

**Ethnic Discrimination and Psychological Distress among Middle Eastern/Arab Americans:
The Roles of Religiosity, Coping, Ethnic Identity, and Family Connectedness**

A Dissertation Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Ayşe Selin İkizler

August 2016

Copyright © 2015 by Ayse Selin Ikizler

All rights reserved.

Dedication

I would like to dedicate this project to all people everywhere feeling left out of the conversation, invisible, or misunderstood, and especially groups like Middle Eastern Americans whose voices are just beginning to be heard.

Acknowledgements

I would like to thank my amazingly supportive advisor, Dr. Dawn Szymanski, for her remarkable investment in my academic and professional development in addition to her care about me as a person. I cannot express how grateful I am for your guidance and encouragement over the past five years. I would also like to thank my committee for their flexibility and backing as I embarked on this project.

Thank you so very much to my husband, Jack, for supporting me in this endeavor every single step of the way, from editing my graduate school applications to relocating to Knoxville (and back again). I will always be grateful for being able to share this journey with you.

I would also like to express my thanks and gratitude to my wonderful parents, family, and friends for their continuous moral and practical support. Many thanks to my mom and dad for always believing in me. Thank you, Mom, for instilling me with compassion for others that has consistently been the driving force behind my work. Thank you, Dad, for instilling within me equal parts curiosity and determination.

A very special thanks to Lisa Rickard, Selim Ikizler, Zeynep Ikizler, Jane Chang, and everyone else who went above and beyond the call of duty in helping recruit participants for this study (and for generally putting up with me throughout grad school).

Many thanks to my four-legged son, Walter, for keeping me company when I worked from home. Last, but not least, I must acknowledge my very special cohort without whom I never would've made it through grad school. You have each left a meaningful impression on me.

Abstract

Despite increased public attention in the past decade towards the Middle East and Arab world, only a small but growing body of research literature investigating the mental health of individuals with ethnic background originating in these countries exists. Given the major stigma associated with being Middle Eastern/Arab (MEA) in the United States, the mental health-related implications for MEA Americans is of particular interest in the present study. Specifically, we investigated (1) the moderating role of religiosity in the link between religious affiliation and ethnic discrimination and (2) potential mediators (coping via internalization, detachment, and drugs/alcohol) and moderators (ethnic identity and family connectedness) in the relationship between ethnic discrimination and psychological distress among 122 MEA Americans. We found that Muslim identification predicted ethnic discrimination for MEAs with high but not low religiosity. In addition, higher levels of ethnic discrimination and more coping with discrimination via internalization, detachment, and drugs and alcohol were uniquely related to higher levels of psychological distress. Finally, family connectedness buffered the link between discrimination and coping via internalization. Future research directions and clinical implications are discussed.

Keywords: *discrimination, mental health, coping, Middle Eastern, Arab, religion*

Table of Contents

Chapter 1: Introduction and General Information	1
Chapter 2: Literature Review	4
<i>Role of Religion</i>	<i>4</i>
<i>Discrimination and Psychological Distress</i>	<i>5</i>
<i>Maladaptive Coping Styles as Mediators in the Discrimination-Distress Link.....</i>	<i>7</i>
<i>The Role of Cultural Factors in the Discrimination-Distress Link.....</i>	<i>10</i>
Ethnic Identity	10
Family Connectedness	12
<i>The Present Study.....</i>	<i>14</i>
Hypothesis 1	13
Hypothesis 2	13
Hypothesis 3	14
Hypothesis 4	15
Hypothesis 5	15
Chapter 3: Methods	16
Participants	16
Measures.....	17
Religious Affiliation.....	17
Religiosity.....	17
Discrimination	18
Coping with Discrimination via Internalization, Detachment, and Drug and Alcohol Use...	19
Ethnic Identity	20
Family Connectedness	20
Psychological Distress	21
Procedures	22
Chapter 4: Results.....	23
Chapter 5: Discussion	28
Limitations and Future Directions	32
Clinical Implications	34
List of References	36
Appendix	48

Vita	57
-------------------	-----------

List of Tables

Table 1: Descriptives and Correlations among all Study Variables	49
Table 2: Summary of Hierarchical Regression Predicting Ethnic Discrimination	50
Table 3: Tests of Ethnic Identity and Family Connectedness as Moderators of the Ethnic Discrimination and Psychological Distress Links	51
Table 4: Tests of Ethnic Identity and Family Connectedness as Moderators of the Ethnic Discrimination and Coping Links	52

List of Figures

Figure 1: Hypothesized Model Predicting Experiences of Discrimination.....	53
Figure 2: Hypothesized Model Predicting Psychological Distress	54
Figure 3: Interaction of Religious Affiliation and Religiosity on Ethnic Discrimination	55
Figure 4: Path Model of Direct and Indirect Relationships of Variables of Interest Predicting Psychological Distress	56
Figure 5: Interaction of Family Connectedness and Ethnic Discrimination on Coping via Internalization	57

Chapter 1

Introduction and General Information

Research and public discourse regarding Islamophobia and ethnic discrimination towards individuals of Middle Eastern/Arab descent has increased dramatically in the years since the attacks against the United States (US) on September 11, 2001 (9/11; Abu-Raiya, Pargament, & Mahoney, 2011; Ernst, 2013; Kulwicksi, Khalifa, & Moore, 2008). Researchers have identified Middle Eastern/Arab (MEA) Americans as a marginalized and misunderstood minority group in the US for whom racial/ethnic identity is multifaceted and complex (Awad, 2010). MEA Americans face stereotypes that associate them with terrorism and being un-American. This population faces daily acts of ethnic oppression (Abu-Raiya et al. 2011; Awad, 2010; Bushman & Bonacci, 2004; Moradi & Hasan, 2004) and hiring discrimination (Derous & Ryan, 2009; Widner & Chlcoine, 2011) in the US. It has been well-established that discrimination is associated with increased psychological distress among minority groups in general (Schmitt, Branscombe, Postmes, & Garcia, 2014), and among MEA Americans in particular (Abu-Raiya et al. 2011; Moradi & Hasan, 2004; Padela & Heisler, 2010; Rousseau, Hassan, Moreau, & Thombs, 2011). Research also shows that the level of perceived discrimination varies for different groups of MEAs on the basis of religious affiliation (Padela & Heisler, 2010).

The purpose of the current study is to (1) explore the possible moderating role of religiosity in the link between religious affiliation and perceived discrimination, and (2) investigate possible mediators and moderators in the link between discrimination and psychological distress among MEAs. More specifically, the present study would examine coping via internalization, coping via detachment, and coping via drugs/alcohol use as possible mediators and ethnic identity and family connectedness as possible moderators. In all, such

investigations increase knowledge about groups most vulnerable to discrimination, the relationship between discrimination and psychological distress, and underlying psychological processes (coping styles and culture-related factors) that predict negative mental health outcomes in order to better intervene with this oppressed population.

Middle Eastern/Arab American Discrimination

Discrimination towards this population has been relatively well-established in the literature. For instance, Abu-Raiya et al. (2011) found that 86% of their sample heard anti-Muslim comments, 68% had undergone special security checks at airports, 60% experienced discriminatory acts, and 55% experienced verbal harassment. Likewise, Moradi and Hasan (2004) reported that among a sample of 108 Arab Americans, 53% reported being treated unfairly by strangers because of their Arab background and 46% reported having been called a racist name at least once in a while within the past year. Finally, Awad (2010) noted that 52% of their MEA American sample reported encounters with others where they were perceived as dangerous or violent due to their ethnicity, and 77% reported exposure to offensive comments about their ethnic group.

Additional evidence of discrimination towards these ethnic minority communities has been found in experimental studies. Bushman and Bonacci (2004) conducted a “lost” email study in which they found that participants endorsed stronger feelings of prejudice toward Arab Americans than other ethnic minority groups and emails sharing positive news with someone with an Arab-sounding name were less likely to be returned by individuals with more prejudiced attitudes. Likewise, a number of resume studies have shown evidence of hiring discrimination towards those with MEA-sounding names (Derous & Ryan, 2009; Widner & Chicoine, 2011).

Although discrimination is evident towards MEAs of varying religious affiliations, the risk of experiencing discrimination seems to be particularly associated with being Muslim. Muslim MEA Americans report higher levels of discrimination as compared to their Christian counterparts (Awad, 2010; Moradi & Hasan, 2004; Padela & Heisler, 2010). It is important to note that qualitative evidence suggests that increased exposure to harassment and discrimination is related to increased visibility of Muslim identifiers (e.g., hijab, beards or kufies; Abu-Raiya et al. 2011). Therefore, it may be that the likelihood of experiencing discrimination for Muslims who do not have visible identifiers may be more similar to non-Muslim MEAs. Thus, examining the role of religiosity as a potential moderator in the religious affiliation-discrimination link is warranted.

Chapter 2

Literature Review

Role of Religion

Some theoretical and empirical literature suggests that possible explanations for increased levels of discrimination towards Muslim MEAs, compared with Christian or other non-Muslim MEAs, stems from the role of Islamic religious beliefs and their associated visible religious markers (e.g., wearing a hijab) that set them apart from the more dominant religions in the US and distance them from US mainstream cultural structures that are centered on mostly-Christian and sometimes Jewish practices (e.g., school and government closings for religious holidays).

In a study that used a sample of Muslims, several participants noted that they believed appearance made them more vulnerable to harassment and discrimination and as a result, the authors of that study suggested that future research collect data on appearance (Abu-Raiya et al. 2011). Indeed, a study examining the experiences of Sikh men discussed how that population has seen an increase in discrimination after the 9/11 attacks, even though they are not MEA or Muslim, but misidentified as such based on appearance (Ahluwalia & Pellettiere, 2010). Finally, Abdulrahim, James, Yamout, and Baker (2012) assessed the role of “whiteness” (essentially, described as closeness to dominant white racial identity/culture) in discrimination and psychological distress among Arab Americans. They found that discrimination was more frequently encountered by Muslims, individuals who identify as non-white, and those who live in an ethnic enclave. In sum, religious markers and visible practices of Islam seem to increase vulnerability to discrimination. Such visible practices are more likely among those with higher levels of religiosity.

Remarkably, there has been a lack of exploration around the role of religiosity in the finding of discrepant levels of perceived discrimination between Muslim MEAs and Christian MEAs. Studies reporting increased levels of discrimination towards Muslims have treated religious affiliation singularly as a categorical classification, but have not fully considered the role of the varying degrees to which Muslims (or non-Muslim MEAs) are committed to more conservative or traditional religious practices. If the explanations for Muslims being more likely targets of ethnic oppression than their non-Muslim counterparts are dependent upon visible religious practices, then it follows that Muslims who are less committed to those practices experience discrimination to a similar degree as non-Muslims. One purpose of the current study is to address this question of how religiosity plays a role in predicting encounters with ethnic discrimination against MEAs in the US.

Discrimination and Psychological Distress among MEAs

The relationship between discrimination and adverse psychological outcomes has been well-established in the literature. An extensive (but not comprehensive) study that included two meta-analyses of this topic found (1) perceived discrimination was related to poorer mental health outcomes and effect sizes were larger for disadvantaged groups as compared with advantaged groups, (2) that this relationship was evident in longitudinal studies after controlling for initial levels of psychological distress, (3) that experimental studies that manipulated general perceptions of discrimination produced negative psychological outcomes and (4) that studies of discrimination against MEAs and Asians produced larger effect sizes than any other racial/ethnic group (Schmitt et al. 2014).

