EDLD 651 Final Project: Discriminatory Experiences, Chronic Strain, Social Connectedness, and Psychological Wellbeing Among Individuals With Marginalized Sexual Orientations

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Author Note

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Abstract

This will be an abstract.

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Introduction

Inherent to living with a marginalized identity is the excess stress that accompanies stigma-related experiences and discriminatory conditions (Frost et al., 2013). An extensive body of literature demonstrates that chronic exposure to stress compromises physical and mental health (see Thotis, 2010, for a review), and ultimately elevates susceptibility to a myriad of physiological and psychiatric disorders (Mohd, 2008). It is not surprising, then, that individuals who identify as gay, bisexual, lesbian, and queer (LGBQ) experience higher rates of psychopathology than their heterosexual counterparts, including substance use disorders (Green & Feinstein, 2012), eating disorders (Parker & Harriger, 2020), deliberate self-injury (King et al., 2008), suicidality, and suicide attempts (Haas et al., 2011). The term "minority stress" has been used to describe the phenomenon of elevated mental health concerns resulting from the societal stigmatization of LGBQ sexual orientation status (Meyer, 1995). The link between minority stress and poor health outcomes may be direct, such that discriminatory experiences lead to increased cortisol (Korous et al., 2017) and cardiovascular reactivity (Panza et al., 2019). However, minority stress may also impact health indirectly through the cognitive burden, strain, and behavioral coping strategies that are required to navigate marginalization (Meyer et al., 2008). Given that morbidity and mortality is intimately tied to social and interpersonal conditions, researchers have come to recognize the importance of relationships and support (Cohen, 2004; Pescosolido, 2011). Social connectedness, which refers to the sense of subjective belonging that people feel in relation to individuals and groups of others, is considered a pivotal factor in individual and population-level health (Haslam et al., 2015). Burgeoning evidence indicates that, among individuals with marginalized identities, connection with others who are marginalized for the same characteristic may mitigate detrimental stress responses (Austin

et al., 2016). Indeed, social connectedness is associated with positive health outcomes and has been found to buffer the negative effects of discrimination and perceived stress among many groups of marginalized individuals (Kim & Fredriksen-Goldsen, 2016; Liao et al., 2016; Liu et al., 2019; Wang et al., 2012).Yet, social connectedness is markedly overlooked in research examining the health of LGBQ individuals. Thus, the purpose of the current study was to examine the longitudinal relationships between discriminatory experiences, chronic strain, social connectedness, and psychological wellbeing among LGBQ individuals.

Methods

Participants

Project STRIDE (Meyer, Dohrenwend, Schwartz, Hunter, & Kertzner, 2016) participants included individuals who had been residing in New York City for a minimum of two years, self-identified as lesbian, gay, bisexual (LGB), or straight, and self-identified as White, Black, or Latino (Meyer, Dohrenwend, Schwartz, Hunter, & Kertzner, 2016). Participants were excluded from the present study if they identified as heterosexual or did not complete the main study measures ($n = 360$). Participants were aged 18-59 years ($M = 32.41$, $SD = 9.25$) and were predominantly White (34%), followed by Black/African-American (33%), and Latino/Hispanic (32%). The distribution of sexual orientations in the study sample can be seen in Table 1.

Table 1.

Distribution of self-identified sexual orientations

Sexual Orientation	Count
Gay	160
Lesbian	104
Queer	12
Bisexual	63
Homosexual	16
Other - LGB	5

Measures

Discriminatory experiences. The discriminatory experiences 8-item measure was adapted from Williams, Yu, Jackson, and Anderson (1997) to be inclusive of all minority groups (e.g. gender minorities). This scale assessed how often discriminatory experiences (e.g. being treated with less respect, being threatened or harassed) occurred throughout their lifetimes. Each question was rated on a 4-point scale (1 = *"often"* through 4 = *"never"*) and coded so that higher scores represented more discriminatory experiences (Meyer, Frost, Narvaez, & Dietrich, 2006). For these analyses, the total number of types (0-8) of everyday discrimination experiences were used.

