

GROUP IDENTITY AND COMMUNITY BELONGINGNESS AS MODERATORS

**Group Identity and Community Belongingness as Moderators of the Relationship between
Discrimination and Negative Mental Health Outcomes**

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Abstract

Discrimination is known to negatively affect mental health, especially amongst those of minority statuses. Research can play a role in finding ways to alleviate the negative effects of discrimination. This thesis aimed to investigate if community belongingness and group identity moderate the relationship between mental health outcomes, specifically depression and psychological well-being. I hypothesized higher levels of discrimination would be associated with higher levels of depression and lower levels of psychological well-being and that higher levels of community belongingness and group identity would weaken the relationship between discrimination and negative mental health outcomes. Responses from 396 participants from a previous longitudinal study, Project STRIDE, were used for this analysis. The study found a weaker relationship between discrimination and depression when collective self-esteem was high amongst Black/Latino and lesbian, gay, or bisexual participants. Though faced with limitations, this paper adds to current literature on protective factors against discrimination.

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Group Identity and Community Belongingness as Moderators of the Relationship between Discrimination and Negative Mental Health Outcomes

Discrimination - “the unfair treatment of people and groups based on characteristics such as race, gender, age or sexual orientation” (American Psychological Association, 2019) – is pervasive and deep-rooted in the United States. Experiencing discrimination can have negative impacts on mental health (e.g., increased symptoms of depression and lower overall psychological well-being), as demonstrated through a large body of research (Pieterse et al., 2012; Yoon et al., 2019). People are discriminated against for many reasons, such as their weight, gender, race/ethnicity, social class, sexual orientation, and/or ability, among others.

This thesis focuses on individuals’ experiences of discrimination based on racial/ethnic identity and sexual orientation; both groups experience more negative mental health outcomes compared to their peers from majority groups. For example, multiracial adolescents report higher levels of depression and anxiety than monoracially White adolescents (Fisher et al., 2014), and Black and Hispanic adults had significantly higher levels of depressive symptoms than their white counterparts (Mossakowski, 2008). With respect to sexual orientation, lesbian, gay, and bisexual (LGB) people have higher levels of adverse mental health outcomes than straight people, such as higher risks for depression and anxiety disorders among adults (King et al., 2008; McNair & Bush, 2016) and youth (Fergusson et al., 2005; Marshal et al., 2011).

Given the deleterious effects of experiencing discrimination, a primary way to promote the psychological well-being of all individuals is to eradicate discrimination and the societal structures that uphold it. Alongside long-term efforts to eliminate discrimination, research can play a role in identifying characteristics of individuals or contexts that may alleviate, in the shorter-term, some of the associated negative mental health consequences. These characteristics

are referred to as protective factors (Substance Abuse and Mental Health Services Administration [SAMHSA], 2019). Potential protective factors that may lessen the negative mental health outcomes related to discrimination include positive self-image, self-control, social competency, community programs, and mentoring, among many others. In this thesis, I investigated whether community belongingness and group identity moderated the relationship between experiencing discrimination and negative mental health outcomes among a sample of adults who were members of racial and/or sexual minority groups in the United States.

Review of Literature

Theoretical Frameworks

This thesis was primarily informed by two perspectives: the integrative model for the study of developmental competencies in minority children (García Coll et al., 1996) and the framework of intersectionality (Cole, 2009; Else-Quest & Hyde, 2016).

Integrative Model for the Study Developmental Competencies in Minority Children

The Integrative Model (García Coll et al., 1996) suggests a way of understanding and evaluating the development of people of color. The model addresses factors that are salient to populations of color and lead to their unique developmental processes, such as segregation, social position variables, and racism/prejudice/discrimination/oppression. The model also takes from constructs that are relevant to developmental processes in other populations, but detail individual factors that lead to differences in developmental processes. Although the Integrative Model focuses mainly on developmental processes of children and adolescents of color, the general ideas proposed in the model influenced this project on adults, some of whom were members of racial minority groups in the US and some of whom were members of sexual minority groups.

First, this model considers the contextual factors that are salient to the development of populations of color. Taking into account contextual factors can be applied to mental health research and interventions and working with minority populations. Much of the research pertaining to mental health in populations of color assess psychological symptoms from the majority perspective when disorders may have different presentations in populations of color (García Coll et al., 1996). As mentioned before, the scales and measures used in the original data collection were developed with the general, majority population in mind. This concept of contextualizing the environment is the basis for my study. Because minority populations have different experiences, they have different needs that need to be met by mental health services. For this thesis, I specifically analyzed the experience of discrimination and its impact on racial and sexual minorities.

Second, the Integrative Model introduces the idea of promoting and inhibiting environments as being instrumental aspects of development in minority populations. García Coll et al. (1996) describe inhibiting environments as places deficient in resources that may hinder developmental competencies in children. In turn, promoting environments are environments that can appropriately provide numerous and quality resources as well as assess the compatibility of two systemic variables. For example, school segregation (inhibiting environment) can become a promoting environment when developmental outcomes are supportive, and children are prepared to deal with prejudice and discrimination.

I extended the idea of promoting and inhibiting environments to the moderating variables used for this project: Community Belongingness and Group Identity. Belonging to a community and having a strong group identity can be contributive factors to a promoting environment as they can increase confidence and provide emotional and physical support when individuals are

faced with discrimination. In turn, low feelings of belongingness to a community and group identity can act as an inhibiting environment in that social supports are lacking when faced with discrimination. The shared experiences among members of marginalized communities can foster a stronger sense of belonging and identity with one's minority status. Further, it could lessen the negative mental health outcomes that are related to discrimination.

Framework of Intersectionality

As this project examines the experiences of discrimination based on race and/or sexuality, it is important to understand how these identities are related to one another. Having multiple social categories plays an important role in how people navigate their social context. Membership in one social category may provide power or privilege in a specific social context while membership in another category simultaneously disempowers an individual. For example, in the context of a traditional, corporate workplace, a White gay man's power would include the privilege of being White and a man but, in this context, the same man would be disempowered by being gay. On the other hand, in the same social setting, a Black gay man would be disempowered from being Black and gay, but still hold some power in being a man. In this study, I looked at the social categories of race and sexuality.

An intersectionality framework informed my understanding of how the two identities interact in relation to discrimination. There are a few specific ways to understand intersectionality within the scope of psychology. One researcher defines the framework as consisting of "analytic approaches that simultaneously consider the meaning and consequences of multiple categories of identity, difference and disadvantage" (Cole, 2009; p. 170). There are three assumptions all definitions of intersectionality include: 1. All people are characterized by multiple, interconnected social categories, such as race/ethnicity, gender, sexual orientation, and

socioeconomic status, 2. It's essential to understand the aspects of power and inequality that are immersed within each of the social categories, and 3. These social categories are not only individual properties (i.e., identity), but also properties of the social context in which people reside (Else-Quest & Hyde, 2016). Taking into consideration this framework, I divided the participants into two subgroups, 1. White Lesbian, Gay, or Bisexual (LGB) participants and 2. Black/Latino LGB participants.

Racial Discrimination and Mental Health

One of the two forms of discrimination I focused on in this thesis was discrimination related to race. Although the United States has made some strides to combat racial discrimination, it is still prevalent today. Lee et al. (2019) found that 63.10% of racial minorities experienced some form of racial discrimination. Overtly, racial discrimination can present as racial profiling, stereotyping, and prejudice/overt bias. There are also subtler ways that racial discrimination can occur through hiring, housing, and microaggressions. For example, an employer can refuse to hire anyone with a criminal record which disproportionately hurts Black and Latinx job applicants because, in the current criminal justice system, they are more likely to have criminal records than white individuals.

Experiencing daily racial discrimination is a chronic stressor for many people of color and can lead to negative effects on health. Racial discrimination has been related to numerous physical health effects, as well as negative mental health impacts, due to the stress it causes the people who experience it (American Psychological Association, 2019). People of racial or ethnic minorities reported lower overall mental health in comparison to European Americans (Cokley et al., 2011) and experiencing everyday discrimination is also strongly associated with mental health problems, such as stress, depression, and emotional dysregulation within African

Americans (Yoon et al., 2019). Furthermore, a metaanalysis conducted by Pieterse et al. (2012) found that the greater the exposure to racial discrimination and other negative race related events the larger the negative impact on the mental health of Black Americans.