Although these meta-analyses are extensive, they fail to capture more nuanced evidence that has been garnered through specific studies examining the link between experiences of

discriminatory events and psychological distress among MEAs (Abu-Raiya et al. 2011; Moradi & Hasan, 2004; Padela & Heisler, 2010; Rousseau et al. 2011). For example, Abu-Raiya et al. (2011) found that 88% of their sample described the anti-Muslim events that they reported as stressful to some degree. However, it is unclear from this study exactly how stressful and what implications that level of stress has for individuals' lives more globally. Other studies have shown more precise indicators of the link between discrimination and mental health concerns. For example, Rousseau et al. (2011) found that discrimination was associated with psychological distress for Muslim Arabs in 2007 (post-9/11), however this link was not evident among non-Muslim Arabs in the same year and for either Muslim or non-Muslim Arabs in 1998 (pre-9/11). With a sample of Detroit area Arab Americans, Padela and Heisler (2010) found that experiences of discrimination were associated with higher levels of psychological distress, lower levels of happiness, and worse health status. Similarly, Moradi and Hasan (2004) reported that recent discriminatory events were positively linked with psychological distress, and negatively related to self-esteem and sense of personal control. This study also found that sense of personal control partially mediated the ethnic discrimination-distress link and fully mediated the relationship between discrimination and self-esteem. This finding underscores the importance of examining additional mediators or theorized causal mechanisms in this link.

Generally, it appears that post-9/11 ethnic discrimination toward MEAs, especially Muslims, has continued and these experiences are clearly linked with psychological distress and other negative psychological outcomes, but research exploring the potential mediators and moderators of these links is scant. Thus, we will examine maladaptive coping responses to discrimination as potential mediators in the discrimination-distress links. An additional purpose of this study was to examine the potentially moderating or buffering role of cultural factors (i.e.,

ethnic identity and family connectedness) in the links between ethnic discrimination and psychological distress and between ethnic discrimination and maladaptive coping responses (see Figure 2).

Maladaptive Coping Styles as Mediators in the Discrimination-Distress Link

Several mediation models have been put forth to explain the psychological processes that connect stressful environmental experiences (in this case, ethnic discrimination) to negative psychological outcomes. One such model is Hatzenbuehler's (2009) theoretical psychological mediation model in which stigma-related stressors and poor mental health outcomes are mediated by coping/emotional regulation, social/interpersonal factors, and cognitions. Many researchers exploring the experiences of oppressed groups have emphasized the idea that discrimination is a very distinctive type of stressor. Wei, Alvarez, Ku, Russell, and Bonett (2010) have articulated how discrimination is pervasive and chronic, damaging at personal and collective levels of identity, and occurring at both interpersonal and institutional levels. Indeed, discrimination experiences are so unique that Kira, Lewandowski, Ashby, Templin, Ramaswamy, and Mohanesh (2014) have argued for conceptualizing this form of stress as an identity trauma or type III trauma on the basis of its chronic nature with no foreseeable end and showed support for this view based on a clinical sample comprised of mostly Arab Americans and Muslims. Similarly, Szymanski and Bandermann (2014) found that heterosexist discrimination and hate crime victimization were directly and uniquely associated with trauma symptoms. Furthermore, they showed that coping with discrimination via internalization, detachment, and drug and alcohol use mediated discrimination-trauma symptom link. Thus, unlike most other sources of stress, discrimination is quite different and therefore calls for attention to coping responses that are specific to it, rather than general coping responses. Indeed,

in Barnes and Lightsey Jr.'s (2005) sample of African American students, experiences of discrimination were not shown to be linked with general coping strategies, nor did coping strategies moderate the discrimination-stress link.

The current study focused on maladaptive coping strategies specific to discrimination, as opposed to adaptive, based on empirical findings suggesting that dysfunctional coping is more likely play a mediating role in the discrimination-distress link. For instance, maladaptive coping styles mediated the relationship between discrimination and psychological distress in a sample of African Americans (Szymanski & Obiri, 2011) and sexual minority women (Szymanski & Henrichs-Beck, 2014), whereas adaptive coping did not mediate any of the oppression-distress links in both studies.

The specific coping strategies included in the current investigation include coping with discrimination via internalization, via detachment, and via drugs and alcohol. Discrimination via internalization refers to blaming oneself for a discriminatory incident (Wei et al. 2010a), which would be an expected response during early stages of racial/ethnic identity development when individuals prefer the dominant culture over their own, according to Sue and Sue's (2003) model. Because MEAs are a nebulous ethnic group comprised of individuals with diverse racial and religious backgrounds and unrecognized by the US Census (Kayyali, 2013), they might be less likely to readily perceive themselves as ethnic minorities. MEAs who came to the US in pursuit of the American dream or as refugees are likely to view the dominant culture as superior to their own to the extent that it symbolizes safety and opportunity. Under such circumstances, some MEAs would best fit into early stages of ethnic identity development when internalization is most likely. Therefore, it is important to examine the extent to which MEAs use internalization

for coping with discrimination and the potential mediating role it has in the discrimination-distress link.

Coping with discrimination via detachment refers to not knowing how to deal with discrimination and withdrawing from social support (Wei et al. 2010a). Some MEA researchers have suggested that the MEA communities in the US are likely to withdrawal from support or help based on expectations that they will be misunderstood (Abu-Ras, 2007). In their study of general coping among Muslims in the US facing anti-Muslim backlash following 9/11, Abu-Raiya et al. (2011) found that isolation was associated with depression and angry feelings. Comments from some of these participants reflect the concept that Muslims would be likely to detach from others, as they spoke of, “feeling ‘alienated . . . isolated . . . not belonging’ after repeatedly hearing people telling him to ‘go home (Abu-Raiya et al. 2011, p. 9).” Another participant from that study reported that classmates, “stopped talking to me and looked at me suspiciously (p. 9),” and he became “sad and reclusive” in response. Likewise, En-Nabut (2007) reported that all six participants in her study of Muslim Arab women described struggles in the US that fit the lonely/isolated/emptiness theme. Thus, theoretical and qualitative evidence indicates that detachment is a key element of MEA experiences in the US. There is a need for quantitative analyses of this coping strategy and its potential mediating role in the discrimination-distress link.

Although studies have shown that alcohol use tends to be low in MEA samples, those sample are often largely Muslim, however this may not be true for non-Muslim MEAs or Muslims with low religiosity. Additionally, while strict Islamic practice prohibits the use of alcohol, many Muslims smoke cigarettes and use marijuana. Choi, Harachi, Gillmore, and Catalano (2006) reported greater substance use in multiracial adolescents, compared to their

monoracial counterparts. Many MEAs are likely to be multiracial and experience similar types of rejection from multiple racial/ethnic groups and lack of belongingness. There has not yet been concrete evidence regarding a connection between substance use as a coping mechanism among MEAs, but it appears to be worth investigating. In addition, although drug and alcohol abuse is generally low in MEA communities, it has emerged as enough of a problem that the first bilingual Arabic-English Alcoholics Anonymous program was formed in the early 1990s as a result of problems with drunk driving, other illegal drug abuses and interpersonal violence (Hakim-Larson, Nassar-McMillan, & Paterson, 2013). Perhaps one explanation for increased alcohol and drug use among this population is because of the rise in ethnic discrimination.

The Role of Cultural Factors in the Discrimination-Distress Link

In addition to the possible role of maladaptive coping responses in explaining how ethnic discrimination influences psychological distress, it is also important to consider how cultural factors might moderate the discrimination-distress link, as well as the discrimination-maladaptive coping responses links for this heterogeneous population. Thus, we propose a moderated mediation model that also explores the possible moderating roles of ethnic identity and family connectedness (See Figure 2).

Ethnic Identity

Ethnic identity refers to an internal process concerned with who the core of an individual is culturally (Yoon et al. 2013). This subjective sense of ethnic group membership includes knowledge about and a sense of belonging to one's ethnic group (Phinney & Ong, 2007). Ethnic identity may act to buffer psychological distress and maladaptive coping responses to discrimination by heightening collective self-esteem, providing a sense of pride and belonging in one's ethnic group, bolstering a sense of solidarity with other MEAs, making an individual feel

more grounded and secure, and obtaining support from other MEAs and non-MEA allies (Smith & Sylva, 2011; Yoon et al. 2013).

A strong ethnic identity might facilitate an individual's attributing her/his experiences of ethnic discrimination to the perpetrator and the larger system of racism rather than coping via internalization and self-blame. In addition, a strong ethnic identity might increase the likelihood that MEAs use their ethnic community support systems rather than cope via detachment. Ethnic identity might also buffer the discrimination-coping via drug and alcohol use link by providing a strong sense of cultural connection and values which frown upon substance use. Drug and alcohol use among MEAs is associated with being more acculturated, speaking English, and having higher levels of education (Abudabbeh & Hamid, 2001). Relatedly a study of Latina adolescents found that 2nd and 3rd generation participants were more likely to engage in problem drinking than their 1st generation counterparts suggesting the possible risks of acculturation and protective role of a strong ethnic identity (Bacio, Mays, Lau, 2013).

Due to the lack of empirical studies on the possible moderating role of ethnic identity in the discrimination-distress link among MEAs, we turn to research with other ethnic minority groups to develop our hypotheses. Such research has shown that ethnic identity served as a protective role in the racial discrimination-psychological distress link among African American college students (Sellers & Shelton, 2003), 2,047 Asians in the US (Yip, Gee, & Takeuchi, 2008) and a sample of South Asian living in Scotland (Cassidy, O'Conner, Howe, & Warden, 2004). It also served as a protective role in the relationship between negative peer norms and school engagement among a sample of diverse adolescents, including Latino, African American, Asian American, Native American, and multiracial participants (Shin, Daly, & Vera, 2007). Ethnic identity has also been shown to act as a buffer in the relationship between acculturation to

mainstream US society and restrictive eating in a sample of Mexican American women (Bettendorf & Fischer, 2009). Taken together, these findings suggest that perhaps ethnic identity can act generally as a protective factor for psychological distress in the face of a myriad of psychosocial stressors including ethnic discrimination. In addition, in the face of high levels of ethnic discrimination, MEAs with a strong ethnic identity may be less likely to engage in maladaptive coping responses to discrimination which may attenuate its negative influences on mental health.

Family Connectedness

Despite the heterogeneity of MEAs, an emphasis on family is one core value that is shared by many MEA cultures (Abudabbeh, 2005; Ajrouch, 2000; Dwairy, Achoui, Abouserrie & Farah, 2006; Erickson & Al-Timimi, 2001; Nassar-McMillan & Hakim-Larson, 2003). Family connectedness refers to how reliant an individual is to his or her family with respect to financial (economic dependence on family), functional (sharing of daily activities with family members), and psychological domains (emotional dependence; Gavazzi, Sabatelli, & Reese-Weber, 1999). Although this value among MEAs is well-established in the literature, there is a dearth of knowledge regarding the relationship between family connectedness and psychological functioning in this population. Researchers have investigated the role of family-oriented cultural values using several different constructs and measures; there is evidence to suggest that they may be more or less interchangeable. Using a sample of over 10,000 college students, Schwartz et al. (2010) found that communalism, familism, and filial piety cluster onto single factor, suggesting that each of these different but related scales measure a very similar construct.

Conceptually, family connectedness should serve a buffering role in discrimination-distress and discrimination-maladaptive coping with discrimination links. Family connectedness is a likely source of strength that could minimize depressed and anxious symptoms, and a source

of support that facilitates healthier coping styles in lieu of maladaptive coping strategies. Indeed, the evidence for family connectedness as a protective factor against negative psychological outcomes has been relatively well-established in the literature with other ethnic minority groups, most notably Asian Americans (Chae, Lee, Lincoln, & Ihara, 2012; Tummala-Narra, Alegria, & Chen, 2012; Wei, Heppner, Ku, & Liao, 2010; Wei, Yeh, Chao, Carrera, & Su, 2013), Latino/as (Umaña-Taylor et al. 2011), and Maori in New Zealand (Stuart & Jose, 2014). Specifically, Tummala-Narra et al. (2012) found that the relationship between perceived discrimination and past-year depression was weaker when levels of family support were higher in a sample of South Asians. In a nationally representative sample of Asian Americans, higher levels of family support were associated with lower levels of depression when level of discrimination was low, but not when discrimination was high (Chae, et al. 2012), suggesting that family support serves as a buffer in the discrimination-distress link but has its limits. Asvat and Malcarne (2008) found that Muslim college students who shared an appreciation for their culture that matched that held by their family members had lower levels of depression than those that did not.

