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Differences between Asians and Pacific Islanders in Mental Health Stigma and Help-seeking Behavior

Kycel Butters
butterskl@hollins.edu

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DIFFERENCES BETWEEN ASIANS AND PACIFIC ISLANDERS IN MENTAL HEALTH

STIGMA AND HELP-SEEKING BEHAVIOR

By

Kycel Laurence P. Butters
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partial fulfillment of the requirements for
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Fall Director: _____
Professor Bonnie Bowers, Ph.D

Caroline Mann
Spring Director: _____
Professor Caroline Mann, Ph.D

Department: Psychology

To my parents & siblings. Thank you for continuing to support me through these four years from

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Differences between Asians and Pacific Islanders in mental health stigma and help-seeking behavior

Stigma is defined as "stereotypes or negative views attributed to a person or groups of people when their characteristics or behaviors are viewed different from or inferior to societal norms," and is prevalent in the mental health sector (Ahmedani, 2011). Mental health stigma, stigma against those with mental health issues, is one of the leading causes of a lack in the utilization of mental health services among both the majority and minorities. Multiple researchers have found differences between ethnic minorities and the majority on mental health stigma, including Narendorf et al.'s (2018) study on race and gender differences on stigma among young adults. There are significant differences between the two populations not just on mental health stigma but also help-seeking behaviors. Multiple studies have found that racially ethnic minorities (REM) tend to have higher stigma towards mental illnesses and have lower help-seeking behaviors compared to their European counterparts (Narendorf et al., 2018). Stigma is often differentiated into two types: Public stigma and self-stigma. Public stigma is defined as the negative attitudes of public or community against individuals with mental health issues which may lead to discrimination (Britt et al., 2008). Self-stigma is the public's portrayal of mental illness internalized by the individual (Britt et al., 2008). Due to underlying cultural and community values, REM tend to have stronger public and self-stigma leading to the avoidance of help-seeking (Narendorf et al., 2018).

Minority vs. Majority

Minority groups are defined as ethnic groups that are counter-normative to society, who may face discriminating treatment, face racial and economic struggles (Cauce et al., 2002; Seyranian et al., 2008). According to the U.S. census, these groups include Blacks/African

Americans, Asian/Pacific Islanders, Native Americans, and Latino/Hispanic. The majority is

defined as the ethnic group with more positive value, higher status, economic advantage, and

better racial treatment which in American society is considered to be European

American/Caucasians (Cauce et al., 2002; Seyranian et al., 2008). Unlike the majority,

minorities are heavily influenced by the racial structures and discrimination they face and put

great emphasis on community opinion and beliefs (Knifton et al., 2010).

       Although a sense of community is prevalent in both minorities and the majority, it seems

to hold greater importance among minorities (Cauce et al., 2002; Chaudhry & Chen, 2018). The

negative labels and stereotypes associated with mental illness held by the public can lead to

discrimination against individuals with a mental disorder (Angermeyer & Matschinger, 2003).

The role that community plays in our emotional lives often influences the formation of mental

health stigma (Cauce et al, 2002). Racially ethnic Minorities (REM) typically belong to

communities that are heavily influenced by the perception of the people around them, and

different minority groups find mental illness stigmatizing. Studies found that African Americans

did not identify symptoms of mental illness as health problems and disregarded them as everyday

struggles or considered mental disorders as weaknesses (Narendorf et al., 2018; Ward et al.,

2013). Chaudhry and Chen (2018) found that Asian Americans saw mental disorders as a

familial problem and blamed the individual along with their family for having the mental

disorder. Due to public opinion, families may try to conceal the mental disorder to avoid the

stigma carried by the individual with the disorder; Cauce and colleagues (2002) found that the

response of family members to mental health issues is dependent on the larger social

environment's response to the issue. Racially ethnic individuals with mental disorders put great

emphasis on the opinions of their family members and community. However, though the

prevalence of stigma is present in REM, this should not be interpreted as the majority having no stigma. Lauber and Rossler (2006) found that western countries who were predominately white had a general population with strong beliefs of limiting civil rights to individuals with mental disorders. They found that the community is more likely to recommend abortions for women with mental illness and to limit driving privileges. Corrigan and colleagues (2001) found that people tend to view the individual with mental illness as childlike and must be watched by a caretaker.

