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ACCULTURATION AND MENTAL HEALTH STATUS AMONG HISPANICS

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ABSTRACT

Acculturation is a process of adjusting to a new language, new customs and norms, unfamiliar rules and laws, and lifestyle changes. Hispanics whom have immigrated to our country make up a substantial part of our population and are likely experiencing the acculturation process. The immigrant paradox suggests that in spite of the low socioeconomic status experienced by many acculturating Hispanics, physical health and mortality outcomes are better than those of non-Hispanic whites. However, studies looking at the relationship between acculturation and mental health have been less clear. Numerous studies on acculturation have shown inconsistent results, some of which point to acculturation and positive mental health outcomes and others that point to acculturation and negative mental health outcomes. Some researchers suggest that having a bicultural identity, that is, identifying with both one's origin and host culture smoothes the acculturation process and is a protective factor against negative mental health outcomes. Risk factors exist as well, particularly perceived discrimination, which can increase stress levels related to acculturation and negatively impact mental health. This study uses data collected from the MUSIC study to analyze the relationship between ethnic and American identities, discrimination, and depression among college students. Results revealed no relationship between ethnic and American identities and depression; however, discrimination was significantly related to depression among Hispanics. The experience of discrimination was also found to be worse for Hispanic men than Hispanic women.

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INTRODUCTION

The U.S. Census Bureau (2000) found that Hispanics make up about 12 percent of the United States population. Hispanics who immigrated from their country of origin are likely to be experiencing acculturation to the new culture, which is defined as a process of adjusting to a new language, new customs and norms, unfamiliar rules and laws, and lifestyle changes (Chun, Organista, & Marín, 2004). This process likely impacts the mental health of Hispanics residing in the United States. In the case of physical health, research has shown that Hispanics recently moved to the United States experience lower mortality rates and better health in adulthood than non-Hispanic whites and more acculturated Hispanics (Palloni & Arias, 2004). Although Hispanics generally have lower socioeconomic status than non-Hispanic whites, a factor traditionally associated with poor health and mortality outcomes, they have actually had better outcomes in these areas than their white counterparts. That Hispanics would have better outcomes in the face of adversity is entitled the immigrant paradox (Palloni & Arias, 2004). Findings such as these should suggest that in the case of mental health, higher acculturation status may be related to worse outcomes, however, results on acculturation and mental health outcomes are mixed, suggesting the immigrant paradox may not be true of mental health. In 1991, Rogler, Cortes, and Malgady reviewed prior literature on acculturation and found that 12 studies linked acculturation with negative mental health while 13 linked it with positive mental health. As discussed below, research results have continued to be mixed.

On one hand, challenges can arise from the acculturation process including learning different norms, rules, values, and a new language (Gonzales, Knight, Morgan-Lopez, Saenz, & Sirolli, 2002). These challenges may put Latinos at risk for negative mental health issues such as depression, low self-esteem, and conduct problems, as well as negative life outcomes such as

low educational attainment, financial instability, and substance abuse (Gonzales et al., 2002). Further, Gonzales et al. (2002) noted that incompatibilities in cultural norms, values, and expectations might complicate the acculturation process more.

On the other hand, acculturation may be beneficial in that it gives individuals the tools necessary to integrate themselves and achieve economic and social stability (Gonzales, Haan, & Hinton, 2001). Enhanced social supports, a direct result of better integration within the new host culture, have been linked with positive mental health outcomes (Dinh, Felipe, Jenn-Yun, & Su, 2009).

Inconsistent results make it difficult to tell whether the affects of acculturation on mental health are positive or negative (Lara, Gamboa, Kahramanian, Morales, & Bautista, 2005). Over the next decade, a growing and substantial proportion of United States youth will face the challenges that accompany integrating oneself within a new culture (Gonzales et al., 2002). Therefore, it is important that we understand the effects of acculturation on psychological well being and functioning.

This paper will review the various findings of research studies about acculturation and mental health status, specifically among the Hispanic population in the United States. I will begin by discussing reasons as to why contradictory findings regarding acculturation may exist as well as findings regarding acculturation and its relationship with both negative and positive mental health outcomes. Finally, using data from the Multisite University Study of Identity and Culture, the relationship between depression and acculturation will be measured.