Some studies on family involvement using Latino/a samples provide evidence that family connectedness serves a buffering role against poor psychological outcomes. Telzer and Fuligni (2009) showed that daily family assistance was associated with higher levels of happiness, through sense of role fulfillment, in an ethnically diverse sample of adolescents, including small portion who identified as MEA. Likewise, Bettendorf and Fischer (2009) found that familism moderated the link between acculturation and eating- and body-related concerns, suggesting a relationship between strong family values and positive mental health outcomes. These authors have also suggested that the closely-related value of collectivism may lead Mexican American women who identify more strongly with their Latina backgrounds to focus more on group needs

and less on individual self-concerns (such as body-related issues). Therefore, it seems fruitful to investigate the moderating role of family connectedness among MEAs, a group with similar yet distinct cultural values when compared to other racial/ethnic minority groups.

The Present Study

The first purpose of the current study was to better understand the relationship between religious affiliation and ethnic discrimination by examining the moderating role of religiosity (see Figure 1). More specifically, we hypothesized that:

- (1) Muslim self-identification (as opposed to other religion or no religious affiliation) would be associated with increased experiences of discrimination. Level of religiosity would moderate this relationship such that increased religiosity would intensify this relationship, especially for Muslims.

An additional purpose of our study was to examine potential mediators and moderators in the relationship between ethnic discrimination and psychological distress among MEA Americans. Our conceptual model is shown in Figure 2. Our specific hypotheses were:

- (2) Maladaptive strategies for coping with ethnic discrimination (specifically, coping via internalization, detachment, and drugs and alcohol) would mediate the discrimination-distress link. That is, the data would be consistent with the notion that higher levels of ethnic discrimination would lead to more coping via internalization, detachment, and drugs and alcohol which in turn would lead to more psychological distress.
- (3) Ethnic identity and family connectedness would moderate or buffer the direct relationship between ethnic discrimination and psychological distress. Specifically, the relationship would be weaker when ethnic identity and family connectedness are high and stronger when ethnic identity and family connectedness are low.

- (4) Ethnic identity and family connectedness would moderate or buffer the relationship between ethnic discrimination and coping via internalization, coping via detachment, and coping via drugs and alcohol. Specifically, the relationship would be weaker when ethnic identity and family connectedness are high and stronger when ethnic identity and family connectedness are low.

Collectively, hypotheses 2 and 4 imply a pattern of moderated mediation (Hayes, 2013). Given that ethnic identity and family connectedness are expected to moderate the direct relationships between ethnic discrimination and each of the three mediators, ethnic identity and family connectedness should also qualify the indirect relationships between ethnic discrimination and distal criteria (i.e., psychological distress). Accordingly, we propose the following hypothesis concerning the conditional indirect effects.

- (5) Ethnic identity and family connectedness would moderate the indirect relationships between ethnic discrimination and psychological distress. Specifically, the indirect relationship would be weaker when ethnic identity and family connectedness are high and stronger when ethnic identity and family connectedness are low (see Figure 2).

Chapter 3

Method

Participants

The final sample includes 122 individuals who identify as having Middle Eastern/Arab background and live in the United States. Power analyses, based on 10-20 observations per estimated parameter (Weston & Gore, 2006) for the mediation model, suggested a sample size of between 70 and 140 participants. For the moderator models, power analyses based on Aiken and West (1991; p. 164, Table 8) suggestions for predictor and moderator variables measured with reliabilities of .80, variance accounted for by the main effects is 0, and inter-predictor correlations around 0, indicated a sample size of 109 to achieve statistical power of .80 in detecting an interaction for large and moderate effect sizes.

Participants were between 18 to 82 years of age, with a mean age of 34.95 years ($SD = 16.21$), and 59.8% ($n = 73$) identified as female and 40.2% ($n = 49$) as male. The sample was 2% Buddhist, 30% Christian, 48% Muslim, 2% Jewish, and 19% no religious affiliation/agnostic/atheistic. In terms of race, 4% identified themselves as Black, 6% Asian, 65% White, 15% Multiracial, and 29% Other. Of those who identified themselves as Other, the most common write-in responses were 10% Middle Eastern, 9% Arab, and 1.6% Persian. The most common MEA countries of origin indicated by the sample were Lebanon (21%), Syria (23%), Palestine (18%), Iran (14%), Egypt (10%), Jordan (7%), Turkey (7%), and Iraq (6%). Many participants identified multiple MEA countries of origin and several participants ($n = 11$) also noted European (e.g., English) and American backgrounds. The sample was 38% 1st generation, 48% 2nd generation, 7% 3rd generation, 3% 4th generation, and 3% temporarily living in the US.

The sample identified themselves as 92% Heterosexual, 3% Bisexual, 2% Lesbian or Gay, and 4% Other. Of the 59 participants (48%) who were currently enrolled in a college or university, 12% (n = 7) were 1st year undergraduates, 17% (n = 10) Sophomores, 20% (n = 12) Juniors, 12% (n = 7) Seniors, 36% (n = 21) graduates students, and 3% (n = 2) Other. Of the 63 participants who were not in school (52%), 3% (n = 2) had earned less than a high school diploma, 6% (n = 4) had a high school diploma, 6% (n = 4) had an associate's/two-year college degree, 38% (n = 24) had a bachelor's/four-year college degree, and 46% (n = 29) had a graduate/professional degree. Two percent were Poor, 24% Lower Middle/Working Class, 34% Middle Class, 35% Upper Middle Class, and 5% Wealthy. Regarding region of residence in the US, 37% of participants were in the Northeast, 21% Midwest, 21% South, and 24% West.

Measures

Religious Affiliation. Religious affiliation was assessed with one item in the demographics questionnaire asking participants to identify their religious affiliation. Responses options were: Buddhism/Buddhist, Christianity/Christian, Islam/Muslim, Judaism/Jewish, No affiliation, and Other. Participants were coded 0 = Non-Muslim and 1 = Muslim.

Religiosity. Religiosity was measured using the 10-item short form of the Religious Commitment Inventory (RCI-10; Worthington et al. (2003). The RCI-10 consists of 10 items reflecting “the degree to which a person adheres to his or her religious values, beliefs, and practices and uses them in daily living” (Worthington et al. 2003, p. 85). Participants were asked to report the degree to which each item is true about them. Sample items include, “I spend time trying to grow in understanding of my faith,” and “Religious beliefs influence all my dealings in life.” Each item is rated on a 5-point Likert scale from 1 (“not at all true of me”) to 5 (“totally true of me”). Mean scores were used with higher scores indicating higher levels of religious

commitment. Reported internal consistency for scores on the RCI-10 with a religiously diverse sample (including Christians, Muslims, and nonreligious individuals) was .95 overall and ranged from .92 to .98 for the specific religious groups. Five-month test-retest reliability was .84. Construct and criterion-validity were evidenced by positive correlations with self-rated religious commitment, frequency of religious practices, and self-rated intensity of spirituality (Worthington et al. 2003). Alpha for the current sample was .96.

Discrimination. Ethnic discrimination was assessed using Moradi and Hasan's (2004) modified version of the Schedule of Racist Events-Recent (SRE; Landrine & Klonoff, 1996). Moradi and Hasan (2004) adapted and validated the SRE-Recent for use with MEAs and referred to it as the SRE-Arab American version (SRE-AA). The SRE-AA consists of 18 items assessing ethnic discrimination in the lives of MEAs. Participants were asked to indicate how often during the past year they experienced a variety of racist events. Example items include "How many times have people misunderstood your intentions and motives because of your Middle Eastern/Arab background?" and "How many times have you *been called a racist name* like sand nigger, terrorist, towel head, foreigner or other names?" Each item is rated on a 6-point Likert scale from 1 = *the event has never happened to you* to 6 = *the event happened almost all the time (more than 70% of the time)*. Mean scores were used with higher scores indicating the experience of more ethnic discrimination. Reported internal consistency for scores on the SRE-AA with an Arab American sample was .94 (Moradi & Hasan, 2004).

As reported by Moradi and Hasan (2004), construct validity was supported by expert review by a team of Arab Americans and by positive correlations between the SRE-AA and experiences of racial-ethnic discrimination related to 9/11, experiences of physical threat, experiences of verbal harassment, negative friendship consequences due to discrimination, and

change in normal activities due to experiences of discrimination. In addition, the SRE-AA was related to the individual's enculturation into traditional Arab culture, having a family member that was enculturated to traditional Arab culture, and being Muslim (rather than Christian). Furthermore, the SRE-AA was negatively related to environmental mastery and positively related to psychological distress. Divergent validity was demonstrated by the finding that SRE-AA scores were not associated with self-deceptive enhancement or impression management dimensions of social desirability (Moradi & Hasan, 2004). Alpha for the current sample was .93.

Coping with Discrimination via Internalization, Detachment, and Drug and Alcohol Use. Maladaptive coping strategies used for dealing with racial/ethnic discrimination was measured by three subscales of the Coping with Discrimination Scale (CDS): Internalization, Detachment, and Drug and Alcohol Use (Wei et al. 2010a). Each subscale includes 6 items representing specific coping strategies that may be used to deal with discrimination. Example items include, "I believe I may have triggered the incident" (Internalization), "I do not talk with others about my feelings" (Detachment), and "I use drugs or alcohol to numb my feelings" (Drug and Alcohol Use). Participants were asked to rate each with the degree to which they personally cope with discrimination on a 6-point Likert-type scale from 1 (*never like me*) to 6 (*always like me*). All 25 items of the CDS were used to maintain the integrity of the scale, but only data from three subscales of interest were used in analyses.

Structural validity was supported by exploratory and confirmatory factor analyses (Wei et al. 2010a). Construct validity for the Internalization, Detachment, and Drug and Alcohol Use subscales was established by positive correlations with measures of self-blame, behavioral disengagement, and substance use, respectively. Incremental validity was demonstrated by variance in depression, life satisfaction, self-esteem, and ethnic identity that could not be

explained by general coping strategies. Wei et al. (2010a) reported internal consistency scores between .77 and .88 for Internalization, .73 and .76 for Detachment, and .72 and .80 Drug and Alcohol Use. Two-week test–retest reliabilities were: .82 for Internalization, .73 for Detachment, and .48 Drug and Alcohol Use (Wei et al. 2010a). For the current sample, alpha scores were .78 for Internalization, .69 for Detachment, and .77 for Drug and Alcohol Use.

Ethnic Identity. We used the Multigroup Ethnic Identity Measure—Revised (MEIM—R; Phinney & Ong, 2007), which includes six items assessing ethnic exploration and commitment. Example items include, “I have a strong sense of belonging to my own ethnic group,” and “I have often talked to other people in order to learn more about my ethnic group.” Participants were asked to rate each item using 5-point Likert-type scale from 1 = *strongly disagree* to 5 = *strongly agree*. Structural validity for the MEIM—R was supported by exploratory and confirmatory factor analyses (Phinney & Ong, 2007). Construct validity was supported by a positive correlation between self-esteem and ethnic identity in two separate samples using an earlier version of the MEIM (Phinney, 1992). Finally, Phinney and Ong (2007) reported a Cronbach’s alpha of .81. Alpha for the current sample was .89.

