Spring 2022

The Influence of Cultural Stigma on Perceptions of Mental Illness

Rakshitha Mohankumar
San Jose State University

THE INFLUENCE OF CULTURAL STIGMA ON PERCEPTIONS OF MENTAL ILLNESS

A Thesis

Presented to

The Faculty of the Department of Psychology

San José State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

by

Rakshitha Mohankumar

May 2022

The Designated Thesis Committee Approves the Thesis Titled

THE INFLUENCE OF CULTURAL STIGMA ON PERCEPTIONS OF
MENTAL ILLNESS

by

Rakshitha Mohankumar

APPROVED FOR THE DEPARTMENT OF PSYCHOLOGY

SAN JOSÉ STATE UNIVERSITY

May 2022

Christine Ma-Kellams, Ph.D.	Department of Psychology
Valerie Carr, Ph.D.	Department of Psychology
Christina Tzeng, Ph.D.	Department of Psychology

ABSTRACT

THE INFLUENCE OF CULTURAL STIGMA ON PERCEPTIONS OF MENTAL
ILLNESS

by Rakshitha Mohankumar

This research study highlighted the significance of studying stigma and long-term coping with a loved one's mental health issues across cultures. Differences in perceptions of mental health based on the type of culture and (in)experience of growing up with someone who had mental health issues were tested. I predicted main effects of both culture and exposure, such that collectivists and those who did not grow up with someone who had mental health issues would have more negative perceptions towards mental health. I also predicted an interaction: while individualists would have relatively positive perceptions regardless of experience, collectivists would have negative perceptions where there is no experience but relatively positive perceptions if there is prior experience. I tested that these effects were held when controlling for socioeconomic status, mental health education, mental health support, and gender. The results of the study only supported a main effect of culture on anger. Additional analyses found that there were interaction effects among culture and mental health support and culture and mental health familiarity for both personal responsibility and anger. Overall, while the study did not bridge the gap between cultural stigma and coping, it did contribute to the literature by indicating how strongly culture and stigma influence mental health perceptions, and how individuals with past experiences of mental illness compared to those without past experiences of mental illness.

Keywords: culture, stigma, mental health disorder, mental illness

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

The Influence of Cultural Stigma on Perceptions of Mental Illness

Mental health and physical health are linked in that mental health disorders can have a profound impact on the prevalence and progression of chronic diseases such as diabetes, cancer, and heart disease (Office of Disease Prevention and Health Promotion, 2022). Yet, in many cultures, there is a general lack of understanding and information available concerning mental health. The general assumption is that stigma is the same across cultures. However, past research has shown that different cultures harbor different levels of stigma towards mental illnesses (Abdullah & Brown, 2011; Lauber & Rössler, 2007; Zolezzi et al., 2018). Other studies have also shown that the stigmatized attitudes directed towards and internalized by individuals with mental health issues lead to difficulty in coping and seeking help (Bathje & Pryor, 2011; Corrigan et al., 2006). This stigma affects the individuals with mental health disorders and their loved ones. Yet, little research has explored these factors together - stigma and long-term coping with a loved one's mental health issues across cultures. How informed and experienced people of a culture are with mental illness contributes to their attitudes and perceptions on issues of mental health. This raises the question of how strongly culture and stigma influence mental health perceptions, and how individuals with past experiences of mental illness compare to those without past experiences of mental illness.

Stigma

Stigma, as it is understood today, can trace its roots back to Goffman's (1963) definition, which states that it is "an attribute that extensively discredits an individual, reducing him or her from a whole and usual person to a tainted, discounted one" (p. 3). Stigma is a socially constructed mark of shame that devalues an individual and outs them as a deviation from

what is considered normal (Dovidio et al., 2000). Stigma is a concept constructed to reflect both culture and society as it allows for there to be a distinction between acceptable and unacceptable groups (Coleman, 1986; Rüsch et al., 2005).

There are two types of stigma: public stigma and self-stigma. Public stigma or reproach can lead to self-inflicted negative effects on the individual with the stigmatized mental illness, which can affect how they cope or deal with their mental health. Public stigma is the reaction of the general public towards a specific group based on the attribute that differentiates them from everyone else. These reactions come in the form of stereotypes, prejudice, and discrimination that result in the stigmatization of a group (Corrigan & Kleinlein, 2005; Rüsch et al., 2005). Studies have shown that education and contact with individuals with mental illness have had positive results in reducing public stigma (Corrigan et al., 2012; Rüsch et al., 2005). Self stigma occurs when individuals in the specific group targeted by public stigma internalize those negative attitudes and stereotypes. Individuals who have internalized mental illness stigma often have lower self-esteem and lower confidence in their abilities, especially when they have less social or family support (Bathje & Pryor, 2011; Corrigan et al., 2006; Rüsch et al., 2005; Watson et al., 2007). Self-stigma severity depends on how informed the general public is about mental health issues and to what degree of contact or experience they have in dealing with mental illnesses, which can differ from culture to culture.

Stigma towards mental illness also varies across cultures. Compared to European-Americans, people of color from collectivist cultures such as Asian, African, Middle Eastern, Latino, and indigenous groups present stronger negative attitudes towards mental illness and

express stronger desires to distance themselves socially from those who have mental illnesses due to social rejection, labeling, and the idea that these issues are a private matter, not to be publicly announced (Carpenter-Song et al., 2010; Cheon & Chiao, 2012; Yang et al., 2007). Whereas, individuals from individualist cultures such as northern Americans and northern Europeans have less negative attitudes towards mental illness. This is largely due to more education and awareness on the topic of mental health, an adaptability in changing their views based on their contact with people who have mental health issues, and generally, there is this notion associated with individualistic cultural values that a person can work towards recovering from the ailing mental health issue (Abdullah & Brown, 2011; Tyler et al., 2008). Different cultures foster different levels of stigma towards mental health issues and individuals who face these types of issues. The studies reviewed in this section provide insight into how in collectivist cultures, there is more pressure to live up to societal expectations. Thus, individuals from collectivist cultures display more negative and stigmatized attitudes towards mental health than individualist cultures due to the fear of being socially outcasted. However, while these studies highlight how the general attitudes towards mental health issues form within a group, a closer look at the level of exposure and relation of an individual to the person with mental health issues is lacking. This research proposal seeks to address this gap by assessing how much the type of culture and level of experience can influence an individual's perceptions towards mental health.

Mental illness is a common source of stigma. There are a wide range of mental health disorders and different levels of stigmatized attitudes surrounding each. One in five people are affected by depression globally and 1 in 13 people worldwide suffer from anxiety (World

Health Organization, 2020), yet stigma--in particular, self-stigma--can make it challenging for an individual to seek help (Batterham et al., 2013). Individuals with anxiety disorder are prone to experiencing self-stigmatized attitudes (Grant et al., 2016; Ociskova et al., 2013) even though anxiety disorder is viewed more favorably by the public relative to other mental illnesses like depression and schizophrenia. Nevertheless, people with anxiety disorder are often told that they have only themselves to blame and that they need to pull themselves together (Wood et al., 2014).

Like anxiety disorder, depressive disorder is also treatable by therapy and medication; however, once again perceived and self-stigma can prevent individuals from seeking the help they need. These self-stigmatized attitudes may stem from negative stereotypes about depression: the notion that these individuals are a danger to themselves and are causing their own symptoms (Wood et al., 2014). In contrast, disorders like schizophrenia are subject to even more stigmatization because the more dangerous and socially inappropriate a mental illness is perceived to be, the less likely people desire to interact with those individuals (Norman et al., 2012).

Different Cultural Attitudes towards Mental Illness

Negative attitudes towards mental health in different cultures, known as cultural stigma, is the influence of cultural norms and values on people's stigmatized beliefs (Abdullah & Brown, 2011). Asian, African, Middle Eastern, Latino, and indigenous cultures all have different attitudes towards mental health disorders compared to Western cultures. It is important to understand how these beliefs differ.

Asian, African, Middle Eastern and Latino cultures are all collectivist compared to Western cultures, which are more independent and autonomic. These collectivist cultures often conform to values of interdependence and duty to family, which can influence their attitudes towards mental illness (Abdullah & Brown, 2011; Lauber & Rössler, 2007; Ng, 1997; Parcesepe & Cabassa, 2013; Pocock, 2017; Zolezzi et al., 2018). In collectivist cultures, mental health disorders can negatively affect public perceptions of the whole family and not just the individual (Abdullah & Brown, 2011; Lauber & Rössler, 2007; Zolezzi et al., 2018). Individuals from these cultures also tend to seek alternative methods, such as religious counseling or culturally based healing arts (acupuncture), to treat mental health issues (Caplan, 2019; Chaudhry & Chen, 2019; Chiu et al., 2005; Lauber & Rössler, 2007; Ward et al., 2013; Zolezzi et al., 2018). For individuals of Asian and Middle Eastern cultures, maintaining family honor is important and revealing private issues like mental illnesses can bring shame on the family. Specific to individuals of African culture, mental illness is highly stigmatized by the public and is even considered contagious similar to HIV/AIDs (Kakuma et al., 2010; Kapungwe et al., 2010). Furthermore, there is a lack of proper education and understanding of mental health issues in African countries because of little funding and poor health infrastructure that leads to strong stigmatized beliefs and attitudes (Monteiro, 2015). These factors all contribute to the greater stigma attributed to mental health issues in collectivist cultures.

Collectivist attitudes have been studied in Western culture, as well, and research has been done with different racial and ethnic groups in the United States in relation to mental illness stigma. While these groups have been immersed in individualistic Western culture, they still

retain collectivist values and thus, can be categorized as collectivist cultures (Coon & Kemmelmeier, 2001; Edara, 2016; Sivadas et al., 2008; Vargas & Kemmelmeier, 2013). African-Americans have suffered a painful history in the United States and this has influenced their attitudes towards seeking mental health help particularly due to internalized stigma related to race (i.e., the experience of being stigmatized for their race may be compounded by the additional stigma that comes from mental health issues); moreover, the relative lack of mental health professionals from their own racial group can make it more difficult for them to speak about their problems (Buser, 2009; Matthews et al., 2006). Preferences for coping using spirituality or religions were found with African-American participants seemingly as these were feasible interventions when compared to seeking professional or medical help (Ward et al., 2013).