Chronic strain. The chronic strain measure was adapted from a scale by Wheaton (1999), which measures strain in 9 areas of life, including general problems, financial issues, work relationships, parenting, family, social life, residence, and health. Responses were coded such that higher scores indicated higher levels of chronic strain (Meyer, Frost, Narvaez, & Dietrich, 2006).

Social connectedness. Social connectedness was contextualized as connectedness to the gay community, as measured by an 8-item scale adapted from Mills et al. (2001) to be more relevant to the geographic area. Each response was rated from 1 (*"agree strongly"*) to 4 (*"disagree strongly"*) and coded so that higher scores indicated a greater level of

connectedness to the gay community (Meyer, Frost, Narvaez, & Dietrich, 2006).

Psychological wellbeing. Psychological wellbeing was assessed using an 18-item measure adapted from Ryff (1989) and Ryff and Keyes (1995). This measured psychological wellbeing on six dimensions including dimensions of self-acceptance, purpose in life, environmental mastery, positive relations with others, personal growth, and autonomy. All responses were coded such that higher scores indicated higher levels of wellbeing (Meyer, Frost, Narvaez, & Dietrich, 2006).

Procedure

For additional details on data collection procedures for Project STRIDE, please see Meyer, Frost, Narvaez, and Dietrich (2006).

Data Analytic Strategy and Hypotheses

Prior to the main analysis, data were screened for missingness. Pearson bivariate correlations were conducted among discriminatory experiences, chronic strain, social connectedness, and psychological wellbeing. To examine the proposed model, a multivariate regression analysis was conducted. Discriminatory experiences, chronic strain, and social connectedness were entered as the predictor variables. Psychological wellbeing was entered as the outcome variable. We expected a negative association between discriminatory experiences and psychological wellbeing (Hypothesis 1). We also expected a negative association between chronic strain and psychological wellbeing (Hypothesis 2). In contrast, we expected a positive association between social connectedness and psychological wellbeing (Hypothesis 3).

We used R (Version 4.0.2; R Core Team, 2020) and the R-packages *apaTables* (Version 2.0.5; Stanley, 2018), *dplyr* (Version 1.0.2; Wickham, François, Henry, & Müller, 2020), *forcats* (Version 0.5.0; Wickham, 2019a), *gdtools* (Version 0.2.2; Gohel, Wickham, Henry, & Ooms, 2020), *ggiraphExtra* (Version 0.3.0; Moon, 2020), *ggplot2* (Version 3.3.2; Wickham, 2016), *haven* (Version 2.3.1; Wickham & Miller, 2020), *janitor* (Version 2.0.1;

Firke, 2020), *knitr* (Version 1.30; Xie, 2015), *lavaan* (Lishinski, 2018; Version 0.6.7; Rosseel, 2012), *lavaanPlot* (Version 0.5.1; Lishinski, 2018), *lm.beta* (Version 1.5.1; Behrendt, 2014), *magick* (Version 2.5.2; Ooms, 2020, 2020), *papaja* (Version 0.1.0.9997; Aust & Barth, 2020), *probemod* (Version 0.2.1; Tan, 2015), *psych* (Version 2.0.9; Revelle, 2020), *purrr* (Version 0.3.4; Henry & Wickham, 2019), *qwraps2* (Version 0.5.0; DeWitt, 2020), *readr* (Version 1.4.0; Wickham, Hester, & Francois, 2018), *rio* (Version 0.5.16; Chan, Chan, Leeper, & Becker, 2018), *rockchalk* (Version 1.8.144; Johnson, 2019), *stringr* (Version 1.4.0; Wickham, 2019b), *tibble* (Version 3.0.4; Müller & Wickham, 2020), *tidyr* (Version 1.1.2; Wickham & Henry, 2020), and *tidyverse* (Version 1.3.0; Wickham et al., 2019) for all our analyses.