Family Connectedness. We assessed family connectedness using the Multigenerational Interconnectedness Scale (MIS; Gavazzi & Sabatelli, 1987, 1988). The MIS is a 31-item self-report measure intended to measure family functioning and individuation (Dwairy, 2003; Gavazzi et al. 1999), along three dimensions: psychological interconnectedness, financial interconnectedness, and functional interconnectedness. Example items include, “I rely on family members’ approval to let me know I am doing things right,” “Family members help me pay for major life expenses,” and “I help family members with everyday household duties and cleaning.” Each item is rated on a scale of 1 (*Never*) to 7 (*Always*), indicating how often the individual

currently has these experiences in their relationships with family members. In two samples of Arab adolescents, alphas were .80 (Dwairy, 2003) and .84 (Dwairy et al. 2006). Structural validity was established using exploratory factor analyses using two Arab samples (Dwairy, 2003, Dwairy et al. 2006). Construct validity was supported by demonstrating that Arabs scored higher on family connectedness than Americans. In addition, family connectedness was correlated with age and gender in expected directions (Dwairy et al. 2006). Alpha for the current sample was .94.

Psychological Distress. We was assessed psychological distress using the Hopkins Symptom Checklist–21 (HSCL-21; Green, Walkey, McCormick, & Taylor, 1988), a shortened version of the Hopkins Symptom Checklist (Derogatis, Lipman, Rickets, Uhlenhuth, & Covi, 1974). The 21-item self-report measure assesses psychological distress along three dimensions: general feelings of distress, somatic distress, and performance difficulty. Example items include “feeling blue” and “trouble concentrating.” Participants indicate how often they have felt each symptom during the past several days using a 4-point Likert-type scale from 1 (*not at all*) to 4 (*extremely*). Mean scores were used, with higher scores indicating greater levels of psychological distress. Reported alpha for scores on the HSCL-21 for samples of undergraduates was .90 (Green et al. 1988) and for adult therapy patients was .89 (Deane, Leathem, & Spicer, 1992). Deane et al. (1992) also found that the measure has good construct and concurrent validity, as demonstrated by significantly difference mean scores between treatment-seeking and non-treatment-seeking samples, and correlations occurring in expected directions between the HSCL-21 and measures of anxiety and general psychological distress. Alpha for the current sample was .91.

Procedures

A Web-based Internet survey was used to collect the data. Procedures for this Website survey and for collecting data online were based on published suggestions (Buchanan & Smith, 1999; Michalak & Szabo, 1998; Riggle, Rostosky, & Reedy, 2005; Schmidt, 1997). Participants were recruited via an e-mail announcement of the study sent to a variety of Arab/Middle East-related listservs, groups, and organizations primarily found through Internet search for MEA community centers and Muslim/MEA student groups. The e-mail announcements were sent to individuals on the Web site listed as either the contact person or the listserv owner. This person was then be asked to forward the research announcement to their listserv and to eligible colleagues and friends. Potential participants used a hypertext link to access the survey Website. After reading an informed consent, participants were instructed to complete the online survey. Participants were also be recruited via snowball sampling using the researchers' personal and professional networks and social media (e.g., advertisements on Facebook).

In order to reduce response biases for our theorized mediation model, psychological distress was assessed prior to and independent of measuring the predictor (i.e., ethnic discrimination and mediational and moderator variables. This created "psychological separation" of the variables as a means of reducing common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). This strategy also served to decrease the chances that participants' memories of ethnic discrimination could influence their answers to the psychological distress symptoms. Other than placing the psychological distress scale first in the survey, all other measures were randomly ordered in the survey.

Chapter 4

Results

The initial sample was comprised of 315 participants who began the online survey. One hundred six participants who left the entire survey blank, 85 participants who left at least one measure entirely blank and two participants who left more than 20% of items missing on one or more measures were eliminated from the dataset, resulting in a final sample of 122 participants.

There was some missing data among the remaining 122 participants who were included in the study. Missing data analysis showed that one half of a percent of all items for all cases were missing, 55.45% of the items were not missing data for any case, and 74.59% of participants had no missing data. No single item had more than 2.5% missing values. Given the very small amount of missing data, we used available case analyses procedures to address missing data points. With available case analysis, mean scale scores are calculated without substitution or imputation of values. This procedure is preferred over mean substitution, which can produce inflation of correlation coefficients among items. Furthermore, it has been found to produce similar results to multiple imputation methods (Parent, 2013).

Data met guidelines for univariate normality (i.e., skewness < 3 , kurtosis < 10 ; Weston & Gore, 2006). Descriptive statistics and bivariate correlations among all study variables are shown in Table 1. Examination of multicollinearity indexes for all analyses indicated that multicollinearity was not a problem (i.e., absolute value correlations $< .90$, variance inflation factors < 10 ; tolerance values $> .20$, and condition indexes < 30 ; Field, 2013; Tabachnick & Fidell, 2001).

We wondered if our moderator variable for Hypothesis 1 (religiosity) was truly meaningful for participants who identified as having no religious affiliation or being agnostic or

atheist ($n = 23$). Due to a violation of the assumption of homogeneity of variance as measured by Levene's Statistic, we used an unequal variance independent t-test to compare those with a religious affiliation and those having no religious affiliation on the religiosity measure. Results revealed that those who identified with an organized religion ($M = 2.56$; $SD = 1.20$) reported higher religiosity than those who identified as having no religious affiliation ($M = 1.16$; $SD = .26$; $t(120) = -10.60$, $p = .000$). Thus, it appeared that religious affiliation was confounded with religiosity for those with no religious affiliation; therefore, we decided to drop those with no religious affiliation from the associated analysis, resulting in a sample of 99 participants for testing Hypothesis 1.

A hierarchical multiple regression analysis was used to test the moderator effects of religiosity on the relationship between religious affiliation (coded 0 = non-Muslim and 1 = Muslim) and ethnic discrimination, as posited by Hypothesis 1. Scores for religiosity were mean centered. Main effects were entered at Step 1 and interaction effects at Step 2. A significant change in R^2 for the interaction term indicated a significant moderator effect (see Table 2). That is, the interaction between religious affiliation and religiosity ($\beta = .33$) was a significant predictor of ethnic discrimination and accounted for 5.3% beyond the variance accounted for by religious affiliation and religiosity (R^2 Change = .053; F Change = 6.141; Significant F Change = .015). Follow-up simple slopes analysis using Hayes (2013) PROCESS SPSS macro (Model 1) revealed that Muslim identification did not predict ethnic discrimination for MEAs with low (-1 SD) levels of religiosity, $B = .08$, $t(95) = -.3915$, $p = .70$; whereas Muslim identification predicted ethnic discrimination for MEAs with high religiosity ($+1$ SD), $B = .74$, $t(95) = 3.884$, $p = .0002$, and at the mean, $B = .41$, $t(95) = 3.001$, $p = .003$. As shown in Figure 3, Muslims at

high and mean levels of religiosity experience more ethnic discrimination than Muslims at low levels of religiosity.

To test Hypothesis 2, bootstrap analyses for multiple mediation were conducted using Hayes (2013) PROCESS SPSS macro (Model 4). As suggested by Preacher and Hayes (2008), for our mediational analysis we used bootstrapping analyses with 1,000 bootstrapping resamples to produce 95% confidence intervals for the indirect effect. Mediation analysis experts increasingly recommend bootstrap confidence intervals, as they do not erroneously assume normality in the distribution of the mediated effect and it can be applied with confidence to smaller samples (c.f., Mallinckrodt, Abraham, Wei, & Russell, 2006; Preacher & Hayes, 2008; Shrout & Bolger, 2002). Contrary to our hypothesis, we found no significant mediating effects for the maladaptive coping strategies that we tested, Coping with Discrimination via Internalization, (mean indirect [unstandardized] effect = .01 ($SE = .01$, 95% CI [-.012, .044], $\beta = .01$), Coping with Discrimination via Detachment (mean indirect [unstandardized] effect = .05 ($SE = .03$, 95% CI [-.004, .122], $\beta = .00$), and Coping with Discrimination via Drugs and Alcohol, (mean indirect [unstandardized] effect = .00 ($SE = .01$, 95% CI [-.019, .038], $\beta = .003$). Although no significant mediational effects were found, there were significant unique direct links between ethnic discrimination and coping with detachment and psychological distress and between the three coping variables and psychological distress (see Figure 4). These findings revealed that higher levels of ethnic discrimination and more coping with discrimination via internalization, detachment, and drugs and alcohol were uniquely related to higher levels of psychological distress. In addition, more ethnic discrimination was related to higher levels of coping via detachment.

For Hypothesis 3, two hierarchical multiple regressions were conducted to test the moderator effects of ethnic identity and family connectedness (Table 3) in the discrimination-distress link. Main effects were entered at Step 1 and interaction effects at Step 2. Contrary to our hypothesis that ethnic identity and family connectedness would buffer the direct relationship between discrimination and psychological distress, there were no significant changes in R^2 for the interaction term for neither ethnic identity (R^2 Change = .002; F Change = .271; Non-Significant F Change = .604) nor family connectedness (R^2 Change = .023; F Change = 3.353; Non-Significant F Change = .070).

For Hypothesis 4, additional hierarchical multiple regressions were conducted to test the moderator effects of ethnic identity and family connectedness in the links between ethnic discrimination and maladaptive coping styles (Coping via Internalization, Coping via Detachment, and Coping via Drugs and Alcohol). Main effects were entered at Step 1 and interaction effects at Step 2. Contrary to hypothesis 4, ethnic identity did not moderate any of the ethnic discrimination-coping strategies links (see Table 4). In addition, family connectedness did not moderate the links between ethnic discrimination and Coping via Detachment and Coping via Drugs and Alcohol (see Table 4).

Consistent with Hypothesis 4, a significant change in R^2 for the ethnic discrimination X family connectedness interaction term indicated a significant moderator effect of family connectedness on the discrimination-Coping via Internalization link. That is, the interaction between ethnic discrimination and family connectedness ($\beta = -.30$) was a significant predictor of Coping via Internalization scores and accounted for 7.9% beyond the variance accounted for by ethnic discrimination and family connectedness (R^2 Change = .079; F Change = 10.269; Significant F Change = .002). Follow-up simple slopes analysis using Hayes (2013) PROCESS

SPSS macro (Model 1) revealed that ethnic discrimination predicted Coping with Discrimination via Internalization for MEA with low family connectedness, $B = .64$, $t(118) = 2.795$, $p = .006$, but not for those with high family connectedness $B = -.23$, $t(118) = -1.37$, $p = .17$ or at the mean. $B = .21$, $t(118) = 1.41$, $p = .16$.

Because we found no mediating effects of the three coping variables in the ethnic discrimination-psychological distress links described above, there can be no moderated mediation. Thus, hypothesis 5 was not supported.

Chapter 5

Discussion

The present study examined the role of religiosity in the link between religious affiliation and ethnic discrimination and possible mediator and moderator variables in the link between ethnic discrimination and psychological distress among MEA Americans. Muslims reported significantly more experiences of discrimination than their non-Muslim counterparts, which is consistent with existing literature (Awad, 2010; Moradi & Hasan, 2004; Padela & Heisler, 2010). Additionally, as hypothesized, religiosity moderated the religious affiliation-discrimination link, which has not previously been established in the literature. Specifically, we found that Muslims with high and average levels of religiosity experienced more discriminatory events based on their MEA background than Muslims with low levels of religiosity. This finding may be due to the increased visibility of more religious Muslims due to religious markers (Abu-Raiya et al. 2011) or because radical Islam is often what is associated with negative images and stereotypes of MEAs in the media and public discourse. The literature generally shows that religiosity is inversely associated with negative mental health outcomes (Chokkanathan, 2013; Nurasikin et al. 2013; McGowan, 2012; Rasic, Robinson, Bolton, Bienvenu, & Sareen, 2011) or positively associated with indicators of well-being (e.g., Allen & Heppner, 2011). One notable exception comes from a study of Muslim Turkish university students in which extrinsic religiosity was associated with symptoms of depression and anxiety, and both intrinsic and extrinsic religiosity was associated with hostility (Kuyel, Cesur, & Ellison, 2012). Additionally, McGowan (2012) found that organizational religiosity was associated with more depressive symptoms among Jews than Christians in their sample, however the intrinsic religiosity-depression link did not vary by religious affiliation. Altogether, it appears that while religiosity is generally associated with more

positive mental health outcomes, this relationship varies based on type of religiosity (organizational, intrinsic, or extrinsic), religious affiliation, and other contextual factors. Our study adds to the literature by identifying one critical way that religiosity may have a negative impact due to increased vulnerability to ethnic discrimination, which is associated with psychological distress.

