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

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Abstract

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Connectedness, and Psychological Wellbeing Among Individuals With Marginalized Sexual

Orientations

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 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. The final sample comprised 360 individuals (50.2% female) aged 18-58 years old ($M = 32.41$ years, $SD = 9.25$). Partticiapnts 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.

Materials

Procedure

Data analysis

We used R (Version 4.0.3; 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), *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 1.3.1; 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

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

Methods

Participants

This study utilizes data from Project STRIDE: Stress, Identity and Mental Health (Meyer, Dohrenwend, Schwartz, Hunter, & Kertzner, 2016). Project STRIDE 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). Case quota sampling methods were used in order to obtain a sample with adequate representation based on age group, sexual orientation, gender, and race/ethnicity (Meyer, Frost, Narvaez, & Dietrich, 2006). For the present study, a subset of data was utilized that included all participants who self-identified as gay, lesbian, queer, bisexual, homosexual, or "other - LGB" and had valid responses to the psychological wellbeing scale at time point 2, discriminatory experiences at time point 1, chronic strain at time point 2, and social connectedness ($n = 360$). Participants were aged 18-59 years ($M = 32.41$, $SD = 9.25$) and the majority identified as gay ($n = 160$, 44.4%), lesbian ($n = 104$, 28.8%), or bisexual ($n = 63$, 17.5%), while 3.3% identified as queer ($n = 12$), 4.4% identified as homosexual ($n =$

16), and 1.4% identified as "other LGB" ($n = 5$). See Table 1 for additional descriptive statistics.

Table 1.

Descriptive statistics for independent and dependent 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 2.

Descriptive statistics of independent and dependent 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)	Other - Homosexual (N = 16)	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

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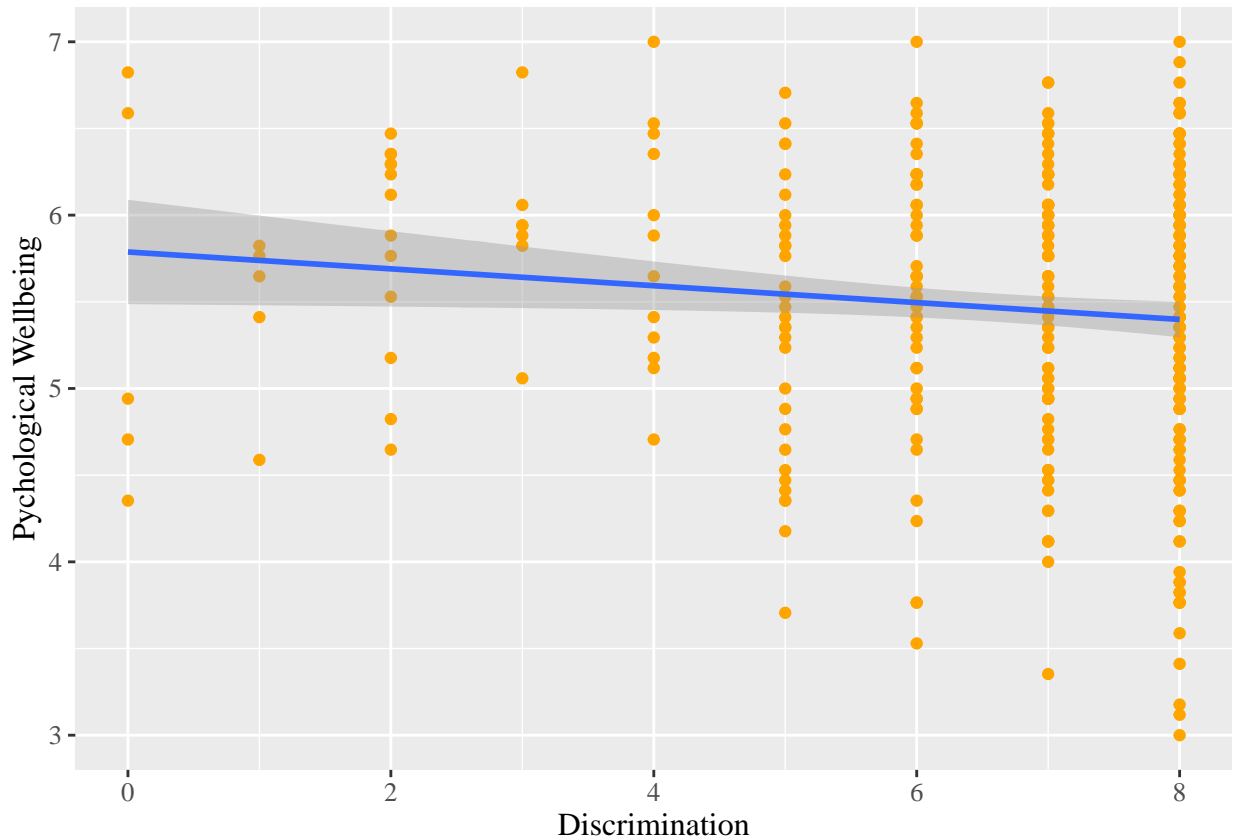
Social connectedness.   Social connectedness was contextualized as connectedness to the gay community, as measured by an 8-item scale adapted from Mills et al. (2001) to be more relevant to the geographic area. Each response was rated from 1 (*"agree strongly"*) to 4 (*"disagree strongly"*) and coded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