With Asian-Americans, there is greater stigma towards mental health disorders compared to European Americans (Hsu et al., 2008; Loya et al., 2010; Shea & Yeh, 2008). Along with Latinos, Asian-Americans perceive individuals with mental illnesses as dangerous; however, these group differences can be moderated by other demographic factors like age, such that older people perceive mental illness with more stigma than younger people (Hsu et al., 2008; Rastogi et al., 2012). Likewise, Middle-Eastern Americans have greater levels of self-stigma, which can increase their resistance to seeking counseling (Soheilian & Inman, 2009). Middle-Eastern migrants often are fleeing from their home countries due to persecution, war, and violence and can suffer from depression, anxiety, and other mental health disorders (Amri & Bemak, 2013). However, due to the deep-rooted stigmatization of these mental

illnesses, experiencing severe prejudice and racial discrimination has culminated in a lack of desire to openly discuss these issues with a professional in the United States.

Indigenous American culture is also classified as collectivist as there is importance placed on community, family, and group harmony (McInerney & Ali, 2013; Sinha & Tripathi, 1994). With Alaskan Native and American Indian cultures, there is not much research on mental health stigma with this group. The handful of studies that exist have focused on how indigenous people's painful history with the United States and mistrust of the government contributes to their wariness towards mental illness treatment (Abdullah & Brown, 2011; Grandbois, 2005; Parcesepe & Cabassa, 2013). While some indigenous tribes do not stigmatize mental illnesses at all (Thompson et al., 1993), others do because of consequences such as substance abuse and suicide (Abdullah & Brown, 2011; Grandbois, 2005). This is a result of the process of deculturation (loss of traditional ways) followed by reculturation (incorporating the ways of the majority). The greater the deculturation and reculturation process, the more likely the affected people will be to accept the methods of treatment of the dominant culture (Grandbois, 2005; Thompson et al., 1993). Moreover, feasibility and lack of clinical professionals who specialize in indigenous-specific treatment make it challenging for indigenous individuals to seek help (Gone & Alcántara, 2007; Manson, 2000; Yurkovich et al., 2012).

Most research on mental illness stigma has been conducted comparing an ethnic group to European-Americans (Abdullah & Brown, 2011). Compared to the other racial groups discussed above, European-American individuals show less stigmatized attitudes towards mental illness. This is not to say that European-Americans do not hold any stigmatized

attitudes at all. In fact, values generally attributed to European-Americans are individualism, competition, and future time orientation (Halbert et al., 2007; Mizelle, 2009; Tyler et al., 2008). Holding individuals to the expectation that they are responsible for their own success can result in stigmatizing those who require help from others in order to succeed (Mizelle, 2009; Tyler et al., 2008). Competition involves evaluating oneself relative to others, and when mental health issues are involved, this can endorse self-stigma or public stigma beliefs (Tyler et al., 2008). As far as future time orientation is concerned, when focusing on the future and in relation to mental health issues, the notion is that individuals can work towards getting better from the mental health conditions that ail them (Tyler et al., 2008). Part of this recovery process can be due to gaining more education and awareness about mental health issues in individualist cultures and less stigmatization towards White individuals who suffer from mental illness. Additionally, European-American mental health professionals are more readily available and accessible in predominantly white, affluent areas (Van Voorhees et al., 2007). Having a practitioner of the same racial background and experience can strengthen the relationship and trust between a therapist and client, compared to if there is a race-discordant relationship (Van Voorhees et al., 2005).

Growing up with Someone with Mental Illness

Often overlooked when treating mental health disorders are the family members of the individuals who have a mental illness. Different studies have been conducted on examining coping with a family member from a parent's perspective (Melnyk et al., 2001), sibling's perspective (Friedrich et al., 2008), and spousal perspective (Coyne et al., 2002). However, the research done on these perspectives is limited and often comorbidities or extremely

severe conditions are investigated. Furthermore, it is rather difficult to find literature on a friend's perspective of coping with another's mental illness. A large group of these family members that are studied are children who are themselves at risk of mental illness and yet they are not always considered when it comes to treatment and interventions (Dam & Hall, 2016; Mowbray et al., 2006; Weissman et al., 1997). Most studies that contain participants who grew up with a parent with mental illness often have small sample sizes, use qualitative methods such as interviews and are generally longitudinal so as to determine the long-term effects of parental mental illness on the children (Abraham & Stein, 2010; Foster, 2010; Kinsella et al., 1996; Patrick et al., 2019).

These studies conducted with children who grew up with one or both parents having a mental health disorder are important because they highlight the impact it can have on the offspring. Children have reported feeling ashamed of their parents' condition because they are bullied and stigmatized against (Dam & Hall, 2016). A lack of social support leads to unhealthy coping mechanisms and significantly more psychological adjustment difficulties (Abraham & Stein, 2010; Gladstone et al., 2011; Kinsella et al., 1996). There is also the burden of responsibility put on these children in that they often become the caregivers for their parents and have a felt obligation or sense of personal responsibility associated with their caregiving (Abraham & Stein, 2012). This can force the children to mature faster and experience less affection and care, which puts a strain on their relationship with their parents. At the same time, they may also report more knowledge and awareness of oncoming episodes or symptoms that aided with their coping of their parents' mental illness (Foster, 2010). Particularly, should children experience and have to deal with their parents' mental

health issues at an early age, it can have negative effects on their education and socialization (Weissman et al., 2006).

The studies reviewed above suggest that both culture and experience can impact a person's attitude towards mental health. Experience can exert a positive effect: those who have grown up with someone who had mental health issues have first-hand experience in coping and caring for said individual. They are more knowledgeable and aware of the symptoms of the mental health disorder than someone who has no experience and thus, their perceptions towards mental health issues are often more understanding and empathetic. At the same time, different cultural attitudes towards mental illness exist; Western, individualistic cultures are more aware and educated on issues of mental health. Particularly for European-American individuals, same-race mental health professionals are available and accessible. It cannot be said the same for collectivist cultures because of the lack of education and awareness of mental health issues and the inaccessibility to culture-specific mental health professional help. For individualists, the opportunities to seek help with a professional, group, or in the community are plenty due to the lower levels of stigma against mental health. Thus, prior experience or coping with mental illness may not hold a significant impact on their perceptions of mental health because of the many other opportunities to address mental health provided by their cultural context. Therefore, regardless of experience, individualistic cultures should hold less stigmatized and more accepting attitudes towards mental health compared to collectivist cultures. In contrast, collectivist individuals should have had less exposure and public awareness or education on mental health issues; because of this lack of external, public opportunities to understand mental illness, only those who have had personal

exposure may be more understanding and less stigmatizing attitudes towards persons dealing with mental health issues.

Taken together, while one body of research highlights the importance of examining close relationships between children and their mentally ill parents, they do not take into account the influence of cultural stigma. On the other hand, the other body of research on culture provides a greater understanding of different cultural attitudes towards mental health, but there is the gap of addressing the coping and perceptions of the loved ones of the individuals with mental health issues. This research proposal seeks to bring together these two bodies of literature as it would further our understanding of mental health perception differences based on stigma severity and the level of exposure to mental health disorders.

The Present Study

The main research question here strives to address cultural differences and explore the effects of mental health issues on loved ones in different North American cultural contexts. The main research objective is to resolve the gap in the literature by undertaking the influence of cultural stigma on perceptions of mental health issues. This would grant a greater understanding of how perceptions differ based on the severity of stigma and amount of experience with mental health issues.

Research Hypotheses

For my proposed survey study of the influence of cultural stigma on perceptions of mental health, I tested the hypothesis that there would be a significant difference in perceptions of mental health based on the type of culture and (in)experience of growing up with someone who had mental health issues.

Main Effect of Culture

Participants from collectivist cultures would have more negative perceptions towards mental health than participants from individualist cultures (see Figure 1).

Figure 1
Graph of the Hypothesized Main Effect of the Moderator and Outcome Variables

Main Effect of Culture

Mental Health Perceptions

Positive (+)

Negative (-)

Collectivist   Individualist

Type of culture
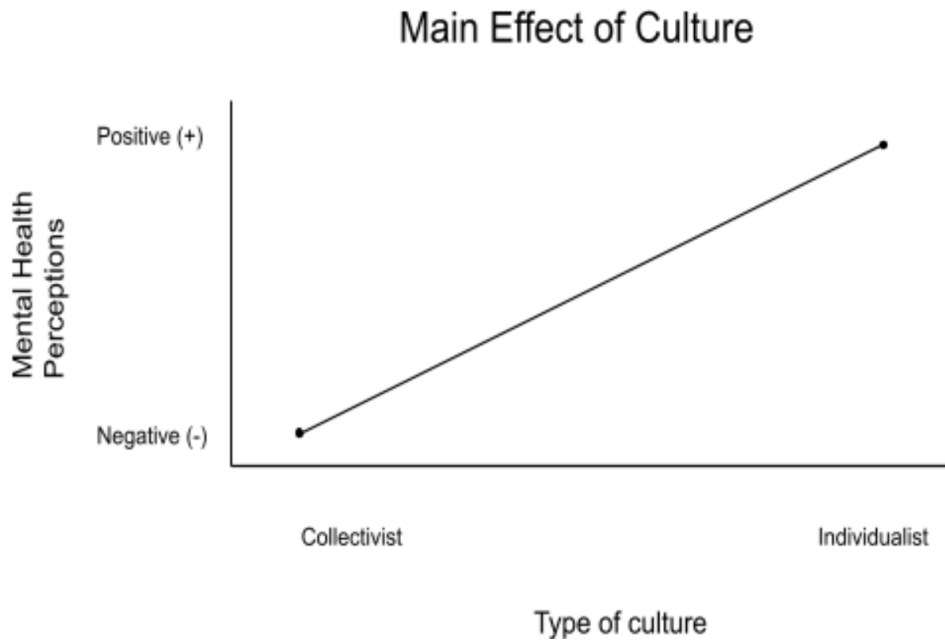
Main Effect of Exposure

Participants who did not grow up with someone who had mental health issues would have more negative perceptions towards mental health than participants who did grow up with someone who had mental health issues (see Figure 2).