Why is there so much variation across results?

Clearly, results regarding the relationship between acculturation and mental health are inconsistent. One reason for such variation is that in research dealing with acculturation and

mental health, social scientists find themselves debating over which construct, acculturation or acculturative stress, really targets what they hope to study. Acculturation is defined as a process of adjusting to a new language, new customs and norms, unfamiliar rules and laws, and lifestyle changes (Chun et al., 2004), while acculturative stress refers to the stress that originates from the acculturation process (Williams & Berry, 1991). Those in support of measuring acculturation accuse researchers who measure acculturative stress of grouping together several pre-existing mental health constructs and coining them as 'acculturative stress' (Rudmin, 2009). Thus, the construct of acculturative stress would confound the mental health outcome it was meant to predict. Those in support of acculturative stress say that a fault of researchers measuring acculturation is in discussing their results as if they actually measured acculturative stress (Hovey, 2000). Therefore, although two studies may both hope to study the adaptation of a new culture and its mental health consequences, different constructs are used to measure the same association. This results in variation among scales and a lack in similarity across research findings.

Another reason for variation in results is the large amount of acculturation scales. First of all, researchers often create their own acculturation scales rather than integrate one another's work to build off previous results and improve existing scales (Rudmin, 2009). This may be partly due to the fact that the lack of an agreed upon definition of acculturation has led researchers to create scales concurrent to their own operational definitions. For instance, Ramos (2005) measured acculturation solely through language, while Rivera (2007), measured it through both language and social relations formed in the new host culture. As other aspects of culture besides language are important for different societies, acculturation scales should

consider more than just language (Rudmin, 2009). Another reason for many scales is that the literature on acculturation is vast, and with so much available information, research is disjointed (Rudmin, 2009). The lack of integration in the research community in these areas may lead to a lack of consistent results. Finally, findings derived from an acculturation scale measuring one culture cannot be generalized to others, further complicating the integration of material on acculturation.

In sum, with a lack in definition of acculturation and so many different scales intended to measure the same construct, it is not surprising that research findings regarding acculturation and mental health vary. Until researchers can agree upon what the notion of acculturation entails, confusion and dissimilarity in results are likely to continue.

Acculturation and Negative Mental Health Outcomes

One reason high levels of acculturation may lead to negative mental health outcomes is that the acculturation process, which involves migrating from one's host country of origin to a foreign location, often entails leaving behind beneficial social supports. Social supports are protective factors against various stressors and are directly related to positive mental health outcomes (Rivera, 2007). While social support is a positive variable, losing it is in fact a stressor. Social support can be generally classified into two major categories: emotional support, which refers to the love and care we feel from others that strengthens our sense of self-worth, or instrumental support, which refers to the tangible support others may provide such as helping with children, cooking, transportation, etc. (Seeman, 1998). Both emotional and instrumental supports suffer as distance makes it difficult to interact and communicate. Several aspects of adapting to a new culture, such as acquiring a new language and obtaining a job, may be stressful

in and of themselves. Therefore, the combination of acculturation and decline in social support may result in mental health issues such as stress and depression (Rivera, 2007).

To examine this association, Rivera (2007) studied 850 Latino residents based in Miami. Self-report data was collected on acculturation status, depressive symptoms, and amount of family support. His findings revealed that high acculturation status was positively associated with depression and was significantly and negatively related to family support. This means highly acculturated individuals had less social support and more symptoms of depression. A study by Dawson (2009) complements this finding. In an examination of Dominican Immigrant women, she found that women experiencing discrimination and stress as a consequence of acculturation fared better if ties to their original culture were greater. In general, their cultural ties remained stronger if they were of low acculturation status. That is, low acculturated individuals were better able to maintain cultural ties than highly acculturated individuals, which in turn benefited their mental health. Additionally, Koneru, Weisman de Mamani, Flynn, and Betancourt (2007) noted that while less acculturated individuals may struggle to access resources due to language barriers, they also experience positive attributes such as living in closer contact with relatives. These studies show that high acculturation status negatively impacts social support, which in turn is related to depression. Acculturation experiences weaken ethnic ties and social relations, which diminishes social support networks and increases the risk of negative psychological outcomes (Rivera, 2007).