Results

Preliminary Analyses

Missing data were minimal; thus, listwise deletion was employed. Means, standard deviations, minimum and maximum values of the main study measures for the total sample can be seen in Table 2. Means, standard deviations, minimum and maximum values of the main study variables according to sexual orientation can be seen in Table 3. Of particular concern is the substantial number of discriminatory experiences reported by participants. Figure 1 displays the average number of everyday discriminatory experiences according to sexual orientation. Pearson bivariate correlations revealed small to moderate correlations among the main study variables (see Figure 2).

Table 2.

Descriptive statistics for main study variables.

	stridy (N = 360)
Everyday Discrmination	
min	0
median	7
max	8
mean (sd)	6.59 ± 1.86
Chronic Strain	
min	1
median	1.67
max	3
mean (sd)	1.71 ± 0.55
Psychological Wellbeing	
min	3
median	5.56
max	7
mean (sd)	5.47 ± 0.79
Social Connectedness	
min	1.38
median	3.38
max	4
mean (sd)	3.29 ± 0.51

Table 3.

Descriptive statistics for main study variables by sexual orientation

	Gay (N = 160)	Lesbian (N = 104)	Queer (N = 12)	Bisexual (N = 63)	Homosexual (N = 16)	Other - LGB (N = 5)
Everyday Discrmination						
min	0	0	5	0	0	5
median	7	7	7	7	8	6
max	8	8	8	8	8	8
mean (sd)	6.63 ± 1.72	6.52 ± 1.99	7.25 ± 0.87	6.43 ± 2.13	6.88 ± 2.03	6.40 ± 1.14
Chronic Strain						
min	1	1	1	1	1	1.33
median	1.67	1.67	1.5	2	1.33	2
max	3	3	3	2.67	1.67	2.67
mean (sd)	1.65 ± 0.53	1.77 ± 0.58	1.64 ± 0.61	1.88 ± 0.51	1.35 ± 0.26	1.87 ± 0.56
Psychological Wellbeing						
min	3	3.41	4.29	3.18	3.12	3.88
median	5.62	5.53	6.03	5.24	5.74	5.12
max	7	6.82	7	6.82	6.59	5.76
mean (sd)	5.51 ± 0.79	5.53 ± 0.70	5.75 ± 0.78	5.24 ± 0.85	5.47 ± 1.01	4.95 ± 0.72

	Gay (N = 160)	Lesbian (N = 104)	Queer (N = 12)	Bisexual (N = 63)	Homosexual (N = 16)	Other - LGB (N = 5)
Social Connectedness						
min	1.38	2.12	3.25	1.88	2.62	2.12
median	3.25	3.38	3.44	3.12	3.5	2.75
max	4	4	4	4	3.88	3.75
mean (sd)	3.26 ± 0.54	3.41 ± 0.45	3.51 ± 0.25	3.14 ± 0.51	3.38 ± 0.40	2.95 ± 0.71

Figure 1.

Experiences of everyday discrimination according to sexual orientation.

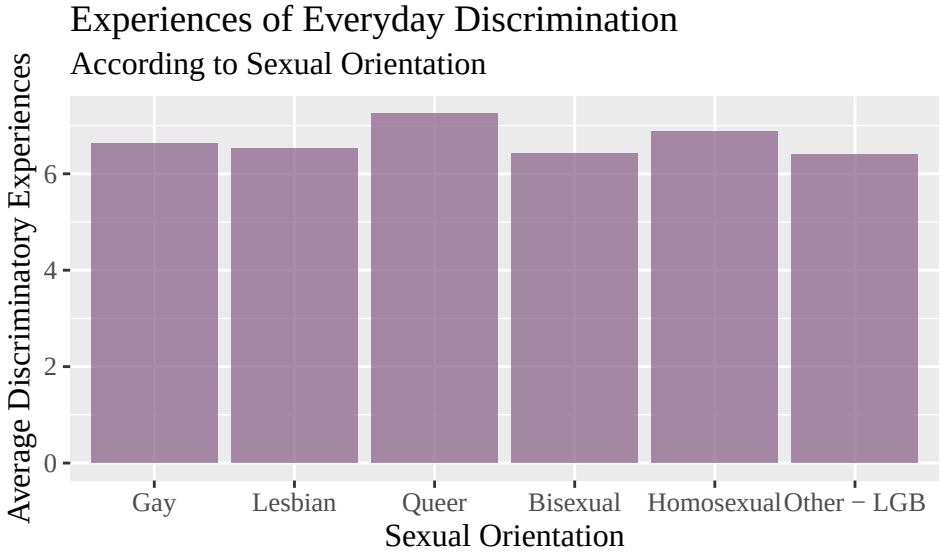

Figure 1

(#fig:mean plot)

Figure 2.