Interaction Effect of Culture and Exposure

Participants from individualist cultures would have relatively positive perceptions regardless of experience; however, participants from collectivist cultures would have negative perceptions where there is no experience but relatively positive perceptions if there is experience growing up with someone who had mental health issues (see Figure 3).

Figure 2

Graph of the Hypothesized Main Effect of the Predictor and Outcome Variables

Main Effect of Exposure

Mental Health Perceptions (y-axis: Positive (+) to Negative (-))

Type of experience (x-axis: Experience to Inexperience)
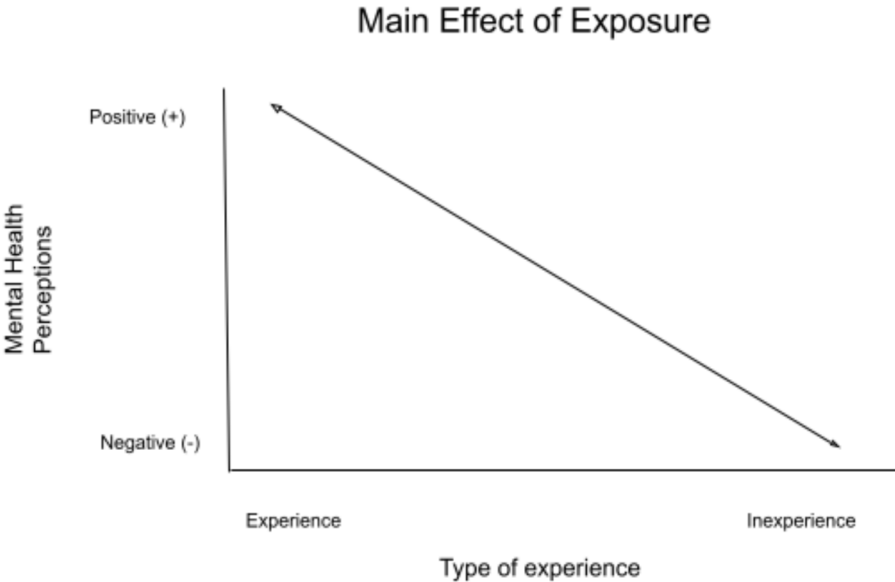
Figure 3

Graph of the Hypothesized Interaction Effect of the Predictor, Moderator, and Outcome Variables

Interaction Effect (Culture x Experience)

Mental Health Perceptions (y-axis: Positive (+) to Negative (-))

Type of Experience (x-axis: Experience to Inexperience)

Culture
Collectivist
Individualist
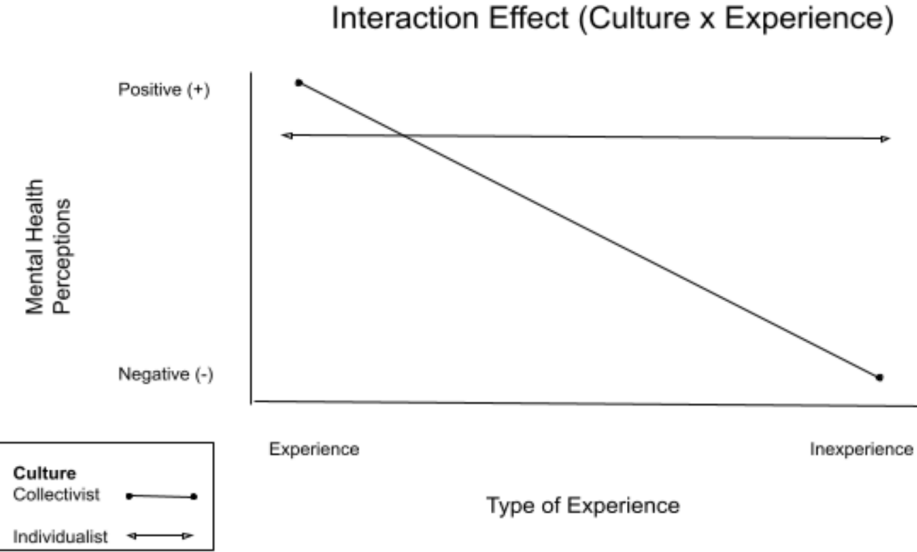
Exploratory Secondary Hypothesis

When controlling for socioeconomic status, mental health education, mental health support, and gender, these effects would still hold (i.e., individualists would still have positive perceptions regardless of experience whereas collectivists would have negative perceptions with no exposure but positive perceptions with exposure).

Methods

Participants

Participants were students from San Jose State University (SJSU) recruited via SONA. Since this study was interested in obtaining perspectives from a diverse population with different cultural backgrounds, SJSU was an ideal site for data collection. SJSU (2019) is a diverse campus with 34.4% Asian, 28% Hispanic, 15.2% White, 10.1% Non-Resident Alien, 4.7% other races, 3.7% Unknown, 3.4% Black, 0.5% Native Hawaiian/Pacific Islander, and 0.1% American Indian/Alaskan Native population. This includes both full-time and part-time students as well as graduate and undergraduates. Additionally, many international students attend SJSU, allowing for a broad range of experiences with cultural stigma. Therefore, no race/ethnicity was excluded. Based on a priori G Power Analysis (Faul et al., 2009) for a two-way ANOVA, with a medium effect size of 0.5 and an alpha of 0.05 with a Power of 0.80, it was expected that a total sample size of 130 with two groups of 64 would be ideal to best address the proposed research.

The sample consisted of 236 college students aged between 18 to 44 (M = 21, SD = 2.58). Participants who identified as Asian made up the majority of the sample (44.5%) followed by Hispanic/Latino (28%), White (10.2%), Multiracial (4%), Black (3.4%), Middle Eastern (1.3%) and Indigenous American (0.4%). More than half (66%) of the participants identified as women, and all participants had completed at least 12 years of education. IRB approval was obtained prior to recruitment. Students received SONA credit for their participation.

Procedure

Participants were asked to complete a demographics questionnaire to assess their cultural/ethnic background and socioeconomic status (Bajaj et al., 2013). A single dichotomous response (yes/no) question was asked to determine if participants have had previous experience with mental health (e.g. "Have you experienced growing up/coping with someone who had mental health issues/mental health disorder?") This categorized participants into two groups - those who have and have not had exposure to mental health issues. Participants' own mental health experience was not considered as the study was primarily examining their attitudes towards mental health with regards to other people.

Examples of individualistic cultures included Western countries such as the United States, United Kingdom, Canada, Netherlands, and Germany (Green et al., 2005). Examples of collectivist cultures included Hispanic, Eastern, and African countries such as Mexico, Spain, Japan, India, Kenya, and Saudi Arabia (Green et al., 2005). The demographic questionnaire did not take into consideration participants' specific country of origin. Therefore, the cultural and ethnic background of participants determined if they were primarily collectivist or individualist.

To assess mental health education, or the amount of prior knowledge or awareness participants had regarding mental health, participants were asked to rate their response to the question "How familiar do you consider yourself to be with the topic of mental health?" on a sliding scale from 0% to 100%. Mental health support ("What type of mental health support, if any, [group or professional support] did you have to rely on in coping with a mental health issue?") was defined as the kind of group, individual, or professional support towards mental

health that the participants and/or their person who is coping with a mental health issue had to rely on. Gender was defined as the categorical gender identity of participants such as male, female, genderfluid, or trans.

Then they were asked to complete a questionnaire with measures assessing their attitudes towards mental health overall derived from the Measurement of Attitudes, Beliefs and Behaviors of Mental Health and Mental Illness report (Yang & Link, 2015). The following measures differ from the questions in the aforementioned paragraph as they directly assess participants' perceptions towards stigma and mental health in relation to the individual in the presented scenarios or based on personal experience. The Social Distance Scale (SDS) (ex: "How would you feel about renting a room in your home to someone like Tim Abbott?") assessed how comfortable participants were with associating themselves with someone who has mental health issues (Link et al., 1987; Penn et al., 1994). The Attribution Questionnaire (AQ) (ex: "How certain would you feel that you would help Harry?") used scenarios to measure the extent to which participants felt that an individual's mental illness was their own responsibility (Corrigan et al., 2003). The Affect Scale (AS) (ex: "If you were to interact with Stacey Johnson, indicate how you would feel": Pessimistic - Optimistic) also used scenarios to measure participants' reactions to mental illness (Penn et al., 1994). The Devaluation of Consumers scale (ex: "Most people in my community would rather not be friends with families that have a relative who is mentally ill living with them") (Struening et al., 2001) was used to measure participants' perceptions of the public stigma that individuals with mental illness faced in society. These scales were averaged to form one composite of each measure of attitude towards mental health with a range of scores 1 to 10. I recoded the scales

accordingly to keep the scores consistent, such that higher scores = positive perceptions and lower scores = negative perceptions.

Research Model

The independent variable, (in)experience of growing up with someone with mental health issues, was defined as any individual who had or did not have long-term coping experience with a family member or friend with mental illness. The dependent variable, perceptions of mental health, was defined as the attitudes towards and perspectives of mental health in general and individuals who had mental health issues themselves. The moderating variable, ethnic/cultural background, was defined as whether the participant self-identifies with a collectivist (i.e., non-European-American) or individualist culture (i.e., European-American). Covariates included SES and gender; additionally, mental health education and mental health support were included as exploratory variables. See Figure 4.