Perceptions of those around the individual influence whether they will seek out help for a mental disorder. Previous studies found that lack of support from the public or from close relationships is perceived by the individual as discrimination but being comfortable to disclose mental illness to a close relationship leads to positive wellbeing (Nugent et al., 2020). Negative reactions can cause individuals with mental disorders to adopt the perspective of those around them and out of fear, shape their behavior to fit in society to avoid stigmatization and having to seek out services (Pattyn et al., 2014). Negative perceptions lead to less help-seeking behavior and under use of available mental health services (Pattyn et al., 2014). When REM experiencing higher stigma do experience symptoms of mental disorder, they tend to not identify those symptoms as high priority and interpret their symptoms as stresses from their environment that has the possibility of disappearing (Narendorf et. al., 2018). Many individuals will ignore their symptoms and may adjust their behavior to project a sense of normalcy. Believing their symptoms do not need medical or professional help tends to arise when individuals have insufficient knowledge about mental illness (Chaudhry & Chen, 2018). Individuals who do not seek help for their mental illness and remain untreated tend to face a reduction in the quality of

life and sometimes develop other medical illnesses which could lead to premature death

(Fagiolini & Goracci, 2009).

Racially ethnic minorities lack access to many of the resources to understand stigma and

practice help-seeking behaviors. Compared to the majority, they face more barriers including

accessibility, acceptability, and availability (Steele et al., 2007). Knowledge on mental health

issues can be gained through education which along with contact interventions can decrease the

stigma surrounding mental illness as well as promote better help-seeking behavior (Rüsch et al.,

2005). However, Nugent and colleagues (2020) suggest that higher levels of education cause

more REM to conceal their diagnosis. Chaudhry and Chen (2018) found that REM families with

higher education held more stigma due to fear of losing their reputation among their community,

but if their higher education was related to mental health (like psychology), there is a reduction

in stigma. For many REM, another barrier, socioeconomic status, limits education. Racially

ethnic minorities lack many of the socioeconomic advantages present in the majority and the gap

between the usage and need for mental health services is largely present in individuals of lower

socioeconomic standing (Steele et al., 2007). This barrier and lack of resources causes higher

stigma among minorities.

Asians and Pacific Islanders

Cultural background is a key influence for stigma among different populations. For

minorities and collectivists groups (groups that put emphasis on the goals and values of the

community rather than individual), culture is an important factor in determining how one acts.

Cultural background influences the conception, perception, experience of symptoms, and

recognition of mental illness (Lauber & Rossler, 2006). In traditional societies, mental illness is

interpreted as an entire group system problem, and the solutions are to deny the existence of it or

somaticize the illness to avoid shame and social marginalization (Lauber & Rossler, 2006).

Among the REM populations, Asians and Pacific Islanders tend to stick to their traditional

values and ways of living; as a result, mental illness among these two groups is regarded as an

issue not of the individual, but of all those who have a relationship with the individual (families,

friends, neighbors) (Choi & Miller, 2014). *Stigma by close others*, which is the individual's

perception of stigma held by the members of their social network, can be found in both groups

(Choi & Miller, 2014). Asian Americans and Pacific Islanders are heterogeneous groups with

varying customs, social norms, and cultural values, but each subpopulation shares values

including collectivism, emotional restraint, conformity, and humility (Choi & Miller, 2014).

Asians

Many studies have found differences between Asian subpopulations on mental health

stigma and help-seeking. Filipinos were found to have help-seeking rates that were relatively

lower compared to both US populations and other minority Asian groups (Martinez et. al., 2020).

About 12% of Filipinos in the US suffered from psychological distress, and they showed higher

prevalence rates of depression and anxiety within the population compared to the US general

population. Martinez et al. (2020) found that regardless of location, abroad or local, Filipinos

tend to have negative attitudes towards help-seeking and that those abroad have the additional

barrier of losing their immigration status which could mean they lose their jobs and are deported

back to their home countries. Research with Asian populations has also found that the higher

stigma and lower help-seeking is often influenced by family and community interactions and

perceptions. In a study with Chinese individuals, Chang and Chen (2020) found that negative

family interactions (unpleasant social encounters that may include criticism, conflicts, or

demands) are more important in predicting quality of life than family support to seek help.