A second reason acculturation may lead to negative health outcomes is that traditional norms, values, and customs of one's origin culture are likely to differ from those of the host society (Hovey, 2000), resulting in conflict between two competing cultures. Especially among men, traditional male gender identity schemas may be interrupted (Ramos, 2005) when they

move from one country to another. A study on Puerto Ricans acculturating to the United States found that higher acculturated Puerto Rican men experienced higher depressive affect and somatic symptoms (Ramos, 2005) possibly due to the relinquishing of traditional male roles. In the Hispanic culture, the male tends to be the dominant household figure (National Healthy Marriage Resource Center, 2009). However, Latinas are more likely to find employment in the United States leading to a complete role-reversal that could lead to demoralization and depression among Puerto Rican men (Ramos, 2005). Traditional roles among Latinas are also changed and fulfilling the role of an employee in place of homemaker can also be distressing (Hovey, 2000). Further, acculturation may be related to negative mental health outcomes in that an unfamiliar and often hostile environment may lead to feelings of inadequacy, worthlessness, and helplessness (Ramos, 2005).

Finally, the transition from one's origin culture to a new culture can be strewn with discriminatory experiences. According to Ramos, negative cultural images about an ethnic group lead many to experience discrimination and oppression, despite high acculturation status. The realization that high acculturation status does not lead to full acceptance and integration into a country also leads to feelings of frustration, powerlessness, and demoralization (Ramos, 2005). In particular, for Hispanic men who are traditionally the breadwinners of their families, experiencing discrimination and lagging behind Latina women in the workforce can impair mental health negatively (Ramos, 2005). Discrimination has been linked to poor mental health outcomes for women as well. Dawson (2009) found that among Dominican women, discriminatory experiences were related to stress levels. Those who experienced major racist events and chronic discrimination exhibited the highest levels of stress (Dawson, 2009).

Acculturation and Positive Mental Health Outcomes

Other research has found that acculturation is in fact associated with positive mental health outcomes. Some studies have shown that as acculturation increases and one becomes more accustomed to and integrated into their surroundings, social support increases and helps individuals integrate themselves positively (Dinh et al., 2009, Gonzales et al., 2001). For instance, in a study of Mexican- American women, Dinh et al. (2009) found that highly acculturated women had more social support and better physical and mental health. As opposed to researchers who felt and have found support for the idea that acculturation may weaken ties to one's original culture, Dinh et al., (2009) suggested that the higher acculturated women may benefit because they have greater access to social capital that led to other forms of social support. When compared to low acculturated Mexican American women who had recently immigrated, the high acculturated women had a more extensive network of family members and friends from whom to receive support.

Concurrent with the idea that more highly acculturated individuals may actually have better mental health, Gonzales et al. (2001) found in a sample of 1,789 older Mexican Americans that more acculturated individuals suffered less depression, likely due to their better understanding of the dominant culture and its language. Therefore, higher acculturation may result in better mental health because a better understanding of culture and language can be useful tools. Those with more understanding have more access to educational and job opportunities, which can enhance one's socio-economic status, not to mention one's social and medical resources. Less acculturated individuals may lack the language fluency needed to make the most of useful educational and occupational resources, resulting in lower financial earnings,

hardship, and frustration (Gonzales et al., 2001). Such circumstances may diminish self-efficacy, resulting in psychological distress (Gonzales et al., 2001).

In support of these findings, Rogler et al. (1991) discussed how low acculturated individuals may suffer because they have not had enough time to acquire language abilities and establish connections in their new location. They are left in isolation from their new society and they lack instruments necessary to integrate themselves into their new environment. This can lead to low self-esteem, which in turn is related to mental health. Therefore, high-acculturated individuals may have better instruments to cope, and thus, better mental health, after all.

Biculturalism and Perceived Discrimination- Protective and Risk Factors

These studies described above demonstrate that acculturation is both a negative and a positive experience. Some research has focused on whether there are forms of acculturation that are healthier than others. Bacallao and Smokowski (2005), for example, in a review of acculturation literature described two distinct forms of acculturation, assimilation and biculturalism, and the opposite health outcomes they often lead to. Individuals who assimilate integrate themselves into their new host culture and cut off ties with their origin culture, resulting in higher rates of substance use, more depression, and more familial conflict (Bacallao & Smokowski, 2005). Bicultural individuals integrate themselves into their new host culture as well; however, they also maintain ties with their origin culture and have been shown to have lower rates of substance use, better mental health, and less familial conflict (Bacallao & Smokowski, 2005).