Figure 4
Research Proposal Model with Predictor, Moderator, and Outcome Variables
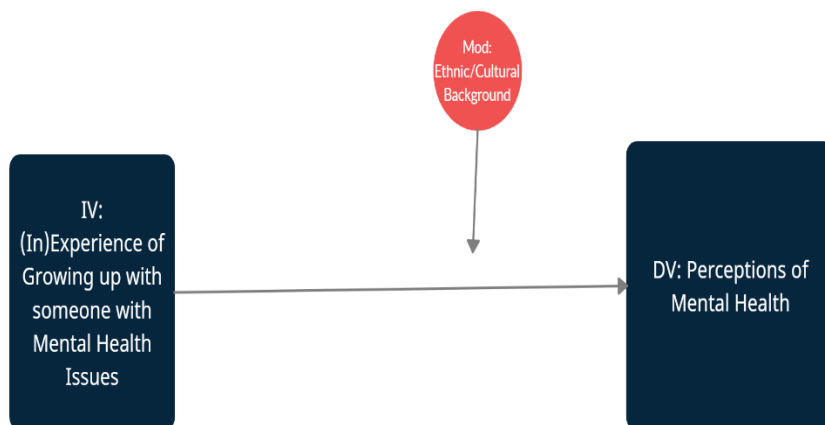
Results

Data Reduction

The planned analyses for this study included creating composites of the measures used in the survey. The questionnaire with the different measures for assessing perceptions towards mental health issues was scored based on the criteria for each measure and to create composites. Higher scores represented more positive attitudes towards mental health and lower scores represented more negative attitudes towards mental health. There was one composite consisting of averaged scores from the different measures. The composite was an average score of the attitudes towards mental health. It consisted of the SDS, AQ, AS, and the Devaluation of Consumers Scale. The following yes/no question "Have you experienced growing up/coping with someone who had mental health issues/mental health disorder?" categorized participants into two groups - those who had and did not have exposure to mental health issues. As a preliminary test of hypothesis 1 and 2, a correlation matrix was run to assess the relationships between the variables of interest (i.e., culture, experiences with mental health issues, attitudes towards mental health). To control for multiple comparisons, a Bonferonni correction was used for the correlations by dividing the standard p value (.05) by the total number of comparisons to get the new target p-value, then using the new smaller p-value as the standard for deciding significance. To assess for moderation, a multivariate ANOVA was used with culture (individualist vs. collectivist) and experience (present or absent) as factors predicting attitudes towards mental health. To assess for the robustness of these effects, a MANCOVA was run controlling for gender and SES; subsequent post hoc analyses also looked at the effect of mental health support and mental health education.

Preliminary Correlational Analysis

A correlation matrix was run to assess the relationships between the variables of interest (i.e., culture, experiences with mental health issues, attitudes towards mental health). Culture was dichotomously coded (1 = Individualist; 2 = Collectivist), as was Experience (0 = No, participants did not grow up coping with/experiencing mental health issues of a loved one; 1 = Yes, participants did grow up coping with/experiencing mental health issues of a loved one). Five out of eleven correlations were statistically significant; see Table 1. Strong relationships were found between culture and: experience with mental health issues ($r = -.15$, $p = .030$), personal responsibility ($r = .16$, $p = .021$), and anger ($r = .177$, $p = .009$), as well as between experience and: personal responsibility ($r = -.17$, $p = .012$), and anger ($r = -.132$, $p = .044$). When controlling for multiple corrections, the new standard for significance went from .05 to .005. Only Anger remained marginally close to the new standard for significance. Both Personal Responsibility and Anger were subscales of the AQ. Personal Responsibility assessed the degree to which participants perceived the hypothetical individual's mental health condition as their felt burden. Anger assessed the degree to which participants perceived the hypothetical individual's mental health condition to be aggravating or irritating for them. The correlations of culture and experience with other self-reported attitudes towards mental health were not significant. In general, the results suggest that participants who identified more with collectivist culture tended to rate higher on the scales of personal responsibility and anger with regards to their perceptions of mental health. Participants who did not experience or cope with someone who had mental health issues also tended to rate higher on these same scales of personal responsibility and anger.

Table 1

Correlations between Variables of Interest

	Culture (individualistic or collectivistic)	Have you experienced growing up/coping with someone who had mental health issues/mental health disorder?
Culture (individualistic or collectivistic)	.	**-.148***
Have you experience growing up/coping with someone who had mental health issues/mental health disorder?	**-.148***	.
Mean of AS items - higher is more positive	.048	.030
Mean of SDS items - higher is more positive, less social distance	-.132	.041
Mean of DCS items - higher is more perceived stigma	.061	.057
AQ Personal Responsibility mean - higher is more perceived personal responsibility	**.158***	**-.165***
AQ Pity mean - higher is more perceived pity	-.082	.098
AQ Anger mean - higher is more perceived anger	**.177****	**-.132***
AQ Fear mean - higher is more perceived fear	.002	-.014
AQ Help mean - higher is more perceived help	-.013	.052
AQ Coercion and Segregation mean - higher is more perceived coercion and segregation	.015	-.084

Note. * Correlation is significant at the 0.05 level (2-tailed)

   ** Correlation is significant at the 0.01 level (2-tailed)

Main Analysis: Do Culture and Experience Influence Mental Health Attitudes?

A multivariate ANOVA was used with culture (individualist vs. collectivist) and experience (present or absent) as factors predicting attitudes towards mental health. A 2 (Culture) × 2 (Experience) between-subjects multivariate analysis of variance was performed on all the dependent variables: AS, AQ subscales (Personal Responsibility, Anger, Pity, Fear, Help, and Coercion & Segregation), Devaluation of Consumers Scale, and SDS. Multiple pairwise comparisons were controlled for using a Bonferroni correction. Results of evaluation assumptions of normality, homogeneity of variance-covariance matrices were assessed; a Box's M of 137.77 indicated that the homogeneity of covariance matrices across groups was assumed ($F(90, 7103.73) = 1.33, p = .02$) and linearity and multicollinearity were satisfactory. Box's M is considered non significant as the sample size is large and the p-value is greater than .001 (Tabachnick & Fidell, 2001). The main effects of culture were significant on the Anger subscale ($F (1, 209) = 8.08; p = .00$, partial η2 = .04) (see Figure 5) but not the Personal Responsibility subscale ($F (1, 209) = 2.29; p = .13$, partial η2 = .01). Collectivists showed significantly higher means on the Anger subscale when compared to Individualists ($M = 3.77, SD = 1.76$ vs. $M = 2.79, SD = 1.42$). No other main effects or interactions were significant (all p's > .12).

To assess the robustness of these effects, a MANCOVA was run controlling for gender and SES. A 2 (Culture) × 2 (Experience, or whether or not participants grew up coping with/experiencing mental health issues of a loved one) between-subjects multivariate analysis of covariance was performed on the two dependent variables of interest identified by the previous correlational analysis (Anger and Personal Responsibility subscales), after

Figure 5

Graph of the Actual Main Effect of Culture on the Anger Subscale
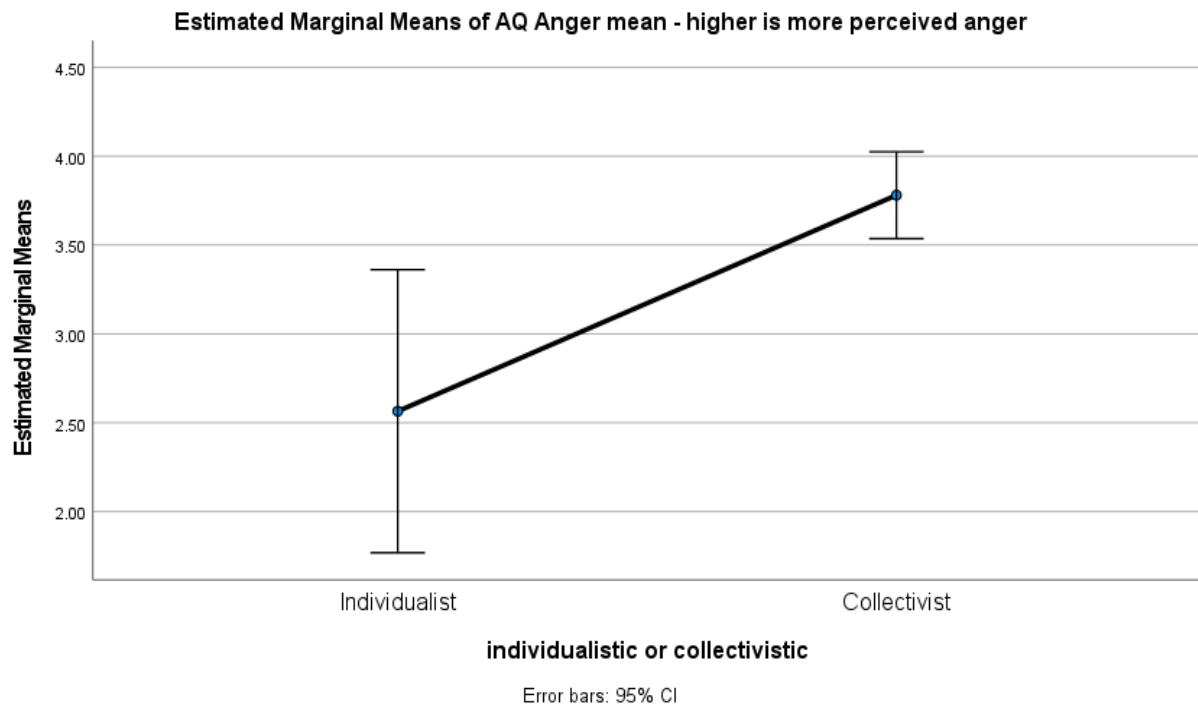
controlling for the two aforementioned covariates. Results of evaluation assumptions of normality, homogeneity of variance-covariance matrices were assessed: a Box's M of 10.28 indicated that the homogeneity of covariance matrices across groups was assumed (F(9, 2071.16) = 1.06, p = .39), and linearity and multicollinearity were satisfactory. The pattern of results was the same. As before, the main effects of culture were significant on only the Anger subscale (F(1, 209) = 8.87, p < .001) but not the Personality Responsibility subscale (F(1, 209) = 2.62, p = .11); no other significant main effects of experience and no significant interaction emerged.