Racial discrimination not only affects adults, but also affects the mental health of children and adolescents. A review of research on discrimination amongst children and adolescents found 121 studies with 461 outcomes that looked at the association of discrimination and mental health among children and adolescents (Priest et al., 2013). Among the studies, exposure to discrimination was most associated with negative mental health outcomes such as anxiety, depression, and negative self-esteem. Furthermore, exposure to discrimination had a negative impact on positive mental health symptoms such as resilience, self-worth, and psychological adaption and adjustment. These negative impacts translated into adulthood as well.

In addition to research on the kinds of mental health outcomes associated with discrimination, there is also research done to understand the pathways by which this relationship occurs. Because discrimination is complex and experienced in a variety of ways, researchers say it is difficult to narrow down the process by which it affects mental health to just one. One pathway may be because experiences of discrimination are exclusionary and result in the “defilement of self” (Fleming, Lamont & Welburn, 2012, p. 403). The “defilement of self” as described by Fleming and colleagues includes feelings of being over-scrutinized, overlooked, underappreciated, misunderstood, and disrespected. Williams and Mohammed (2013) posit that racial discrimination can affect the mental health of those exposed through psychological responses, such as internalizing racism, problems with racial identity, self-esteem, and/or stereotype threats. This is important to note because understanding the association between racial

discrimination and mental health is necessary but understanding how or why this association is significant is also vital.

Discrimination Based on Sexual Orientation and Mental Health

The second form of discrimination I focused on in this thesis was discrimination related to sexual orientation. Same-sex relationships have been documented all throughout history, all throughout the world (Dabhoiwala, 2015). Although overt hatred/discrimination towards LGB people is considered unacceptable in many places, more subtle forms of discrimination take place in the form of microaggressions. Furthermore, 76% of homosexual and bisexual people reported experiencing discrimination, and of that, 25% reported that their sexual orientation alone was the basis of the discrimination (Mays & Cochran, 2001).

Similar to racial minority individuals, people who experience discrimination based on their sexual orientation can experience distress, which can lead to negative mental health outcomes. Slater et al. (2017) found that individuals who identified as LGB were more at risk for excessive alcohol consumption as well as developing substance abuse disorders compared to straight individuals. Gay men may be three or four times more likely to experience depression, anxiety, and other disorders in comparison to heterosexual men (Lewis, 2009). Additionally, LGB individuals who had experienced more discrimination were more likely to have a psychiatric disorder (Mays & Cochran, 2001). Because people in the LGB community are more at risk for negative mental health symptoms due to discrimination, it is important to study factors that can protect against those outcomes.

Protective Factors for Experiencing Discrimination and Mental Health Symptoms

Most research related to minority mental health focuses on negative mental health outcomes. In turn, practices and interventions focus more on alleviating the negative mental

health symptoms rather than understanding how the experiences of people from minority groups may impact and exacerbate negative mental health symptoms. While all people (both with majority and minority status) have a sense of community, minority status people may utilize and participate in their communities differently due to events such as discrimination and prejudice. Senses of community and identity can play a role in how members of minority groups view themselves and can be considered a vital tenet of adaptive culture. The importance and the role these two concepts play in minority communities have the possibility of lessening the negative effects of discrimination.

Community Belongingness

Feeling a connection to one's community is an essential part of the human experience of needing to belong and is related to positive outcomes (Baumeister & Leary, 1995). Community belongingness refers to individuals' attachments to their respective communities and the associated social participation (Kitchen et al., 2012). Feeling as if you belong in your community can foster positive health outcomes through building self-esteem and mutual respect (Shields, 2008). After accounting for other variables (SES, chronic conditions, and health behaviors), community belongingness amongst people of color was strongly associated with mental and general health (Kitchen et al., 2012; Shields, 2008). Feeling accepted by their community also promoted participants' sense of emotional safety as well as safety in physical spaces (Hudson & Romanelli, 2020). Hudson and Romanelli (2020) also found that the increased feeling of interconnectedness amongst racial minority people fostered an exchanging of resources and material goods amongst members of the community.

The community also plays an important role in the lives of LGB individuals. For LGB youth, having a school community that has gay-straight alliances (GSAs) and/or sexual

orientation and gender identity policies has been shown to reduce the harm caused by victimization and harassment. GSAs are school clubs led by students to help reduce prejudice against and harassment of LGB students in schools, and anyone who is an ally may join (Goodenow et al., 2006). Students attending schools that have such clubs reported higher feelings of safety and lower depressive symptoms, suicidal thoughts and behaviors, and substance abuse (Goodenow et al., 2006; Hatzebuehler et al., 2014; Poteat et al., 2012). Having access to and participating in GSAs also benefited youth into adulthood (Toomey et al., 2011), when they reported better psychological health and lessening of negative effects of victimizations. These positive outcomes associated with high feelings of community belongingness could protect against and alleviate some negative mental health outcomes associated with discrimination.

Group Identity

In addition to community belongingness, group identity can be linked to positive outcomes. Group identity refers to the idea of how an individual views themselves regarding their membership in a certain group or community (American Psychological Association, 2020). How one defines themselves regarding their race and their emotional judgment based on race can influence mental health outcomes when associated with race-related events. Those that positively defined themselves and had lower emotional judgments on how others perceived them regarding race had lower depressive symptoms when anticipating race-related events (Hoggard et al., 2015). Because having a poor group identity is associated with higher symptoms of depression, having a strong group identity could be associated with mitigating negative mental health outcomes due to discrimination. For example, Jones et al. (2007) found that among Black women, multicultural identity was negatively related to levels of depression.

Furthermore, higher LGB identity commitment levels were associated with lower levels of psychological distress and lower levels of depressive symptoms (Santos et al., 2016). How LGB identifying individuals view themselves (centrality) and other members of the LGB community (private regard) also impacts self-esteem and psychological distress. Frederick and Williams (2021) found that the more positively LGB participants viewed their sexual identity and the more positively they viewed their own LGB group, the lower their levels of psychological distress were. They also found a positive relationship between private regard and general self-esteem. Additionally, Frederick and Williams (2021) found that high levels of centrality moderated the relationship between stigma and self-esteem. Applied to the variables under consideration in this thesis, these results suggest that group identity could serve as a protective factor against the negative mental health symptoms associated with discrimination.

The Present Study

This study aims to add to the literature about discrimination and mental health. Previous literature suggests that discrimination can be related to negative mental health symptoms such as higher levels of depressive symptoms and substance abuse (Zvolensky et al., 2019). Although discrimination is related to higher depression and substance abuse, higher levels of group identity and community belongingness reduced negative mental health symptoms (Hoggard et al., 2015; Jones et al., 2007; Kitchen et al., 2012; Shields, 2008).

The goals of this analysis were to see if group identity and community belongingness moderated the relationship between experiencing discrimination and negative mental health symptoms. I hypothesized that racial minority and/or sexual orientation minority participants who experienced more discrimination would have higher levels of negative mental health symptoms. I also hypothesized that the participants who reported higher levels of group identity

and community belongingness would have lower levels of negative mental health symptoms. Finally, I hypothesized that group identity and community belongingness would moderate the relationship between discrimination and negative mental health symptoms. In other words, I hypothesized that when levels of group identity and community belongingness were low, the relationship between discrimination and negative mental health outcomes would be stronger (or vice versa – when these levels were higher, the relationship between discrimination and negative mental health outcomes would be weaker).

Method

Data Source

The data used for these analyses were from a three-year longitudinal study called Project STRIDE. The principal investigators were Ilan H. Meyer, Bruce Philip Dohrenwend, Sharon Schwartz, Joyce Hunter, and Robert M. Kertzner. The data were collected from February 2004 through January 2005. The data set was downloaded from the Resource Center for Minority Data (RCMD) website: <https://www.icpsr.umich.edu/web/RCMD/studies/35525>.

