and lesbian communities (Anderson, 1998; Binks, 1993; Isikoff, 1983), the current research provides a unique contribution indicating that high perceived control may serve as an important resilience factor for lesbians in the impact negative world scenarios have on their emotional distress. This resilience factor joins other factors such as social support and self-esteem that were found to moderate the relationship between exposure to negative life events and psychological distress (Szymanski & Kashubeck-West, 2008).
This research has several limitations. First, the convenience sample recruited online through snowball technique that participated in the current study may be prone to selection bias. It is possible that recruitment was biased toward individuals who demonstrated high levels of self-disclosure as well as those who were more integrated in the gay and lesbian communities. Notably, online studies have become more widely accepted with studies documenting non-detrimental impact on the reliability and validity of the findings (Vallejo, Jordán, Díaz, Comeche, & Ortega, 2007). Second, literature suggests that while women were found to suffer more than men from intrinsic emotional problems such as depression and anxiety, men tend to suffer more from extrinsic problems, such as substance abuse (Avison & McAlpine, 1992; Gore, Aseltine Jr, & Colten, 1992; Kessler, 2003; Turner & Lloyd, 1995). Therefore, it is possible that the effect regarding the impact of perceived control on the relationship between the hostile-world scenario and emotional distress was found only among women due to the inclusion of emotional distress as the outcome variable. Future research should include extrinsic problems such as substance abuse. Third, the current study was conducted in Israel, so it may be that the Israeli context posed limitations to the generalizability of the findings. Study findings should be replicated in other societies/cultures. Finally, since ours, was a cross-sectional study we were not able to determine a cause an effect relationship between the study variables. Future research using experimental designs (e.g., experimental manipulation to increase perceived control) is needed to determine the effect of the perceive control on emotional distress as well as overcome the possible confounding effect of sociodemographic and clinical variables.

Our findings highlight the importance of studying the complex relationship among, gender, sexual orientation and emotional distress. More specifically, perceived control may have
a significant protective factor against emotional distress among the lesbian community. Future research should identify designated psychological tools that will support the sense of perceived control. The Israeli societal context, which is characterized by patriarchal culture, sustaining masculine stereotype, and long-lasting disapproval of non-heterosexual sexual orientation, poses lesbian women in a profound vulnerability to adverse psychological well-being thus making the further exploration of protective factors, such as perceived control, crucial to sustaining well-being in light of hostile-world realities. In practice, alongside the need to keep promoting social change regarding the exposure of gay and lesbian individuals to minority stress, increasing their sense of perceived control over their lives may decrease concerns within the hostile-world themes unique to him/her, thus benefiting their wellbeing and reducing their risk to develop emotional distress.
References


**Table 1.** Socio-Demographic Characteristics of Participants by Gender (N = 98).

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Gay men</th>
<th>Lesbians</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>n</strong></td>
<td>56</td>
<td>42</td>
<td></td>
</tr>
<tr>
<td><strong>Age (years); mean (SD)</strong></td>
<td>28.0 (6.8)</td>
<td>26.9 (4.5)</td>
<td>t(96) = 1.00, n.s.</td>
</tr>
<tr>
<td><strong>Country of birth</strong></td>
<td></td>
<td></td>
<td>$\chi^2 (1) = 1.37$, n.s.</td>
</tr>
<tr>
<td>Israel</td>
<td>53 (94.6%)</td>
<td>37 (88.1%)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>3 (5.4%)</td>
<td>5 (11.9%)</td>
<td></td>
</tr>
<tr>
<td><strong>Years of formal education; mean (SD)</strong></td>
<td>13.2 (2.0)</td>
<td>12.9 (2.1)</td>
<td>t(93) = 0.85 n.s.</td>
</tr>
<tr>
<td><strong>Family status</strong></td>
<td></td>
<td></td>
<td>$\chi^2 (3) = 4.82$, n.s.</td>
</tr>
<tr>
<td>Single</td>
<td>44 (78.6%)</td>
<td>26 (61.9%)</td>
<td></td>
</tr>
<tr>
<td>Living with partner</td>
<td>9 (16.1%)</td>
<td>12 (28.6%)</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>2 (3.6%)</td>
<td>4 (9.5%)</td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td>1 (1.8%)</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Income</strong></td>
<td></td>
<td></td>
<td>$\chi^2 (4) = 3.10$, n.s.</td>
</tr>
<tr>
<td>Much below average</td>
<td>21 (38.9%)</td>
<td>23 (56.1%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sample 1</td>
<td>Sample 2</td>
<td></td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Below average</td>
<td>13 (24.1%)</td>
<td>7 (17.1%)</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>9 (16.7%)</td>
<td>6 (14.6%)</td>
<td></td>
</tr>
<tr>
<td>Above average</td>
<td>8 (14.8%)</td>
<td>4 (9.8%)</td>
<td></td>
</tr>
<tr>
<td>Much above average</td>
<td>3 (5.6%)</td>
<td>1 (2.4%)</td>
<td></td>
</tr>
</tbody>
</table>