Post-Hoc Analyses

The following analyses were conducted post-hoc to examine the predictors of mental health attitudes among people who had experienced growing up with someone who had

23

mental health issues. For these analyses, only participants who answered 'Yes' to the experience variable were selected. In addition to examining the effect of culture, I also tested for the effect of: (a) the presence (or absence) of mental health support that they or their loved one received to cope with a mental health issue, and (b) their familiarity with the topic of mental health.

Does the Presence of Mental Health Support Interact with Culture to Explain Mental Health Attitudes among Those Who Grew up Coping with Mental Health Issues?

A 2 (Culture: individualist vs. collectivist) × 2 (Mental Health Support: whether or not participants received any type of mental health support to cope with a mental health issue) between-subjects multivariate analysis of variance was performed on all the DVs of interest: AS, AQ, Devaluation of Consumers Scale, and SDS. Multiple pairwise comparisons were controlled for using a Bonferroni correction. Results of evaluation assumptions of normality, homogeneity of variance-covariance matrices were assessed; a Box's M of 116.75 indicates that the homogeneity of covariance matrices across groups was assumed ($F(90, 4702.100) = 1.02, p = .43$), and linearity and multicollinearity were satisfactory. A significant interaction of culture and mental health support was found only on personal responsibility ($F(1, 111) = 4.60, p = .03$, partial $\eta2 = .04$). Among those who received mental health support, collectivists perceived greater personal responsibility than individualists ($Mdiff = 1.03, p < .001$) (see Figures 6a and 6b), but among those who did not receive support, no cultural differences emerged ($Mdiff = .51, p = .42$). [Alternatively, when comparing those who received support versus did not within each cultural group, no differences emerged among individualists ($Mdiff = 1.06, p = .11$), but a marginal difference emerged among collectivists,

Figure 6

(a) Graph of Individualist Differences by Absence or Presence of Mental Health Support on the Personal Responsibility Subscale. (b) Graph of Collectivist Differences by Absence or Presence of Mental Health Support on the Personal Responsibility Subscale
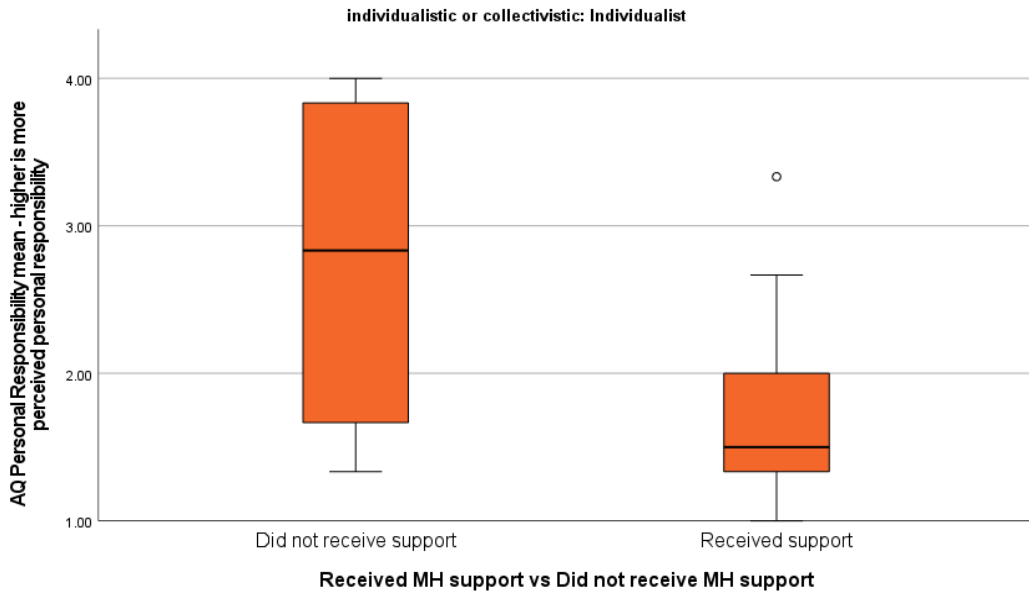
(a)
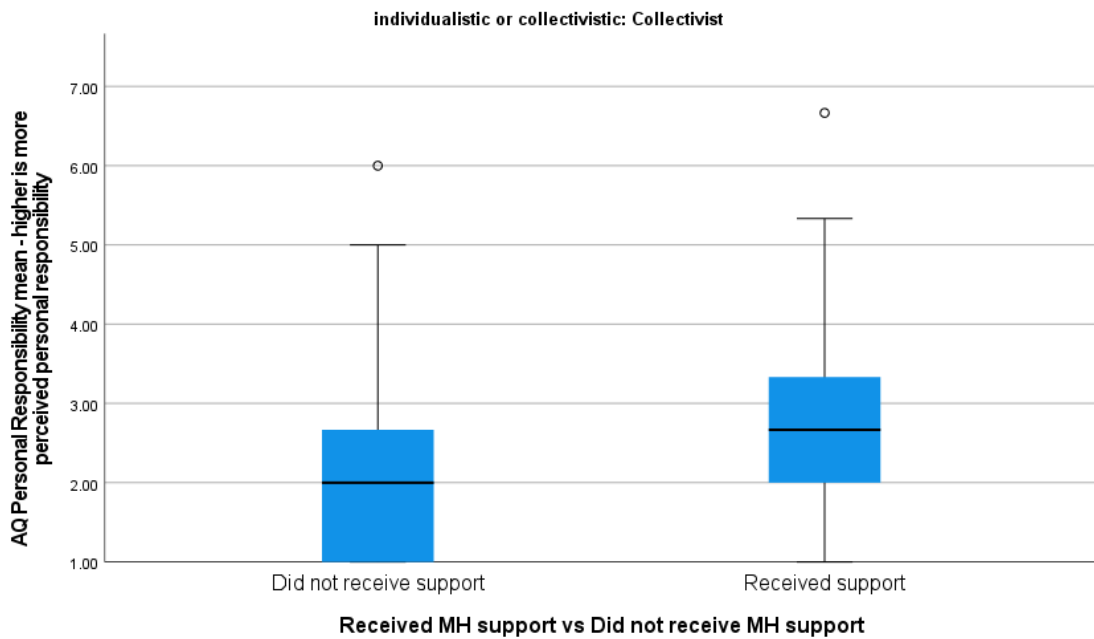
(b)

with those who received mental health support reporting higher personal responsibility than those who did not, *Mdiff* = .48, *p* = .079]. No other pairwise comparisons emerged as significant.

The analysis of variance above was repeated with gender as the covariate to assess for the robustness of these effects. Results of this analysis showed a similar pattern to the post-hoc MANOVA with the exception that, when controlling for gender, the interaction effect of culture and mental health support was marginal instead of significant ($F(1, 103) = 3.51$, $p = .06$, partial $\eta2 = .03$).

Does Familiarity (with Mental Health) Interact with Culture to Predict Mental Health Attitudes among Those Who Grew up Coping with These Issues?

I also tested whether familiarity with mental health issues (along with culture) emerged as a predictor of attitudes among this same group of individuals who grew up coping with such disorders. Given that familiarity was a continuous variable, multiple linear regressions were used to test for these main effects and interactions. Given that Anger and Personal Responsibility had emerged previously as the only significant outcomes in these previous (correlational) analyses, those were the dependent variables used herein in separate regressions testing the effects of culture, familiarity, and their interaction among people with experience.

Personal Responsibility. Multiple regression analyses were conducted to examine the relationship between the Personal Responsibility scale and the predictors: Culture (coded as 1 = Individualist, 2 = Collectivist) and Mental Health Familiarity (on a continuous scale from 0 to 10). The multiple regression model with both predictors was significant: $R^2 = .093$, $F(3, 111) = 3.80$, $p = .012$. There was no main effect of culture ($p = .062$), a main effect of

familiarity (ß = 11.09, t(111) = 2.55, p = .012), and an interaction between culture and mental

health familiarity on personal responsibility, ß = 1.09, t(111) = 2.53, p = .013. Since this

interaction effect between culture and mental health familiarity was significant, follow-up

simple regression slopes were run. Individualists and collectivists were examined separately

in order to identify the relationship between mental health familiarity and personal

responsibility. The simple regression model was significant for individualists: R^2 = .55, F(1,

16) = 19.17, p < .001 but not for collectivists: R^2 = .006, F(1, 95) = .53, p = .47. For

individualists, greater mental health familiarity predicted lesser perceptions of personal

responsibility (see Figure 7), ß = -.74, t(16) = -4.38, p < .001, but for collectivists, no such

relationship emerged (ß = .074, t(95) = .73, p = .46).

