Does romantic partner support mitigate daily discrimination's association with mental health outcomes for diverse adults?

by

Caroline Gimarc

B.S., Texas Tech University, 2017
M.S., Kansas State University, 2019

AN ABSTRACT OF A DISSERTATION

submitted in partial fulfillment of the requirements for the degree

DOCTOR OF PHILOSOPHY

Department of Applied Human Sciences
College of Health and Human Sciences

KANSAS STATE UNIVERSITY
Manhattan, Kansas

2022

Abstract

Discrimination is ubiquitous across the United States. Discrimination has many negative consequences for mental health, including increased anxiety, depression, and stress. Racial and ethnic minorities may experience greater discrimination, which may put them at greater risk of negative mental health consequences. Theoretically grounded in the Double ABC-X Model and Critical Race Theory, and guided by existing literature, this study tested to what extent partner support and racial/ethnic identity may moderate the associations between discrimination and mental health (e.g., depression, anxiety, and stress). Participants were collected across the United States in a sample of 698 adults involved in a romantic relationship. Data were collected via surveys collected through the Prolific survey website. Greater discrimination was significantly linked with higher depression, anxiety, and stress. More partner support was significantly associated with lower depression, anxiety, and stress. Black participants reported significantly lower depression, anxiety, and stress; whereas Hispanic participants reported significantly higher levels of depression. In most cases, race and ethnicity did not moderate the association between discrimination and mental health outcomes, but Black participants increased at steeper rates in depression and anxiety as discrimination increased, relative to other groups. Partner support was found to be a moderator between discrimination and depression, where those experiencing high levels of discrimination in the context of high partner support reported significantly lower depression than those perceiving low partner supports. Implications of how discrimination is experienced are discussed.

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Table of Contents

List of Figures

List of Tables

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To my Manhattan Running family, you all helped keep me on my toes and motivated to excel in my personal and professional goals. You all got me through it. Gross! To my parents and siblings, thank you for your consistent encouragement and love. You have helped me every step of the way and now get to support me through the end of my time as a student. To my cohort, thank you for always being supportive and excited about my goals. To the KSU CFT program, you all have helped me celebrate my successes and been constant cheerleaders. To my committee, Dr. Amber Vennum, Dr. Chelsea Spencer, and Dr. Don Saucier. Thank you all for fostering my love for public scholarship, research, and teaching. To my major professor, Dr. Jared Durtschi. Thank you for your continued support both in and out of school. It has been a strange few years with many challenges and you have continued to support me.

Dedication

To my Manhattan family, I wouldn’t have finished without you.

Chapter 1 - Introduction

Discrimination continues to be a pervasive and dangerous problem in the United States. Discrimination is defined as unfair or differential treatment of individuals based on an identity that those individuals hold (Phelan et al., 2008). There are many forms that discrimination can take, including: race, age, sexual orientation, gender, religion, socioeconomic status, and more (Potter et al., 2019). More specifically, 65% of Black Americans, 37% of Hispanics, 34% of Asians, and 25% of Whites have stated they felt discriminated against (Horowitz et al., 2019).

Discrimination is a ubiquitous issue in the United States, with large negative consequences for mental health. Discrimination has been associated with higher rates of depression, anxiety, stress, loneliness, and anger (Jochman et al., 2019). All of these mental health outcomes can have a strong negative impact on the person's life. There is also an increased rate of suicidal ideation in people who have experienced discrimination (Oh et al., 2019). The increased levels of depression, anxiety, stress, loneliness, anger, and suicidal ideation are concerning and indicate a need to better understand the connection that discrimination has with mental health. Risk factors can be identified for professionals working with individuals who experience discrimination.

Given how common discrimination is and its known negative effects on mental health, it is important to understand potential protective factors that to some degree may assuage these expected negative effects from discrimination. For many, when stressful events occur, a romantic partner is the person initially sought after for comfort and soothing. A partner is someone who has the ability to listen to concerns and accept lived experiences (Kappen et al., 2018). When a partner is able to listen, people can feel supported and this support offers a degree of protection and buffering from discrimination's poisonous effects (Seluck et al., 2017). If support from a

romantic partner has the ability to lessen the impact of some mental health concerns, it may also be able to lessen the impact of discrimination for those experiencing it. There are several instances of how belonging to a specific racial or ethnic group would moderate the relationship between discrimination and negative mental health outcomes in such instances, including a significant increase in negative mental health outcomes as a result of discrimination (Kalibatseva et al., 2020; Lardier et al., 2017).

There is more information to be discovered when it comes to discrimination, mental health outcomes, and support. Although it is known that the moderating effect of *general* support can help lessen the impacts of discrimination on mental health, it is unknown how *partner* support can moderate this association (Basar & Oz, 2016; Hope et al., 2017). Moreover, the potential moderating effect of romantic partner support in the associations between discrimination and mental health are expected to differ by racial and ethnic identity. For example, if some groups experience more frequent and intense discrimination, it is plausible that some groups are at even greater risk of discrimination affecting mental health. This study will advance what is known in regards to discrimination and mental health by looking at a diverse sample of 698 adults in romantic relationships during August 2020—in the midst of the coronavirus pandemic, a hostile presidential election season, and the police violence that sparked the Black Lives Matter movement. This study will look at how discrimination during this stressful period affected mental health in a diverse national sample, and what factors put some people at greater risk (e.g., racial and ethnic identity), and what factors may be protective for individuals (e.g., romantic partner support). Implications from these findings can shed light on important novel methods that may be useful for prevention and clinical treatment of those coping with discrimination.

Chapter 2 - Literature Review

Discrimination is a very difficult experience and has the potential to lead to negative consequences, such as depression, anxiety, and stress. A pileup of events—including discrimination—can cause more stress within a system, or relationship, that can impact how individuals interpret their experiences. Partner support may serve as a protective factor between discrimination and depression, anxiety, and stress. This work is largely informed by the Double ABC-X model, which builds an understanding around the impact of stressful events on a system, the perception of those events, and how resources play a part in adapting to future events.

Theoretical Framework – Double ABC-X Model

The Double ABC-X model shows the progression of stressful events over time and their impact on a system of people, such as a couple or family (McCubbin & Patterson, 1983). This is a timely model to consider, as there has been a pileup of stressful events in the lived experience of adults in the United States, such as the COVID-19 pandemic and the 2020 United States Presidential election. The current study focuses on the Double ABC-X model for its applicability in considering the unique stressors that individuals face and how support from romantic partners may contribute to the ability to cope with those stressors.

The "A" (aA) in the double ABC-X model represents a pileup of stressors (McCubbin & Patterson, 1983). Since March of 2020, the stressors include the COVID-19 pandemic, the 2020 United States. presidential election, and many acts of racial violence and discrimination that occurred across the United States (e.g., the death of multiple innocent people due to police brutality and concern over loved ones getting sick with COVID). The impact of these stressors was apparent by the increase in anxiety, substance use, depression, loneliness, isolation, and relational stress (Afifi et al., 2020; van Gelder et al., 2020; WHO, 2020). Each of the events

mentioned (the election, COVID-19, discrimination and racial violence) were all stressful events on their own. When combined, this cumulative effect of multiple stressors magnify and exacerbate each of the other stressors, where the overall perceived stress might be greater than the sum of each individual stressor.

The "B" (bB) in the Double ABC-X model represents existing and new resources (McCubbin & Patterson, 1983). For instance, the system (couple or family) may have access to healthcare resources, sufficient financial resources, or multiple close friends that might make it easier to endure the pileup of stressors. In this case, partner support could be a powerful resource if it allows the individuals within the system greater emotional safety to communicate about the stresses and hurt and able to receive comfort and healing from the partner. Those that have greater resources, such as social support or support from a romantic partner, should be able to cope with the pileup of stressors more effectively.

The "C" (cC) in the Double ABC-X model discusses the perception of the stressful events (McCubbin & Patterson, 1983). For example, an individual may see a person that looks like them killed by police. Another may fear deportation when witnessing this happening to others in their ethnic group. These observations and perceptions color the overall experience and imbue it with meaning. There could be increased fear and stress that the same events could occur to them because of what happened to other people. This perception may lower one's perceived sense of safety and self-worth.

Lastly, the Double "X" (xX) factor describes how the system has adapted based on the stressful events that have occurred and the system's ability to cope with the events based on their resources and perception of the stressors. Using the example above, if in stressful situations such as political stress resulting in discrimination and the COVID-19 pandemic, an individual who

views their partner as supportive may fare better. When higher levels of support exists within the relationship, the couple system may provide a place of healing where the impact from discrimination to stress, depression, and anxiety is assuaged. Putting the model together, a stressor (aA) would be discrimination faced by the participants in the survey. The resources (bB) would be support received from a romantic partner and the perception of the event (cC) would be an individual's depressive, anxiety, or stress symptoms.

Theoretical Framework – Critical Race Theory

Although the Double ABC-X model describes the way in which individuals within a system experiences stress, there are still gaps in why one racial group may experience more or less disparities than another, and the impact this may have on the varying groups of people, such as Black, Asian, Hispanic, and White. Critical Race Theory (CRT) discusses how certain groups of people that experience more privileges than others based on the system that society has created (Delgado & Stefancic, 2001). The first assumption of CRT is that racism is ordinary based on the way society operates. Discrimination is something that happens on a daily basis, based on the groups that are prioritized by society. This ties into the second assumption, that society serves to prioritize White individuals in power, making it difficult for change to occur. This assumption encompasses that colorblindness is not something that helps society. Ignoring the differences individuals have benefits the individuals in power and ignore the disparities some groups of people experience because of their racial, sexual, or other relevant identities.