**Sexual orientation**

<table>
<thead>
<tr>
<th>Sexual orientation</th>
<th>Sample 1</th>
<th>Sample 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainly homosexual</td>
<td>46 (82.1%)</td>
<td>23 (54.8%)</td>
</tr>
<tr>
<td>Mostly homosexual and sometimes heterosexual</td>
<td>5 (8.9%)</td>
<td>4 (9.5%)</td>
</tr>
<tr>
<td>Mostly homosexual and but substantially heterosexual</td>
<td>2 (3.6%)</td>
<td>8 (19.0%)</td>
</tr>
<tr>
<td>Equally homo-and heterosexual</td>
<td>1 (1.8%)</td>
<td>3 (7.1%)</td>
</tr>
<tr>
<td>Mostly heterosexual and sometimes homosexual</td>
<td>2 (3.6%)</td>
<td>4 (9.5%)</td>
</tr>
</tbody>
</table>

\[ \chi^2 (4) = 11.28, p = .024 \]
Table 2. Means and Standard Deviations of the Hostile-World Scenario, Perceived Control and emotional distress among Gay Men and Lesbians (N = 98)

<table>
<thead>
<tr>
<th></th>
<th>Gay men</th>
<th>Lesbians</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 56</td>
<td>n = 42</td>
<td></td>
</tr>
<tr>
<td>Emotional Distress (GHQ-12)</td>
<td>23.2 (5.3)</td>
<td>25.0 (6.6)</td>
<td>t(96) = -1.47, n.s.</td>
</tr>
<tr>
<td>The Hostile World Scenario</td>
<td>2.8 (0.4)</td>
<td>2.9 (0.4)</td>
<td>t(95) = -1.02, n.s.</td>
</tr>
<tr>
<td>Perceived Control</td>
<td>5.5 (1.0)</td>
<td>5.3 (1.0)</td>
<td>t(96) = 1.29, n.s.</td>
</tr>
</tbody>
</table>
Table 3. Hierarchical Linear Regression Examining Predictors of Emotional Distress among Gay Men and Lesbians (n = 97)

<table>
<thead>
<tr>
<th>Model</th>
<th>B</th>
<th>SE B</th>
<th>β</th>
<th>Partial r</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Step 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>22.70</td>
<td>1.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>1.38</td>
<td>1.27</td>
<td>.12</td>
<td>.11</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>.40</td>
<td>.47</td>
<td>.09</td>
<td>.09</td>
</tr>
<tr>
<td><strong>Step 2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostile-world scenario</td>
<td>2.67</td>
<td>1.57</td>
<td>.19</td>
<td>.18</td>
</tr>
<tr>
<td>Perceived control</td>
<td>-2.72</td>
<td>.66</td>
<td>-.44**</td>
<td>-.40</td>
</tr>
<tr>
<td><strong>Step 3</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostile-world scenario x Gender</td>
<td>-3.09</td>
<td>3.39</td>
<td>-.14</td>
<td>-.10</td>
</tr>
<tr>
<td>Hostile-world scenario x Perceived control</td>
<td>.89</td>
<td>1.21</td>
<td>.07</td>
<td>.08</td>
</tr>
<tr>
<td>Perceived control x Gender</td>
<td>-2.89</td>
<td>1.46</td>
<td>-.30*</td>
<td>-.21</td>
</tr>
<tr>
<td><strong>Step 4</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hostile-world scenario x Perceived control x Gender</td>
<td>4.88</td>
<td>2.45</td>
<td>.29*</td>
<td>.21</td>
</tr>
</tbody>
</table>

8, p<.001

^p = .05, * p<.05, ** p<.01
Figure 1.
Figure 2.