More generally, we found that psychological distress was associated with a Muslim religious affiliation. This finding may be related to more difficult acculturation processes and more acculturative stress among Muslim MEAs in addition to being more frequent targets of ethnic discrimination and negative stereotyping. Previous research suggests that acculturation comes more easily to Arab Christians in contrast with Arab Muslims since Muslims are religious minorities in the US (Faragallah et al. 1997; Ghanem-Ybarra, 2003), which also helps to explain the disparity between psychological distress among Muslim and as compared with non-Christian MEA Americans.

Although we found no significant mediator effects for the maladaptive coping with discrimination strategies, we did find that higher levels of ethnic discrimination and more coping with discrimination via internalization, detachment, and drugs and alcohol were uniquely related to higher levels of psychological distress. The finding that ethnic discrimination is related to psychological distress is consistent with previous research specifically with MEA Americans (Abu-Raiya et al. 2011; Moradi & Hasan, 2004; Padela & Heisler, 2010; Rousseau et al. 2011) and broadly with marginalized groups in general (Schmitt et al. 2014). Furthermore, the persistence of the ethnic discrimination-distress link when other important coping variables are considered underscores the importance of this relationship.

No previously published research has examined the relationships between maladaptive coping with discrimination strategies and distress. The current study contributes to the literature to show that these maladaptive coping strategies are in fact employed by MEAs as with other groups (e.g., sexual minorities, Szymanski & Bandermann, 2014) and are related to psychological distress. However, because we did not find any significant explanatory effects of these coping styles, our findings do not support Hatzenbuehler's (2009) theoretical psychological mediation model, at least as it relates to more individual, interpersonal experiences of ethnic discrimination among MEA Americans. Future research might examine ethnic discrimination at more subtle levels (e.g., microaggressions) and at institutional and cultural levels to determine if coping responses assessed in this study mediate their links with psychological distress.

Although neither ethnic identity nor family connectedness had a significant moderating effect on the discrimination-distress link, there was a trend towards a significant moderator effect of family connectedness ($p = .06$), suggesting that the difference between the high and low family connectedness groups may occur at the lower levels of ethnic discrimination when those with high family connectedness may have more psychological distress. Our relatively small sample and low power may have contributed to our inability to detect a significant interaction effect. We will continue to collect additional data and re-test our hypotheses in order to make this determination. If increasing our sample and power to determine a moderator effect yields a significant effect, this finding would be contrary with that which has been well-established with other ethnic minority populations (e.g., Chae et al. 2012; Stuart & Jose, 2014; Tummala-Narra et al. 2012; Wei et al. 2010b; Wei et al. 2013; Umaña-Taylor et al. 2011). It may be that high family connectedness increases the likelihood of inter-generational cultural conflicts which in turn creates more psychological distress. It's possible that family connectedness carries with it

added burdens of family obligations (e.g., taking care of other family members) or pressure to please family members. Indeed, a study using a diverse sample of adolescents showed that those who spent more time helping family reported feeling happier and there was no association between time spent helping and feelings of distress, however those who spent more days assisting parents with certain tasks reported more distress (Telzer & Fuligni, 2009). Taken together with our current findings, it seems that cultural factors clearly have a complex relationship with psychological distress among MEAs, and perhaps in a way that is unique from other ethnic minority groups.

As hypothesized, we found a significant moderator effect of family connectedness on the discrimination-coping via internalization link. Specifically, ethnic discrimination predicted coping with discrimination via internalization for MEA with low family connectedness, but not for those with high family connectedness. Thus, it appears that increased family connectedness protects against the use of coping with discrimination via internalization. In other words, those with more family connectedness are less likely to blame themselves for instances of ethnic discrimination. Perhaps being close with one's family increases the likelihood of witnessing discriminatory events against others of similar ethnic background and/or otherwise learning about others also being victims of the same types of discrimination. It seems that such exposure would be validating or normalizing for an individual who experiences ethnic discrimination (i.e., thinking, "It's not just me or something I've personally done that's caused me to be treated unfairly") and thus reduce or prevent coping with discrimination via internalization. However, we did not find support for a moderator effect of family connectedness on the links between discrimination and neither coping via detachment nor coping via drugs and alcohol.

Limitations and Future Directions

Several limitations due to the nature of this study being cross-sectional and using a non-probability sample must be acknowledged. We cannot infer causation based on the current study, nor can we take our findings to be representative of MEAs in the US. Future investigations may address some of these limitations by using a longitudinal study design. The issue of non-representativeness might be addressed by changing language in the recruitment materials and/or using different recruitment methods. During the recruitment phase of the current study, we received feedback from prospective participants suggesting that the term “Middle Eastern/Arab American” was either unclear with regard to who should be included or upsetting because some individuals took it to mean that we were equating *Middle Eastern* and *Arab*. Future research could address this issue by using more explicitly inclusive language (e.g., “Middle Eastern and/or Arab American,” “individuals of any religious background or mixed ethnic backgrounds are welcome to participate”). Alternatively, future research may consider exploring a more specific population of interest (e.g., Muslims, Arabs, 1st generation immigrants), which might bring prospective participants to identify more strongly with the study and choose to participate accordingly. Furthermore, some prospective participants expressed hesitations of completing an online survey for fear that they would be targeted and placed under surveillance by government agencies. This concern could be addressed in the future by allowing participants the option to complete the survey via traditional pencil-and-paper.

Another limitation is that our study design did not have sufficient power to detect all but the very largest interaction effects. Additionally, a possible limitation of the current study was that the measure we used for the ethnic discrimination variable was originally developed to measure the similar but related construct of *racist* events with a more visible minority population.

Therefore, it might not capture feelings of oppression or marginalization based on more subtle experiences of bias (e.g., microaggressions, othering, assumptions of Whiteness, Islamophobia), however we chose this measure because it had previously been validated with this population. Although the SRE did function well in the current study, an ethnic discrimination measure designed specifically for MEA Americans might pick up on aspects of MEA experiences that the SRE does not address. Researchers may also consider assessing other forms of oppression relevant to MEA Americans such as microaggressions in interpersonal relationships, exposure to biased media representations of MEAs, or Islamophobia.

Given that the original sample for developing the CDS (Wei et al. 2010a) did not include MEA Americans and we did not find a mediator role of the maladaptive coping with discrimination variables in the discrimination-distress link, it remains unclear what coping with discrimination styles are used by MEAs that may explain how individual experiences of discrimination are linked to distress. Future research that explores other potential coping styles (e.g., reaching out, rumination, isolation, internalized stigma), would be beneficial for better understanding just how ethnic discrimination is related to distress in MEAs and continue to test Hatzenbuehler's psychological mediation model.

An additional fruitful area of research would be to examine how family connectedness serves as a buffer against coping via internalization. Are there other resources that might provide similar benefits for those who have experienced ethnic discrimination? For example, could general social support, social identity, collective self-esteem protect against distress in similar ways? If they all do, then maybe the value of family connectedness in this moderator role comes from having meaningful connections with others in general. If social support does not moderate the discrimination-internalization link and social identity or collective self-esteem do, then

maybe the benefit has more to do with feeling connected specifically with one's ethnic community.

Clinical Implications

One of the most important contributions of this study comes from the fact that much of the published recommendations for clinical work with MEAs to date have largely stemmed from conceptual assumptions based on general MEA cultural values and expectations (e.g., Erickson & Al-Timimi, 2001; Nassar-McMillan & Hakim-Larson, 2003). Very little research has directly investigated moderators and mediators in the discrimination-distress link. . The current study informs readers specifically about factors associated with distress among MEA Americans, including Muslim identification, ethnic discrimination, and maladaptive coping with discrimination (via internalization, detachment, and drug and alcohol use). It is important for clinicians to be aware of these risk factors in order to identify, assess, and address them with clients. Additionally, the finding that family connectedness buffers the link between discrimination and coping via internalization offers a very specific possible intervention point for clients who appear to be blaming themselves for oppressive experiences. In such cases, clinicians might move beyond making statements that validate and normalize MEA experiences of discrimination and ask clients about their family dynamics, which may be influencing their reactions.

From a social justice perspective, the current study does the critical work of highlighting diversity within MEA populations in US with respect to religious diversity in religiosity in addition to affiliation, which has not previously been addressed in the literature with this population. Clinicians can see how one's experience in the world is likely to differ based on one's religious affiliation as well as how actively engaged they are with that religion.

Finally, although we did not find a mediator role of these maladaptive coping strategies, the current study does show that coping via internalization, coping via detachment, and coping via drugs and alcohol in response to discrimination are related to distress. In light of this finding, clinicians may be more vigilant in observing or assessing these coping strategies. Based on one's own biases and assumptions about MEAs (Muslims in particular), clinicians might tend toward avoiding questions regarding drugs and alcohol, but our findings indicate that despite some religious values against it, substance use is relevant for this population. Helping clients identify and practice alternative more adaptive coping such as reaching out, educating others, engaging interfaith dialogues, and positive religious coping that have been identified by MEA Americans in previous research (Abu-Raiya, et al. 2011; Ikizler & Szymanski, 2014) might redirect energy away from maladaptive coping responses that are associated with psychological distress.

List of References

- Abdulrahim, S., James, S., Yamout, R., & Baker, W. (2012). Discrimination and psychological distress: does Whiteness matter for Arab Americans? *Social Science & Medicine*, 75, 2116–23. doi:10.1016/j.socscimed.2012.07.030
- Abu-Raiya, H., Pargament, K. I., & Mahoney, A. (2011). Examining coping methods with stressful interpersonal events experienced by Muslims living in the United States following the 9/11 attacks. *Psychology of Religion and Spirituality*, 3, 1–14. doi:10.1037/a0020034
- Abu-Ras, W. (2007). Cultural beliefs and service utilization by battered Arab immigrant women. *Violence against Women*, 13, 1002–28. doi:10.1177/1077801207306019
- Abudabbeh, N. & Hamid, A. (2001) Substance use among Arabs and Arab Americans. In S. L. A Straussner (Ed.), *Ethnocultural factors in substance abuse treatment* (pp. 275-290). New York: Guilford Press.
- Abudabbeh, N. (2005). Arab families: An overview. In M. McGoldrick, J. Giordano, & N. Garcia-Preto (Eds.), *Ethnicity and family therapy* (3rd ed., pp. 423-436). New York: Guilford Press.
- Ahluwalia, M. K., & Pellettiere, L. (2010). Sikh men post-9/11: Misidentification, discrimination, and coping. *Asian American Journal of Psychology*, 1, 303–314. doi:10.1037/a0022156
- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Ajrouch, K. J. (2000). Place, age, and culture: Community living and ethnic identity among Lebanese American adolescents. *Small Group Research*, 31, 447–469. doi:10.1177/104649640003100404