The third assumption of CRT is that society chooses to ignore what is similar about people and focus on what is different about people. Moving to the fourth assumption, everyone carries multiply identities such as race, sexual orientation, gender expression, and physical health. Some of these identities fit the common culture better than others and some of these

identities are easier to see than others. Based on the space that someone is occupying, individuals may choose to focus on their gender identity more than their racial identity in an attempt to fit in with the group that has more societal power. If certain groups are able to create a society where specific identities are valued, then individuals who do not identify with the valued identities are more likely to experience discrimination than those who more closely align with what has been considered ideal.

Literature Review

Discrimination

Experiencing discrimination has many negative outcomes, such as a pileup of anger, anxiety, loneliness, and depression (Jochman et al., 2019). This aligns with the pileup of stressors described in the Double ABC-X model, that the more stress experienced by the pileup of negative events is going to impact the perception of discrimination across a large timeframe. Similarly, a meta-analysis also found that daily instances of discrimination were associated with poorer mental health outcomes (Potter et al., 2019). This fits with the results found by Lee et al. (2019), stating that racial and ethnic minorities (Black, Asian, and Hispanic) experience more microaggressions on a daily basis than White adults. Experiencing microaggressions at a higher rate could lead to the conclusion that the impact of these events are felt much more acutely than that of White adults (Lee et al., 2019).

To counter the results found in the Potter and colleagues' (2019) article, another study found that Black individuals attending a predominantly White university who experienced daily discrimination were relying on avoidant-type coping methods, such as just ignoring the discrimination or shoving it off as if it did not happen (Vassilliere et al., 2016). Their avoidant methods were associated with higher levels of distress, depressive symptoms, and lower

satisfaction. When the resource of other members of the same identity community were not as readily present, the perception of the stressful events led to maladaptation on the part of the participants in this study. This could partially be due to exposure to daily discrimination events and pressure to assimilate as the result of coping with threats to identity (Jochman et al., 2019).

The impacts of daily discrimination experiences, such as being treated rudely or followed around in a store are severe, impacting individuals socially, economically, educationally, mentally, and physically (Cenat et al., 2021). Those who have encountered more discrimination events on a regular basis are more likely to perceive their situation as worse than those who have experienced less discrimination events (Doyle & Molix, 2015). The outcome of these experiences with discrimination are commonly reported as increased emotional dysregulation and higher emotional reactivity (Doyle & Molix, 2014).

Discrimination and Depression. Discrimination is highly correlated with depressive symptoms. For instance, in a study analyzing racially diverse adolescents, discrimination was associated with poor mental health outcomes, such as depression (Yip, 2015). The association between discrimination and increased depressive symptoms is not unique to racial identity. Those identifying as gender minorities (transgender or gender fluid) and experiencing discrimination on a daily basis were associated with more symptoms of depression, which were often coped with through disconnection from social supports (Puckett et al., 2019). Social withdrawal is also a symptom of depression, which can perpetuate feelings of depression as a result of daily discrimination if those who are being discriminated against are unable to reach out to the necessary social supports. Carter et al. (2016) and Popa-Velea et al. (2019) both draw attention to the high depression rates for individuals who have been discriminated against in association with their racial identity and sexual orientation. The consequences of discrimination

on depressive symptoms are apparent and severe. Similar trends can be tracked when observing the association between discrimination experiences and anxiety.

Discrimination and Anxiety. Discrimination is also closely associated with heightened anxiety symptoms (Lowe et al., 2018; Yip, 2015). Higher levels of experiencing racial discrimination were associated with higher levels of anxiety symptoms and coped with through internalization of the events (Sosoo et al., 2020). Specifically for emerging adults who identified as Hispanic, anxiety acted as a moderator, amplifying the relationship between daily discrimination and suicidal ideation (Cheref et al., 2019). This serves as evidence about the interaction between anxiety symptoms and depressive symptoms. If anxiety and depressive symptoms were not enough, stress serves as an additional negative consequence of daily discrimination.

Discrimination and Stress. Discrimination is also robustly associated with higher stress (Ramon-Arbues et al., 2020; Sutin et al., 2016). For sexual and gender minorities, daily discrimination experiences were highly correlated with an increase in day-to-day stress, as well as an increase in nicotine, alcohol, and drug use (Livingston et al., 2018). One study found that a large source of stress for Black individuals was fear of being pulled over by the police, and consequences associated with this stress were highlighted to be long-term (Miller & Vittrup, 2020). A lack of control over a situation, such as being stopped by the police, also contributes to a heightened sense of stress (Folkman, 2010). Across the board, individuals who were experiencing unfair treatment based on a characteristic about themselves, such as their weight, reported higher levels of day-to-day stress than those who did not experience the discrimination (Sutin et al., 2016). All of these examples serve as evidence that greater exposure to discrimination is associated with elevated stress.

Race

Historically, varying racial and ethnic groups across the United States have experienced discrimination and various mental health consequences unique to each racial and ethnic group. Discrimination events can include being followed around in stores, being told to "speak the language", or an increased fear about how they will be treated during run-ins with the police (Azab & Clark, 2017; Miller & Vittrup, 2020). In recent years, there have been several policies that uniquely impact Hispanic-identifying individuals surrounding their potential deportation (Wray-Lake et al., 2018). An increased fear of getting deported has also been connected to extreme levels of anxiety. Although numerous Hispanic individuals are United States citizens and may not fear being deported, there is still an environment created where Hispanic adults may not feel welcome in the United States. Black-identifying individuals have experienced more discrimination during interactions with the police than other racial groups (Miller & Vittrup, 2020). With the onset of COVID-19, Asian Americans have faced increased rates of xenophobia as a result of "bringing the pandemic here" (Litam, 2020; Perry et al., 2021). Increased levels of xenophobia have been associated with negative mental health outcomes such as anxiety, major depression, alcohol/drug abuse, and PTSD (Litam, 2020).

Although each racial and ethnic group have their own unique ways of experiencing discrimination, it is important to point out that the rate at which the groups experience discrimination is substantially different. For instance, 61% of Asian Americans compared to 52% Black, 46% Hispanic, and 37% White Americans have been subject to slurs or jokes (Horowitz et al., 2019). Black Americans (60%) also report people acting as though "they were not smart" more than the other racial groups with Hispanics at 48%, Asians at 36%, and Whites at 26%. It is already known that discrimination has large negative consequences on mental health, such as

depression, anxiety, and stress (Jochman et al., 2019). When it comes to theory, CRT describes a prioritization of one group over the others. In the United States, the country was built on a foundation that supports White individuals (Delgado & Stefancic, 2001). Thus, Black, Hispanic, and Asian Americans may have exacerbated symptoms of depression, anxiety, and stress as a result of not feeling as valued in society (Lee et al., 2019).

The associations between discrimination and mental health (anxiety, depression, stress) are expected to vary in magnitude based on racial and ethnic identity, due to differences in frequency and intensity of discrimination experiences by various groups (Horrowitz et al., 2019). For example, a Black woman may experience substantially more discrimination than a White man, and these experiences are expected to magnify the strength of the associations between discrimination and mental health for her. This may in part be due to the idea of White privilege and White fragility, that White individuals may be weaker in their response to how they handle discrimination, as they have less experience with it (Ng et al., 2020). Asians may also deal with discrimination differently due to society often labeling them a "model minority" (Kent et al., 2020). Considering all of the negative consequences of racial discrimination highlighted through its impact on depression, anxiety, and stress, we now pivot to bring awareness to potential protective factors.

There are a few instances where racial/ethnic identification, either Hispanic, Asian, or Black, was found to moderate the relationship between discrimination and depression. For instance, when looking at minority status, depression, and suicidality among counseling service clients, participants who identified as more than one minority were at a much higher risk for depression and suicidality (Kalibatseva et al., 2020). This fits along with CRT, stating that people hold many identities as well as highlighting the challenges of holding many minority

statuses means that individuals are not a part of the culture benefited by the system. Similarly, another study found that Hispanic sexual minority adolescents were also at an increased risk for depression and suicidal ideation from discrimination (Lardier et al., 2017). Lastly, identifying as Black also associated with an increase in depressive symptoms when facing daily discrimination (Mereish et al., 2016). These studies do not look specifically at anxiety or stress, although it is our hypothesis that race will also moderate these outcomes as anxiety and stress are also highly associated with discrimination. It is also important to focus on what may buffer the relationship between daily discrimination and mental health.

Partner Support

Support from a partner can be important in lessening the impact of discrimination to mental health outcomes. Strong partner support can lead to an increase in overall relational satisfaction and an increase in quality of life (Panayiotou & Karekla, 2013; Porter & Chambless, 2017). Lower partner support was associated with higher levels of depression and anxiety, whereas high levels of partner support were associated with lower levels of stress (Civitci, 2015; Schnapp et al., 2019).

There is little research that has been conducted on the potential moderating role partner support may play between discrimination and mental health. However, there is a body of literature that has found associations of other sources of support moderating the relationship between discrimination and mental health outcomes. First, higher levels of discrimination and lower levels of support led to more mental health concerns during the pandemic for Asian Americans (Lee & Waters, 2021). This highlights the importance of romantic partner support. One study did see the impact of spousal support as a buffer between general discrimination (defined as gender, sexuality, and appearance) and depressive symptoms (Donnelly et al., 2019).