Correlation Panels and Distributions For All Variables Included in the Model.

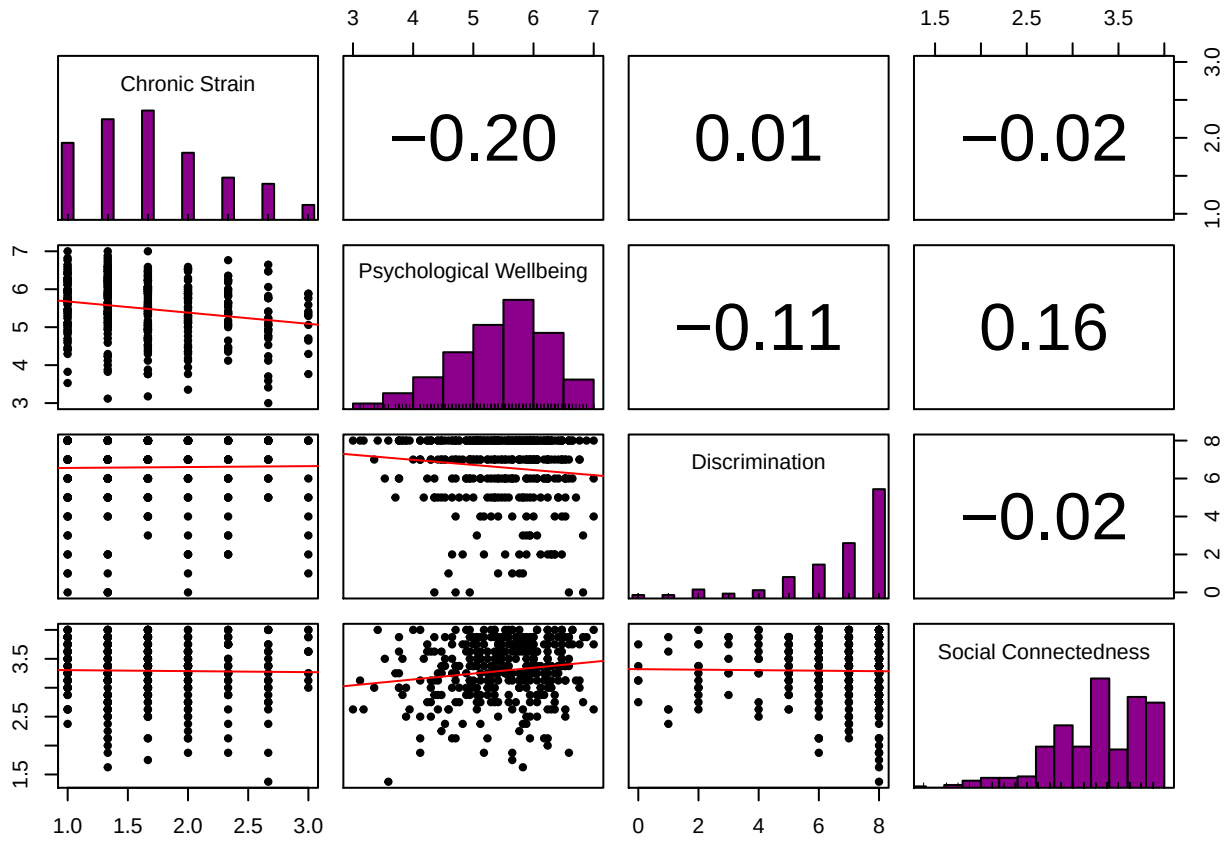

Figure 2

(#fig:correlation panels)