Individuals with mental illness are more sensitive to the negative perceptions of their family and are more likely to use that as a determinator of their willingness to seek help than the support to seek help. This may be caused by the belief that negative family interactions are manifestations of the public's view and how the public would treat them (Chang & Chen, 2020). Countries in both East and Southeast Asia with cultural, religious, and socioeconomic diversity were found to allocate a small amount of their health budget to mental illness compared to western countries including the U.S. and Europe (Ito et al., 2012). In these countries, they also saw that admission and treatments involved family consent and that community services were failing to be used by individuals with mental disorders. Asians— especially those with stronger religious ties— are more likely to attribute their symptoms to spiritual possession and seek out help from traditional healers. Ito et al. (2012) stated that people with more persistent mental disorders are consistently left out of the planning and budgeting for health services. They also stated that it was not uncommon to see health professionals who did not work under the mental health sector to have negative attitudes toward mental illness. Due to this, many individuals would rather cope with the illness themselves than reach out to health professionals and get rejected or stigmatized by those in authority. Like some Western countries, in many Asian countries, there is not just stigma surrounding the person with the mental illness, but the psychiatric institutions and services as well (Ito et al., 2012). For individuals, there seems to be consequences in all sides of the situation as they will be stigmatized if they are found to have mental disorders, but they will also be stigmatized if they are seen using the services provided for them to help with the disorders. It would be easier and less consequential to themselves and their family to keep their disorder hidden or deny its existence.

Pacific Islanders

Native Hawaiian and Pacific Islanders (NHPI) refers to individuals with ancestry from islands in Polynesia, Micronesia, and Melanesia. Many of the citizens from these islands vary in citizenship and due to this, many choose to migrate to the United States and are assimilated into the western culture (Kwan et al., 2020). Pacific Islanders experience many barriers leading to the underuse of mental health services. They face barriers such as low socioeconomic status and lack of insurance, and well as complicating health conditions such as increased rates of obesity, diabetes, cardiovascular disease, and cancer (Subica et al., 2019). Compared to the U.S. national average of 7.4%, Pacific Islander youths showed higher numbers of suicide attempts with 12.1% of Native Hawaiians, 23.0% of Guamanians, and 15.5% in the Northern Mariana Islands attempts suicide (Kwan et al., 2020). These results are in line with the data that NHPI adolescents showed the highest prevalence of depressed moods, about 36.1%, among all the U.S. racial groups (Subica et al., 2019). However, these distinct data are often concealed under the umbrella term used in many surveys, "Asian American and Pacific Islander (AAPI) or Asian and Pacific Islander (API)."

Due to their similar values and traditional living, Asians and Pacific Islanders tend to be grouped as a single population rather than two. This is typically due to the smaller population sizes of Pacific Islanders and simplicity in combining them together because of their similarities. As a result, many of the subgroup differences are hidden, and targeted help towards Pacific Islanders has been overlooked. Data showed that AAPI had lower rates of schizophrenia compared to the white majority, but when compared to Asians (Japanese, Chinese, and Filipinos), Pacific Islanders showed higher hospitalization rates due to schizophrenia (Kwan et al., 2020). They also found that 4.1% of Pacific Islanders experienced psychological distress

compared to single-race Asians who experienced only 1.6% in the last 30 days before taking the survey. Despite this high numbers of mental disorders present among Pacific Islanders; the use of mental health services is lacking.

Stigma is extremely prevalent among NHPI and they hold greater beliefs in supernatural or sociomoral causes rather than neurobiological. A study of mostly Native Hawaiians and Samoans found that they believed the illnesses were caused by the imbalance of family values, the community, physical environment, and the church or spiritual beings (Kwan et al., 2020). Guamanians attributed poor health to the island's spiritual beings (Kwan et al., 2020). These strong beliefs dictated the attitude towards mental illness among NHPI. Pacific Islanders frequently endorsed stigmatizing aspects of depression and schizophrenia including larger social distance from those with depression, and they thought of mental illnesses as less serious than other illnesses (Kwan et al., 2020). Subica and colleagues (2019) stated that NHPI attribute mental disorders to sociomoral causes and tend to associate the worst stigma with sociomoral attributions. Kwan (2020) found that PI are more likely to endorse stigmatizing views of depression and schizophrenia and preferred to keep their distance from individuals with mental disorders. Subica and colleagues (2019) also found that NHPI desire more social distance from those with mental disorders because of their possibility of dangerousness. Stereotypes of dangerousness have increased over the years and public education has not produced the effect of reducing stigma (Link, 1999). Kwan (2020) found that Pacific Islanders had some knowledge on mental health issues (they recognized that mental health could be attributed to the mind and thought processes) and treatments, but they did not understand the various symptoms linked to mental illnesses and the treatments available to individuals who have a mental illness.