Bicultural individuals have more positive outcomes because of a skill-set they inherit called cultural frame-switching. This skill set allows them to “shift their socio-cognitive perceptual schemas in order to fit situational demands” (Bacallao & Smokowski, 2005). This

means bicultural individuals have the ability to behave differently and more appropriately in a range of situations according to the context. Because bicultural individuals possess this skill, they can relate to both their American friends and Hispanic family, as they understand both cultures and can access tools from both when necessary. Unfortunately, assimilated individuals disregard their origin culture in exchange for their new host culture and consequently lack the ability to frame-switch from one culture to another. While assimilated individuals may resort to substance use as a means to fit in with American peers (Rogler et al., 1999), bicultural individuals can relate to both friends and family easier using their frame-switching abilities. As a result, biculturalism often results in less family dysfunction and consequently, better mental health functioning. Therefore, it seems that biculturalism, in which one both integrates themselves within their host culture yet remains tied to their origin culture, seems to be a protective factor.

In addition to protective factors in the acculturation process, Bacallao and Smokowski (2005) also mentioned perceived discrimination to be a risk factor. Acculturating Hispanics may face discrimination based on their gender, race, or skin color in simple daily situations or even in more complex situations such as applying for job positions. Data pulled from The Parent-Teen Biculturalism Project (PTBP) were used to seek protective and risk factors among Latino families in the United States. Adolescents aged 12 to 18 filled out self-reports of common issues related to internalizing and externalizing behavioral problems. Among the problems, perceived discrimination was a highly significant predictor of both internal and external issues. Discrimination and oppression of Hispanics living in the United States may result in feelings of inadequacy and hopelessness (Ramos, 2005). These feelings can translate to Latinos feeling powerless over life situations and negative about their futures (Ramos, 2005). The negative

feelings associated with perceived discrimination can result in behavioral disorders, including depression, making perceived discrimination a risk factor for acculturating individuals. Hispanic males whom demand much respect in their origin culture may experience discrimination more harshly than Hispanic females.

Hypotheses

1. As biculturalism has been shown to be a protective factor, I predicted that those individuals at both low and high extremes of acculturation would experience higher levels of depression while individuals who are somewhat acculturated but still remain oriented towards their culture of origin would exhibit less depressive symptoms.
2. As perceived discrimination has been mentioned as a major risk factor by previous researchers, I hypothesized that individuals whom experience perceived discrimination would have higher levels of depression.
 - 2a. Furthermore, the experience of discrimination would be worse for men than women, as it can assist in the relinquishing of traditional male roles among Hispanics.

METHODS

The data used for this study was drawn from the Multisite University Study of Identity and Culture (MUSIC study). The intent of the MUSIC study was to assess college students' beliefs about culture, religion, parenting, and risky behaviors. The researchers used a cross-sectional design and self-reports to measure all constructs. The survey was administered on college campuses across the country. Students were recruited through an informational flyer and participation was voluntary. Those who completed the survey were offered extra-credit from professors. The entire survey was estimated to take around 90 minutes to complete.

The original MUSIC sample consisted of 9,260 participants (6,756 females). Participant's ages ranged from 16 to 63 with the average age being 20.39 years, although three outliers (ages 2 and 10) were removed, as they were likely falsely coded. Participants came from a range of ethnic backgrounds including 60.3% who identified as white, 14.8% Hispanic, 9.2% black, 7.5% East Asian, 2.5% South Asian, 1.2% Middle Eastern, and .1% Colored-South African. 4.5% of participants did not respond to the ethnicity measure. Family income varied with 18.7% of respondents having an annual family income of less than \$30,000, 17.6% reported between \$30,000-50,000, 30.5% had \$50,000 to 100,000 and 26% had above \$100,000.