Participants

A total of 524 people participated in the original study. However, this thesis only used responses from 396 people as the responses from participants who identified as White and Straight were not used in this analysis. Respondents were selected from among eligible screened individuals using a representative case quota sampling method (Shontz, 1965) to fill 16 cells of a table corresponding to variation in gender (male and female), sexual orientation (LGB and straight), race/ethnicity (white, Black, and Latino), and age group (18-30 and 31-59). Participants were eligible to take part in the study if they (a) self-identified as male or female and were assigned that sex at birth; (b) self-identified as lesbian, gay, bisexual (LGB), straight, or used

other terms conveying such identification (e.g., queer, heterosexual); (c) self-identified as White, Black, or Latino or used other terms conveying such identifications (e.g., Hispanic, African American); (d) were between the ages of 18 and 59; (e) resided in New York City for two years or more; and (f) were able to speak English well enough to engage in casual conversation. Individuals were not eligible to participate in the study if a close family member or a live-in partner already participated in the study.

Procedure

For the STRIDE study, longitudinal data were collected from February 2004 to January 2005. The first data were collected as a baseline interview and then a follow-up interview was done one year later. For this thesis, I used the data collected during the baseline. The baseline interview lasted on average 3.82 hours, and respondents were compensated with \$80. For the follow-up interview (an average of 1.91 hours), respondents were compensated \$60. Each interview was in-person using computer-assisted and paper-and-pencil instruments. An additional \$10 gift card was provided for those who completed the follow-up interview by the due date. Most interviews took place in research offices in either Washington Heights or Chelsea. In rare cases, another location was used for ease of access and privacy. Four interviews were conducted over the phone.

Measures

Demographic Variables

Socio-demographic information collected about respondents included age, education (highest grade completed ranging from some high school to doctoral degree), race, and Hispanic ethnicity; these items had the same language developed and used by the U.S. Census Bureau in the U.S. population survey of 2000. In addition to these items, racial/ethnic identity was assessed

with the question “What is the country of origin related to your or your family’s ethnic or national background, if any?” Respondents were allowed to select up to two nations from a comprehensive listing. For the purposes of the study, the instrument also assessed whether participants were natives of NYC or migrated there as adults. For the thesis, I used the demographic information related to race/ethnicity.

A brief, 5-item questionnaire for screening sexual orientation adapted from Laumann et al. (1994), and successfully used in previous studies by the principal investigator (Meyer & Colten, 1999; Meyer et al., 2002) was included. Questions assessed the gender of the respondents’ sex partners since age 18, during the previous 5 years, and within the last year prior to the interview. Responses were categorically recorded and included the option of selecting either: 1 = “with men only,” 2 = “with women only,” 3 = “both men and women,” or 4 = “no sexual contact.” After these questions were answered, respondents were asked how sexually attracted they were to persons of the same gender (i.e., 1 = “men only” to 5 = “women only”) and how appealing it was for them to have sex with someone of the same gender (i.e., 1 = “very appealing” to 4 “not at all appealing”). For my thesis, the combined values (sexual partners and sexual attraction) were used to determine who was included as LGB.

Depressive Symptoms

The Center for Epidemiological Studies Depression scale (CES- D) is a 20-item measure of depressive symptoms experienced over a one-week period prior to the conduction of the interview. The scale is a widely used measure of generalized distress, scores have shown good reliability and validity (Radloff, 1977; Roberts & Vernon, 1983). Some of the items were: “During the past week... you felt depressed / you felt hopeful about the future / you felt people dislike you.” Respondents responded to such items on a 4-point scale (0 = “rarely or none of the

time (<1 day);” 3 = “most or all of the time (5-7 days)”). Scores on the measure demonstrated good internal consistency within the baseline sample ($\alpha = 0.92$). Some items were reverse coded so that higher scores on all items reflected more depressive symptoms. For this thesis, I used average scores to account for a high range in clinical scores.

Psychological Well-being

Adapted from Ryff (1989) and Ryff and Keyes (1995), respondents were asked if they agreed or disagreed with each of 18 items. This measure was developed to integrate theories of life course development and mental health conceptions of psychological well-being. Psychological well-being dimensions included self-acceptance (e.g., “When I look at the story of my life I am pleased with how things have turned out”), positive relations with others (e.g., “I have not experienced many warm and trusting relationships with others”), autonomy (e.g., “I judge myself by what I think is important, not by the values of what others think is important”), environmental mastery (e.g., “In general, I feel I am in charge of the situation in which I live”), purpose in life (e.g., “Some people wander aimlessly in life, but I am not one of them”), and personal growth (e.g., “For me, life has been a continuous process of learning, changing, and growth”). Each subscale contained three items. Scores on the measure demonstrated good internal consistency ($\alpha = 0.79$). All items were coded so that higher scores reflected higher well-being. Summed scores were divided by the number of items in each subscale to obtain mean total scores for each participant. In the original study, both a total psychological well-being score and subscale scores were used depending on the theoretical questions of interest. For the thesis, I used the total score.

Everyday Discrimination

The Everyday Discrimination measure was modified by the original research team based

on the 8-item instrument originally developed by Williams et al. (1997), based on qualitative research with African Americans. This instrument measured chronic, routine, and less overt experiences of unfair treatment. The scale assessed the experience of being treated with less courtesy, less respect, and receiving poorer service than others, as well as being threatened or harassed, called names, or insulted. The scale was adapted by the project STRIDE research team so that it applied to all the minority groups in the study (i.e., gender, ethno-racial and sexual minority identities). The questions inquired as to how often these experiences occurred over respondents' lifetimes on a 4-point scale (1 = "often" through 4 = "never"). For each item, respondents were asked whether the experience was related to their sexual orientation, gender, ethnicity, race, age, religion, physical appearance, income level/social class, or some other form of discrimination. Scores on this measure demonstrated good internal consistency ($\alpha = 0.82$). Responses were recoded so that higher scores reflected more everyday discrimination. Summed scores were divided by the number of items for the scale to obtain a mean total score for each participant.

Community Belongingness

I operationalized community belongingness using two scales: collective self-esteem and participation in minority communities. The collective self-esteem scale (Luhtanen & Crocker, 1992) was used to assess individuals' evaluation of their collective identity and group memberships. Four domains of collective self-esteem were assessed using four items each. They were membership esteem, public collective self-esteem, private collective self-esteem, and importance to identity. Items included "I often regret that I belong to some of the social groups that I do" and "Others respect the social groups that I belong to". Respondents rated the extent to which they agree with each of the 16 statements on a scale of 1 (strongly agree) to 7 (strongly

disagree). Scores on the measures demonstrated good internal consistency ($\alpha = 0.86$). Responses were coded so that higher scores reflected greater collective self-esteem. Summed scores were divided by the number of items for each scale to obtain a mean total score for each participant.

The participation in minority communities instrument assessed the various groups and integration the participant had with the minority groups under study (i.e., sexual, gender and ethno-racial). The 9-item initial questions asked respondents to state whether (yes/no) they have attended meetings or participated in some other way in different organizations and clubs in the past 12 months. These included things like professional or business meetings, a gym or health club, and religious congregation. If respondents answered yes to any of the preliminary questions, they were then asked to identify if the group or organization they attended was heavily attended by similar others (e.g., if a Latino gay man participated in a professional organization, he would be asked if that organization was heavily attended by other LGBs and Latinos; if the participant was female, she was asked whether women heavily attend these same groups). Scores on the measure demonstrated average internal consistency ($\alpha = 0.70$). These follow-up questions were also dichotomous yes/no responses.

Strength of Group Identity

Following Williams et al. (1999), the study measured strength of group identity on a 4-point scale as the extent to which respondents indicated that they feel close in their ideas and feelings to groups based on their sexual orientation (i.e., gay community), race/ethnicity (African American, Latino communities), or gender (the feminist community). Each group identity was assessed using 1 item only. Possible responses ranged from 1 (“very close”) to 4 (“not close at all”). Scores on this measure demonstrated poor internal consistency ($\alpha = 0.36$) Responses

were recoded so that higher scores reflected stronger group identities.

Analysis Plan

I first removed the participants who identified as both White and Straight (given that they were not members of either racial or sexual orientation minority groups) and then divided the remaining participants into two subgroups: 1. Participants who identified as White and lesbian, gay, or bisexual and 2. Participants who identified as Black or Latinx and lesbian, gay, or bisexual.