Though the importance of family, community, the physical environment, and the church

is considered when reflecting on their mental disorders, this did not mean that Pacific Islanders

were completely against the idea of counseling. In fact, studies found that Polynesian students in

the U.S. have a neutral standing towards seeking help, but the reason they might not entertain the

idea is because of the stigma – Polynesian men had higher levels of self-stigma compared to

Polynesian women while Polynesian women had higher levels of public stigma compared to

Polynesian men (Kwan et al., 2020). Pacific Islanders were also found equally likely to attend

mental health services as white Americans, but they had higher rates of discontinuing the service.

However, this difference could be attributed to the fact that Polynesian students studying in the

U.S. have assimilated to western culture and adapted certain European cultural values. Asian

American and Pacific Islanders adopt parts of the individualistic aspects of European Americans

and are more willing to seek counseling because they start to value self-resilience as a means of

lower burden on their family (Choi & Miller, 2014). Choi and Miller (2014) also found that

compared to other ethnic groups, AAPI are stronger in holding their grounds against authorities

including family members and are not easily swayed by opinions of those close to them. Kwan

and colleagues (2020) found that more supportive family members and friends are an enabling

factor to seek out help. In the same study, they found that community outreach, especially those

conducted in native languages, could further decrease stigma with the NHPI community. The

importance of public opinions among these groups is highly related to the cultural value that the

illness is a familial or group issue (Lauber & Rossler, 2007).

Current Study

Little research is available about Pacific Islanders' mental health stigma. This study

hopes to shed further light on the differences between Asians and Pacific Islanders which are two

different ethnic groups clustered together simply based on low numbers and similarities. The lack of studies about Pacific Islanders' mental health stigma leads to less targeted help and strategies for this population (Kwan et al., 2020). Subica and colleagues (2019) claim to be the first quantitative study exploring NHPI mental health stigma and help-seeking in an at-risk racial population.

Based on past research and in hopes of providing support to existing research on Pacific Islanders, the current study treats Asians and Pacific Islanders as groups independent of one another and examines the differences between the two ethnic groups on mental health stigma. Through an online survey given to college students in the Micronesian Island of Saipan, we were able to observe whether these two ethnic groups showed significant differences from one another. It was hypothesized that (1) Pacific Islanders will have higher levels of stigma, both self and public stigma, and lower levels of help-seeking than Asians, (2) Pacific Islanders will be more likely to attribute mental illness to sociomoral or spiritual attributions and report greater social distance when presented with a vignette featuring an individual with schizophrenia, (3) Asians will be more open to seeking professional help than Pacific Islanders, (4) factors including accessibility, cultural barriers, and public opinions (external stigma) will have greater effect than personal or family beliefs for both ethnic groups.

Methods

Participants

Participants were selected from the island of Saipan because the island is a U.S. territory and commonwealth, so the community understands certain values of the mainland U.S. as well as holding U.S. citizenship. However, these islanders are also physically isolated from mainland U.S., therefore they are not completely assimilated to the culture and continue to hold on to and

practice their traditional customs and values. There were originally 107 participants from

Northern Marianas College who participated in the survey. Participants who were not Pacific

Islander or Asian were excluded from the study as it is solely focused on those two ethnic

populations. After removing participants who were not Asian or Pacific Islander, our study had

100 participants. There were 63 Asians (47.1% Filipino, 5.9% Chinese, 4.9% Korean, 1%

Japanese, 3% mixed Asian) and 37 Pacific Islanders (22.6% Chamorro, 3.9% Carolinian, 2%

Pohnpeian, 2% Chuukese, 1% Micronesian, 1% Palauan, 3% mixed Pacific Islander). This

sample of participants are semi-representative of the population of Saipan with a 50% Asian

population (35.3% Filipino, 6.8% Chinese, 4.2% Korean, and others) and a 34.9% PI population