Figure 7
*Graph of the Post-Hoc Regression Interaction Effect of Culture and Mental
Health Familiarity on the Personal Responsibility Subscale*
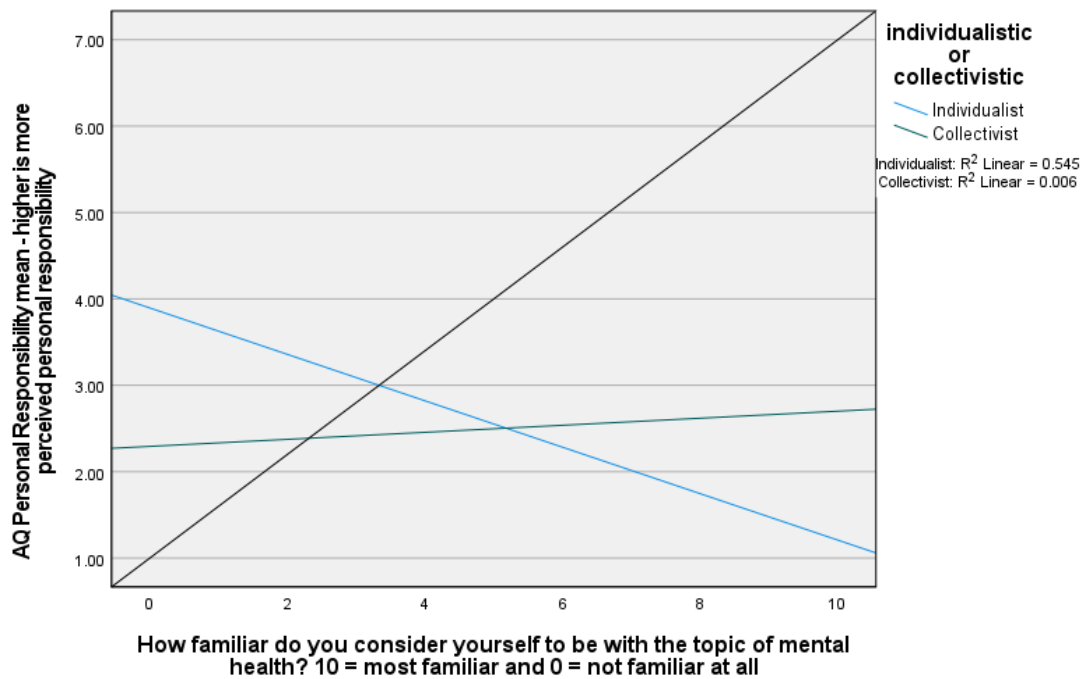
Anger. Multiple regression analyses were also conducted with Anger as the outcome (using the same predictors as above: Culture (coded as 1 = Individualist, 2 = Collectivist) and Mental Health Familiarity (on a continuous scale from 0 to 10)). The multiple regression model with both predictors was significant, $R^2 = .069$, $F(3, 111) = 2.73$, $p = .048$. Once again, there was no main effect of culture ($p = .27$), but there was a main effect of familiarity ($ß = -1.01$, $t(111) = 2.32$, $p = .022$), and an interaction of culture and mental health familiarity, $ß = 1.08$, $t(111) = 2.48$, $p = .015$. Since the interaction effect between culture and mental health familiarity was significant, follow-up simple regression slopes were run. As before, individualists and collectivists were tested separately to examine the link between mental health familiarity and anger. The simple regression model was significant for individualists: $R^2 = .27$, $F(1, 16) = 5.88$, $p = .027$ but not for collectivists: $R^2 = .022$, $F(1, 95) = 2.17$, $p = .14$. For individualists, greater mental health familiarity predicted lower levels of anger ($ß = -.52$, $t(16) = -2.43$, $p = .027$) (see Figure 8) but no such relationship emerged for collectivists ($ß = .15$, $t(95) = 1.47$, $p = .14$).

Figure 8

Graph of the Post-Hoc Regression Interaction Effect of Culture and Mental Health Familiarity on the Anger Subscale
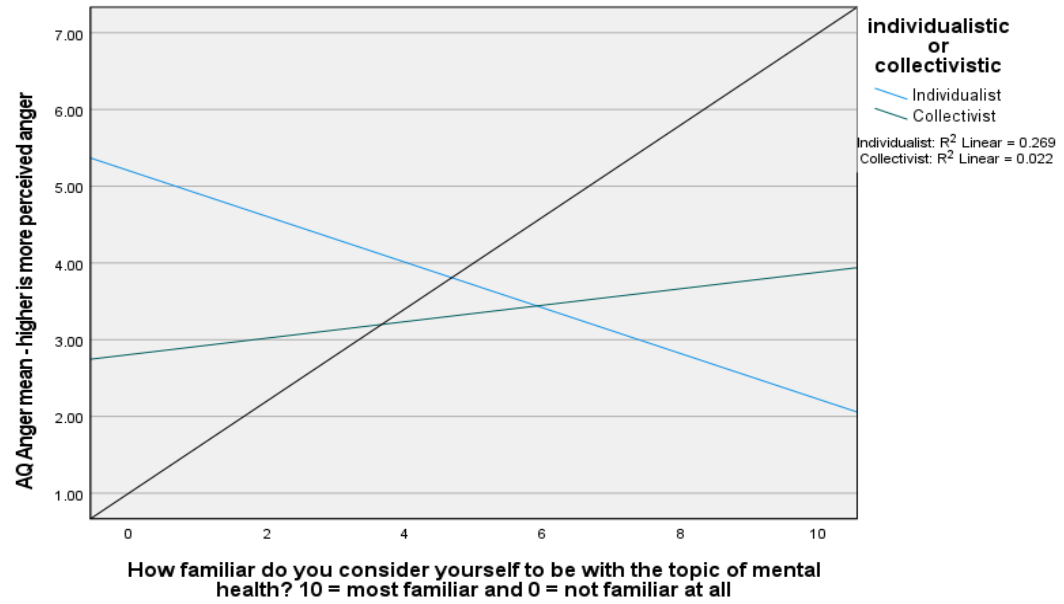
Discussion

Overall, this survey study yielded nuanced relationships between culture, experience with mental health, and attitudes. Initially, both the type of culture and exposure to mental health issues correlated with the perception measures such that participants who identified more as collectivists and who had not had prior experience in coping with mental health issues scored higher particularly for anger and personal responsibility. However, upon further examination of these outcomes simultaneously, only a main effect of culture on anger emerged: collectivists showed more anger, aggravation, or irritation in perceptions of mental health compared to individualists towards the individual who had a mental health issue in the presented scenario. The pattern of results was the same even when controlling for covariates such as gender and SES.

The findings in the current study are parallel to prior findings where collectivists view individuals with mental illness in a more negative light (Carpenter-Song et al., 2010; Cheon & Chiao, 2012; Yang et al., 2007). The significant outcome of anger was particularly interesting. While past research indicates collectivists exhibiting negative perceptions, those would only include distancing themselves from the individual with mental illness or treating them with caution as they were perceived as dangerous (Hsu et al., 2008; Rastogi et al., 2012). Prior literature did not associate strong emotions such as anger with mental health perceptions.

Therefore, in relation to the proposed hypotheses, only the main effect of culture was supported and not the main effect of exposure or the interaction between the two. The strength of culture overshadows the effect of experience, at least with regard to the current

30

study. With future research, the study design can consider attempting to better balance the two factors when examining attitudes towards mental health.

Additional analyses were conducted to examine differences among participants who had indicated they had experienced growing up with someone who had mental health issues. This allowed for other predictors such as mental health support and familiarity in addition to culture to be tested on the various attitude measures. There were interaction effects among culture and mental health support and culture and mental health familiarity for both personal responsibility and anger. Mental health support tended to have divergent effects as a function of culture: cultural differences between individualists and collectivists emerged only under conditions of mental health support, but not in its absence. When the comparison was within culture, it appeared that among collectivist participants, having mental health support was linked to perceptions of marginally greater personal responsibility but no effect emerged among individualist participants. Related to prior literature, there exists the burden of felt obligation with individuals who have grown up coping with and caregiving for someone else's mental illness (Abraham & Stein, 2012). Perhaps tied in with collectivist values of interdependence and duty to one's family, this burden of greater personal responsibility is heightened by the existence of mental health support resources. When it came to familiarity, being familiar or educated on the topic of mental health supported less personal responsibility and anger for individualists, but made no difference for collectivists. This again aligns with prior research conducted with individualist groups. The more aware and educated they are on the topic of mental health, the less likely they are to distance themselves from individuals with mental illness (Abdullah & Brown, 2011). The more contact

individualists have with those who suffer from mental health issues, the more they are able to adapt their perceptions towards mental illness (Tyler et al., 2008).

In general, this study did grant a greater understanding of how perceptions differ based on the type of culture and the amount of experience and familiarity with mental health issues. While the evidence did not bridge the gap between the two bodies of literature - stigma and long-term coping with a loved one's mental health issues across cultures, the results did imply that how informed and experienced people of a culture are with mental illness contributes to their attitudes and perceptions on issues of mental health. The evidence also indicates the strength that culture has and how that can influence mental health perceptions.

Limitations

While this study did provide great insight into how culture and experience can play a role in perceptions of mental health, gaps or limits exist where the current research could have been conducted or measured differently. The population from which the study sample was derived consisted of college students and primarily those who were studying or majoring in Psychology. The results could have differed had the sample been more diverse in terms of fields of study. Additionally, having a more diverse sample with a greater age range as well as the differences in the type of student (graduate, international) could also influence the outcome of the evidence. While there were significant interactions among the different predictors within the group of participants who indicated they had experience growing up with someone who had mental health issues, the closeness of this person to the participant was not accounted for. Participants' own experiences with mental health disorders were also not taken into consideration. Experience in the current study was measured dichotomously as

presence or absence. The study did not consider the continuous range of different types of experience, where an individual could deal with coping in different stages of their lives. Additionally, the study did not address the within-group differences among the various collectivist racial/ethnic identities. Future research can better account for the presence or absence of experience with close versus distant others and compare how one's own experience and coping with someone else's mental illness can impact perceptions of mental health. Furthermore, measuring experience as a continuous variable and accounting for within-group differences among the broader racial categories can result in a richer understanding of the influence of cultural stigma on mental health perceptions.

Conclusion

Every culture has different attitudes towards mental health based on cultural beliefs and values. Interventions and awareness campaigns need to be inclusive of these beliefs and values when discussing mental health and in different cultural contexts. The focus should be centered on ways to reduce stigmatized attitudes towards individuals of other cultures and implementation of culture-specific interventions to promote mental health help-seeking across cultures. When the topic of mental health is acknowledged culture-specifically, it can aid in reducing the stigma surrounding help-seeking and mental illness itself. A more in-depth understanding of cross-cultural mental health stigma will allow for improvements in interventions, treatments, and awareness for mental health issues.