Sample

From the original MUSIC study sample, the data collected for this study was narrowed down to 1,428 individuals who identified themselves as Hispanic. Additionally, the sample only included those participants who had answered the full range of questions and were therefore not missing any data. After eliminating those who had not responded to ethnicity, age, gender, annual family income, or US born variables or those who had not filled out items on the Center for Epidemiologic Studies Depression (CES-D), Multi-Group Ethnic Identity (MEIM), Multi-

Group Ethnic Identity (American Identity Version- AMID), or Scale of Ethnic Experience (SEE) measures, the final analytic sample totaled 1,032.

As mentioned, all participants identified themselves as Hispanic. The sample was 75.5% female (24.5% male). The ages of participants ranged from 16 to 63, with the average age being 20.46 years. 27.4% had an annual family income of less than \$30,000, 26.6% reported between \$30,000-50,000, 27.8% had \$50,000-100,000 and 18.1% had above % 100,000. A total of 790 individuals were born in the United States while 242 were not.

Measures

Center for Epidemiologic Studies Depression Scale (CES-D)

The Center for Epidemiologic Studies Depression Scale (CES-D) is used to measure depressive symptoms in the general population (Radloff, 1977). The scale consists of twenty items such as “this week, my friends tried to cheer me up, but I didn’t feel happy” and “I have felt down and unhappy this week” that are scored on a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Items 4, 8, 12, and 16 were positive items that were reverse scored such as “this week, I felt just as good as other people.” Scores are then summed with higher scores indicating higher levels of depression. The reliability of the CES-D measure for this study was .87 indicating high reliability.

Multi-group Ethnic Identity Measure (MEIM)

The Multi-group Ethnic Identity Measure (MEIM) is intended to measure ethnic identity on a continuous scale. In this study, the MEIM was used to determine participants’ adherence to their origin culture. The MEIM measures ethnic identity in the areas of positive ethnic attitudes and sense of belonging, ethnic identity of achievement, ethnic behaviors or practices, and other-group orientation through 12 items (Phinney, 1992). Respondents are asked to indicate the

degree to which they agree with statements on a scale of 1 (strongly disagree) to 5 (strongly agree) such as “I have a clear sense of my ethnic background and what it means for me” and “I have a lot of pride in my ethnic group”. Higher scores indicate a greater sense of ethnic identity. The reliability of the scale in this study was .92.

Multi-group Ethnic Identity Measure- American Version (AMID)

The Multi-group Ethnic Identity Measure American Version (AMID) uses the same items as the original MEIM. The MEIM has been created so it is adaptable to particular populations (Phinney, 1992). In this study, the AMID measures the degree to which participants identify as American. Respondents are asked to indicate the degree to which they agree with statements on a scale of 1 (strongly disagree) to 5 (strongly agree) such as “I have a clear sense of the United States and what it means for me” and “I have a lot of pride in the United States”. Higher scores indicate a higher degree of American identity. The reliability of the Multi-group Ethnic Identity Measure in this study was .89.

Perceived Discrimination- The Scale of Ethnic Experience

The Scale of Ethnic Experience (SEE) is used to measure ethnicity-related cognitive constructs across varying ethnic groups. A 32-item version of the SEE was created based on four factors that were consistent across ethnic groups: ethnic identity, perceived discrimination, mainstream comfort, and social affiliation (Malcarne, Chavira, Fernandez, & Liu, 2006). For the purposes of this study, 9 items were used from the SEE to measure the construct of perceived discrimination. Items such as “my ethnic group does not have the same opportunities as other ethnic groups” and “my ethnic group is often criticized in this country” reflect how individuals perceive their ethnic group to be treated in the United States. A higher score indicates higher perceived discrimination. Items 1, 2, 5, and 9 were positive items such as “generally speaking,

my ethnic group is respected in America” that had to be reverse scored. The reliability of this measure for this study was .82.

Additional Variables

Other variables looked at were age, gender, US born, and annual family income. Dummy variables were created for US born (1= US born, 0=non US born), gender (1= female, 0=male), and annual family income (each income value had a chance to be 1 at which point the other values were 0). Dummy variables allowed for easy selection of cases and interpretation of model outputs.