We used R (Version 4.0.3; 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), *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 1.3.1; 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

Figure 1 displays the average number of everyday discriminatory experiences according to sexual orientation.
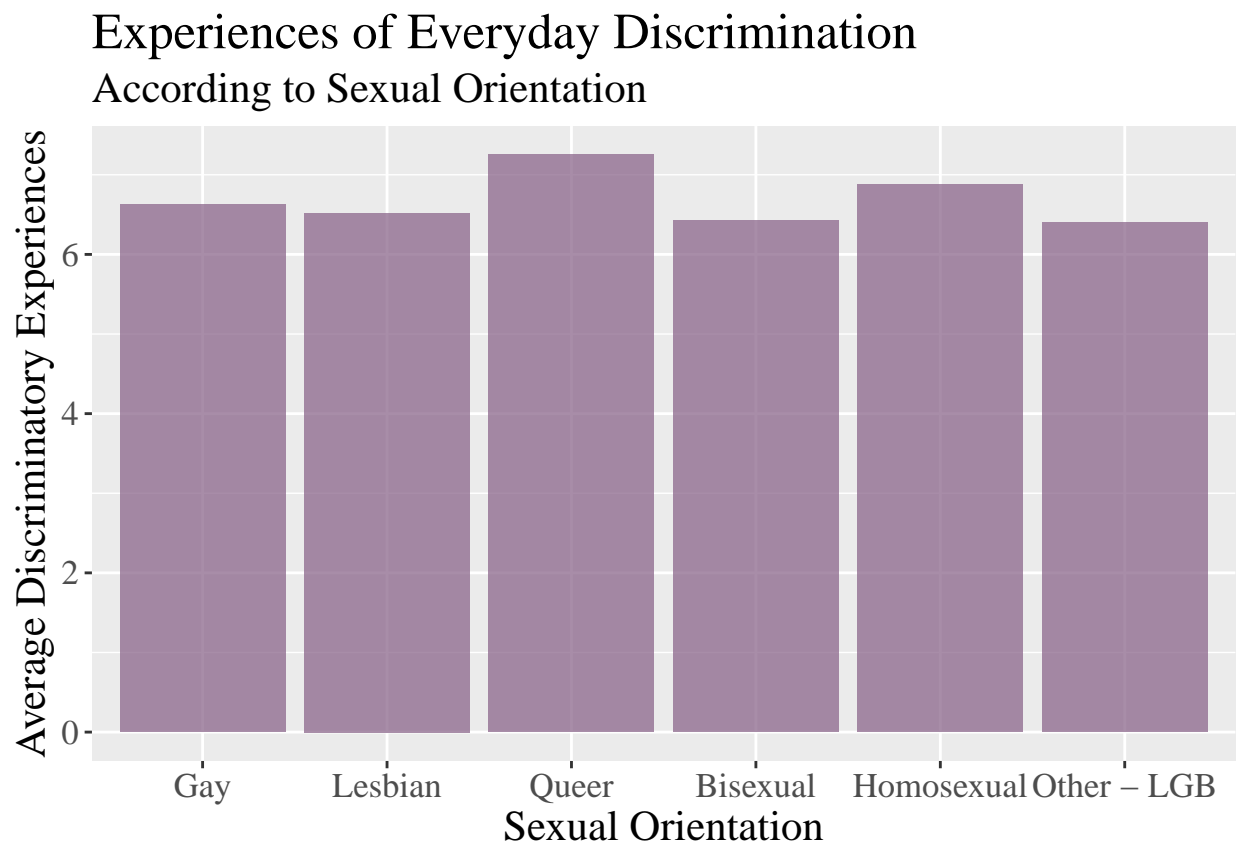