Spousal support was also found to mitigate psychological distress as a result of unfair treatment in Asian Americans where social support did not (Rollock & Lui, 2016). This emphasizes that there is something unique about the romantic relationship that could contribute to the buffering effect romantic partner support has on mental health outcomes. Similar results were found for Black couples when faced with discrimination. Couples who supported more effectively around discrimination led to overall better mental health (Smith et al., 2020).

In addition to these examples, there are several other instances where support has been helpful in mitigating the impacts of negative mental health from discrimination. Peer support was found to be a protective factor when looking at the association between discrimination and negative mental health outcomes (Basar & Oz, 2016). Similarly, religious support was also found to mitigate some of the strong associations between discrimination and psychiatric disorders such as depression, anxiety, and substance use (Hope et al., 2017). One last example of this association was parental support in transgender individuals. In this case, parental support was found to serve as a protective factor between discrimination and psychological stress (Wilson et al., 2016). All of these examples illustrate the impact that support of varying kinds may have, as well as identify gaps in the literature that show the moderating effects of romantic partner support between discrimination and depression, anxiety, and stress. This illustrates the necessity for this study in order to better understand how romantic partner support can be a protective factor between discrimination and depression, anxiety, and stress.

Present Study

Data from 698 racially and ethnically diverse adults were collected from across the United States. in order to gain clarity on the associations between discrimination and mental health for diverse groups, and to examine partner support as a potential protective factor in these

associations. The following research questions were explored in this paper: RQ1. To what extent were higher scores on daily discrimination experiences associated with depression, anxiety, and stress? RQ2. To what extent were the associations between daily discrimination and depression, anxiety, and stress moderated by racial and ethnic group (Black, Asian, Hispanic, White)? RQ3. To what extent were the associations between daily discrimination and depression, anxiety, and stress moderated by romantic partner support?

In order to increase confidence in the results from this study, several relevant control variables were incorporated into the study design, including: income, age, gender identity, sexual orientation, and how important religion is in the participants' lives. These five control variables were chosen because, outside of race, socioeconomic status, age, gender, sexual orientation, and religion are common reasons people experience discrimination and are linked with mental health (Potter et al., 2019). Holding multiple minority statuses was also associated with poorer mental health, such as depression (Kalibatseva et al., 2020).

Chapter 3 - Method

Data and Sample

Data were gathered through a Qualtrics survey published on the Prolific professional survey website. Prolific was chosen for its ability to target specific populations of diverse individuals in romantic relationships across the United States. Prolific allowed data to be collected very quickly and compensates participants accordingly, $3.00 per participant for the completed survey. Participants took on average 20 minutes to complete the survey. Since Prolific compensates their participants, the rate of missing data within the data set was very low and of high quality. Funds to pay participant were provided by the Robert H. Poresky Assistantship in the Department of Applied Human Studies at Kansas State University.

In order to gain a racially diverse sample, data were intentionally collected from 202 Black-identifying individuals, 179 Hispanic-identifying individuals, 178 Asian-identifying individuals, and 139 White-identifying individuals. The study was designed to take between 15 and 20 minutes to complete. In the larger project from which this study was a part, we gathered data in August 2020 on a variety of topics including mental health, COVID-19 and the 2020 Presidential election, drug and alcohol use, relationship dynamics, self-care, and more.

In this survey, inclusion criteria consisted of participants being over the age of 18, living in the United States, and in a relationship (e.g., dating, engaged, or married). These inclusion criteria were selected based on the rationale of studying adults who lived in the United States. who experienced the current events of that time period, and who had a romantic partner to see to what extent this partner's support helped the participant. This inclusion criteria provided 699 people. One individual was dropped as they were not in a romantic relationship leaving a final operational sample of 698 total participants used in the current analyses. The average age of

participant was 27.54 years (*SD* = 8.47, see Table 3.2). LGBTQ-identifying participants (*n* = 145) represented 20.8% of the sample while 60.0% of the sample were women (*n* = 419). There was a good distribution of income, ranging from $24,999 or less (14%) up to $150,000 or more (10.6%).

Table 3.1. *Descriptive statistics (N = 698).*

Variable	*M (%)*	*SD*	*Range*
Age	27.54	8.47	18-67
Religion Importance	2.79	1.56	1-5
Gender Identification			
Woman	60.0%	-	0-1
Man	36.8%	-	0-1
Nonbinary	3.2%	-	0-1
Sexual Orientation			
Straight	79.2%	-	0-1
LGBTQ	20.8%	-	0-1
Income			
$24,999 or less	14.0%	-	-
$25,000-$49,999	19.6%	-	-
$50,000-$74,999	20.8%	-	-
$75,000-$99,999	14.3%	-	-
$100,000-$124,999	12.3%	-	-
$125,000-$149,999	8.3%	-	-
$150,000 or more	10.6%	-	-

Table 3.2. *Sample characteristics (N = 698).*

Variable	Overall		Black		Asian		Hispanic		White	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Discrimination[a]	2.36	0.98	2.53	1.09	2.17	0.81	2.24	0.88	2.53	1.07
Depression[a]	2.61	1.20	2.32	1.18	2.62	1.17	2.80	1.22	2.75	1.20
Anxiety[b]	2.05	0.81	1.83	0.79	2.09	0.81	2.19	0.80	2.14	0.80
Perceived Stress[c]	2.81	0.79	2.50	0.81	2.91	0.77	3.00	0.78	2.92	0.69
Partner Support[c]	4.00	0.68	4.08	0.65	4.03	0.64	4.04	0.71	3.79	0.67

[a]Range 1-6. [b]Range 1-4. [c]Range 1-5.

Measures

Predictor

Discrimination. Discrimination was measured using the Everyday Discrimination Scale (Williams et al., 1997). Nine questions assessed on a six-point Likert scale from 1 (*never*) to 6

(*almost every day*) were asked. Participants were instructed to think about experiences they have in their day-to-day life and assess how frequently they happened. Questions included "you are treated with less respect than other people are" and "people act as if they are afraid of you." The responses to the nine questions were then averaged to give each participant a score from 1 to 6. This measure was found to be reliable with an alpha of .91. This measure and each of the other measures were also tested to ensure a reliable alpha for each particular racial or ethnic group. All alphas were similar and acceptable across the varying groups.

Outcomes

Depression. Depression was measured using the Major Depression Inventory (MDI; Olsen et al., 2003). The scale has twelve questions, but only ten are averaged together to create each participant's score. Participants were asked to think how much of the time over the past two weeks they "…felt you lost interest in your daily activities" and "…had difficulty in concentrating." The measure was assessed on a six-point Likert scale ranging from 1 (*at no time*) to 6 (*all the time*). The higher score of the two questions "have you felt very restless" and "have you felt subdued" is taken into account when calculating the final score and the lower is dropped. Similarly, the higher score of the following two questions is taken into account while the lower is dropped: "have you suffered from reduced appetite" and "have you suffered from increased appetite." This measure was reliable with an alpha of .93.

Anxiety. Anxiety was assessed using the Generalized Anxiety Disorder-7 survey (GAD-7; Spitzer et al., 2006). The seven questions ranged from 1 (*not at all*) to 4 (*nearly every day*). Similar to the MDI, the GAD-7 asks participants to think about how often they have had problems over the past two weeks such as "feeling nervous, anxious, or on edge" and "worrying

too much about different things." The responses were then averaged to give each participant a score ranging from 1 to 4. This measure was found to be reliable with an alpha of .92.

Perceived stress. Perceived stress was assessed using the Perceived Stress Scale (PSS-4; Cohen et al., 1983). The measure asked how often participants felt a certain way in the last month ranging from 1 (*never*) to 5 (*very often*). The four questions included have you felt "…confident about your ability to handle your personal problems" and "…you were unable to control the important things in your life." To ensure the measure was accurately assessing the level of stress participants were experiencing, a fifth question was added by the researchers, "have you felt overwhelmed with stress." The questions were then averaged to create a score from 1 to 5. The original four questions had a reliable alpha of .70. Correlation tables and an exploratory factor analysis were then used to determine the fit of the added question and reassess the reliability and factor structure of the measure. It was determined that the added question contributed to a higher reliability of the measure, raising the alpha to .78 by adding the question.

Moderators

Partner support. To assess partner support, the Dyadic Coping Inventory (DCI; Bodenmann, 2008) was used. The scale consisted of 11 questions asking about how the participant's partner responds when the participant is feeling stressed. Questions include "my partner blames me for not coping well enough with stress" and "my partner helps me analyze the situation so that I can better face the problem." The questions were assessed from 1 (*very rarely*) to 5 (*very often*). After the appropriate questions were reverse coded so that higher scores indicated greater support, the average of the 11 questions was computed, assigning each participant a score between 1 and 5. The subscales within the DCI are reliable and valid, with an alpha of .88.

Race. Race was assessed by asking participants "what is your racial or ethnic origin?". Participants could choose from four categories: African American/Black, Asian, Hispanic, or Caucasian/White. There were a few individuals that identified as both Caucasian/White and Hispanic. These participants were coded as Hispanic in the final analysis. There was no category for multiracial, due to the sampling procedure with Prolific only asking for a certain number of participants from each racial or ethnic group. The racial/ethnic categories were then separated into four separate variables: Black, Asian, Hispanic, and White. Each of these variables were then dummy coded so that, for instance, those identifying as Black were coded as a 1 and all other participants were coded as a 0. The process was repeated across the four race variables. Caucasian/White was used as the reference group and not included in the analysis. These race variables that were dummy coded, in the analysis results are interpreted as the unstandardized betas as the mean difference between the racial/ethnic category versus white.