(23.9% Chamorro, 4.6% Carolinian, and others) (Northern Mariana Islands demographics

profile, 2020). There were 79 females and 23 males who participated in the study. Participants'

age ranged from 17 to 52 ($M = 20.98$, $SD = 4.31$). Religious affiliation was also assessed, and

results showed that there were 56% Catholic, 16.7% Christian, 2% Born Again Christian, 1%

Agnostic, 1% Buddhism, 1% Jehovah's Witness, 1% Seventh-day Adventist, and 9.9% not

specified. An additional demographic question of whether the participant was diagnosed by a

professional showed that only three people were diagnosed with a psychological disorder.

Materials

Vignette of Pacific Islander

A vignette adapted from Subica and colleagues (2019) was used for the study (Appendix

A). Subica (2019) had adapted their vignette from studies by Prescosolido et al. (2010, 2013) in

which the vignettes have been culturally translated as well as assessed in 16 different countries.

The vignette produced in the original research had names and ethnicities specific to the islands of

Samoa and Marshall Island. For this study, the names and ethnicities were changed to Jose and

Maria to reflect the island culture of Saipan. The vignette includes four descriptions of two sexes

(male and female) experiencing symptoms of two psychological disorders (depression and

schizophrenia). Participants were randomly assigned one of four descriptions which may have

included a male with depression, a male with schizophrenia, a female with depression, or a

female with schizophrenia. Following the vignette were questions assessing the variables of:

attribution, seriousness and treatability, and social distance and dangerousness. Attribution

consists of eight questions including "Jose/Maria's condition is due to chemical imbalance" or

"Jose/Maria's condition is due to God's will." Seriousness and treatability ask questions about

how likely they are to improve through specific treatments which includes "How serious is

Jose/Maria's condition" and "Jose/Maria handles it on their own." Social distance and

dangerousness consist of seven questions, that assess whether participants are willing to engage

with the individual, including "Jose/Maria works closely on a job with you." Each subscale used

a four-point Likert scale ranging from 1 (*Very Unlikely*) to 4 (*Very Likely).* For the subscale of

attribution, higher scores on certain statements indicate whether participants endorse

neurobiological, sociomoral, or other attributions. For seriousness and treatability, higher scores

on specific statements indicated their preference towards professional, self, or traditional

treatments. For social distance and dangerousness, higher scores indicated greater social

distance. In this study, the sub-group of social distance questions had a Cronbach's alpha of

0.88.

Attitudes towards Mental Health Problems Scale

This scale, created by Gilbert et al. (2007), consists of 35 questions separated into five

subscales: Attitudes towards mental health problems, external shame/stigma awareness, internal

shame, Reflected Shame 1, and Reflected Shame 2 (Appendix B). Attitudes towards mental

health problems measures how the individual's community or family perceives mental illness generally. External stigma measures how the individual believes their community and family would react if the individual had a mental illness, and internal shame measures how individuals would feel if they, themselves, suffered from a mental illness. Reflected Shame 1 measures how their community and family would react to them having a mental illness, and Reflected Shame 2 measures how their community would react to them having a family member with a mental illness. Questions included in the scale are "My community sees mental health problems as something to keep a secret" and "I would worry that my mental health problems could damage my family's reputation." Each subscale is scored on a four-point Likert scale ranging from 0 (*Do not agree at all*) to 3 (*Completely agree*). Higher scores indicate more negative attitudes and stigma towards mental health problems. Cronbach's alpha for the sub-scales were 0.69 in previous research. For this study, the total scale Cronbach's alpha was .83 with each subscale having a Cronbach's alpha above .90.

Barriers to Seeking Mental Health Counseling Scale

This scale, created by Shea et al. (2019), consists of 28 questions separated into six subscales: Negative perceived value, ingroup stigma, discomfort with emotions, lack of knowledge, lack of access, and cultural barriers (Appendix C). Negative perceived value measures how individuals view therapy; ingroup stigma measures how the individual's community perceives stigma; discomfort of emotions measures whether participants have negative reactions to exposing their emotions to counselors; lack of knowledge measures whether individuals know how to seek mental health services; lack of access measures whether participants have the financial support and time for mental health services; and cultural barriers measures if individuals believe culturally-targeted help is needed for mental health services.