- Allen, G. E. K., & Heppner, P. P. (2011). Religiosity, coping, and psychological well-being among Latter-Day Saint Polynesians in the U.S. *Asian American Journal of Psychology*, 2, 13–24. doi:10.1037/a0023266
- Asvat, Y., & Malcarne, V. L. (2008). Acculturation and depressive symptoms in Muslim university students: Personal-family acculturation match. *International Journal of Psychology*, 43, 114-124. doi: 10.1080/00207590601126668.
- Awad, G. H. (2010). The impact of acculturation and religious identification on perceived discrimination for Arab/Middle Eastern Americans. *Cultural Diversity & Ethnic Minority Psychology*, 16, 59–67. doi:10.1037/a0016675
- Bacio, G. A. Mays, V. M., & Lau, A. S. (2013). Drinking initiation and problematic drinking among Latino adolescents: Explanations of the immigrant paradox. *Psychology of Addictive Behaviors*, 27, 14-22. doi: 10.1037/a0029996
- Barnes, P. W., & Lightsey, O. R. Jr. (2005). Perceived racist discrimination, coping, stress and life satisfaction. *Journal of Multicultural Counseling and Development*. 33, 48–61. doi: 10.1002/j.2161-1912.2005.tb00004.x
- Bettendorf, S. K., & Fischer, A. R. (2009). Cultural strengths as moderators of the relationship between acculturation to the mainstream U.S. Society and eating- and body-related concerns among Mexican American women. *Journal of Counseling Psychology*, 56, 430–440. doi:10.1037/a0016382
- Buchanan, T., & Smith, J. L. (1999). Using the internet for psychological research: Personality testing on the world wide web. *British Journal of Psychology*, 90, 125-144. doi: 10.1348/000712699161189

- Bushman, B. J., & Bonacci, A. M. (2004). You've got mail: Using e-mail to examine the effect of prejudiced attitudes on discrimination against Arabs. *Journal of Experimental Social Psychology, 40*, 753–759. doi:10.1016/j.jesp.2004.02.001
- Cassidy, C., O'Conner, R. C., Howe, C., & Warden, D. (2004). Perceived discrimination and psychological distress: The role of personal and ethnic self-esteem. *Journal of Counseling Psychology, 51*, 329-339. doi: 10.1037/0022-0167.51.3.329
- Chae, D., Lee, S., Lincoln, K., & Ihara, E. (2012). Discrimination, family relations, and major depression among Asian Americans. *Journal of Immigrant and Minority Health, 14*, 361-70. doi: 10.1007/s10903-011-9548-4
- Choi, Y., Harachi, T.W., Gillmore, M.R., & Catalano, R.F. (2006). Are multiracial adolescents at greater risk? Comparisons of rates, patterns, and correlates of substance use and violence between monoracial and multiracial adolescents. *American Journal of Orthopsychiatry, 76*, 86-97. doi: 10.1037/0002-9432.76.1.86
- Chokkanathan, S. (2013). Religiosity and well-being of older adults in Chennai, India. *Aging & Mental Health, 17*, 880–887. doi: 10.1080/13607863.2013.790924
- Derogatis, L. R., Lipman, R. S., Rickets, K., Uhlenhuth, E. H., & Covi, L. (1974). The Hopkins Symptom Checklist (HSCL): A self-report symptom inventory. *Behavioral Science, 19*, 1-14.
- Deros, E., & Ryan, A. M. (2009). Hiring discrimination against Arab Minorities: Interactions between prejudice and job characteristics, *Human Performance, 22*, 297–320. doi:10.1080/08959280903120261
- Dwairy, M. (2003). Validation of multigenerational interconnectedness scale among Arab adolescents. *Psychological Reports, 93*, 697–704. doi:10.2466/pr0.2003.93.3.697

- Dwairy, M., Achoui, M., Abouserie, R., & Farah, A. (2006). Adolescent-family connectedness among Arabs: A second cross-regional research study. *Journal of Cross-Cultural Psychology, 37*, 248–261. doi:10.1177/0022022106286923
- En-Nabut, I. (2007). The lived experiences of immigrant Arab Muslim women in the United States: Implications for counselors and other helping professionals. *University of New Orleans Theses and Dissertations*.
- Erickson, C. D., & Al-Timimi, N. R. (2001). Providing mental health services to Arab Americans: Recommendations and considerations. *Cultural Diversity and Ethnic Minority Psychology, 7*, 308–327. doi:10.1037//1099-9809.7.4.308
- Ernst, C. W. (Ed.). (2013). *Islamophobia in America: The anatomy of intolerance*. New York, NY: Palgrave Macmillan.
- Faragallah, M. H., Schumm, W. R., & Webb, F. J. (1997). Acculturation of Arab-American immigrants: An exploratory study. *Journal of Comparative Family Studies, 28*, 182-203.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Thousand Oaks, CA: Sage.
- Gavazzi, S. M., & Sabatelli, R. M. (1987). *Assessing levels of individuation through multigenerational interconnectedness*. Paper presented at the National Council of Family Relations 49th Annual Conference, Atlanta.
- Gavazzi, S. M., & Sabatelli, R. M. (1988). *Multigenerational interconnectedness and family involvement: Assessing levels of individuation in adolescence and early adulthood*. Paper presented at the National Council of Family Relations 50th Annual Conference, Philadelphia.
- Gavazzi, S. M., Sabatelli, R. M., & Reese-Weber, M. (1999). Measurement of financial, functional, and psychological connections in families: Conceptual development and

- empirical use of the Multigenerational Interconnectedness Scale. *Psychological Reports*, 84, 1361–1371. doi: 10.2466/pr0.1999.84.3c.1361
- Ghanem-Ybarra, G.J. (2003). *The acculturation process and ethnic self-identification of second-generation Christian Palestinian American women* (Unpublished doctoral dissertation), California Professional School of Psychology at Alliant International University, San Diego.
- Green, D. E., Walkey, F. H., McCormick, I. A., & Taylor, A. J. W. (1988). Development and evaluation of a 21-item version of the Hopkins Symptom Checklist with New Zealand and United States respondents. *Australian Journal of Psychology*, 40, 61-70.
- Hakim-Larson, J., Nassar-McMillan, S., & Paterson, A. D. (2013). Culturally alert counseling with Middle Eastern Americans. In G. McAuliffe (Ed.), *Culturally alert counseling: A comprehensive introduction (2nd Edition; pp 263-292)*. Thousand Oaks, CA: Sage.
- Hatzenbuehler, M. L. (2009). How does sexual minority stigma “get under the skin”? A psychological mediation framework. *Psychological Bulletin*, 135, 707–30.
doi:10.1037/a0016441
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. New York: Guilford Press.
- Ikizler, A. S., & Szymanski, D. M. (2014). A qualitative study of Middle Eastern/Arab American sexual minority identity development. *Journal of LGBT Issues in Counseling*, 8, 206-241.
doi: 10.1080/15538605.2014.89729
- Kayyali, R. (2013). US census classifications and Arab Americans: Contestations and definitions of identity markers. *Journal of Ethnic and Migration Studies*, 39, 1299–1318.
doi:10.1080/1369183X.2013.778150

- Kira, I.A, Lewandowski, L., Ashby, J. S., Templin, T., Ramaswamy, V., & Mohanesh, J. (2014). The traumatogenic dynamics of internalized stigma of mental illness among Arab American, Muslim, and refugee clients. *Journal of the American Psychiatric Nurses Association*, 20, 250–266. doi:10.1177/1078390314542873
- Kulwicki, A., Khalifa, R., & Moore, G. (2008). The effects of September 11 on Arab American nurses in metropolitan Detroit. *Journal of Transcultural Nursing : Official Journal of the Transcultural Nursing Society*, 19, 134–139. doi:10.1177/1043659607313071
- Kuyel, N., Cesur, S., & Ellison, C. G. (2012). Religious orientation and mental health: A study with Turkish university students. *Psychological Reports*, 110, 535-546. doi: 10.2466/02.09.PR0.110.2.535-546
- Landrine, H., & Klonoff, E. a. (1996). The Schedule of Racist Events: A measure of racial discrimination and a study of its negative physical and mental health consequences. *Journal of Black Psychology*, 22, 144–168. doi:10.1177/00957984960222002
- Mallinckrodt, B., Abraham, W. T., Wei, M., & Russell, D. W. (2006). Advances in testing the statistical significance of mediation effects. *Journal of Counseling Psychology*, 53, 372–378. doi:10.1037/0022-0167.53.3.372
- McGowan, J.C. (2012). Religious affiliation and gender: Differences in the association between religiousness and psychological distress. *Dissertation Abstracts International*, 73.
- Michalak, E. E., & Szabo, A. (1998). Guidelines for internet research: An update. *European Psychologist*, 3, 70-75. doi: 10.1027//1016-9040.3.1.70
- Moradi, B., & Hasan, N. T. (2004). Arab American persons' reported experiences of discrimination and mental health: The mediating role of personal control. *Journal of Counseling Psychology*, 51, 418–428. doi:10.1037/0022-0167.51.4.418

- Nassar-McMillan, S. C., & Hakim-Larson, J. (2003). Counseling considerations among Arab Americans. *Journal of Counseling and Development, 81*, 150-159.
- Nurasikin, M. S.; Khatijah, L. A.; Aini, A.; Ramli, M.; Aida, S. A., Zainal N.Z., & Ng C.G. (2013). Religiousness, religious coping methods and distress level among psychiatric patients in Malaysia. *International Journal of Social Psychiatry, 59*, 332-338. doi: 10.1177/002076401243712
- Padela, A. I., & Heisler, M. (2010). The association of perceived abuse and discrimination after September 11, 2001, with psychological distress, level of happiness, and health status among Arab Americans. *American Journal of Public Health, 100*, 284–91. doi:10.2105/AJPH.2009.164954
- Parent, M. C. (2013). Handling item-level missing data: Simpler is just as good. *The Counseling Psychologist, 41*, 568-600. doi: 10.1177/0011000012445176
- Phinney, J. S. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with diverse groups. *Journal of Adolescent Research, 7*(2), 156–176. doi:10.1177/074355489272003
- Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology, 54*, 271-281. doi: 10.1037/0022-0167.54.3.271
- Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879-903. doi: 10.1037/0021-9010.88.5.879

- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879-891. doi: 10.3758/BRM.40.3.879
- Rasic, D., Robinson, J. S., Bolton, J., Bienvenu, O. J., & Sareen, J. (2011). Longitudinal relationships of religious worship attendance and spirituality with major depression, anxiety disorders, and suicidal ideation and attempts: Findings from the Baltimore epidemiologic catchment area study. *Journal of Psychiatric Research*, 45, 848-854. doi:10.1016/j.jpsychires.2010.11.014
- Riggle, E. D. B., Rostosky, S. S., & Reedy, C. S. (2005). Online surveys for GLBT research: Issues and techniques. *Journal of Homosexuality*, 49, 1-21. doi:10.1300/J082v49n02_01
- Rousseau, C., Hassan, G., Moreau, N., & Thombs, B. D. (2011). Perceived discrimination and its association with psychological distress among newly arrived immigrants before and after September 11, 2001. *American Journal of Public Health*, 101, 909-915. doi:10.2105/AJPH.2009.173062
- Sellers, R. M., & Shelton, J. N. (2003). The role of racial identity in perceived racial discrimination. *Journal of Personality and Social Psychology*, 84, 1079-1092. doi: 10.1037/0022-3514.84.5.1079
- Schmidt, W. C. (1997). World-wide web survey research: Benefits, potential problems, and solutions. *Behavior Research Methods, Instruments & Computers*, 29, 274-279. doi: 10.3758/BF03204826
- Schmitt, M. T., Branscombe, N. R., Postmes, T., & Garcia, A. (2014). The consequences of perceived discrimination for psychological well-being: A meta-analytic review. *Psychological Bulletin*, 140, 921-948. doi: 10.1037/a0035754

Schwartz, S. J., Weisskirch, R. S., Hurley, E. A., Zamboanga, B. L., Park, I. J. K., Kim, S. Y.,...