Control Variables

Six control variables were included in the final analysis. Income was assessed categorically on a scale of 1 to 7, where a 1 represented an income of $24,999 or less and a 7 represented an income of $150,000 or more. Age was measured in years and ranged from 18 to 67. There were three gender identities in the dataset, men, women, and nonbinary. Both women and nonbinary were included in the final analysis. Women and nonbinary were both dichotomously coded: women (1), not women (0) and nonbinary (1), not nonbinary (0). Participants identifying as men were used as the reference group. Sexual orientation was coded in a similar way where 1 represented LGBTQ-identifying individuals and 0 represented heterosexual individuals. The last control variable was the importance of religion in the participants' lives. This ranged from not important at all (1) to incredibly important (5).

Importance of religion was included as opposed to religious identity in an attempt to better assess how participants view religion as a part of their lives.

Analysis Plan

The data were collected using a Qualtrics survey and then uploaded into SPSS (IBM Corp., 2017). From there, data were carefully screened to assess for outliers, missing data, ensure adequate normal-shaped distributions, and homoscedasticity among the variables of interest. Then, we tested bivariate correlations to assess zero-order correlations. The path analysis was tested in Mplus 8 (Muthen & Muthen, 1998-2017). All three research questions were run at the same time within the same path analysis, as there was sufficient statistical power and sample size in order for the analysis to run simultaneously. Path coefficients were entered from the primary predictor, discrimination, to the three primary outcome variables, depression, anxiety, and stress. In like manner, path coefficients were entered from the control variables to each of the outcome variables, depression, anxiety, and stress. The main effects of the moderator and the interaction effects of the moderator were also entered as regressors to the three mental health outcomes within the same path analysis model. The main effects of the continuous moderator (partner support) and continuous predictor were standardized, and the interaction term was the product of these standardized variables. The main effects for the dummy coded moderator (race) were not standardized, but those dichotomously dummy coded race variables were multiplied by the standardized discrimination variable in the computation of the interaction terms for those moderators. The error variances of the outcome variables (depression, anxiety, stress) were correlated due to shared variance. Any significant interaction effect results were plotted at one standard deviation high and one standard deviation low on the continuous predictor and moderator variable. The model was just-identified. Two models were run and reported in order

to increase the integrity of the design and gain a better understanding of how controls impacted the final results. The first model contained the independent variable of discrimination with the moderating variables of romantic partner support and racial group leading to the outcomes of anxiety, depression, and stress. The second model included the same variables as above but included several control variables. This was done separately as a robustness check of the obtained output. Significance tests were conducted with two-tailed results. In order to reduce the probability of Type II errors, significant results of $p < .10$ were included given the slightly lower power to detect interaction effects.

Chapter 4 - Results

Descriptives and Correlations

The mean discrimination for the sample was 2.36, ranging from 1 to 6 (*SD* = 0.98). Depression had a mean of 2.61, ranging from 1-6 (*SD* = 1.20), anxiety had a mean of 2.05, ranging from 1-4 (*SD* = 0.81) and perceived stress had a mean of 2.81, ranging from 1-5 (*SD* = 0.79). Partner support had a relatively high average of 4.00, ranging from 1-5 (*SD* = 0.68). In terms of racial/ethnic identity, 28.9% of the sample were Black (*n* = 202), 25.6% Asian (*n* = 179), 19.9% White (*n* = 139), and 25.5% Hispanic (*n* = 178). After conducting ANOVA and post-hoc analyses, Black participants had significantly lower scores on anxiety, depression, and stress than the other racial groups ($p < .05$). All of the other racial groups did not significantly differ from each other for their scores in anxiety, depression, or stress ($p < .05$). White participants reported significantly less partner support than the other racial groups. Black and White participants reported significantly more discrimination than that of the other racial groups ($p < .05$).

Table 4.1. *Correlations (N = 698).*

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Income	-										
2. Age	.28**	-									
3. Religion importance	.17**	.35**	-								
4. Nonbinary	-.11**	-.11**	-.13**	-							
5. Women	-.17**	-.42**	-.26**	-.22**	-						
6. LGBTQ	-.15**	-.26**	-.26**	.35**	.12**	-					
7. Anxiety	-.14**	-.28**	-.21**	.14**	.19**	.28**	-				
8. Depression	-.14**	-.23**	-.20**	.17**	.10**	.29**	.81**	-			
9. Stress	-.22**	-.30**	-.25**	.13**	.20**	.29**	.70**	.68**	-		
10. Discrimination	.04	.08*	.14**	.04	-.14**	.09*	.27**	.37**	.25**	-	
11. Partner Support	-.03	-.26**	.01	.04	.05	.10**	-.21**	-.26**	-.18**	-.25**	-

*$p < .05$. **$p < .01$ (two-tailed).

Primary Model- Without Controls

Anxiety

There were two direct effects that were significantly associated with the anxiety outcome. First, Black individuals reported significantly lower anxiety symptoms relative to White participants (b = -.30, p < .001, β = -.17, see Table 4.2). Hispanic and Asian participants did not have significantly different anxiety symptoms than White participants. Second, as the amount of support from a romantic partner increased, anxiety decreased (b = -.11, p < .001, β = -.14). Perhaps surprisingly, discrimination was not found to significantly decrease or increase anxiety.

Two significant moderating effects were found. First, the association between discrimination and anxiety significantly differed for Hispanic participants (b = .15, p = .089, β = .09). As can be seen in Figure 4.1, as levels of discrimination increased, Hispanic individuals experienced significantly more anxiety than White individuals. When low levels of discrimination were experienced, anxiety levels were similar for Hispanic and White participants. Second, identifying as Black also moderated the association between discrimination and anxiety (b = .19, p = .013, β = .14). When experiencing low levels of discrimination, Black individuals experienced less anxiety than White participants (see Figure 4.2). Although Black individuals experienced significantly more anxiety the more discrimination they had been victim to, at all levels of discrimination Black participants reported lower anxiety symptoms relative to White participants.

Table 4.2. *Model results without controls (N = 698).*

Variable	Anxiety			Depression			Stress		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Hispanic	.13	.09	.07	.24**	.12	.09	.14†	.08	.08
Black	-.30***	.09	-.17	-.37**	.12	-.14	-.40***	.08	-.23
Asian	.05	.09	.03	.10	.12	.04	.10	.08	.05
Support	-.11***	.03	-.14	-.21***	.04	-.17	-.08**	.03	-.10
Discrimination	.09	.06	.10	.22*	.09	.19	.12†	.06	.15
Discrimination x Support	.01	.03	.01	-.07†	.04	-.06	.01	.03	.02
Discrimination x Hispanic	.15†	.09	.09	.20	.13	.08	.12	.09	.07
Discrimination x Black	.19*	.08	.14	.28*	.11	.14	.11	.08	.08
Discrimination x Asian	.14	.09	.07	.25†	.13	.09	.16†	.09	.09
Intercept	2.59	.11		2.17	.10		3.64	.12	
R^2	.14			.21			.16		

†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$ (two-tailed).

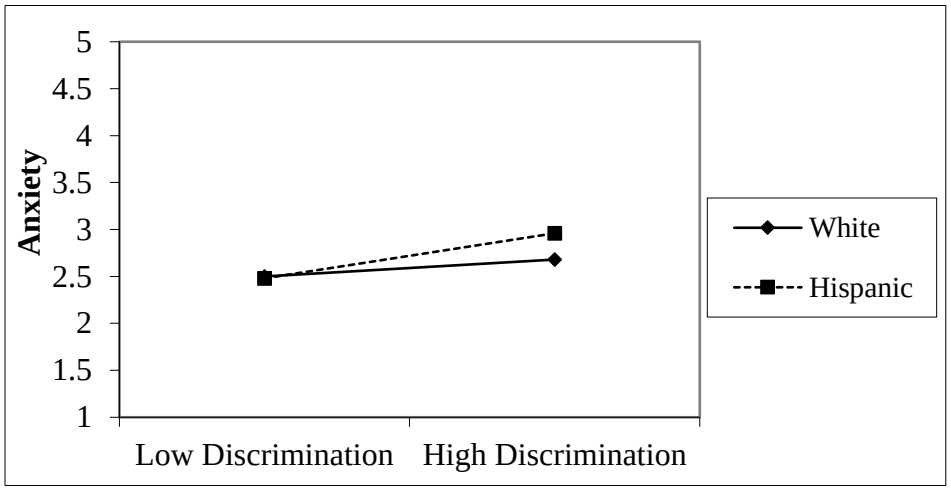

Figure 4.1. *Hispanic individuals moderating the association between discrimination and anxiety, without controls (N = 698).*

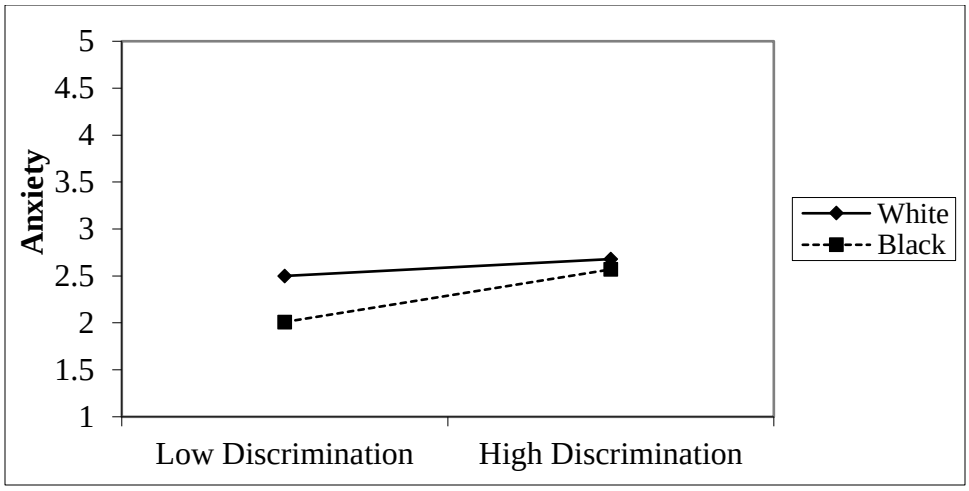

Figure 4.2. *Black individuals moderating the association between discrimination and anxiety, without controls (N = 698).*