REFERENCES

Abdullah, T., & Brown, T. L. (2011). Mental illness stigma and ethnocultural beliefs, values, and norms: An integrative review. *Clinical Psychology Review*, *31*(6), 934-948. https://doi.org/10.1016/j.cpr.2011.05.003

Abraham, K. M., & Stein, C. H. (2010). Staying connected: Young adults' felt obligation toward parents with and without mental illness. *Journal of Family Psychology*, *24*(2), 125-134. https://psycnet.apa.org/doi/10.1037/a0018973

Abraham, K. M., & Stein, C. H. (2012). Emerging adults' perspectives on their relationships with mothers with mental illness: Implications for caregiving. *American Journal of Orthopsychiatry*, *82*(4), 542-549. https://doi.org/10.1111/j.1939-0025.2012.01175.x

Amri, S., & Bemak, F. (2013). Mental health help-seeking behaviors of Muslim immigrants in the United States: Overcoming social stigma and cultural mistrust. *Journal of Muslim Mental Health*, *7*(1), 43-63. https://doi.org/10.3998/jmmh.10381607.0007.104

Bajaj, J. S., Riggio, O., Allampati, S., Prakash, R., Gioia, S., Onori, E., Piazza, N., Noble, N. A., White, M. B., & Mullen, K. D. (2013). Cognitive dysfunction is associated with poor socioeconomic status in patients with cirrhosis: An international multicenter study. *Clinical Gastroenterology and Hepatology, 11*(11), 1511-1516.

Bathje, G., & Pryor, J. (2011). The relationships of public and self-stigma to seeking mental health services. *Journal of Mental Health Counseling*, *33*(2), 161-176. https://doi.org/10.17744/mehc.33.2.g6320392741604ll

Batterham, P. J., Griffiths, K. M., Barney, L. J., & Parsons, A. (2013). Predictors of generalized anxiety disorder stigma. *Psychiatry Research*, *206*(2-3), 282–286. https://doi.org/10.1016/j.psychres.2012.11.018

Buser, J. K. (2009). Treatment-seeking disparity between African Americans and Whites: Attitudes toward treatment, coping resources, and racism. *Journal of Multicultural Counseling and Development*, *37*(2), 94-104. https://doi.org/10.1002/j.2161-1912.2009.tb00094.x

Caplan, S. (2019). Intersection of cultural and religious beliefs about mental health: Latinos in the faith-based setting. *Hispanic Health Care International*, *17*(1), 4-10. https://doi.org/10.1177%2F1540415319828265

Carpenter-Song, E., Chu, E., Drake, R. E., Ritsema, M., Smith, B., & Alverson, H. (2010). Ethno-cultural variations in the experience and meaning of mental illness and treatment: Implications for access and utilization. *Transcultural Psychiatry*, *47*(2), 224-251. https://doi.org/10.1177%2F1363461510368906

Chaudhry, T., & Chen, S. H. (2019). Mental illness stigmas in South Asian Americans: A cross-cultural investigation. *Asian American Journal of Psychology*, *10*(2), 154-165. https://psycnet.apa.org/doi/10.1037/aap0000141

Cheon, B. K., & Chiao, J. Y. (2012). Cultural variation in implicit mental illness stigma. *Journal of Cross-Cultural Psychology*, *43*(7), 1058-1062. https://doi.org/10.1177%2F0022022112455457

Chiu, L., Morrow, M., Ganesan, S., & Clark, N. (2005). Spirituality and treatment choices by South and East Asian women with serious mental illness. *Transcultural Psychiatry*, *42*(4), 630-656. https://doi.org/10.1177%2F1363461505058920

Coleman, L. M. (1986). Stigma. In S. C. Ainlay, G. Becker, & L. M. Coleman (Eds.), *The dilemma of difference* (pp. 211-232). Springer.

Coon, H. M., & Kemmelmeier, M. (2001). Cultural orientations in the United States: (Re) examining differences among ethnic groups. *Journal of Cross-Cultural Psychology*, *32*(3), 348-364. https://doi.org/10.1177%2F0022022101032003006

Corrigan, P. W., & Kleinlein, P. (2005). The impact of mental illness stigma. In P. W. Corrigan (Ed.), *On the stigma of mental illness: Practical strategies for research and social change* (pp. 11-44). American Psychological Association. https://doi.org/10.1037/10887-001

Corrigan, P. W., Markowitz, F. E., Watson, A., Rowan, D., & Kubiak, M. A. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior, 44*(2), 162-179. https://doi.org/10.2307/1519806

Corrigan, P. W., Morris, S. B., Michaels, P. J., Rafacz, J. D., & Rüsch, N. (2012). Challenging the public stigma of mental illness: A meta-analysis of outcome studies. *Psychiatric Services*, *63*(10), 963-973. https://doi.org/10.1176/appi.ps.201100529

Corrigan, P. W., Watson, A. C., & Barr, L. (2006). The self–stigma of mental illness: Implications for self–esteem and self–efficacy. *Journal of Social and Clinical Psychology*, *25*(8), 875-884. https://doi.org/10.1521/jscp.2006.25.8.875

Coyne, J. C., Thompson, R., & Palmer, S. C. (2002). Marital quality, coping with conflict, marital complaints, and affection in couples with a depressed wife. *Journal of Family Psychology*, *16*(1), 26-37.

Dam, K., & Hall, E. O. (2016). Navigating in an unpredictable daily life: A metasynthesis on children's experiences living with a parent with severe mental illness. *Scandinavian Journal of Caring Sciences*, *30*(3), 442-457. https://doi.org/10.1111/scs.12285

Dovidio, J. F., Major, B., & Crocker, J. (2000). Stigma: Introduction and overview. In T. F. Heatherton, R. E. Kleck, M. R. Hebl, & J. G. Hull (Eds.), *The social psychology of stigma* (1st ed., pp. 1-28). Guilford Press.

Edara, I. R. (2016). Relation of individualism–Collectivism and ethnic identity to spiritual transcendence among European Americans, Asian Indian Americans, and Chinese Americans. *Counseling and Values*, *61*(1), 44-63. https://doi.org/10.1002/cvj.12025

Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149-1160. https://doi.org/10.3758/BRM.41.4.1149

Foster, K. (2010). 'You'd think this roller coaster was never going to stop': Experiences of adult children of parents with serious mental illness. *Journal of Clinical Nursing*, *19*(21-22), 3143-3151. https://doi.org/10.1111/j.1365-2702.2010.03293.x

Friedrich, R. M., Lively, S., & Rubenstein, L. M. (2008). Siblings' coping strategies and mental health services: A national study of siblings of persons with schizophrenia. *Psychiatric Services*, *59*(3), 261-267.

Gladstone, B. M., Boydell, K. M., Seeman, M. V., & McKeever, P. D. (2011). Children's experiences of parental mental illness: A literature review. *Early Intervention in Psychiatry*, *5*(4), 271-289. https://doi.org/10.1111/j.1751-7893.2011.00287.x

Goffman, E. (1963). *Stigma: Notes on the management of spoiled identity.* Prentice-Hall.

Gone, J. P., & Alcántara, C. (2007). Identifying effective mental health interventions for American Indians and Alaska Natives: A review of the literature. *Cultural Diversity and Ethnic Minority Psychology*, *13*(4), 356-363. https://psycnet.apa.org/doi/10.1037/1099-9809.13.4.356

Grandbois, D. (2005). Stigma of mental illness among American Indian and Alaska Native nations: Historical and contemporary perspectives. *Issues in Mental Health Nursing*, *26*(10), 1001-1024. https://doi.org/10.1080/01612840500280661

Grant, J. B., Bruce, C. P., & Batterham, P. J. (2016). Predictors of personal, perceived and self-stigma towards anxiety and depression. *Epidemiology and Psychiatric Sciences*, *25*(3), 247-254. https://dx.doi.org/10.1017%2FS2045796015000220

Green, E. G., Deschamps, J. C., & Paez, D. (2005). Variation of individualism and collectivism within and between 20 countries: A typological analysis. *Journal of Cross-Cultural Psychology*, *36*(3), 321-339. https://doi.org/10.1177%2F0022022104273654

Halbert, C. H., Barg, F. K., Weathers, B., Delmoor, E., Coyne, J., Wileyto, E. P., & Malcowicz, S. B. (2007). Differences in cultural beliefs and values among African

American and European American men with prostate cancer. *Cancer Control: Journal of the Moffitt Cancer Center, 14*(3), 277–284.

Hsu, L. K. G., Wan, Y. M., Chang, H., Summergrad, P., Tsang, B. Y., & Chen, H. (2008). Stigma of depression is more severe in Chinese Americans than Caucasian Americans. *Psychiatry: Interpersonal and Biological Processes*, *71*(3), 210-218. https://doi.org/10.1521/psyc.2008.71.3.210

Kakuma, R., Kleintjes, S., Lund, C., Drew, N., Green, A., & Flisher, A. J. (2010). Mental health stigma: What is being done to raise awareness and reduce stigma in South Africa? *African Journal of Psychiatry*, *13*(2), 116-124. https://doi.org/10.4314/ajpsy.v13i2.54357

Kapungwe, A., Cooper, S., Mwanza, J., Mwape, L., Sikwese, A., Kakuma, R., Lund, C., Flisher, A. J., & MHaPP Research Programme Consortium. (2010). Mental illness-stigma and discrimination in Zambia. *African Journal of Psychiatry*, *13*(3), 192-203.

Kinsella, K. B., Anderson, R. A., & Anderson, W. T. (1996). Coping skills, strengths, and needs as perceived by adult offspring and siblings of people with mental illness: A retrospective study. *Psychiatric Rehabilitation Journal*, *20*(2), 24-32. https://psycnet.apa.org/doi/10.1037/h0095388

Lauber, C., & Rössler, W. (2007). Stigma towards people with mental illness in developing countries in Asia. *International Review of Psychiatry*, *19*(2), 157-178. https://doi.org/10.1080/09540260701278903

Link, B. G., Cullen, F. T., Frank, J., & Wozniak, J. F. (1987). The social rejection of former mental patients: Understanding why labels matter. *American Journal of Sociology*, *92*(6), 1461-1500. https://doi.org/10.1086/228672

Loya, F., Reddy, R., & Hinshaw, S. P. (2010). Mental illness stigma as a mediator of differences in Caucasian and South Asian college students' attitudes toward psychological counseling. *Journal of Counseling Psychology*, *57*(4), 484-490. https://psycnet.apa.org/doi/10.1037/a0021113

Manson, S. M. (2000). Mental health services for American Indians and Alaska Natives: Need, use, and barriers to effective care. *The Canadian Journal of Psychiatry*, *45*(7), 617-626. https://doi.org/10.1177%2F070674370004500703

Matthews, A. K., Corrigan, P. W., Smith, B. M., & Aranda, F. (2006). A qualitative exploration of African-Americans' attitudes toward mental illness and mental illness treatment seeking. *Rehabilitation Education*, *20*(4), 253-268. https://doi.org/10.1891/088970106805065331

McInerney, D. M., & Ali, J. (2013). Indigenous motivational profiles: Do they reflect collectivism? A cross-cultural analysis of similarities and differences between groups

classified as individualist and collectivist cultures. In R. Craven, G. Bodkin-Andrews, & J. Mooney (Eds.), *Indigenous peoples* (pp. 211-232). Information Age.