I conducted preliminary analyses for each subgroup. These analyses involved tests of normality (histogram, skewness, and kurtosis), tests for outliers, linearity between variables, and assessed if the variables had a problematic correlation or not.

The main analysis consisted of multiple regression analysis with two steps within each of the two subgroups. First, I estimated a bivariate regression to understand the relationship between the predictor (Discrimination) and outcome variables (Depression and Psychological Well-Being) for each subgroup. Then, for each subgroup, I estimated a regression with moderators to understand the relationship between the predictor and outcome variables with the addition of group identity and community belongingness as moderators. I conducted post-analysis diagnostics for each set of regressions to assess if the models met the assumptions. Lastly, I compared the results of each subgroup at the conceptual (but not statistical) level.

Results

Preliminary Analyses

Before conducting the main regression analysis, I conducted preliminary analyses to see if the variables met the assumptions for a regression analysis.

Everyday Discrimination

The Everyday Discrimination predictor appeared to be nearly normally distributed. The mean and the median were nearly identical in value (see Table A1), and the skewness and kurtosis values showed the data were not drastically skewed or peakier/flatter than normal. There appeared to be no outliers according to the boxplot. Further investigation of the z-scores showed that there were no extreme outliers (no z-scores were outside |3|). When looking at larger, national samples, as well as within similar locations, participants in this study have noted lower experiences with discrimination than what would be expected.

Depression (CES-D)

The mean and the median for the depressive symptoms variable were quite different (Table A1), which showed the data were not approximately normally distributed. The skewness showed that the responses were very skewed to the left, and the kurtosis showed that the curve of the distribution was quite steep (Table A1). Based on outlier tests, there appeared to be 6 outliers. The deviations from non-normality indicate that the results of the regression analyses should be interpreted with caution, although the large sample size means that the deviations are unlikely to cause severe problems (Field, 2018).

Psychological Well-Being

The mean, median, skewness, and kurtosis for Psychological Well-Being suggested the data were normally distributed (Table A1). Box-plots and z-scores showed 1 extreme outlier.

Group Identity

Two subgroups for group identity were evaluated. LGB group identity, which was completed by all participants, was approximately normally distributed. The mean and the median were similar in value, and the skewness and kurtosis values showed the data were not abnormally

skewed or peaky/flat. The boxplot indicated a few outliers on the lower end. There were no z-scores above 3 or below -3, but there was a large gap between -1.5 to -2.9; accordingly, values above -1.5 could be outliers. In the subgroup of Racial Minority participants, the descriptive statistics showed that Group Identity related to racial group was normally distributed, and both the boxplot and the z-scores indicated no outliers in the data.

Community Belongingness

Two variables were used to operationalize Community Belongingness. The first variable was Collective Self-Esteem. The mean and median, as well as the skewness and kurtosis (Table A1) values, indicated a normally distributed variable. The boxplot showed one potential outlier on the lower end of the distribution (with a z-score of -3.47).

The second variable was Participation in Minority Communities. This variable was also divided into two subgroups: Participation in LGB Communities (for all participants) and Participation in Racial Minority Communities (for participants of color only). The mean, median, skewness, and kurtosis for Participation in LGB Communities suggested a normal distribution (Table A1). According to the boxplot, there were four potential outliers at the higher end of the distribution. There was one z-score value above 3 at 3.52. The descriptive statistics for Participation in Racial Minority Communities also suggested this variable was normally distributed (Table A1). The boxplot showed four potential outliers on the higher end of the distribution. The z-scores showed five values that are above 3.

Correlations

To assess the bivariate relationships between the predictor (Everyday Discrimination), Moderating variables (Group Identity and Community Belongingness), and outcome variables (Depression and Psychological Well-Being), I conducted a correlation analysis. Everyday

Discrimination had a significant correlation with both outcome variables and all the moderating variables except Collective Self-Esteem. The scatterplots between the predictor and outcome variables showed linear relationships. The scatterplots between the moderating variables and outcome variables also showed linear relationships. There was a negative linear relationship between discrimination and psychological well-being and a positive linear relationship between discrimination and depression.

Participant Subgroup 1: White LGB Participants

Bivariate Regression Analysis

To address the first part of the research question – the relationship between Discrimination and Depression and Psychological Well-Being – I estimated a bivariate regression for each outcome variable. Tables A3 and A4 show the results from the bivariate regressions.

Everyday Discrimination predicted 10.9% of the variation in the Depression score amongst this subgroup, $F(1,133) = 16.068, p < .001$ and 15.6% of the variation in the Psychological Well-being score, $F(1,133) = 24.444, p < .001$. Everyday Discrimination was a significant predictor of both Depression (positive) and Psychological Well-Being (negative).

Diagnostics. To assess if these models met the assumptions for regression analysis, I conducted post-analysis diagnostics.

I assessed multi-collinearity by looking at the Collinearity Tolerance and Variance Influence Factor (VIF) for each outcome variable. The Collinearity Tolerance for both outcomes were above .10 and the Statistic VIF for both outcomes were below 10. Therefore, there was no problematic collinearity found in this model.

Next, I looked for influential cases in the model by assessing the SDFit and SDBetas. For both outcomes, the SDFit and SDBeta values were within the $|2|$ range (Field, 2018), so there were no influential cases that affected the regression coefficients.

I analyzed the histograms for the Standardized Residuals for each outcome to assess the normality of the residuals. The residuals appeared to be relatively normal for both outcomes.

To assess the homoscedasticity of the residuals, I looked at the scatterplots of the predictor (Discrimination) and Unstandardized Predicted Outcome with the Standardized Residuals. There was more variation in the standardized residuals amongst participants who had higher scores for Discrimination. However, there were no data for participants who reported a Discrimination score higher than 3, so I cannot firmly say if the assumption was met in this model (this pattern was identified for both outcomes). There was less variation in the predicted Depression score above approximately .850. However, there are no data available for Depression scores above 1.20, so I cannot accurately say if the assumption was met. There were no data available for Psychological Well-Being scores lower than 4.50 and higher than 6.25, so I cannot accurately say if the assumption was met.

Multiple Variable Regression (without Interaction)

For these models, the predictors were Discrimination, Group Identity, Collective Self-Esteem, and Community Participation. Tables A3 and A4 show results of these regressions.

Outcome Variable: Depression. Group Identity and Everyday Discrimination accounted for 12.1% of the variation in Depression scores, $F(2,133) = 8.988, p < .001$. Everyday Discrimination was a significant positive predictor of Depression, but Group Identity was not.

Discrimination, Collective Self-Esteem, and Community Participation predicted 16.2% of the variation in Depression scores, $F(3,133) = 8.371, p < .001$. Everyday Discrimination was a

significant positive predictor and Collective Self-Esteem was a significant negative predictor, but Community Participation was not.

Outcome Variable: Psychological Well-Being. For the Psychological Well-Being score, Discrimination and Group Identity accounted for 15.7% of the variation, $F(2,133) = 12.153$, $p < .001$. Discrimination, but not Group Identity, was a significant negative predictor of Psychological Well-Being in this model.

Everyday Discrimination, Collective Self-Esteem, and Community Participation predicted 28.4% of the variation in Psychological Well-Being scores, $F(3,133) = 17.155$, $p < .001$. Discrimination (negative) and Collective Self-Esteem (positive), but not Community Participation, were significant predictors of Psychological Well-Being.

Diagnostics. Based on the Collinearity Tolerance and the Variance Influence Factor, no problematic collinearity was found in this model. SDFits and SDBetas showed no influential cases. Residuals for both outcomes were approximately normally distributed. The model seemed to work well for only those participants who had low levels of discrimination. Furthermore, there was little variation for participants who had low or no LGB Group Identity, for those who had high Collective Self-Esteem, and for those who had high Community Participation. There were not many participants who had low predicted Psychological Well-Being scores and high predicted Depression scores. Therefore, I cannot accurately say if the assumption was met.

Multiple Variable Regression (with Interaction)

These models included the predictors of Discrimination, Group Identity, Collective Self-Esteem, and Community Participation, along with (as applicable) interactions between 1. Discrimination and Group Identity, 2. Discrimination and Community Participation, and 3.