Depression

There were several direct pathways significantly associated with the depression outcome. Similar to anxiety symptoms, Black participants reported significantly lower depressive symptoms relative to White participants (b = -.37, p = .003, β = -.14). This differed from Hispanic participants, who experienced significantly higher depressive symptoms than White participants (b = .24, p = .049, β = .09). Asian participants did not have significantly different depressive symptoms than White participants (b = .10, p = .435, β = .04). Discrimination was associated with higher depressive symptoms (b = .22, p = .011, β = .19), whereas more support from a romantic partner was found to be associated with lower depressive symptoms (b = -.21, p < .001, β = -.17).

Along with the significant direct pathways, there were also several pathways found to moderate the relationship to the outcome of depressive symptoms. First, romantic partner support significantly moderated the association between discrimination and depression (b = -.07, p = .097, β = -.06). Figure 4.3 illustrates that as discrimination increased, high amounts of partner

support was associated with lower depressive symptoms. High support was also associated with lower depressive symptoms even when low levels of discrimination were experienced. When experiencing high levels of discrimination, Black participants reported lower depressive symptoms than White participants. With this being said, there was a significant increase in depressive symptoms for Black individuals experiencing high levels of discrimination (b = .28, p = .011, β = .14; see Figure 4.4). For Asian participants, they reported less depressive symptoms versus White participants when reporting less discrimination and high depressive symptoms when reporting more discrimination (b = .25, p = .055, β = .09; see Figure 4.5).

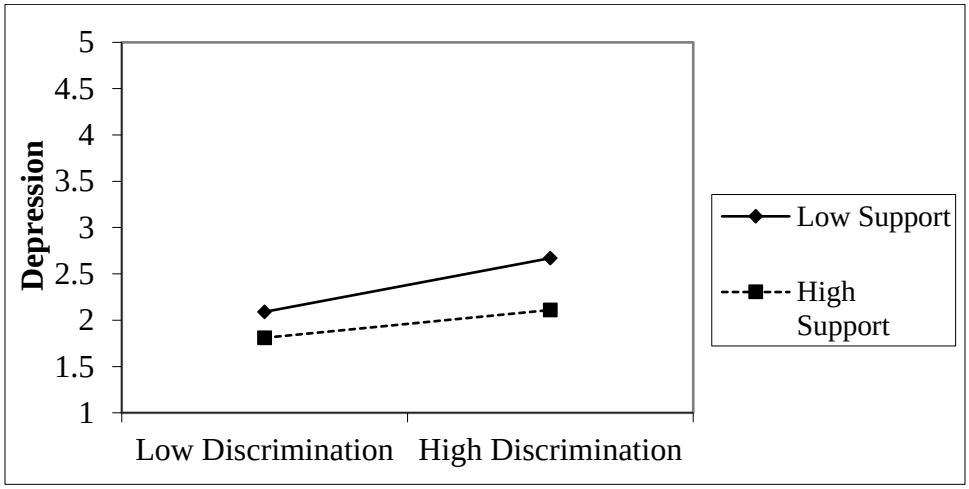

Figure 4.3. *Partner support moderating the association between discrimination and depression, without support.*

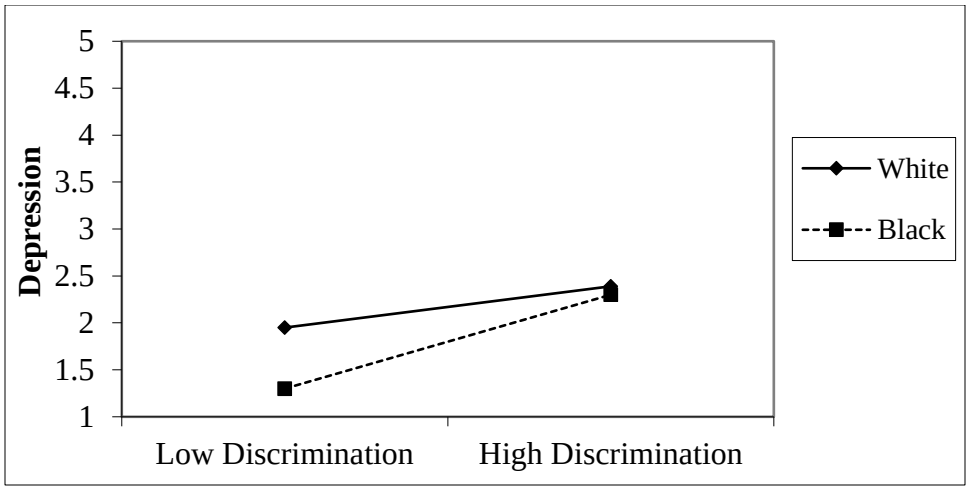

Figure 4.4. *Black individuals moderating the association between discrimination and depression, without controls (N = 698).*

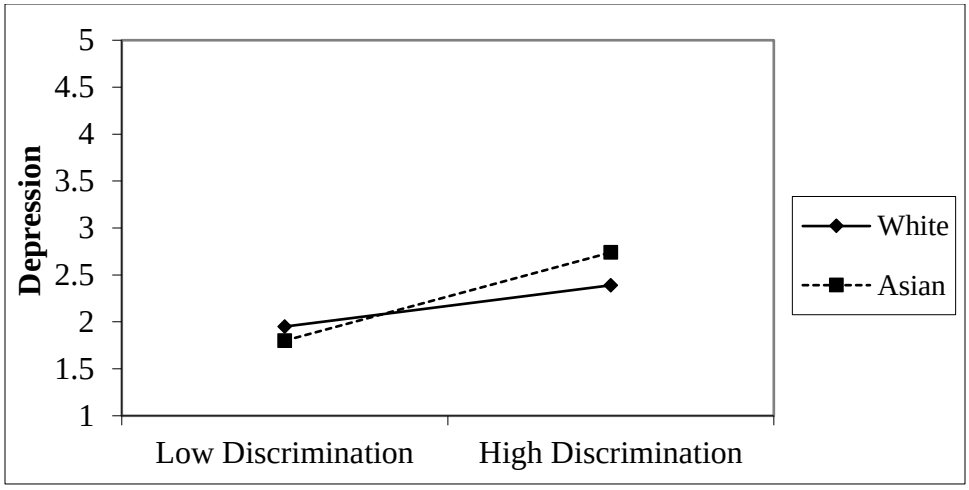

Figure 4.5. *Asian individuals moderating the association between discrimination and depression, without controls (N = 698).*

Stress

Similar trends were seen with the direct effects associated with the outcome variable of stress. Hispanic individuals experienced marginally significantly higher stress symptoms than White participants (b = .24, p = .094, β = .09), whereas Black individuals experienced significantly lower symptoms of stress than White (b = -.37, p < .001, β = -.14). Romantic

partner support followed the same pattern as depression, where higher levels of support were associated with lower levels of stress (b = -.21, p = .004, β = -.17). Also following the trends of both anxiety and depression, higher levels of discrimination were marginally associated with higher levels of stress (b = .22, p = .051, β = .22).

One significant moderation pathway was observed in predicting stress. Asian identifying participants significantly moderated the association between discrimination and stress (b = .16, p = .063, β = .09). As levels of discrimination increased, Asian individuals experienced significantly more stress than White participants. When low levels of discrimination were experienced, Asian and White participants reported similar levels of stress (see Figure 4.6).

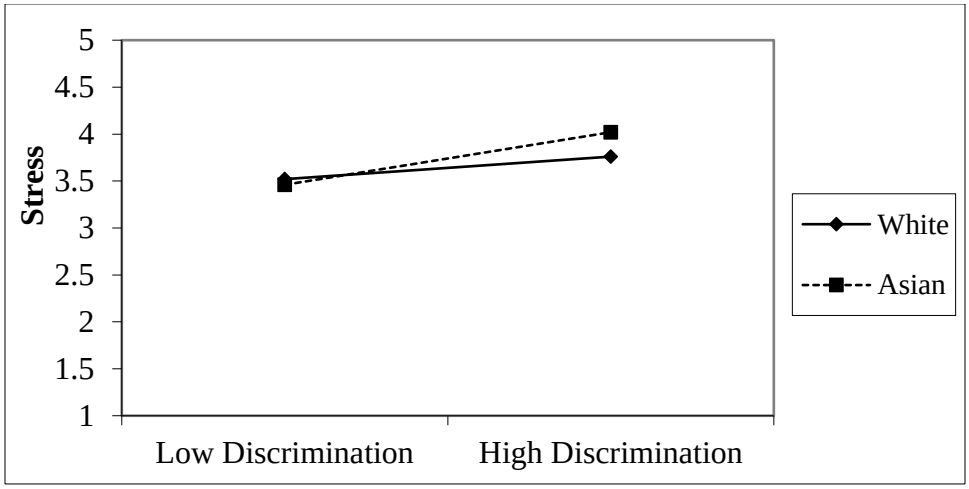

Figure 4.6. *Asian individuals moderating the association between discrimination and stress, without controls (N = 698).*

Primary Model- With Controls

Anxiety

The same model was then tested, but with the inclusion of the five control variables. This was done to double check the reliability of the results. When incorporating control variables, two

direct pathways were found to be significantly associated with the anxiety outcome. As romantic partner support increased, anxiety decreased (b = -.17, p < .001, β = -.20, see Table 4.3). Unsurprisingly, as discrimination increased, anxiety also increased (b = .17, p = .003, β = .21). In the control model, no significant moderation was found. This differed from the previous model where Hispanic- and Black-identifying participants significantly moderated the pathway between discrimination and anxiety.