Melnyk, B. M., Feinstein, N. F., Moldenhouer, Z., & Small, L. (2001). Coping in parents of children who are chronically ill: Strategies for assessment and intervention. *Pediatric Nursing*, *27*(6), 548-558.

Mizelle, N. D. (2009). Counseling white Americans. In I. Marini & M. A. Stebnicki (Eds.), *The professional counselor's desk reference* (pp. 247–254). Springer.

Monteiro, N. M. (2015). Addressing mental illness in Africa: Global health challenges and local opportunities. *Community Psychology in Global Perspective*, *1*(2), 78-95. https://doi.org/10.1285/i24212113v1i2p78

Mowbray, C. T., Bybee, D., Oyserman, D., MacFarlane, P., & Bowersox, N. (2006). Psychosocial outcomes for adult children of parents with severe mental illnesses: Demographic and clinical history predictors. *Health & Social Work*, *31*(2), 99-108. https://doi.org/10.1093/hsw/31.2.99

Ng, C. H. (1997). The stigma of mental illness in Asian cultures. *Australian & New Zealand Journal of Psychiatry*, *31*(3), 382-390. https://doi.org/10.3109%2F00048679709073848

Norman, R. M., Windell, D., & Manchanda, R. (2012). Examining differences in the stigma of depression and schizophrenia. *International Journal of Social Psychiatry*, *58*(1), 69-78. https://doi.org/10.1177%2F0020764010387062

Ociskova, M., Prasko, J., & Sedlackova, Z. (2013). Stigma and self-stigma in patients with anxiety disorders. *Activitas Nervosa Superior Rediviva*, *55*(1-2), 12-18.

Office of Disease Prevention and Health Promotion. (2022). *Mental health*. Healthy People 202. https://www.healthypeople.gov/2020/leading-health-indicators/2020-lhi-topics/Mental-Health

Parcesepe, A. M., & Cabassa, L. J. (2013). Public stigma of mental illness in the United States: A systematic literature review. *Administration and Policy in Mental Health and Mental Health Services Research*, *40*(5), 384-399. https://psycnet.apa.org/doi/10.1007/s10488-012-0430-z

Patrick, P. M., Reupert, A. E., & McLean, L. A. (2019). "We are more than our parents' mental illness": Narratives from adult children. *International Journal of Environmental Research and Public Health*, *16*(5), 839. https://doi.org/10.3390/ijerph16050839

Penn, D. L., Guynan, K., Daily, T., Spaulding, W. D., Garbin, C. P., & Sullivan, M. (1994). Dispelling the stigma of schizophrenia: What sort of information is best? *Schizophrenia Bulletin*, *20*(3), 567-578. https://doi.org/10.1093/schbul/20.3.567

Pocock, L. (2017). Mental health issues in the Middle East: An overview. *Middle East Journal of Psychiatry and Alzheimers*, *84*(4221), 1-6. https://doi.org/10.5742/MEPA.2017.93004

Rastogi, M., Massey-Hastings, N., & Wieling, E. (2012). Barriers to seeking mental health services in the Latino/a community: A qualitative analysis. *Journal of Systemic Therapies*, *31*(4), 1-17. https://doi.org/10.1521/jsyt.2012.31.4.1

Rüsch, N., Angermeyer, M. C., & Corrigan, P. W. (2005). Mental illness stigma: Concepts, consequences, and initiatives to reduce stigma. *European Psychiatry*, *20*(8), 529–539. https://doi.org/10.1016/j.eurpsy.2005.04.004

San Jose State University. (2019, February 20). *Student quick facts*. Institutional research. http://www.iea.sjsu.edu/Students/QuickFacts/

Shea, M., & Yeh, C. (2008). Asian American students' cultural values, stigma, and relational self-construal: Correlates of attitudes toward professional help seeking. *Journal of Mental Health Counseling*, *30*(2), 157-172. https://doi.org/10.17744/mehc.30.2.g662g5l2r1352198

Sinha, D., & Tripathi, R. C. (1994). Individualism in a collectivist culture: A case of coexistence of opposites. In U. Kim, H. C. Triandis, Ç. Kâğitçibaşi, S.-C. Choi, & G. Yoon (Eds.), *Individualism and collectivism: Theory, method, and applications* (pp. 123–136). Sage Publications.

Sivadas, E., Bruvold, N. T., & Nelson, M. R. (2008). A reduced version of the horizontal and vertical individualism and collectivism scale: A four-country assessment. *Journal of Business Research*, *61*, 201–210. https://doi.org/10.1016/j.jbusres.2007.06.016

Soheilian, S. S., & Inman, A. G. (2009). Middle Eastern Americans: The effects of stigma on attitudes toward counseling. *Journal of Muslim Mental Health*, *4*(2), 139-158. https://doi.org/10.1080/15564900903245766

Struening, E. L., Perlick, D. A., Link, B. G., Hellman, F., Herman, D., & Sirey, J. A. (2001). Stigma as a barrier to recovery: The extent to which caregivers believe most people devalue consumers and their families. *Psychiatric Services*, *52*(12), 1633-1638. https://doi.org/10.1176/appi.ps.52.12.1633

Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics*. Allyn & Bacon.

Thompson, J. W., Walker, R. D., & Silk-Walker, P. (1993). Psychiatric care of American Indians and Alaska Natives. In A. C. Gaw (Ed.), *Culture, ethnicity & mental illness* (pp. 189–241). American Psychiatric Press.

Tyler, K. M., Uqdah, A. L., Dillihunt, M. L., Beatty-Hazelbaker, R., Conner, T., Gadson, N., & Stevens, R. (2008). Cultural discontinuity: Toward a quantitative investigation of a major hypothesis in education. *Educational Researcher*, *37*(5), 280–297. http://doi.org/10.3102/0013189X08321459

Van Voorhees, B. W., Fogel, J., Houston, T. K., Cooper, L. A., Wang, N. Y., and Ford, D. E. (2005). Beliefs and attitudes associated with the intention to not accept the diagnosis of depression among young adults. *Annals of Family Medicine 3*(1), 38–46. https://doi.org/10.1370/afm.273

Van Voorhees, B. W., Walters, A. E., Prochaska, M., & Quinn, M. T. (2007). Reducing health disparities in depressive disorders outcomes between non-Hispanic whites and ethnic minorities. *Medical Care Research and Review*, *64*(5_suppl), 157S-194S. https://doi.org/10.1177%2F1077558707305424

Vargas, J. H., & Kemmelmeier, M. (2013). Ethnicity and contemporary American culture: A meta-analytic investigation of horizontal–vertical individualism–collectivism. *Journal of Cross-Cultural Psychology*, *44*(2), 195-222. https://doi.org/https://doi.org/10.1177/0022022112443733

Ward, E., Wiltshire, J. C., Detry, M. A., & Brown, R. L. (2013). African American men and women's attitude toward mental illness, perceptions of stigma, and preferred coping behaviors. *Nursing Research*, *62*(3), 185-194. https://dx.doi.org/10.1097%2FNNR.0b013e31827bf533

Watson, A. C., Corrigan, P., Larson, J. E., & Sells, M. (2007). Self-stigma in people with mental illness. *Schizophrenia Bulletin*, *33*(6), 1312-1318. https://doi.org/10.1093/schbul/sbl076

Weissman, M. M., Warner, V., Wickramaratne, P., Moreau, D., & Olfson, M. (1997). Offspring of depressed parents: 10 years later. *Archives of General Psychiatry*, *54*(10), 932-940. https://doi.org/10.1001/archpsyc.1997.01830220054009

Weissman, M. M., Wickramaratne, P., Nomura, Y., Warner, V., Pilowsky, D., & Verdeli, H. (2006). Offspring of depressed parents: 20 years later. *American Journal of Psychiatry*, *163*(6), 1001-1008. https://psycnet.apa.org/doi/10.1176/appi.ajp.163.6.1001

Wood, L., Birtel, M., Alsawy, S., Pyle, M., & Morrison, A. (2014). Public perceptions of stigma towards people with schizophrenia, depression, and anxiety. *Psychiatry Research*, *220*(1-2), 604-608. https://doi.org/10.1016/j.psychres.2014.07.012

World Health Organization. (2020, September 2). *Mental health*. https://www.who.int/mental_health/advocacy/en/#Factsheets

Yang, L. H., Kleinman, A., Link, B. G., Phelan, J. C., Lee, S., & Good, B. (2007). Culture and stigma: Adding moral experience to stigma theory. *Social Science & Medicine*, *64*(7), 1524-1535. https://doi.org/10.1016/j.socscimed.2006.11.013

Yang, L. H., & Link, B. G. (2015, October). *Measurement of attitudes, beliefs and behaviors of mental health and mental illness*. https://sites.nationalacademies.org/cs/groups/dbassesite/documents/webpage/dbasse_170048.pdf

Yurkovich, E. E., Hopkins, I., & Rieke, S. (2012). Health-seeking behaviors of Native American Indians with persistent mental illness: Completing the circle. *Archives of Psychiatric Nursing*, *26*(2), e1-e11. https://doi.org/10.1016/j.apnu.2011.11.002

Zolezzi, M., Alamri, M., Shaar, S., & Rainkie, D. (2018). Stigma associated with mental illness and its treatment in the Arab culture: A systematic review. *International Journal of Social Psychiatry*, *64*(6), 597-609. https://doi.org/10.1177%2F0020764018789200