Discrimination and Collective Self-Esteem. Tables A3 and A4 show the results of this set of models.

Outcome Variable: Depression. Discrimination, Group Identity, and the interaction between Discrimination and Group Identity accounted for 12.2% of the variation in Depression scores, $F(3,133) = 6.048$, $p < .001$. None of the variables by themselves, however, were significant predictors of Depression.

Discrimination, Collective Self-Esteem, and their interaction accounted for 16.9% of the variation in Depression, $F(3,133) = 8.795$, $p < .001$. None of the variables individually, however, were significant predictors of Depression.

Discrimination, Community Participation, and their interaction predicted 11.3% of the variation in the outcome Depression, $F(3,133) = 5.542$, $p = .001$. Everyday Discrimination was the only significant positive predictor.

Outcome Variable: Psychological Well-Being. Discrimination, Group Identity, and Discrimination and Group Identity combined predicted 15.9% of the variation for Psychological Well-Being, $F(3,133) = 8.175$, $p < .001$. None of the variables were significant predictors of Psychological Well-Being.

Discrimination, Community Participation, and those two variables combined accounted for 17.0% of the variation in Psychological Well-Being, $F(3,133) = 8.895$, $p < .001$. Discrimination was the only significant negative predictor.

Collective Self-Esteem, Discrimination, and Collective Self-Esteem and Discrimination combined accounted for 28.4% of the variation in Psychological Well-Being, $F(3,133) = 17.147$, $p < .001$. None of the variables were significant predictors of Psychological Well-Being for White and LGB participants.

Diagnostics. This model yielded a few problematic collinearity diagnostics. Discrimination, Community Participation, Community Participation x Discrimination, and Collective Self-Esteem x Discrimination all had problematic collinearity. However, that is a common problem in models with interactions. There were no influential cases. The residuals were also approximately normally distributed. There was variation for those who have low scores for Discrimination, high scores for Group Identity, low Community Participation, high Collective Self-Esteem, low Group Identity x Discrimination, and low Community Participation x Discrimination. Further, there was variation for participants with a high predicted Psychological Well-Being score and low predicted Depression scores. However, similar to the other models, there were few or no responses at some values of the scales.

Participant Subgroup 2: Black/Latino LGB Participants

Bivariate Regression Analysis

To address the first part of the research question, I estimated a bivariate regression for each outcome variable. Tables A5 and A6 show the results from the bivariate regression.

For the Black or Latino and LGB participants, Everyday Discrimination accounted for 8.70% of the variation in Depression, $F(1,260) = 24.606, p < .001$. The predicted Depression score when Everyday Discrimination was zero was significant. Discrimination was a significant positive predictor of Depression within this participant subgroup.

Discrimination accounted for 3.30% of the variation in Psychological Well-being, $F(1,261) = 8.858, p = .003$. The Psychological Well-Being score when Discrimination was zero was significant. Discrimination was a significant negative predictor.

Diagnostics. Based on the Collinearity and VIF, there was no problematic Collinearity for either outcome variable. The SDFit and SDBeta showed no influential cases for either

outcome variable. The residuals for both outcome variables were relatively normally distributed. For the Depression outcome variable, the model did not predict many high Depression scores or low Psychological Well-being Scores, so it was difficult to determine whether the residuals had constant variances with respect to the predicted scores. However, the residuals of the model were homoscedastic based on Discrimination scores in both outcome variables.

Multiple Variable Regression (without Interaction)

For this model, the predictors were Discrimination, Group Identity, Collective Self-Esteem, and Community Participation. Tables A5 and A6 show results of this regression.

Outcome Variable: Depression. LGB Group Identity, Racial Minority Group Identity, and Everyday Discrimination accounted for 9.4% of the variation, $F(3,260) = 8.886, p < .001$. Only Everyday Discrimination was a significant positive predictor of Depression in this model.

Everyday Discrimination, Collective Self-Esteem, LGB Community Participation, and Racial Minority Community Participation predicted 18.0% of the variation, $F(4,260) = 14.017, p < .001$ in Depression. Everyday Discrimination (positive), Collective Self-Esteem (negative), and Racial Minority Community Participation (positive) were significant predictors of Depression within this subgroup.

Outcome Variable: Psychological Well-Being. LGB Group Identity, Racial Minority Group Identity, and Everyday Discrimination account for 4.5% of the variation in the Psychological Well-Being score, $F(3,261) = 4.010, p = .008$. For this model, only Discrimination was a significant (negative) predictor of Psychological Well-Being.

Everyday Discrimination, Collective Self-Esteem, LGB Community Participation, and Racial Minority Community Participation predicted 21.9% of the variation in the Psychological

Well-Being score, $F(4,261) = 18.010, p < .001$. Discrimination (negative) and Collective Self-Esteem (positive) were significant predictors of Psychological Well-Being.

Diagnostics. Diagnostic analysis of Tolerance and VIF found no problematic collinearity in this model. Based on the SDFits and SDBetas, there were no influential cases. All residuals were normally distributed. The model worked well for all levels of Discrimination. This model did not have variation for participants who had low scores for LGB Group Identity, Racial Minority Group Identity, and Collective Self-Esteem. There also were no data for all levels of the response scale. On the other hand, the model did have enough data for participants with high Community Participation. The model only had variation for those with mid-level predicted values of Depression and Psychological Well-Being. There were no data available for very high or very low predicted Depression and Psychological Well-Being scores.

Multiple Variable Regression (with Interaction)

For this model the predictors were Discrimination, Group Identity, Collective Self-Esteem, and Community Participation. The models also included (as applicable) interactions between 1. Discrimination and Group Identity (LGB and Racial Minority), 2. Discrimination and Community Participation (LGB and Racial Minority), and 3. Discrimination and Collective Self-Esteem. Tables A5 and A6 show the results of this set of models.

Outcome Variable: Depression. Discrimination, LGB Group Identity, Racial Minority Group Identity, Discrimination and LGB Group Identity, and Discrimination and Racial minority Group Identity combined predicted 9.4% of the variation for Depression, $F(6,260) = 5.291, p < .001$. None of the variables by themselves were significant predictors of Depression.

Collective Self-Esteem, Discrimination, and Collective Self-Esteem and Discrimination combined accounted for 17.3% of the variation in Depression, $F(3,260) = 17.871 (p < .001)$. In

this model, Discrimination was a significant positive predictor, as was the interaction between Discrimination and Collective Self-Esteem (negative). Figure A1 shows that at higher levels of Collective Self-Esteem, the relationship between Discrimination and Depression is less strong (compared to lower levels of Collective Self Esteem). The results of the Johnson-Neyman procedure found when Collective Self-Esteem values reach above 5.34, there is no statistically significant relationship between Discrimination and Depression.

Discrimination, Community Participation (LGB and Race), and Discrimination and Community Participation (LGB and Race) combined predicted 11.4% of the variation in the outcome Depression, $F(5,260) = 6.547$ ($p < .001$). Only Discrimination was a significant predictor of Depression.

Outcome Variable: Psychological Well-Being. Discrimination, LGB Group Identity, Racial Minority Group Identity, Discrimination and LGB Group Identity, and Discrimination and Racial Minority Group Identity combined accounted for 5.1% of the variation, $F(5,261) = 2.733$, $p = .020$. Discrimination was the only significant (negative) predictor.

Collective Self-Esteem, Discrimination, and Collective Self-Esteem and Discrimination combined accounted for 22.8% of the variation in Psychological Well-Being, $F(3,261) = 25.358$ ($p < .001$). Only Discrimination was a significant (negative) predictor.

Discrimination, Community Participation (LGB and Race), and Discrimination and Community Participation (LGB and Race) combined accounted for 5.4% of the variation in Psychological Well-Being, $F(5,261) = 2.923$ ($p = .014$). None of the variables were significant predictors.