Figure 1. Experiences of everyday discrimination according to sexual orientation.
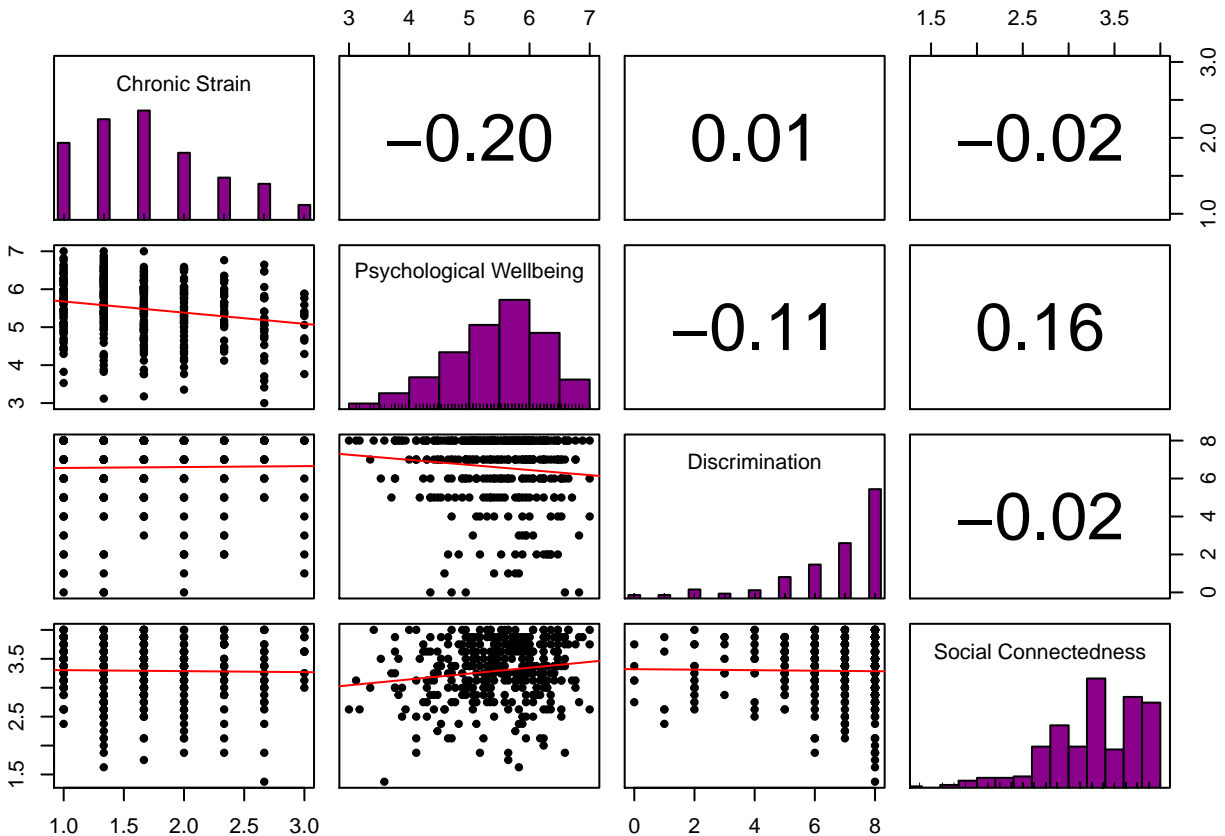
(#fig:mean plot)

*Figure 2*. Correlation panels for all variables included in the model.

(#fig:correlation panels)

|	chr_gen_2	perwellb_2	dis_d_total	connect
chr_gen_2	1.000	-0.203	0.014	-0.019
perwellb_2	-0.203	1.000	-0.114	0.158
dis_d_total	0.014	-0.114	1.000	-0.016
connect	-0.019	0.158	-0.016	1.000