Greene, A. D. (2010). Communalism, familism, and filial piety: are they birds of a collectivist feather? *Cultural Diversity & Ethnic Minority Psychology*, 16, 548–60.

doi:10.1037/a0021370

Shin, R., Daly, B., & Vera, E. (2007). The relationships of peer norms, ethnic identity, and peer support to school engagement in urban youth. *Professional School Counseling*, 10, 379–

388. doi: 10.1037/e539352007-001

Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, 7, 422–445. doi:

10.1037/1082-989X.7.4.422

Smith, T. B., & Sylva, L. (2011). Ethnic identity and personal well-being of people of color: A meta-analysis. *Journal of Counseling Psychology*, 58, 42–60. doi: 10.1037/a0021528

Stuart, J. & Jose, P. E. (2014). The protective influence of family connectedness, ethnic identity, and ethnic engagement for New Zealand Māori adolescents. *Developmental Psychology*,

50, 1817–1826. doi: 10.1037/a0036386

Sue, D. W., & Sue, D. (2003). *Counseling the culturally diverse: Theory and practice* (4th ed.). New York, NY: Wiley.

Szymanski, D. M., & Bandermann, K. M. (2014). Exploring coping mediators between

heterosexist oppression and posttraumatic stress symptoms among lesbian, gay, and

bisexual persons. *Psychology of Sexual Orientation and Gender Diversity*, 1, 213–224.

doi: 10.1037/sgd0000044

- Szymanski, D. M. & Henrichs-Beck, C. (2014). Exploring sexual minority women's experiences of external and internalized heterosexism and sexism and their links to coping and distress. *Sex Roles*, 70, 28-42. doi: 10.1007/s11199-013-0329-5
- Szymanski, D. M., & Obiri, O. (2011). Do religious coping styles moderate or mediate the external and internalized racism-distress links? *The Counseling Psychologist*, 39, 438-462. doi: 10.1177/0011000010378895
- Telzer, E. H., & Fuligni, A. J. (2009). Daily family assistance and the psychological well-being of adolescents from Latin American, Asian, and European backgrounds. *Developmental Psychology*, 45, 1177–89. doi:10.1037/a0014728
- Tummala-Narra, P., Alegria, M., & Chen, C. N. (2012). Perceived discrimination, acculturative stress, and depression among South Asians: Mixed findings. *Asian American Journal of Psychology*, 3, 3–16. doi:10.1037/a0024661
- Umaña-Taylor, A. J., Updegraff, K. A., & Gonzales-Backen, M. A. (2011). Mexican-origin adolescent mothers' stressors and psychosocial functioning: examining ethnic identity affirmation and familism as moderators. *Journal of Youth and Adolescence*, 40, 140–57. doi:10.1007/s10964-010-9511-z
- Wei, M., Alvarez, A. N., Ku, T.-Y., Russell, D. W., & Bonett, D. G. (2010). Development and validation of a Coping with Discrimination Scale: Factor structure, reliability, and validity. *Journal of Counseling Psychology*, 57, 328–44. doi:10.1037/a0019969
- Wei, M., Heppner, P. P., Ku, T.-Y., & Liao, K. Y.-H. (2010). Racial discrimination stress, coping, and depressive symptoms among Asian Americans: A moderation analysis. *Asian American Journal of Psychology*, 1, 136–150. doi:10.1037/a0020157
- Wei, M., Yeh, C. J., Chao, R. C.-L., Carrera, S., & Su, J. C. (2013). Family support, self-esteem,

and perceived racial discrimination among Asian American male college students.

Journal of Counseling Psychology, 60, 453–61. doi:10.1037/a0032344

Weston, R., & Gore, P. A. (2006). A brief guide to Structural Equation Modeling. *The*

Counseling Psychologist, 34, 719–751. doi: 10.1177/0011000006286345

Widner, D., & Chicoine, S. (2011). It's all in the name: Employment discrimination against Arab

Americans. *Sociological Forum*, 26, 806–823. doi:10.1111/j.1573-7861.2011.01285.x

Worthington Jr., E. L., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W.,

... & O'Connor, L. (2003). The Religious Commitment Inventory--10: Development,

refinement, and validation of a brief scale for research and counseling. *Journal of*

Counseling Psychology, 50, 84. doi:10.1037/0022-0167.50.1.84

Yip, T., Gee, G. C., & Takeuchi, D. T. (2008). Racial discrimination and psychological distress:

The impact of ethnic identity and age among immigrant and United States-born Asian

adults. *Developmental Psychology*, 44, 787–800. doi: 10.1037/0012-1649.44.3.787

Yoon, E., Chang, C.-T., Kim, S., Clawson, A., Cleary, S. E., Hansen, M., ... Gomes, A. M.

(2013). A meta-analysis of acculturation/enculturation and mental health. *Journal of*

Counseling Psychology, 60, 15–30. doi:10.1037/a0030652

Appendix

Table 1

Descriptives and Correlations among all Study Variables

Variable	Possible Range	M (SD)	1	2	3	4	5	6	7	8
1. Religious Affiliation (Non-Muslim vs. Muslim)	0-1	0.48 (.50)	---							
2. Religious Commitment	1-5	2.30 (1.22)	.20*	---						
3. Ethnic Discrimination	1-6	1.74 (.70)	.25*	.21*	---					
4. Coping via Internalization	1-6	2.49 (1.07)	.01	-.12	.07	---				
5. Coping via Detachment	1-6	2.44 (1.02)	.09	.00	.18*	.43**	---			
6. Coping via Drugs and Alcohol	1-6	1.77 (1.05)	-.20*	-.14	.02	.30**	.25**	---		
7. Ethnic Identity	1-5	3.69 (.94)	.19*	.40**	.18*	-.03	-.04	-.03	---	
8. Family Connectedness	1-7	3.56 (1.19)	.26**	.24**	.25*	.13	.18	-.15	.35**	---
9. Psychological Distress	1-4	1.72 (.52)	.20*	.03	.38**	.40**	.53**	.30**	.01	.26**

Note. For Religious Affiliation, Non-Muslim was coded as 0 and Muslim identity was coded as a 1; * $p < .05$; ** $p < .001$.

Table 2

Summary of Hierarchical Regression Predicting Ethnic Discrimination

Step	Variables	<i>B</i>	β	R^2	$R^2 \Delta$	$F \Delta$	<i>df</i>
1	Main Effects			.133	.133	7.376**	2, 96
	Religious Affiliation	.41	.28*				
	Religiosity	-.00	-.00				
2	Interaction Effects			.186	.053	6.141*	1, 95
	Religious Affiliation X Religiosity	.28	.33*				

Note: β reflects values for the final regression equation; * $p < .05$; ** $p < .001$.

Table 3

Tests of Ethnic Identity and Family Connectedness as Moderators of the Ethnic Discrimination and Psychological Distress Links

Predictor Variable	<i>B</i>	β	<i>t</i>	<i>R</i> ² Δ	<i>F</i> Δ	<i>df</i>
Criterion: Psychological Distress						
Step 1				.147	10.24*	2, 119
Ethnic Discrimination	.29	.39	4.51**			
Ethnic Identity	-.04	-.07	-.7			
Step 2				.002	.271	1, 188
Ethnic Discrimination X Ethnic Identity	-.04	-.04	-.52			
Criterion: Psychological Distress						
Step 1				.172	12.32*	2, 119
Ethnic Discrimination	.29	.39	4.31*			
Family Connectedness	.07	.16	1.83			
Step 2				.023	3.35	1, 118
Ethnic Discrimination X Family Connectedness	-.10	-.16	-1.83			

Note. β and *t* reflects values from the final regression equation; * $p < .01$

Table 4

Tests of Ethnic Identity and Family Connectedness as Moderators of the Ethnic Discrimination and Coping Links

Predictor Variable	Criterion	<i>B</i>	β	<i>t</i>	<i>R</i> ² Δ	<i>F</i> Δ	<i>df</i>
Internalization							
Step 1					.006	.359	2, 119
Ethnic Discrimination		.11	.07	.79			
Ethnic Identity		-.05	-.05	-.48			
Step 2					.003	.356	1, 118
Ethnic Discrimination X Ethnic Identity		-.09	-.06	-.60			
Detachment							
Step 1					.039	2.42	2, 119
Ethnic Discrimination		.29	.20	2.15*			
Ethnic Identity		-.08	-.07	-.79			
Step 2					.000	.047	1, 118
Ethnic Discrimination X Ethnic Identity		.032	.02	.22			
Drugs and alcohol							
Step 1					.001	.067	2, 119
Ethnic Discrimination		.04	.02	.25			
Ethnic Identity		-.04	-.03	-.33			
Step 2					.001	.062	1, 118
Ethnic Discrimination X Ethnic Identity		-.04	-.02	-.25			
Internalization							
Step 1					.018	1.12	2, 119
Ethnic Discrimination		.21	.13	1.41			
Family Connectedness		.08	.09	.97			
Step 2					.079	10.27**	1, 118
Ethnic Discrimination X Family Connectedness		-.36	-.30	-3.21**			
Detachment							
Step 1					.052	3.29*	2, 119
Ethnic Discrimination		.28	.19	2.00*			
Family Connectedness		.11	.13	1.36			
Step 2					.016	2.07	1, 118
Ethnic Discrimination X Family Connectedness		-.16	-.14	-1.44			
Drugs and alcohol							
Step 1					.026	1.56	2, 119
Ethnic Discrimination		.15	.10	1.01			
Family Connectedness		-.16	-.18	-1.90			
Step 2					.014	1.69	1, 118
Ethnic Discrimination X Family Connectedness		-.15	-.12	-1.30			

Note. β and *t* reflects values from the final regression equation; * $p < .05$, ** $p < .01$.

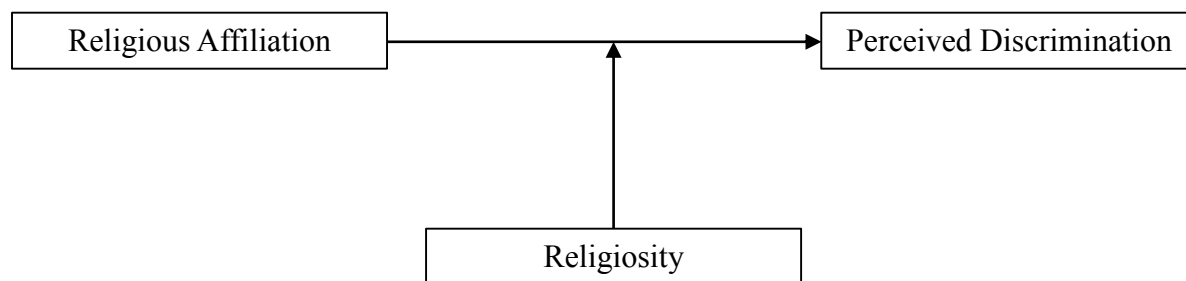


Figure 1

Hypothesized Model Predicting Experiences of Discrimination

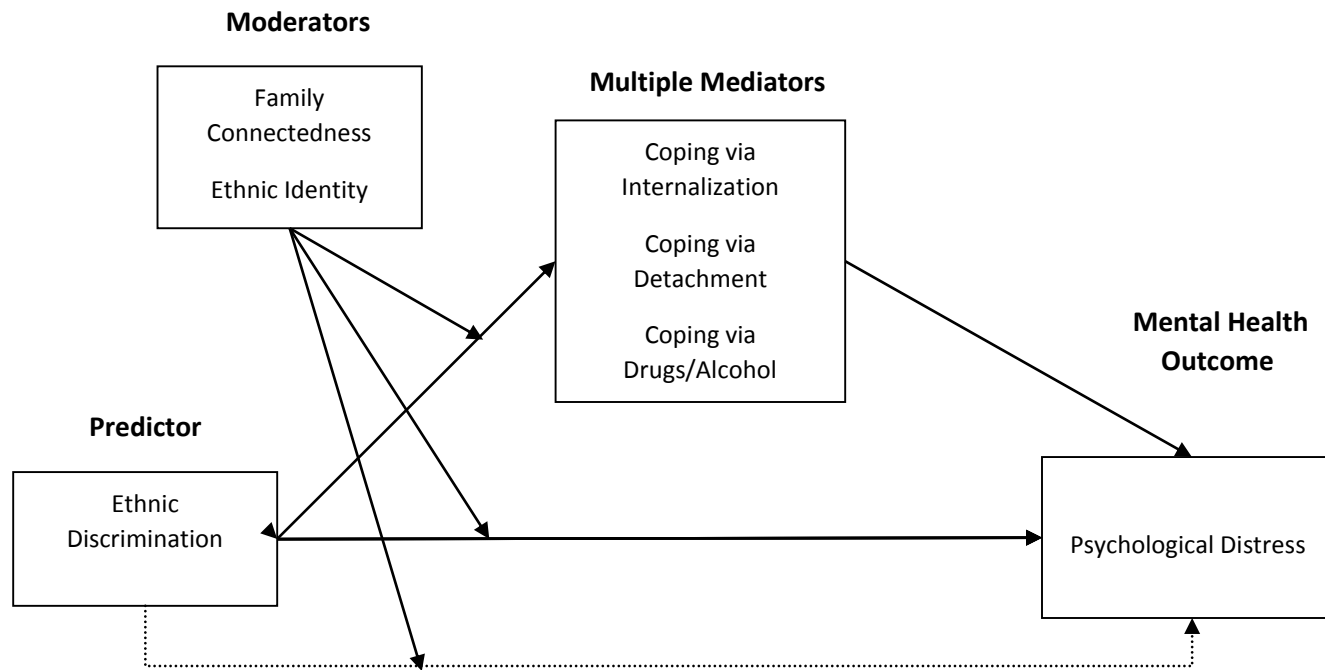


Figure 2

Hypothesized Model Predicting Psychological Distress

Note: Dashed line indicates conditional indirect effect.