Procedures

To pursue Hypothesis 1, linear regression models of depression were run with American Identity, ethnic identity, discrimination, age, gender, and income as independent variables. After running estimated ordinary least squares regression models of depression by American and ethnic identity yielded no relationship, both American and ethnic identity were recoded into categorical variables of low, medium, and high. The categorization of MEIM and AMID into low, medium, and high allowed for easy comparison of and interaction between varying levels of ethnic and American identity and depression, allowing for the examination of whether a bicultural identity predicted better adjustment.

To pursue Hypothesis 2, estimated ordinary least squares regression models of depression including age, gender, income, and discrimination, and excluding American and ethnic identity measures, were run for the whole sample. Next, the linear regression models were run separately by men and women, allowing for the observance of gender differences to analyze Hypothesis 2a. A final linear regression model including the interaction between gender and discrimination was run. Using values produced from the final interaction model of gender and discrimination, the

predicted values of depression from discrimination were calculated and graphed for males and females.

RESULTS

Regression analyses revealed no significant relationship between American identity or ethnic identity and depression, thus Hypothesis 1 was not supported. After this finding, American identity and ethnic identity were broken down into categorical variables of low, medium, and high and run in interaction models against one another (e.g., low ethnic identity and low American identity, low ethnic identity and medium American identity, low ethnic identity and high American identity etc). Neither American nor ethnic identity separately or in combination revealed significant differences in relation to depression. American and ethnic identity levels did not relate to depression, however, age, being US born, and discrimination were all significantly related to depression and gender was marginally related to depression (See Table 1). Increasing age was negatively associated with depression, whereas being US born and reporting more perceived discrimination were related to more depression. To explore whether discrimination affected US born individuals more or differed by gender, an interaction model of US born and discrimination was run separately for men and women.

The interaction of US born and discrimination was not significantly related to depression, however discrimination alone was significantly related to depression and significant gender differences were revealed between men and women (See table 2). Hypothesis 2, that discrimination would relate to depression, was supported. The relationship between discrimination and depression for men was more than double that of females, suggesting that the experience of discrimination may affect men more negatively than women. Hypothesis 2a, that discrimination would affect men more negatively than women, was supported. For women, age was also significant with increasing age indicating a decrease in depression.

As the experience of discrimination related to depression differently for men and women,

I further tested the interaction between gender and discrimination in the model estimated on men and women together (See table 3). Again, discrimination and age were significant, with increasing age being negatively associated with depression and increasing discrimination being positively associated with depression. Gender, US born and the interaction between gender and discrimination were marginally significant. The model revealed women to start off with more depression than men and also to have slower increases in depression based on discrimination than men. Figure 1 shows the predicted values of depression for men and women based on discrimination. This figure reveals that as discrimination increases for both men and women, so does depression, however, the same increase in discrimination for both genders affects males much more negatively.

Discussion

This study predicted that individuals at the low and high ends of acculturation would experience more depression than those individuals who identified with both their ethnic culture and American culture. Neither ethnic nor American identities separately or in combination were predictive of depression. Comparing categorical variables of low, medium and high for both variables still rendered no results. Hypothesis 1, that those individuals at the low and high levels of acculturation would experience higher levels of depression, therefore, was not supported. That the sample was made up of college students may be a possible explanation for why the expected relations were not found. College students are likely well integrated in both their culture of origin and host culture. Further, college campuses are often diverse and expose students to new cultures and ideas daily. In support of this idea, a study by Devos (2006) focusing on identity among Mexican American and Asian American college students found that both Mexican Americans and Asian Americans had high levels of implicit bicultural identity.

College students from ethnic minorities are immersed in social situations that follow the practices of their culture of origin while at the same time the American culture remains in the surrounding environment (Devos, 2006). These daily experiences with both cultures results in many college students identifying with both their origin and host cultures, or in other words, it makes them bicultural. Biculturalism is said to be a protective factor, allowing individuals to switch cultural frameworks when needed and benefitting mental health. The participants in the MUSIC study were college students who, as implied by the findings of Devos (2006), may have been implicitly bicultural. Knowing that biculturalism is a protective factor in the acculturation process and the majority of the sample may have been bicultural, the finding that acculturation was in no way related to depression may be understood.