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,

$\hat{\beta}_1 = -0.05, SE(\hat{\beta}_1) = -0.11, t(356) = -2.14, p = .03$. Figure 3 displays the relationship between everday discrimination and psychological wellbeing. 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 4 displays the path model with corresponding beta coefficients.
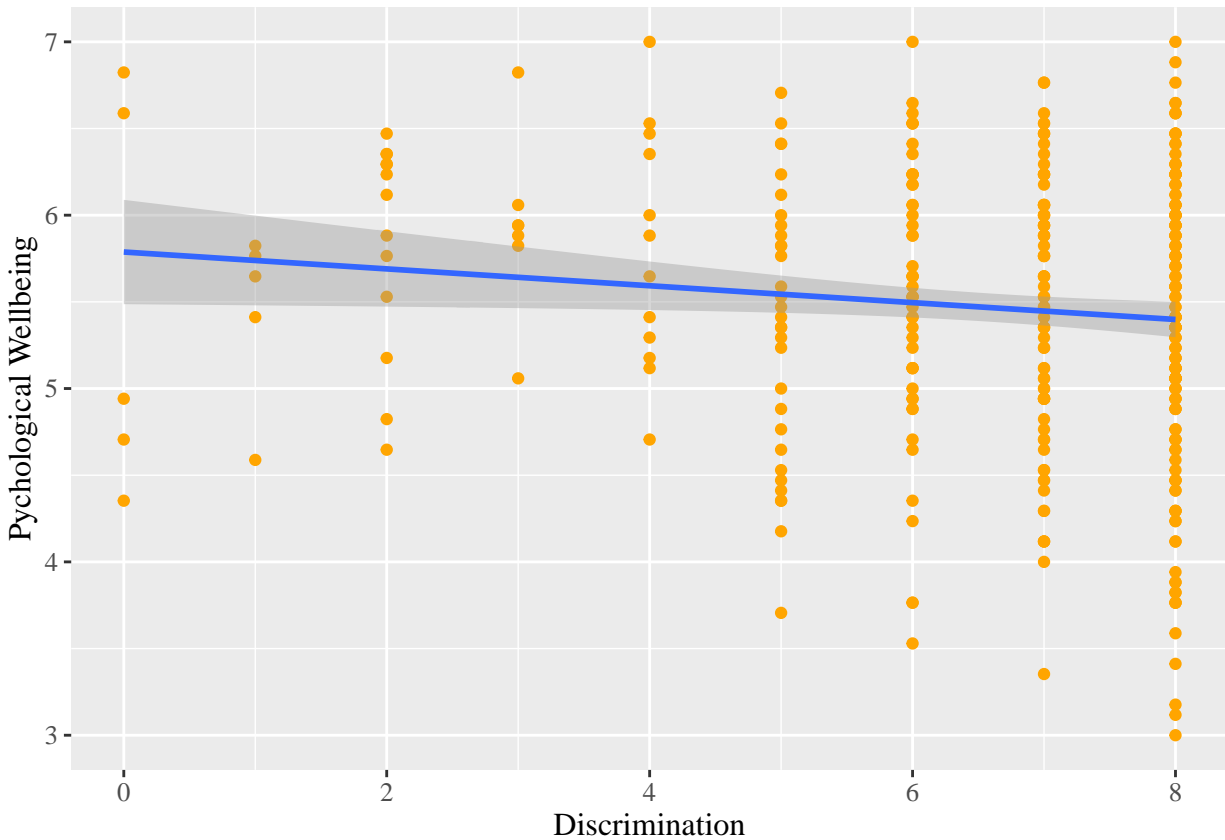
Figure 3. Effect of everyday experiences of discrimination on psychological wellbeing in sexual minorities.

(#fig:regression plot)
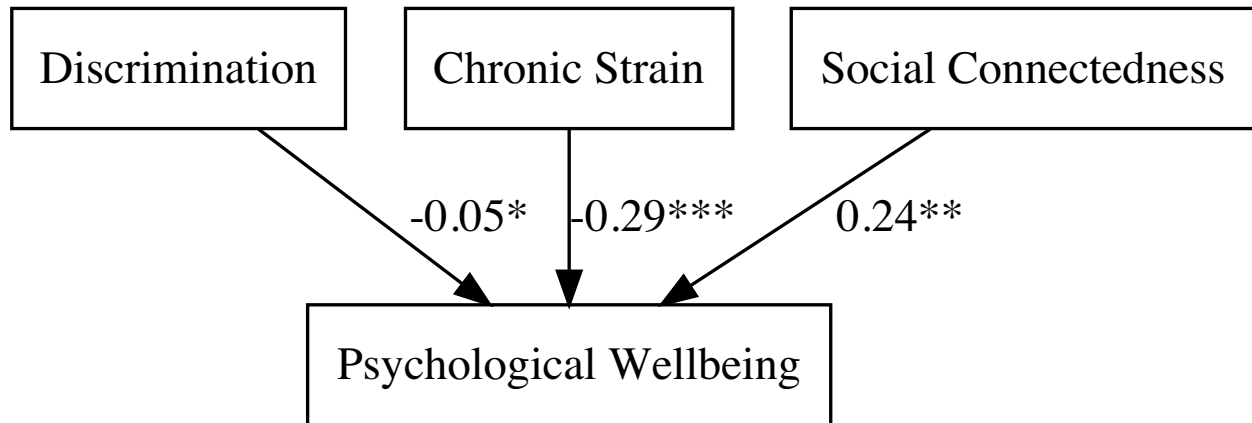
Figure 4. Path model for the effect of discrimination, chronic strain, and social connectedness on psychological wellbeing.

(#fig:lavaan plot)

Discussion

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