Diagnostics. Based on the Tolerance and VIF, this model did yield some problematic collinearity. LGB Group Identity x Discrimination and Racial Minority Group Identity x

Discrimination combined yielded problematic collinearity for both outcome variables. Collective Self-Esteem x Discrimination, Discrimination (in the Collective Self-Esteem Model), and Community Participation (LGB and Racial Minority) all had problematic collinearity. The diagnostics did not find any influential cases that affected the model. The residuals appeared to be normally distributed. The model was homoscedastic for Discrimination amongst this subgroup. Furthermore, the model had variation only for participants with higher LGB and Racial Minority Group Identities, and the model had ample variation only for lower scores on Group Identity (both) x Discrimination and low predicted scores of Depression and Psychological Well-Being. For the Community Belongingness variables, this model had few data points and low variation for those who had low Collective Self-Esteem, high Collective Self-Esteem x Discrimination, and high Community Participation. Additionally, there were some values on the response scales where there were no responses, which makes it difficult to accurately determine whether the assumption was met.

Discussion

The purpose of this study was to understand if group identity and community belongingness moderated the relationship between discrimination and mental health. Additionally, I assessed if these relationships differed between two subgroups of participants with different constellations of minority group identities: 1. Participants who identified as White and LGB, 2. Participants who identified as Black or Latino and LGB.

I first hypothesized that more experiences of discrimination would be associated with higher depressive symptoms and lower psychological well-being. The results from the first regression analysis were consistent with the hypothesis that everyday discrimination is a significant predictor of depression (positively) and psychological well-being (negatively).

Specifically, participants in both subgroups who experienced more discrimination had higher levels of depression and lower levels of psychological well-being. These results are consistent with literature on the relationship between discrimination and mental health (Pieterse et al., 2012; Yoon et al., 2019; Priest et al., 2013; Slater et al., 2017; Lewis, 2009).

Secondly, I hypothesized that participants who had had higher levels of group identity and community belongingness would have lower levels of depression symptoms and higher levels of psychological well-being. The results supported this hypothesis in both subgroups. Additionally, amongst Black/Latino LGB participants, a higher score on participation in racial minority communities was weakly associated with lower levels of depression symptoms. Group Identity was not associated with depression or psychological well-being, which was not consistent with my prediction. The original data may have been collected with a specific question in mind and therefore the predictors and moderators may not have been collected in the way that I would have needed for this project. For example, a big part of the original study assessed stress as a major predicting variable on various mental health outcomes. It also included many more variables such as Stigma, Self-Esteem, Internalized Homophobia, and Closet to name a few that lent to the analysis. Additionally, the Everyday Discrimination measure was not modified to specify the contextual factors of participants and asked generally about participants' experiences with unfair treatment. This measure also emphasizes experiences with interpersonal or relational discrimination when, for many minority groups, structural discrimination is also vital to their experiences. For example, non-White participants who were more likely to report higher levels of racial discrimination when the questions were framed to explicitly describe experiences of racial discrimination compared to general statements of unfair treatment (Lee et al., 2019).

Lastly, I predicted that group identity and community belongingness would moderate the relationship between discrimination and negative mental health outcomes. This hypothesis was mostly not supported, with one exception. Amongst the subgroup of Black/Latino LGB participants, collective self-esteem did moderate the relationship between discrimination and depression. When participants had higher collective self-esteem scores, the relationship between discrimination and depression was weaker. In other words, participants had lower levels of depressive symptoms when faced with discrimination when their collective self-esteem was high. This pattern was only found in the Black/Latino LGB participants and not the White LGB participants. The difference in the results from the two subgroups could be attributed to the fact that members of the Black/Latino LGB subgroup face disempowerment and discrimination in two social categories: race and sexuality. In comparison the White LGB participants face disempowerment in their sexuality but have privilege in their race. As informed by the Intersectionality framework, people who are members of both racial and sexual orientation minority groups may rely heavily on their communities as a form of social and emotional support when faced with the disempowerment associated with their race and sexuality social categories.

No other significant moderating relationship was found with any other variables. In previous studies, group identity was linked with higher self-esteem, and self-esteem is considered an important pathway for discrimination and mental health (Frederick and Williams, 2021; Fleming, Lamont and Welburn, 2012). Therefore, self-esteem may be an important factor to consider when understanding group identity in relation to discrimination and mental health. The group identity measure used only one item per social group and assessed how close they felt in their ideas and perceptions based on their social groups (i.e., sexual orientation and race). There were no items within the group identity measure that evaluated self-esteem within their

group identity. Instead, the collective self-esteem measure, which assessed participants' evaluation of their group memberships and collective identity, was used. This may be why collective self-esteem, and not group identity, was the only moderator identified in this study.

This thesis also aimed to apply the ideas of promoting and inhibiting environments to community belongingness and group identity. The hope was that this study would show that community belongingness and group identity moderate the relationship between discrimination and depression and psychological well-being. However, the analysis did not yield significant results for community participation and group identity. From my results, discrimination is indeed inhibiting on people who experience it and is related to higher levels of depressive symptoms and lower levels of psychological well-being. However, participation in the community and group identity were not found to be salient enough to support, protect, and act as promoting environments against discrimination for minority populations.

Implications for Counseling and Therapy

The results of the current thesis could have several clinical implications. Black/Latino LGB participants who had reported higher levels of collective self-esteem had lower depression and higher overall psychological well-being resulting from discrimination. Mental health professionals could use this information and find ways to bolster collective self-esteem of their clients who are minorities. One of the ways mental health professionals could do this is by holding groups therapy for their clients to be able to connect with others that belong to the same minority groups. Group therapy sessions with members of the same social categories could provide a space for people to process feelings and experiences of belonging to the minority status(es), develop skills to cope with the effects of discrimination related to their minority status, and help connect with community resources. As a mental health professional,

understanding the contextual background is essential when working with all their clients, but especially clients with minority statuses. For minorities, having a provider who not only has knowledge of and understands the history of the discrimination faced by minority groups, but also having a provider that shares their minority status with their clients is vital for the quality of care the client receives (Meyer and Zane, 2014). Mental health professionals can use the results of this thesis to start working towards understanding how discrimination affects minority populations, especially if they do not belong to or identify with a specific community.

Limitations

The results of this study need to be interpreted considering several limitations. First, the data set used for this analysis is nearly 20 years old. The responses and sentiments regarding the LGB and racial minority community have changed since the time the data were collected. For example, in 1977, 43% of US adults agreed same-sex marriage should be legal and in 2013 the number had increased to 66% (Gallup, 2015). Since then, in 2015, same-sex marriage was legalized in the United States. Additionally, the participants and original study took place in New York City, a typically liberal-minded area. A smaller city or town or another place might have different perspectives and narratives that could influence people's experiences with discrimination and mental health in relation to their minority status. For example, children and adolescents living in states that have many antibullying laws for sexual orientation and gender identity report experiencing less victimization and harassment compared to children and adolescents living in states without these laws (Kosciw et al., 2014). A smaller town may not have the same diversity a large city might have. The exposure to diversity could lead to more knowledge about minority communities and potentially challenge biases and notions held about certain groups. Large cities are not free from prejudice and discrimination, but the diversity in

some cities may lead to boroughs or neighborhoods forming to serve as safe spaces for these communities. When conducting similar studies, data could be collected from various cities and towns to accurately gauge how the relationship changes depending on factors such as location, external biases, and social sentiments.

Conclusion and Future Directions

Despite limitations, this paper adds to current literature regarding protective factors against discrimination and their aid in lessening negative mental health outcomes due to discrimination. The current thesis results suggest the potentially important role of collective self-esteem in understanding how depression and psychological well-being could be lessened and increase, respectively, when experiencing prejudice and discrimination for racial and sexual minorities.

Future research should look to conduct a similar study in different areas of the United States to see if the results of the study are replicated or different. Additionally, future researchers could look to see if intersectional identities are greater affected by discrimination. In this study, the data set analyzed two subgroups: White and LGB and Black/Latino and LGB. Researchers could examine the differences and similarities between Black/Latino and Straight folks and Black/Latino and LGB folks. Furthermore, future similar studies should incorporate more racial/ethnic identities and sexual identities.