Although acculturation levels were not related to depression, discriminatory experiences were related. Specifically, Hypothesis 2, that perceived discrimination would increase depression among Hispanics, was supported. The finding that discrimination negatively impacts the mental health of Hispanics has consistently been found in mental health studies (Dawson, 2009). Discrimination can result in unequal treatment and denial of opportunities with education, employment, and housing simply because of membership to a particular ethnic group. Daily racial hassles as well as major racist events can increase stress levels, which may translate into depression (Dawson, 2009). Further, Hypothesis 2a, that the experience of perceived discrimination would be worse for men than women, was also supported. One reason that this gender difference might exist is that Hispanic culture traditionally emphasizes respect to men and men as the dominant household earners. Unfortunately, employment discrimination in the United States negatively impacts Latinos and Latinas. Hispanics may be treated unequally on the basis of factors such as gender, race, skin color, and accent (Morales, n.d.). Further, those

males struggling to obtain employment may experience the relinquishing of traditional male roles such as being the main earner of the household (Ramos, 2005). Fully acculturated males who may not be receiving the respect in their host culture that they demanded in their origin culture may experience discrimination in a much more negative manner than females.

The finding that perceived discrimination relates to depression and especially so for men is interesting, however, this study does have limitations. Future research should consider a sample with a more varied age group. These results cannot be generalized to other populations of Hispanics outside of college students. The findings among younger and older Hispanics are likely to differ, as they may not be equipped with the same coping tools as Hispanic college students. Also, the CES-D measure of depression was created according to symptoms that exist in the United States population. Depression may manifest itself differently in Hispanic subgroups than it does in the US population. For instance, cultural norms unique to Hispanics such as 'machismo', where a male is viewed as strong and unemotional, influence how depression manifests itself (Ramos, 2005). Using a measure specifically meant to assess depression among Hispanics may yield more accurate results.

This study suggests that discrimination, rather than acculturation status, may be an important factor in determining depression levels among Hispanic college students. College students that may be implicitly bicultural are already equipped with the tools necessary to integrate themselves within their host culture yet maintain practices tied to their origin culture. Also, the experience of discrimination impacts males more than females.

These findings have implications for intervention and prevention of poor mental health outcomes among Hispanics. Individuals interested in working with the Hispanic immigrant population should consider the factors most related to depression among acculturating Hispanics

and potential sex differences. This study clearly linked discrimination with depression among Hispanics of different socioeconomic status, age, and both genders. Especially among men, this link was even stronger. Knowing that discrimination negatively impacts acculturating Hispanics, especially males, intervention and prevention programs should consider how to decrease the negative effects of discrimination. Coping methods, such as utilizing social supports in the face of discrimination, may be an effective method (Dawson, 2009). Also, bicultural skills training for older and younger generations of Hispanics could be taught, as bicultural skills may be an effective way to upkeep the mental health of Hispanic immigrants.

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APPENDIX

Table 1: The Prediction of Depression from Age, US Born, and Discrimination

	B	SE	P
Age	-0.01	0.01	*
Gender	-0.00	0.05	+
US Born	0.10	0.05	*
Discrimination	0.12	0.03	*
Income \$30 to 50k	-0.01	0.05	
Income \$50 to 100k	0.01	0.05	
Income \$100k+	-0.02	0.06	

Note: R Square: 0.034

*Indicates $p < .05$, + indicates $p < .10$

Dependent variable is depression

Source: *MUSIC Study*

APPENDIX

Table 2: The Prediction of Depression from Age, US Born and Discrimination by Gender

	B	SE	P		B	SE	P
<i>Men</i>				<i>Women</i>			
Age	-0.01	0.02			-0.02	0.01	*
US Born	-0.10	0.10			-0.08	0.05	
Discrimination	0.19	0.06	*		0.09	0.03	*
Income \$30 to 50k	0.16	0.12			-0.06	0.06	
Income \$50 to 100k	0.07	0.12			-0.01	0.06	
Income \$100k+	-0.01	0.13			-0.02	0.07	

Note: R Square for men: 0.062, R Square for women: 0.031

*Indicates $p < .05$

Dependent variable is depression

Source: *MUSIC Study*

APPENDIX

Table 3: The Prediction of Depression from Interaction of Gender and Discrimination