A number of control variables were also significantly associated with anxiety. Older age was associated with lower anxiety symptoms (b = -.02, p < .001, β = -.23). Individuals identifying as nonbinary reported significantly more anxiety than men (b = .38, p = .025, β = .09). Following this trend, women also reported more anxiety symptoms than men (b = .20, p = .003, β = .12). Those who hold an LGBTQ identity also had higher anxiety versus heterosexual participants (b = .27, p < .001, β = .14). Last, the more important religion is in participant's lives, the lower their reported anxiety (b = -.04, p = .084, β = -.07).

Table 4.3. *Model results with controls (N = 698).*

Variable	Anxiety			Depression			Stress		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Hispanic	-.02	.08	-.01	.04	.12	.01	-.04	.08	-.02
Black	-.12	.08	-.07	-.09	.12	-.03	-.23***	.08	-.13
Asian	-.08	.08	-.04	-.07	.12	-.03	-.03	.08	-.02
Support	-.17***	.03	-.20	-.28***	.04	-.23	-.13***	.03	-.17
Discrimination	.17*	.06	.21	.35***	.08	.29	.22***	.06	.28
Discrimination x Support	-.02	.03	-.03	-.10*	.04	-.08	-.01	.03	-.01
Discrimination x Hispanic	.03	.08	.02	.02	.12	.01	-.01	.08	-.01
Discrimination x Black	.06	.08	.04	.05	.12	.03	-.06	.07	-.05
Discrimination x Asian	-.01	.09	-.00	.03	.12	.01	.00	.08	.00
Income	-.01	.02	-.02	-.02	.02	-.03	-.05**	.02	-.12
Age	-.02***	.00	-.23	-.03***	.01	-.23	-.02***	.00	-.21
Nonbinary	.38*	.17	.09	.62*	.24	.09	.19	.16	.04
Woman	.20**	.07	.12	.12	.09	.12	.13*	.06	.08
LGBTQ	.27***	.07	.14	.44***	.12	.03	.29***	.07	.15
Religion	-.04†	.02	-.07	-.07*	.03	.23	-.05*	.02	-.09
Intercept	2.65	.16		3.60	.23		3.60	.16	
R^2	.27			.33			.29		

†p < .10. *p < .05. **p < .01. ***p < .001 (two-tailed).

Depression

Two direct pathways were significantly associated with the depression outcome when incorporating control variables. Following previous trends from the model without controls, support from a romantic partner was associated with lower depressive symptoms (b = -.28, p < .001, β = -.23). As discrimination increased, participants reported higher depressive symptoms (b = .35, p < .001, β = .29). Again, similar to the model without controls, one pathway was found to moderate the relationship between discrimination and the outcome of depressive symptoms: Low support from a romantic partner was associated with higher depression when participants reported both low levels and high levels of discrimination. Conversely, in the context of high levels of support, individuals reported lower symptoms of depression whether or not they were experiencing low or high levels of discrimination (b = -.10, p = .012, β = -.08, see Figure 4.7).

There were four control variables significantly associated with the outcome of depression. Older participants reported less depression versus younger participants (b = -.03, p < .001, β = -.23). Nonbinary individuals reported significantly more depression than men (b = .62, p = .011, β = .09) and LGBTQ participants also reported more symptoms of depression versus heterosexual counterparts (b = .44, p < .001, β = .15). Individuals who viewed religion as more important reported significantly less depression versus those who did not view religion as important (b = -.07, p = .012, β = -.10).

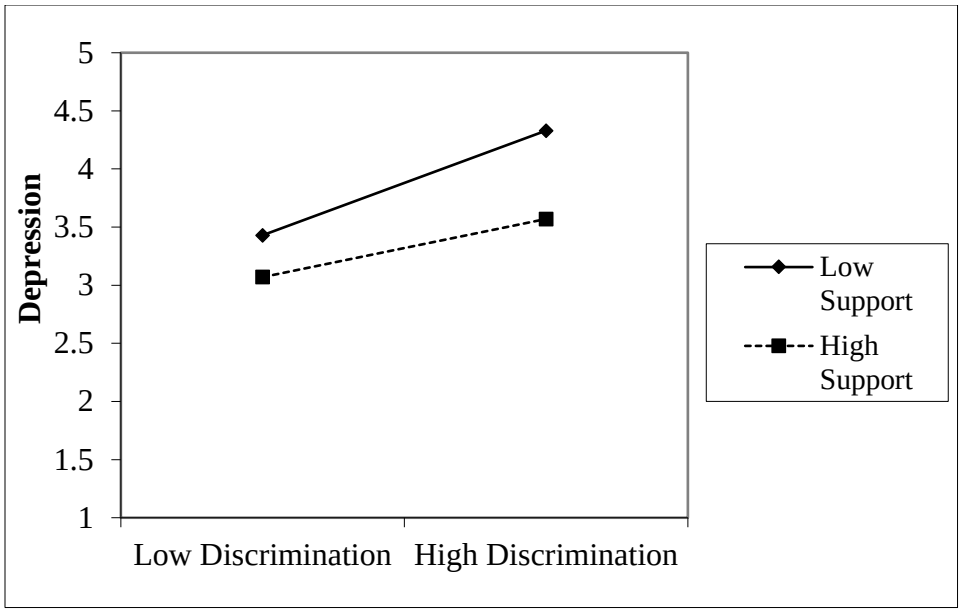

Figure 4.7. *Partner support moderating the association between discrimination and depression, with controls (N = 698).*

Stress

Several direct effects were associated with the outcome variable of stress after control variables were included. First, Black participants reported lower levels of stress than White participants (b = -.23, p = .003, β = -.13). This follows the same pattern of the model without control variables. Romantic partner support was associated with less stress (b = -.13, p < .001, β = -.17), whereas more discrimination was associated with more stress (b = .22, p < .001, β = .28). No moderation was found in this model when looking at the outcome variable stress.

Five control variables were associated with stress. The higher income participants earned, the less stress they reported (b = -.05, p = .001, β = -.12). Following a similar direction, older participants also reported less stress (b = -.02, p < .001, β = -.21). Women participants reported higher stress levels than men (b = .13, p = .036, β = .08). LGBTQ individuals also reported higher levels of stress than heterosexual individuals (b = .29, p < .001, β = -.09). Last, the more important religion was to the participants, the less stress they reported (b = -.05, p = .022, β = -

.09). Table 4.4 serves as a comparison between the model without controls and the model with controls.

Table 4.4. *Comparison of model without controls and model with controls, unstandardized betas (N =698).*

Variable	Anxiety		Depression		Stress	
	Without Controls	With Controls	Without Controls	With Controls	Without Controls	With Controls
Hispanic	.13	-.02	.24**	.04	.14†	-.04
Black	-.30***	-.12	-.37**	-.09	-.40***	-.23**
Asian	.05	-.08	.10	-.07	.10	-.03
Support	-.11***	-.17***	-.21***	-.38***	-.08**	-.13***
Discrimination	.09	.17**	.22*	.35***	.12†	.22***
Discrimination x Support	.01	-.02	-.07†	-.10*	.01	-.01
Discrimination x Hispanic	.15†	.03	.20	.02	.12	-.01
Discrimination x Black	.19*	.06	.28*	.05	.11	-.06
Discrimination x Asian	.14	-.01	.25†	.03	.16†	.00

†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$ (two-tailed).

Chapter 5 - Discussion

The results from this study followed the results of previous studies (Jochman et al., 2019), showing that discrimination is associated with increased anxiety, stress, and depression. When the three different groups, Black, Hispanic, and Asian were compared to White participants, some surprising results emerged indicating Black Americans may experience better overall mental health than White Americans. As expected, partner support from a romantic partner was associated with lower symptoms of anxiety, depression, and stress. These results were further confirmed when more partner support significantly decreased symptoms of depression when participants experienced high levels of discrimination. The meaning of these results are discussed below.

Discrimination

Across the board, discrimination was associated with higher symptoms of anxiety, depression, and stress, both in the model with controls and without controls. Our study parallels that of preexisting literature also finding strong associations between discrimination and poorer mental health (Lowe et al., 2018; Potter et al., 2019; Ramon-Arbues et al., 2020; Yip, 2015). It is helpful to note that the discrimination measure we used looked at instances of daily discrimination, where micro-aggressions on a smaller scale were being assessed. Impacts of these events could have long-term consequences, compounding over time, such as the deterioration of mental health and strain on social relationships (Brownlow et al., 2019; Doyle & Molix, 2016). If discrimination continues, it is possible that the consequences could be as severe as suicide because the individuals experiencing the discrimination may not have the resources to be able to manage the negative symptoms associated with discrimination, as being exposed to high levels of stress for prolonged periods of time is associated with hypervigilance and a change

in brain structure for how individuals may process stressful events in the future (Berger & Sarnyai, 2015).