GROUP IDENTITY AND COMMUNITY BELONGINGNESS AS MODERATORS

APPENDIX A

Results Tables and Figures

Table A1

Descriptive Statistics (Total N = 396)

	ED	PWB	Depression (CES-D)	Group Identity		Community Participation		CSE
				LGB	RM	LGB	RM	
Valid N	396	396	395	396	262	396	262	396
Mean	2.42	5.37	0.71	3.11	2.83	1.94	1.54	5.20
Median	2.44	5.47	0.55	3.00	3.00	2.00	1.00	5.27
Mode	2.50	5.53	0.55	3.00	3.00	1.00	.00	6.00
SD	0.62	0.75	0.56	0.72	0.81	1.72	1.56	0.88
Variance	0.38	0.58	0.32	0.52	0.65	2.96	2.44	0.78
Skewness	-0.06	-0.40	1.20	-0.67	-0.47	0.88	0.87	-0.18
SE Skewness	0.12	0.12	0.12	0.12	0.15	0.12	0.15	0.12
Kurtosis	-0.19	-0.18	1.28	0.66	-0.09	0.23	0.01	-0.51
SE Kurtosis	0.25	0.25	0.25	0.25	0.30	0.25	0.30	0.25

Note. ED = Everyday Discrimination, PWB = Psychological Well Being; LGB = Lesbian, Gay, Bisexual; RM = Racial Minority; CSE = Collective Self Esteem

Table A2*Bivariate Correlations*

	PWB	Depression	Group Identity		Community Participation		CSE
			RM	LGB	RM	LGB	
ED	-0.25**	0.28**	0.10	0.00	0.17**	0.19**	-0.05
PWB		-0.54**	0.09	0.03	0.03	0.08	0.44**
Depression			-0.00	0.08	0.08	-0.05	-0.28**
Group Identity RM				0.22**	0.19**	-0.01	0.18**
Group Identity LGB					0.15*	0.19**	0.25**
Community Participation RM						0.54**	0.24**
Community Participation LGB							0.27**

Note. ED = Everyday Discrimination, PWB = Psychological Well Being; LGB = Lesbian, Gay, Bisexual; RM = Racial Minority; CSE = Collective Self Esteem. **Correlation is significant at the 0.01 level (2-tailed)

Table A3*Results of Sequential Regression Models for Predicting Depression in White and LGB Subgroup*

Predictors	Bivariate Regression		Multiple Regression (No Interaction)		Multiple Regression (Interaction)	
	Unstd Coeff.	Std Coeff.	Unstd Coeff.	Std Coeff.	Unstd Coeff.	Std Coeff.
Constant	-0.10		-0.39		-0.15	
Everyday Discrimination	0.32**	0.33	0.33**	0.34	0.46	1.70
LGB Group Identity			0.09	0.11	0.18	0.99
LGB Group Identity x Discrimination					-0.07	-0.52
Predictors			Unstd Coeff.	Std Coeff.	Unstd Coeff.	Std Coeff.
Constant			0.83*			
Everyday Discrimination			0.27**	0.28		
Collective Self-Esteem (CSE)			-0.15**	-2.36		
Community Participation (CP)			-0.00	-0.00		
Predictors					Std Coeff.	Unstd Coeff.
Constant					0.32	
Everyday Discrimination					0.73	0.76

Collective Self-Esteem (CSE)	-0.01	-0.02
CSE x Discrimination	-0.12	-0.49
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Predictors	Std Coeff.	Unstd Coeff.
Constant	-0.17	
Everyday Discrimination	0.38**	0.39
Community Participation (CP)	0.04	0.13
CP x Discrimination	-0.02	-0.21
<hr/>		

Table A4*Results of Sequential Regression Models for Predicting Psychological Well-Being in White and LGB Subgroup*

Predictors	Bivariate Regression		Multiple Regression (No Interaction)		Multiple Regression (Interaction)	
	Unstd Coeff.	Std Coeff.	Unstd Coeff.	Unstd Coeff.	Std Coeff.	Unstd Coeff.
Constant	6.75**		6.81**		5.99**	
Everyday Discrimination	-0.53**	-0.40	-0.53**	-0.40	-0.33	-0.24
LGB Group Identity			-0.02	-0.02	0.13	0.10
LGB Group Identity x Discrimination					-0.10	-0.19
Predictors			Unstd Coeff.	Std Coeff.		
Constant			4.77**			
Everyday Discrimination			-0.44**	-0.32		
Collective Self-Esteem (CSE)			0.32**	0.36		
Community Participation (CP)			0.01	0.03		
Predictors					Unstd Coeff.	Std Coeff.
Constant					4.55**	
Everyday Discrimination					-0.36	-0.27

Collective Self-Esteem (CSE)	0.35	0.39
CSE x Discrimination	-0.02	-0.06
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Predictors	Unstd Coeff.	Std Coeff.
Constant	6.31**	
Everyday Discrimination	-0.67**	-0.50
Community Participation (CP)	-0.08	-0.21
CP x Discrimination	0.05	0.34

**Coefficient is significant at the .01 level (2-tailed)

Table A5*Results of Sequential Regression Models for Predicting Depression in the Black/Latino and LGB Subgroup*

Predictors	Bivariate Regression		Multiple Regression (No Interaction)		Multiple Regression (Interaction)	
	Unstd Coeff.	Std Coeff.	Unstd Coeff.	Std Coeff.	Unstd Coeff.	Std Coeff.
Constant	0.08		-0.00		0.30	
Everyday Discrimination	0.27**	0.30	0.27**	0.23	0.27	1.70
Group Identity - LGB			0.06	0.08	0.06	0.98
Group Identity - RM			-0.04	-0.06	-0.05	-0.07
Group Identity LGB x Discrimination					-0.00	-0.01
Group Identity RM x Discrimination					0.00	0.02
Predictors			Unstd Coeff.	Std Coeff.		
Constant			0.96**			
Everyday Discrimination			0.27**	0.30		
Collective Self-Esteem (CSE)			-0.18**	-0.27		
Community Participation (CP) LGB			-0.05	-0.16		
Community Participation (CP) (RM)			0.06*	0.16		

Predictors	Unstd Coeff.	Std Coeff.
Constant	0.33	
Everyday Discrimination	0.74**	0.81
Collective Self-Esteem (CSE)	0.00	0.01
CSE x Discrimination	-0.12*	-0.60
Predictors	Unstd Coeff.	Std Coeff.
Constant	0.38**	
Everyday Discrimination	0.28**	0.31
CP LGB	-0.03	-0.08
CP RM	0.01	0.04
CP LGB x Discrimination	-0.02	-0.12
CP RM x Discrimination	0.02	0.11

Table A6*Results of Sequential Regression Models for Predicting Psychological Well-Being in the Black/Latino and LGB Subgroup*

Predictors	Bivariate Regression		Multiple Regression (No Interaction)		Multiple Regression (Interaction)	
	Unstd Coeff.	Std Coeff.	Unstd Coeff.	Std Coeff.	Unstd Coeff.	Std Coeff.
Constant	5.84**		5.33**		5.72**	
Everyday Discrimination	-0.22**	-0.18	-0.23**	-0.19	-0.46*	-0.38
Group Identity LGB			0.02	0.02	0.00	0.00
Group Identity RM			0.10	0.10	-0.05	-0.05
Group Identity LGB x Discrimination					0.02	0.04
Group Identity RM x Discrimination					0.11	0.25
Predictors			Unstd Coeff.	Std Coeff.		
Constant			4.00**			
Everyday Discrimination			-0.23**	-0.19		
Collective Self-Esteem (CSE)			0.37**	0.43		
Community Participation (CP) (LGB)			0.02	0.04		
Community Participation (CP) (RM)			-0.03	0.07		

Predictors	Unstd Coeff.	Std Coeff.
Constant	5.05**	
Everyday Discrimination	-0.89**	-0.30
Collective Self-Esteem (CSE)	0.14	0.12
CSE x Discrimination	0.15	0.58
Predictors	Unstd Coeff.	Std Coeff.
Constant	5.497**	
Everyday Discrimination	-0.21	-0.17
CP LGB	0.22	0.46
CP RM	-0.07	-0.14
CP LGB x Discrimination	-0.06	-0.35
CP RM x Discrimination	0.04	0.14

*Coefficient is significant at the .05 level (2-tailed), **coefficient is significant at the .01 level (2-tailed)