	B	SE	P
Age	-0.02	0.01	*
Gender	0.31	0.19	+
US Born	0.09	0.05	+
Discrimination	0.19	0.05	*
Gender*Disc	-0.11	0.06	+
Income \$30 to 50k	-0.02	0.05	
Income \$50 to 100k	0.00	0.05	
Income \$100k+	-0.02	0.06	

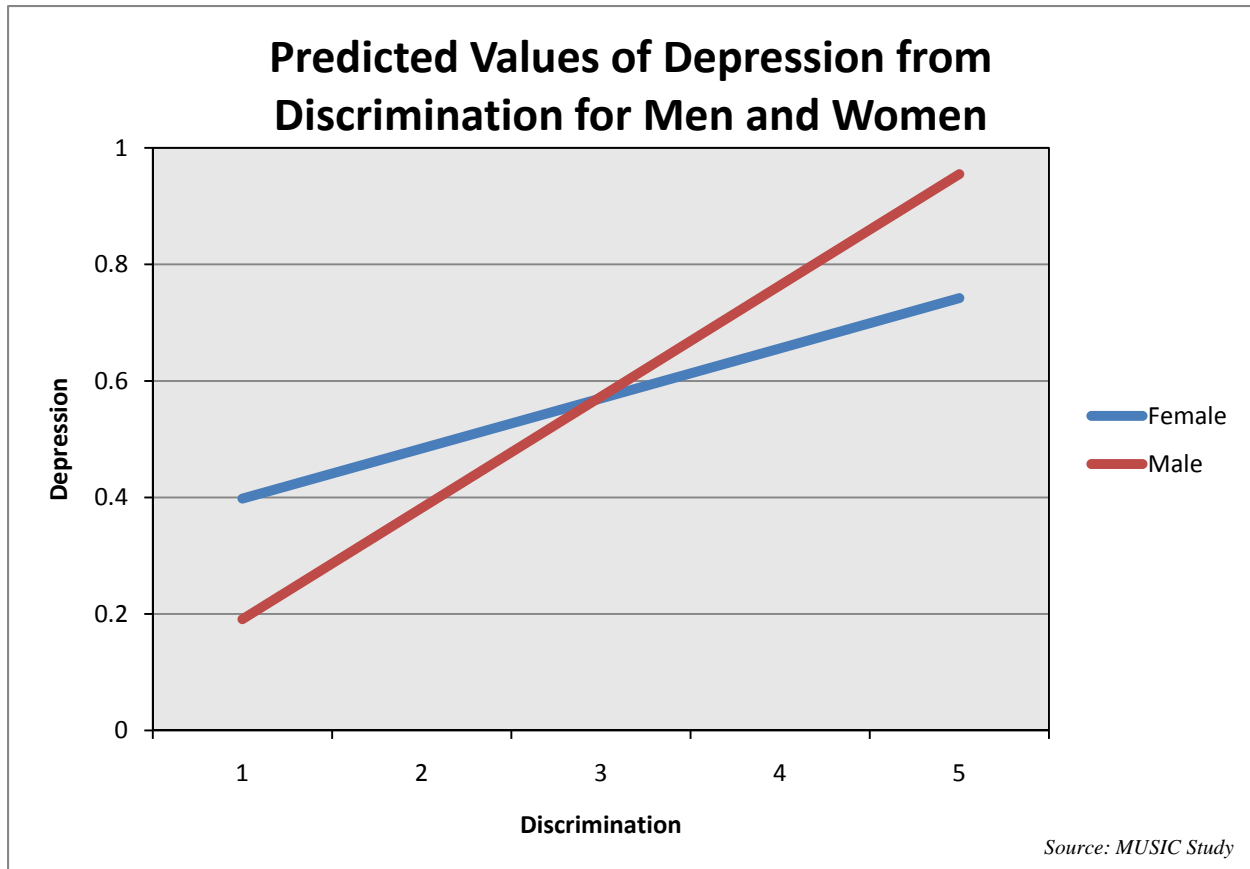
Note: R Square: 0.036

*Indicates $p < .05$, + Indicates $p < .10$

Dependent variable is depression

Source: *MUSIC Study*

APPENDIX



ACADEMIC VITA of Caroline Gazze

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