Partner Support

Continuing on with analysis of the direct effects within the model, romantic partner support was associated with lower anxiety, depression, and stress in the model without controls and with controls. This fits with our research questions and draws attention to the importance of receiving support from a romantic partner. It also follows previous research that partner support can be associated with positive mental health outcomes, such as an increase in overall relational satisfaction and increase in quality of life (Panayioutou & Karekla, 2013; Porter & Chambless, 2017). Through moments of support within a romantic relationship, safety is created, allowing each partner to seek out support when they need it (Johnson, 2004). When these moments are created, it can help lessen the impact of negative mental health because individuals feel heard and validated (Porter & Chambless, 2017).

Although support was associated with less anxiety, depressive, and stress symptoms, partner support was only found to moderate the relationship between discrimination and depression. High support was associated with lower depressive symptoms as discrimination increased. Support could be a valuable asset when it comes to depression as support is a way to feel appreciated and feeling appreciated is associated with lower depression (Cummings & Kropf, 2015). The lack of moderation between discrimination and stress and anxiety leaves one to speculate about the differences between depression, anxiety, and stress. Both anxiety and stress are characterized by excessive worrying (Duval et al., 2015). Where depression is centered around feeling slow and tired, anxiety and stress can sometimes have the opposite effect (Duval et al., 2015; Fried et al., 2016). Anxiety and stress, as they were assessed in this study, can leave

one feeling on edge, tense, feel as though there is a loss of control in their lives, and feel as though things are not going well (Cohen et al., 1983; Spitzer et al., 2006). Partner support was assessed with questions asking about how a partner processes events with their partner, as well as open communication (Bodenmann, 2008). This type of processing may contribute to overthinking related to stress and anxiety. A person who is highly stressed or anxious may have already spent time thinking through all of the solutions possible in a given situation, such as after facing discrimination (Garcini et al., 2021). This type of processing may be beneficial for helping mitigate the impact of depression because the partner is able to help the individual see solutions that they otherwise may not be able to see, such as how to avoid a situation in the future that may lead to discrimination (Garcini et al., 2021).

There is also a possibility that timing of receiving partner support plays a factor in lessening the impact of discrimination on anxiety, depression, and anxiety. For instance, social support immediately following a traumatic event, such as a discrimination event, can help mitigate some of the stress of the event (Sayed et al., 2015). As stated in the results, there were a few moderating effects in the model without control variables. Primary results without controls indicate that being a part of certain racial or ethnic minority groups could increase symptoms of anxiety, depression, and stress, in the context of higher discrimination. More specifically, as discrimination levels increased, anxiety symptoms increased to a greater extent in both Hispanic and Black participants. Similarly, as discrimination levels increased, depression increased to a greater extent in Black and Asian participants. Lastly, as discrimination levels increased, stress increased to a greater extent in Asian participants. Critical Race Theory might suggest that discrimination serves as a reminder of a society that is not built to serve minorities (Delgado & Stefancic, 2001). Thus, the solution to discrimination quickly becomes systemic and does not

give the individual being discriminated much power to make their situation better. These results could give some insight into how each racial or ethnic group reacts to discrimination events, especially with the fact that Asian, Black, and Hispanic individuals have all been shown to experience more microaggressions than White individuals (Forrest-Bank & Jenson, 2015).

Race

When looking at the results of racial/ethnic identity within the study, some surprising themes emerged. The model results without controls differ from that of the model with controls. When looking at the model with controls, no significant moderating effect was found for participants who belonged to a specific racial/ethnic group. When thinking about Critical Race Theory (CRT), there are many identities participants hold outside of their racial/ethnic status (Delgado & Stefancic, 2001). These statuses include socioeconomic status, religion, gender identity, and sexual orientation, which were all controlled for in this study. Accounting for some of the other stressors in participants' lives, it is fitting that there is no longer a moderating effect by identifying with a specific racial/ethnic minority group. Across the board, all of the control variables were significant predictors of anxiety, depression, or anxiety. The R^2 values also increased from the model without controls to the model with controls. This further evidences the importance of looking at mental health in a larger context. The impact of discrimination extends to age, sexual orientation, gender identity, religion, and socioeconomic status (Vargas et al., 2020).

Hispanic

Hispanic participants had significantly higher depression and stress symptoms versus White participants. With this being said, when controls were added, Hispanic participants did not have significantly different reported depressive and stress symptoms relative to White

participants. This could mean that depressive symptoms and stress symptoms were more closely tied to factors such as age, income, gender identity, sexual orientation, and the importance of religion. Results from this study follow trends of other studies showing that sexual minority status, among other minority identities, was associated with more depressive symptoms (Lardier et al., 2017; Sutter & Perrin, 2016). Hispanic participants reported about the same amount of anxiety as other participants when experiencing low discrimination. As discrimination increased, Hispanic participants reported significantly more symptoms of anxiety versus White participants. The conclusions that can be drawn from the reports of mental health from Hispanic participants fall in line with other research that again, state that discrimination is harmful to mental health (Jochman et al., 2019).

Black

Also surprising, Black participants had significantly lower levels of reported anxiety, depression, and stress when compared to White participants. It was expected that their scores for anxiety, depression, and stress might be higher than that of White participants, given challenges of living in racist culture. In line with the Double ABC-X model, there is a chance that Black participants are utilizing more effective resources versus White participants. These resources could include emotionally focused coping, where Black individuals are more aware of their emotions and able to express them (Vassilliere et al., 2016). Perhaps there is an association here where Black participants may be adopting an "it's not that bad" frame of mind, where even though there is discrimination happening, they have access to resources such as a housing, food, and a stable environment or that they are passively coping with the impacts of discrimination (Forsyth & Carter, 2014; Mekawi et al., 2022). The results suggest that for Black participants, their anxiety and depression significantly increase the more discrimination they face. With this

being said, their symptoms of anxiety and depression were still less than that of other participants experiencing high levels of discrimination. This follows the trends stated earlier, where Black participants overall had fewer symptoms of anxiety, depression, and stress than other participants. With this being said, the data were collected shortly after Derek Chauvin was convicted of murdering George Floyd, which may have felt empowering for many Black individuals across the United States, leading to lower mental health symptoms than other times.

Asian

Within the sample, Asian participants did not significantly differ from White participants when looking at anxiety, stress, and depression. Their scores were not significantly lower or higher. This was unexpected as we anticipated that Asian participants may also have higher levels of anxiety, depression, and stress due to discrimination. Asian participants had their own trend when looking at depression and stress. Asian participants reported less depressive and stress symptoms than White participants when experiencing low levels of discrimination. As the amount of discrimination increased, Asian participants reported more symptoms of depression and stress than White participants. Asian individuals may be using more tangible coping methods, such as yoga, gratitude, and spiritual practices, which may contribute to their ability to manage symptoms of mental health when faced with low levels of discrimination (Kent et al., 2020). It is important to understand how the assumptions from this study can be used when working with individuals and couples experiencing discrimination. As the implications of this study are discussed next, it is important to point out that discrimination is an ongoing occurrence that has a devastating impact on mental health (Jochman et al., 2019). Although romantic partner support is presented as a potential moderator to help lessen the impacts of discrimination, I want to draw attention to the fact that it does not begin to fix the root causes of discrimination.

Clinical Implications

The results presented in this article can be useful when working with clients who are facing discrimination. When the therapist is working with a client facing challenges of negative mental health symptoms, the therapist should take the time to understand how a client's minority statuses may be contributing to a client's stress, depression, or anxiety symptoms (MacLeod, 2012). Clients may not associate their symptoms with discrimination (MacLeod, 2012). Therapists can help clients process the impact of discrimination by asking them questions associated with microaggressions. This assessment can include questions such as "Have there been times where people act as if they are better than you?" or "Do you feel you are treated with less respect than other people are?" (Williams et al., 1997).

If talking about discrimination events is helpful to mitigating their negative impacts, then engaging a romantic partner in conversations can also be helpful. While engaging a partner in therapy in order to help cope with discrimination, it is important to keep in mind cultural contexts which could help the partners be supportive of each other (Forster et al., 2017). Another buffer found in previous literature is that agreeing on how bad a situation may be impacting one's partner has the ability to bring a couple together (Sharabi et al., 2016). Partners cannot help if they are unaware of what is going on with their significant other. While one partner is sharing their experiences of discrimination, it is important for a therapist to encourage the listening partner not to try to justify the behaviors of discrimination that the speaking partner may have faced (McNeil Smit et al., 2020). It is also necessary to help the partner listen to the story as opposed to jumping in with solutions right away if solutions are not what the speaking partner needs (Lipscomb & Emeka, 2020). Overall, therapists can help partners feel supported by

encouraging listening, not jumping in with solutions, and asking the partner in distress what would make them feel supported.

It may be helpful for therapists to be aware that in this sample, Black participants reported the best mental health. Researchers have shown that in some cases Black Americans cope with discrimination in negative ways, such as avoiding the issue or adopting a problem-oriented mindset (Jones et al., 2020). This could lead to important therapy conversations regarding how Black clients are coping with discrimination. Passive coping skills, such as accepting the discrimination as a fact or keeping the event to themselves, can lead to worse metal health symptoms (Polanco-Roman et al., 2016). It is important that therapists work with clients facing discrimination in order to learn positive coping skills. Strong identity has shown to lower the impact of discrimination, which is an important focus of therapeutic goals when combatting the negative impacts discrimination have (Polanco-Roman et al., 2016). Other active coping skills, such as talking it out or trying to fix the injustice, when possible, can allow the client space to be able to talk about the traumas they have experienced (Polanco-Roman et al., 2016).