Primary Analyses

A multiple regression analysis was conducted to examine the effects of discriminatory experiences, chronic strain, social connectedness on psychological wellbeing among LGBQ individuals. When all variables were entered into the model, discriminatory experiences were negatively associated with psychological wellbeing, $\hat{\beta}_1 = -0.05, SE(\hat{\beta}_1) = -0.11, t(356) = -2.14, p = .03$. Likewise, consistent with hypothesis 2, chronic strain was significantly negatively associated with psychological wellbeing, $\hat{\beta}_2 = -0.29, SE(\hat{\beta}_2) = -0.20, t(356) = -3.91, p < .001$. Consistent with hypothesis 3, social connectedness was significantly positively associated with psychological wellbeing, $\hat{\beta}_3 = 0.24, SE(\hat{\beta}_3) = 0.15, t(356) = 2.99, p < .001$. Taken together, all three predictors explained approximately 7.7% of the variance in psychological wellbeing,

$F(3, 356) = 9.90, p < .001, R^2 = .077$. Figure 3 displays the relationship between everyday discrimination and psychological wellbeing. Figure 4 displays the path model with corresponding beta coefficients. **Figure 3.**

Path model for the effect of discrimination, chronic strain, and social connectedness on psychological wellbeing.

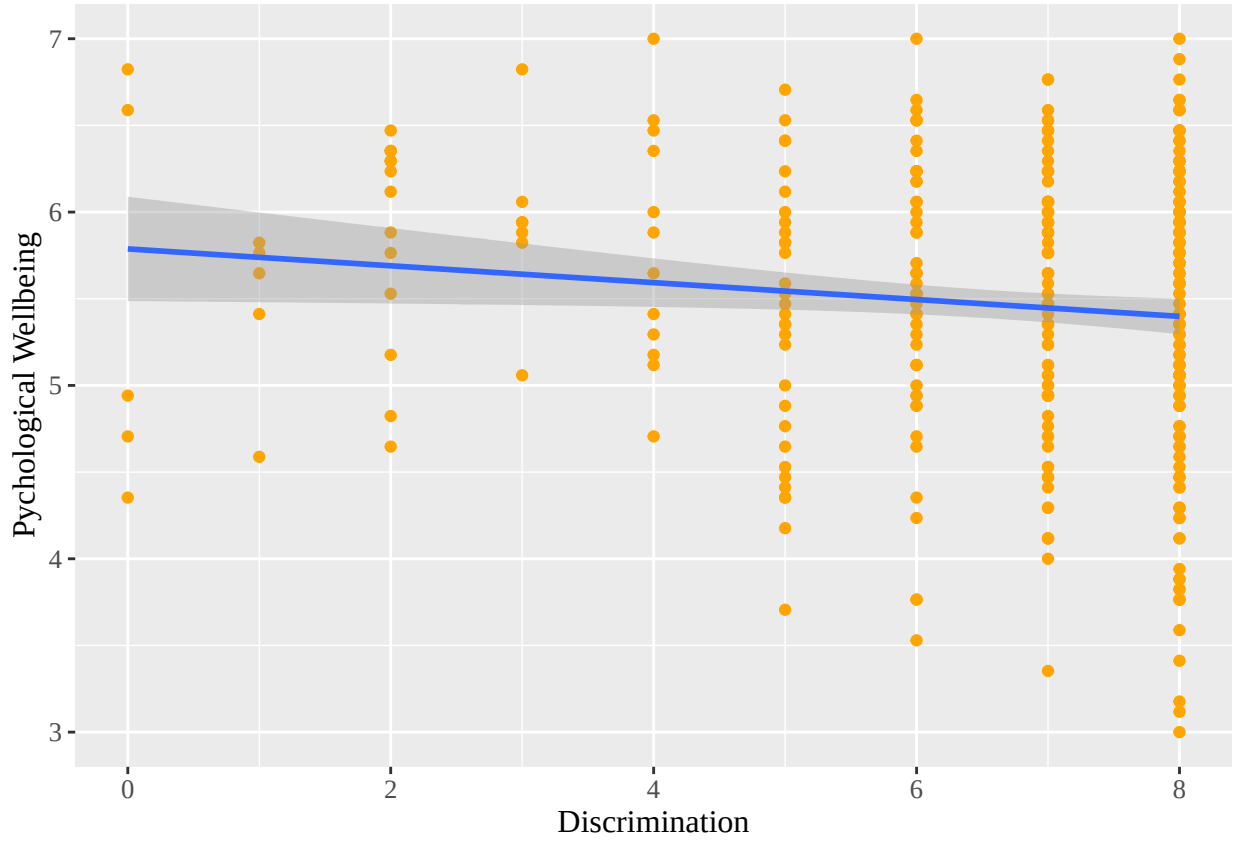

Figure 3

(#fig:regression plot)

Figure 4.

Path model for the effect of discrimination, chronic strain, and social connectedness on psychological wellbeing.

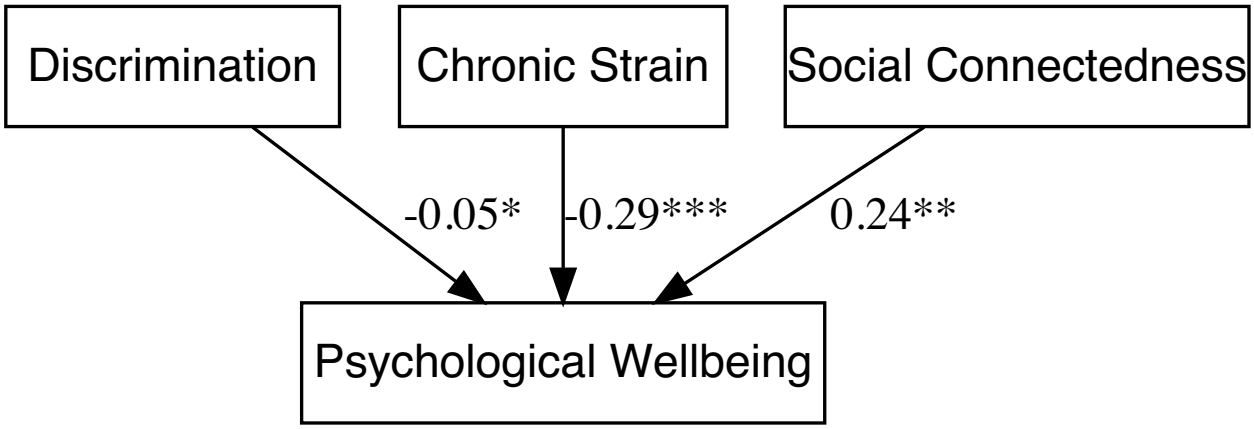

Figure 4

(#fig:lavaan plot)

Discussion

Findings that connectedness was positively associated with psychological well-being are simultaneously intuitive and in synchrony with the literature. For members of the LGB community, both physical and virtual spaces in which members can create and maintain meaningful relationships with similiarly identified individuals may be one method to increase resilience within this group. (Discuss discrimination and strain, intersectionality) In considering interventions to improve health and well-being among LGB communities, it is important to not place the burden on these groups; a preventative approach in line with a social ecological perspective must also include mechanisms designed to reduce both implicit and explicit bias in the general population. Approval of LGBT+ issues has decreased among young people (FIND AND CITE), and the presidential administration of 2016 - 2020 took several actions during their tenure which further marginalized this population. Although this study did not measure social connectedness outside of the LGB community, future research examining perceived acceptance by the general population may better inform health promotion interventions for this group.

Strengths and Limitations

The availability and tidyness of the data from this robust sample gathered by Meyer, Dohrenwend, Schwartz, Hunter, and Kertzner (2016) are a clear strength of the present work. However, it is unclear whether or not these results are applicable to LGB members outside of New York City itself, and furthermore within rural areas. Future work may benefit from examining whether LGB individuals who relocate to large cities share similiar rates of discrimination and may be systematically different from community members who have no relocated.

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