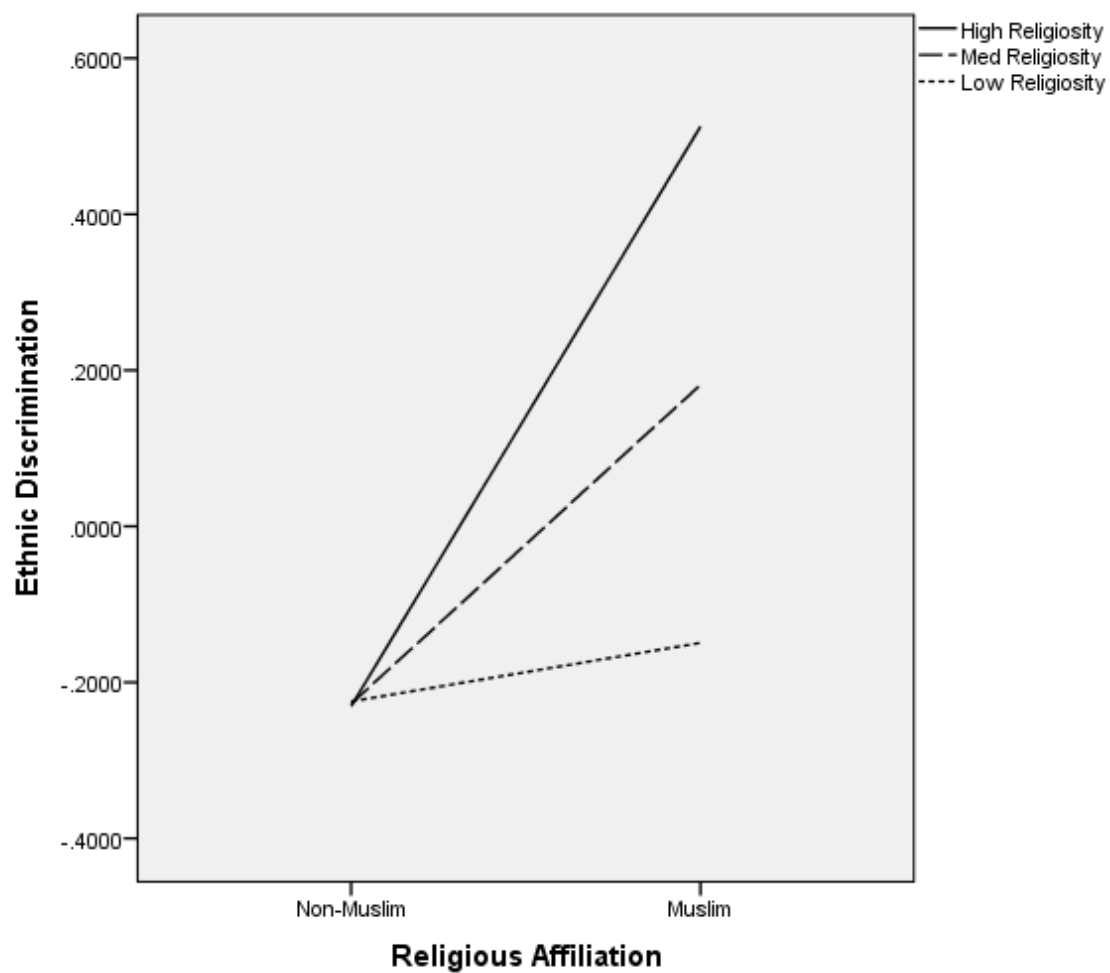


Figure 3

Interaction of Religious Affiliation and Religiosity on Ethnic Discrimination

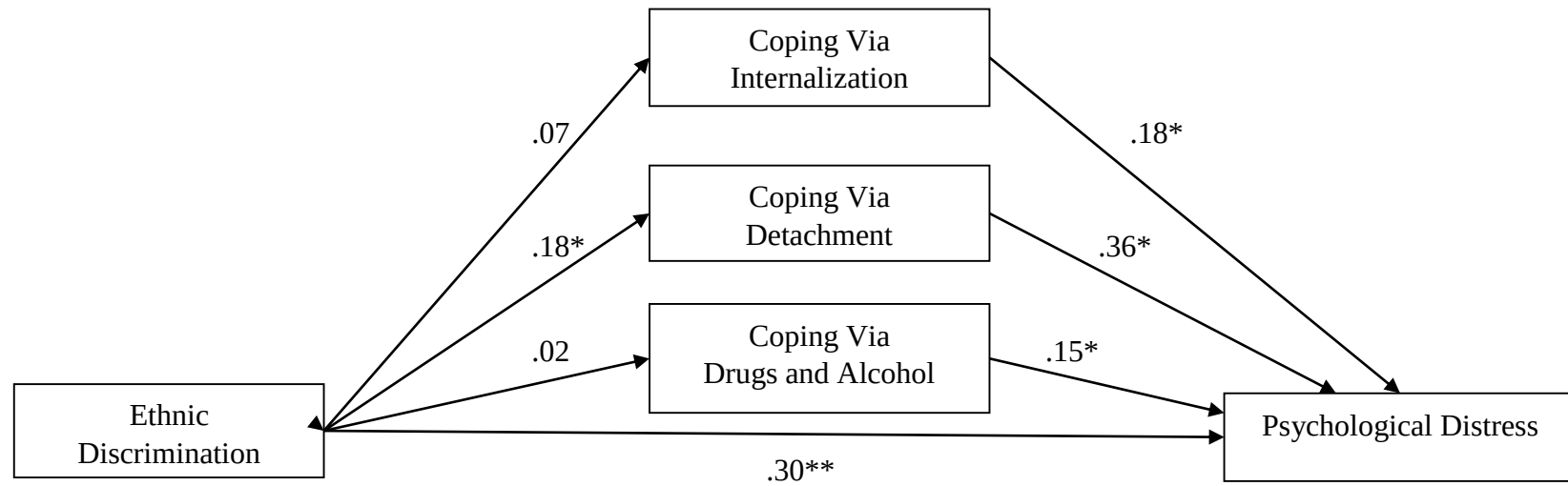


Figure 4

Path model of direct and indirect relationships of variables of interest predicting psychological distress.

Note. Values reflect standardized coefficients; * $p < .05$, ** $p < .01$.

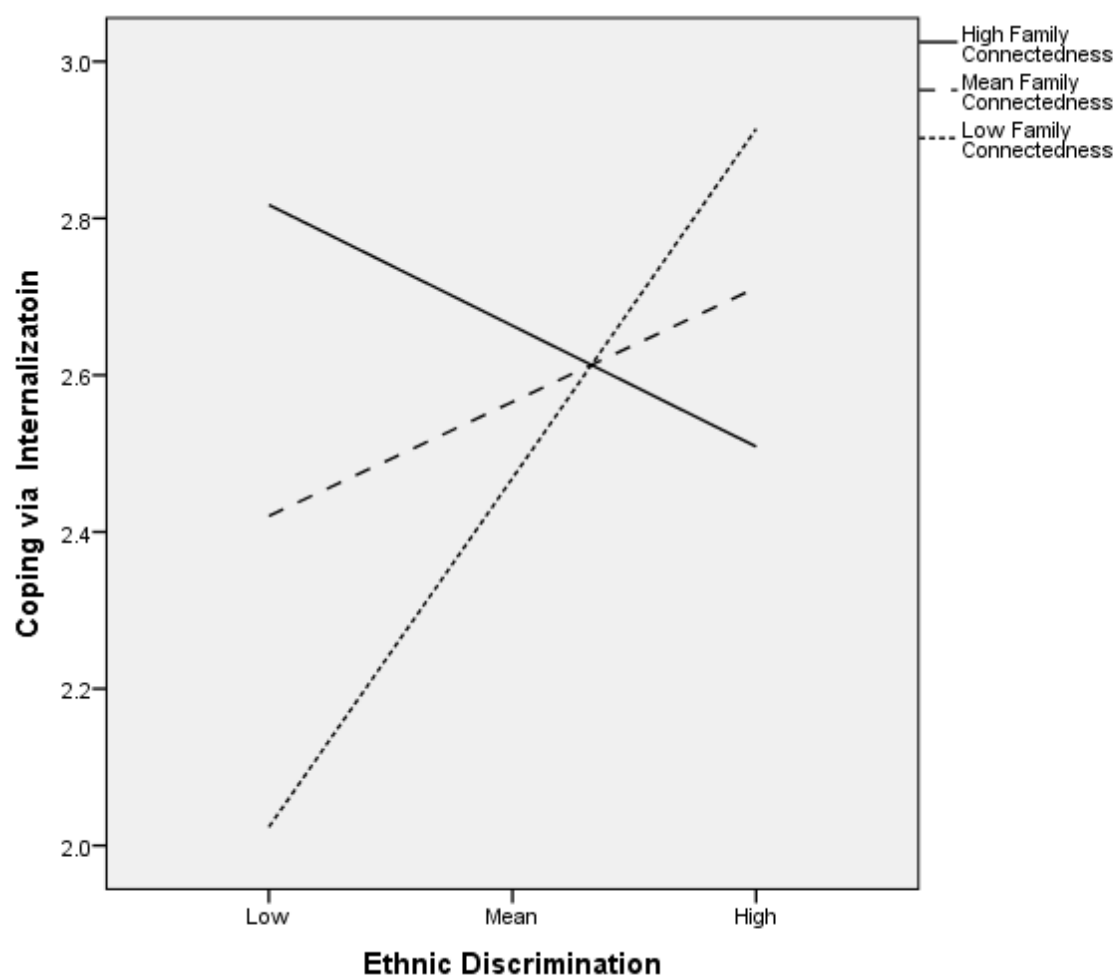


Figure 5

Interaction of Family Connectedness and Ethnic Discrimination on Coping via Internalization

Vita

Ayşe Selin İkizler was born in Washington, DC as a first-generation American to immigrant parents from Turkey. She was raised in Maryland and attended St. Mary's College of Maryland for her undergraduate education and graduated with honors in 2007 with a degree in Psychology and minor in Women, Gender, and Sexuality Studies. Ayşe then attended the University of Tennessee in pursuit of a doctor of philosophy degree in Counseling Psychology. She will graduate in August 2016 after the completion of a year-long clinical internship at the University of Maryland Counseling Center.