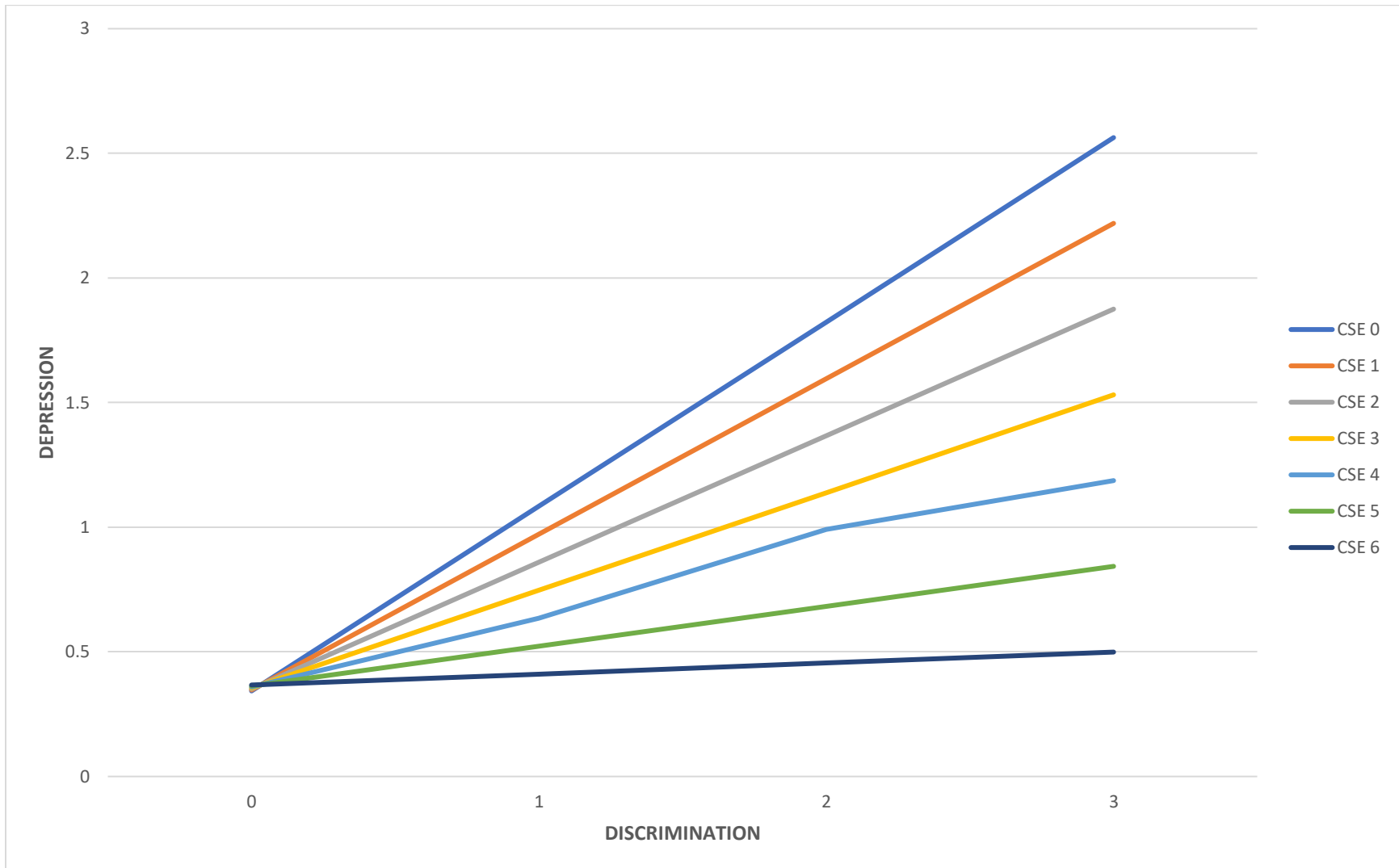
Table A7*Breakdown of Gender and Age*

Average Age of Participants		32.43 years
Gender	Males	198*
	Females	198*

*Number of participants

Figure A1

The Relationship between Discrimination and Depressive Symptoms at Varying Levels of Collective Self Esteem



APPENDIX B

Listed Items of Each Measure

Table B1

Everyday Discrimination

How often have you...

...been treated with less courtesy than others?

...been treated with less respect than others?

...received poorer services than others in restaurants or stores?

...experienced people treating you as if you're not smart?

...experienced people acting as if they are better than you are?

...experienced people acting as if they are afraid of you?

...experienced people acting as if they think you are dishonest?

...been called names and insulted?

Table B2

Psychological well-being

When I look at the story of my life, I am pleased with how things have turned out so far.

Some people wander aimlessly through life, but I am not one of them.

The demands of everyday life often get me down.

In many ways I feel disappointed about my achievements in life.

Maintaining close relationships has been difficult and frustrating for me.

I live life one day at a time and don't really think about the future.

In general, I feel I am in charge of the situation in which I live.

I am good at managing the responsibilities of daily life.

I sometimes feel as if I've done all there is to do in life.

For me, life has been a continuous process of learning, changing, and growth.

I think it is important to have new experiences that challenge how I think about myself and the world.

People would describe me as a giving person, willing to share my time with others.

I gave up trying to make big improvements or changes in my life a long time ago.

I tend to be influenced by people with strong opinions.

I have not experienced many warm and trusting relationships with others.

I have confidence in my own opinions, even if they are different from the way most other people think.

I judge myself by what I think is important, not by the values of what others think is important.

I have a sense of direction and purpose in my life.

It's difficult for me to voice my own opinions on controversial matters.

I like most aspects of my personality.

Table B3

CES-D

During the past week...

...You were bothered by things that don't usually bother you.

...You did not feel like eating; your appetite was poor.

...You felt that you could not shake off the blues even with help from your family or friends.

...You felt that you were just as good as other people.

...You had trouble keeping your mind on what you were doing.

...You felt depressed.

...You felt that everything was an effort.

...You felt hopeful about the future.

...You thought your life had been a failure.

...You felt fearful.

...Your sleep was restless.

...You were happy.

...You talked less than usual.

...You felt lonely.

...People were unfriendly.

...You enjoyed life.

...You had crying spells

...You felt sad.

...You felt that people dislike you.

...You could not get going.

Table B4

Group Identity

How close do you feel in your ideas and your feelings to the LGB community?

How close do you feel in your ideas and your feelings to the non-gay African American community?

How close do you feel in your ideas and your feelings to the non-gay Hispanic or Latino community?

(Ask of Women Only) How close do you feel in your ideas and your feelings to the feminist community?

Table B5

Community BelongingnessCommunity Participation

In the past year, have you attended any or participated in some other way in any...

...Professional or business group?

...Gym or health club?

...Recreational group activities, such as sports, dance, or theater?

...Religious congregation or a religious social group?

...Political or activist association?

... Twelve-step or other self enhancement program?

... On-line chat groups or discussion groups?

...Web-based organizations or list-serves?

... Charitable or social service organization such as a food kitchen or shelter?

Follow up questions: Is the [Location] heavily attended by

- lesbians, gay men, or bisexuals
- Black/African-Americans

- Latinos

Collective Self-Esteem

I am a worthy member of the social groups I belong to.

I feel I don't have much to offer to the social groups I belong to.

I am a cooperative participant in the social groups I belong to.

I often feel I'm a useless member of my social groups.

I often regret that I belong to some of the social groups I belong to.

In general, I'm glad to be a member of the social groups I belong to.

Overall, I often feel that the social groups of which I am a member are not worthwhile.

I feel good about the social groups I belong to.

Overall, my social groups are considered good by others.

Most people consider my social groups, on the average, to be more ineffective than other social groups.

In general, others respect the social groups that I am a member of.

In general, others think that the social groups I am a member of are unworthy.

Overall, my group memberships have very little to do with how I feel about myself.

The social groups I belong to are an important reflection of who I am.

The social groups I belong to are unimportant to my sense of what kind of person I am.

In general, belonging to social groups is an important part of my self-image.

GROUP IDENTITY AND COMMUNITY BELONGINGNESS AS MODERATORS

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