Strengths, Limitations, and Future Directions

Strengths

There was a goal to collect data from a diverse sample of people. We were able to do this by intentionally choosing people who were diverse in their racial and ethnic identities. Through this, we were also able to gain a sample that was diverse in many other ways, such as sexual orientation (20.8% identifying as LGBTQ), income, and gender. The intentionality to collect data from a diverse national sample made sure that voices were represented from across the U.S. and pushing the agenda to ensure that minority populations are accounted for in research. Along with this, the timing of this project is helpful. Our focus on discrimination follows a contextual period

in the United States. where discrimination is frequently discussed in the media and among our citizens. This project will add to the growing body of literature and help conversations surrounding diversity, equity, and inclusion. Further, there was minimal research on the impacts of romantic partner support as a buffer for some of the negative impacts of discrimination. This is necessary to gain a better understanding of how people who are arguably the most meaningful to us can play a role when helping cope with the aftereffects of discrimination. With this being said, there were limitations to the study that are necessary to highlight.

Limitations

Initially, we wanted to use a variable that would give us more information about what kind of discrimination the participants were facing, whether it be racial, age-related, weight-related, or other. There was an issue with the survey that prevented us from being able to use this variable in the intended way, which is why the authors talked about discrimination broadly. The Everyday Discrimination Scale was used to assess discrimination and this was useful in assessing discrimination related to certain microaggressions participants may experience. However, it did not specifically assess all of the ways a person could be discriminated against, such as when applying for a loan or workplace discrimination. The data were also only collected from one partner in a relationship, where they were asked to think about their perception of their romantic partner. Collecting data from both partners would have allowed for increased options in the analysis of the data and understanding the dyadic interactional nature of how couples cope with discrimination and support one another. More relationship dynamics that could have helped strengthen the study were to assess for interracial relationships and relationship length. Relationship length and type of relationship (dating, engaged, married) also plays a role in how couples interact with each other as well as potential commitment to the relationship. Moreover,

data were only collected from individuals in relationships. In the future, it could be useful to look at differences between individuals in relationships and their support networks compared to individuals who are not in relationships.

Although all participants were currently living in the United States, country of origin could influence how they perceive discrimination in the United States versus their home country. The time the data were collected was when the United States were heavily wearing masks and stressed out about current events. The world is in a slightly different place right now, potentially with less stress about the pandemic than when the data were collected. Last, there was not room in this study to categorize participants as biracial, they were placed in one racial group. There could be another way to assess for participants' racial and ethnic identity that would allow for individuals to more accurately self-identify culturally. Critical Race Theory (CRT) also describes societal implications of racism. Because of this, CRT is less specific about microaggressions that individuals may face on a daily basis.

Future Directions

In the future, it would be useful to research the validity of each assessment within each racial and ethnic group. This would give a better understanding of how mental health outcomes, such as anxiety, depression, and stress, varies from each group after taking into account that the assessments may work differently for each group. As mentioned above, the data collected was not dyadic. It would be useful to collect dyadic data in the future in order to understand how perceived partner support being received versus perceived partner support being given varies between the couples. Are there partners that believe they are more supportive than their partner thinks they are? The study focused on broad daily discrimination. In the future, it would be useful to look at many different types of discrimination in order to see the impact the types of

discrimination have on mental health outcomes. Lastly, further exploration could be done surrounding the coping skills of unique groups of people facing discrimination.

Conclusion

This study observed the impact of discrimination on the outcomes of anxiety, depression, and stress looking at partner support and racial/ethnic identity as moderators. The results indicated negative impacts of discrimination on mental health. We were able to observe that Black participants within this sample had surprisingly less symptoms of anxiety, depression, and stress than others. We were also able to determine that partner support is an important resource when dealing with the impacts of discrimination and its relationship with depression. Black Through these results, it is important that we understand how to best support individuals who may be facing large levels of discrimination. Our results presented here contribute to a growing literature surrounding discrimination, and although partner support is something that can help mitigate some of the impacts of discrimination, it is important to note that discrimination is harmful to mental health and all of us can make efforts in our respective spheres to increase social justice and equity for all. These findings can be helpful to therapists and others are we continue to discuss fighting the injustices that exist within our society.

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Appendix A - Survey

Discrimination: In your day-to-day life, how often do any of the following things happen to you?

	Never (1)	Less than once a year (2)	A few times a year (3)	A few times a month (4)	At least once a week (5)	Almost everyday (6)
You are treated with less courtesy than other people are	○	○	○	○	○	○
You are treated with less respect than other people are	○	○	○	○	○	○
You receive poorer service than other people at restaurants or stores	○	○	○	○	○	○
People act as if they think you are not smart	○	○	○	○	○	○
People act as if they are afraid of you	○	○	○	○	○	○
People act as if they think you are dishonest	○	○	○	○	○	○
People act as if they’re better than you	○	○	○	○	○	○
You are called names or insulted	○	○	○	○	○	○

You are threatened or harassed	○	○	○	○	○	○

Anxiety: Over the last two weeks, how often have you been bothered by the following problems?

	Not at all (1)	Several days (2)	Over half the days (3)	Nearly every day (4)
Feeling nervous, anxious, or on edge	○	○	○	○
Not being able to stop or control worrying	○	○	○	○
Worrying too much about different things	○	○	○	○
Trouble relaxing	○	○	○	○
Being so restless that it's hard to sit still	○	○	○	○
Becoming easily annoyed or irritable	○	○	○	○
Feeling afraid as if something awful might happen	○	○	○	○

Depression: Over the last two weeks, how have you been feeling?

	At no time (1)	Some of the time (2)	Slightly less than half the time (3)	Slightly more than half the time (4)	Most of the time (5)	All the time (6)
Have you felt low in spirits or sad?	○	○	○	○	○	○

Have you lost interest in your daily activities?	○	○	○	○	○	○
Have you felt lacking in energy and strength?	○	○	○	○	○	○
Have you felt less self-confident?	○	○	○	○	○	○
Have you had a bad conscience or feelings of guilt?	○	○	○	○	○	○
Have you felt that life wasn't worth living?	○	○	○	○	○	○
Have you had difficulty in concentrating, e.g., when reading the newspaper or watching television?	○	○	○	○	○	○
Have you felt very restless?	○	○	○	○	○	○
Have you felt subdued or slowed down?	○	○	○	○	○	○
Have you had trouble sleeping at night?	○	○	○	○	○	○
Have you suffered from reduced appetite?	○	○	○	○	○	○

Have you suffered from increased appetite?	○	○	○	○	○	○

Stress: The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please indicate your response by selecting how often you felt or thought a certain way.

In the last month, how often have you felt…

	Never (1)	Almost never (2)	Sometimes (3)	Fairly often (4)	Often (5)
…that you were unable to control the important things in your life?	○	○	○	○	○
…confident about your ability to handle your personal problems?	○	○	○	○	○
…that things were going your way?	○	○	○	○	○
…difficulties were piling up so high that you could not overcome them?	○	○	○	○	○
…overwhelmed with stress?	○	○	○	○	○

Support: This scale is designed to measure how you and your partner cope with stress. Please answer each question as honestly as possible.

	Very rarely (1)	Rarely (2)	Sometimes (3)	Often (4)	Very often (5)
My partner shows empathy and understanding to me	○	○	○	○	○

My partner expresses that they are on my side	○	○	○	○	○
My partner blames me for not coping well enough with stress	○	○	○	○	○
My partner helps me to see stressful situations in a different light	○	○	○	○	○
My partner listens to me and gives me the opportunity to communicate what really bothers me	○	○	○	○	○
My partner does not take my stress seriously	○	○	○	○	○
My partner provides support, but does so unwillingly and unmotivated	○	○	○	○	○
My partner takes on things that I normally do in order to help me out	○	○	○	○	○
My partner helps me analyze the situation so that I can better face the problem	○	○	○	○	○
When I am too busy, my partner helps me out	○	○	○	○	○
When I am stressed, my partner tends to withdraw	○	○	○	○	○

Appendix B - IRB Approval

KANSAS STATE UNIVERSITY | University Research Compliance Office

TO: Dr. Jared Durtschi
Family Studies and Human Services
Campus Creek Complex

FROM: Rick Scheidt, Chair
Committee on Research Involving Human Subjects

DATE: 11/02/2020

RE: Proposal #10195.3, entitled "COVID-19: How Has Individual Wellbeing Been Impacted?."

MODIFICATION OF IRB PROTOCOL #10195.2, ENTITLED, "COVID-19: How Has Individual Wellbeing Been Impacted?"

EXPIRATION DATE: 07/26/2023

The Committee on Research Involving Human Subjects (IRB) has reviewed and approved the request identified above as a modification of a previously approved protocol. **Please note that the original expiration remains the same.**

All approved IRB protocols are subject to continuing review at least annually, which may include the examination of records connected with the project. Announced in-progress reviews may also be performed during the course of this approval period by a member of the University Research Compliance Office staff. Unanticipated adverse events involving risk to subjects or to others must be reported immediately to the Chair of the IRB, and / or the URCO

It is important that your human subjects activity is consistent with submissions to funding / contract entities. It is your responsibility to initiate notification procedures to any funding / contract entity of any changes in your activity that affects the use of human subjects.