Questions included in the scale are "I don't think talking with a mental health counselor would be useful" and "I don't know where to seek mental health counseling." Each sub-scale is scored on a six-point Likert scale ranging from 1(*Strongly Disagree*) to 6 *(Strongly Agree)*. Higher scores in each subscale indicated which barriers are more present for individuals. Cronbach's alpha for each subscale in the previous research was: negative perceived value (a=0.77), discomfort with emotions (a=0.91), ingroup stigma (a=0.82), lack of knowledge (a=0.84), lack of access (a=0.87), and cultural barriers (a=0.82) (Shea et al, 2019).

Procedures

A survey, approved by Hollins University's Human Research Review Committee, was sent out and left open for approximately a month. Participants were given a Qualtrics survey link through psychology professors in Northern Marianas College, via word of mouth, posters, and emails. When participants accessed the survey, they were presented with an informed consent form stating the purpose of study as well as assurance of confidentiality. A shortened version of the survey name was provided to avoid bias before taking the survey. If they agreed to the study, they were directed to the demographics page (age, gender, religious affiliation, ethnicity, and diagnosis of mental illness) followed by one of four vignette descriptions which may vary by sex and diagnosis; this was followed by the Attitudes towards Mental Health Problems Scale and the Barriers to Mental Health Counseling Scale. After completing the questions, which took approximately 15-30 minutes, participants were presented with a debriefing form with a separate link attached. The link redirected participants to a separate survey (which could not be linked back to the current study) to provide the opportunity for students to sign up for extra credit for psychology courses as well as a chance to enter a raffle to win a $25 Amazon gift card.

Results

Attributions from vignettes

A repeated measures ANOVA was conducted to test for a potential interaction between attributions of mental illness and ethnicity. Results showed there was no significant interaction, $F(3.5, 338.9) = .79$, $p = .13$, $\eta_p^2 = .018$ and no significant main effect between Asians and Pacific Islanders on attributions of mental illness $F(1, 98) = .32$, $p = .58$, $\eta_p^2 = .003$ (Table 1). There was, however, a significant a main effect for attributions $F(3.5, 338.9) = .64.90$, $p = <.001$, $\eta_p^2 = .399$ (Table 1). According to multiple comparison tests, mental illness was equally attributed to neurological causes and "life's ups and downs", followed by physical attributions. Attributions to religion and sociomoral causes were less common. Differences among attributions are summarized in the group comparisons column of Table 1. Table 2 and Figure 1 display the means and standard deviations for each attribution.

Table 1.

Repeated Measures ANOVA results for the effect of attribution and ethnicity based on Vignette of Pacific Islanders

	F	*df*	*p*	$\eta_P{}^2$	*Group comparisons*
Main effect of attribution type	64.90	3.5, 338.9*	<.001	.399	(Neuro = Life) > Phys > Socio > Religion
Main effect of ethnicity	0.32	1, 98	.58	0.003	Asian = Pacific Islander
Interaction	0.79	3.5, 338.9*	.13	0.02	----

* Sphericity assumption not met (Green-house Geisser correction)

Note. Neuro = Neurological, Life = Life's ups & downs, Phys = physical, Socio = Sociomoral, Religion = Religion; Group comparisons based on Post Hoc test (multiple pairwise comparisons)

Table 2.

Mean and standard deviations of Asians and Pacific Islander on attributions of mental illnesses based on the Vignette of Pacific Islander

	Asians		Pacific Islanders		Total sample	
	n = 63		n = 37		N = 100	
	M	SD	M	SD	M	SD
Neurological	2.87	0.44	2.86	0.50	2.87	0.46
Religion	1.59	0.69	1.68	0.75	1.62	0.71
Sociomoral	1.96	0.56	2.11	0.50	2.02	0.54
Physical	2.44	0.78	2.24	0.60	2.37	0.72
Life's Ups & Downs	2.86	0.80	2.62	0.83	2.77	0.81

Figure 1

Mean score of strength towards five attributions of mental illness between Asians and Pacific Islanders (PI) based on the Vignette of Pacific Islander. Vertical lines represent standard deviation of mean.
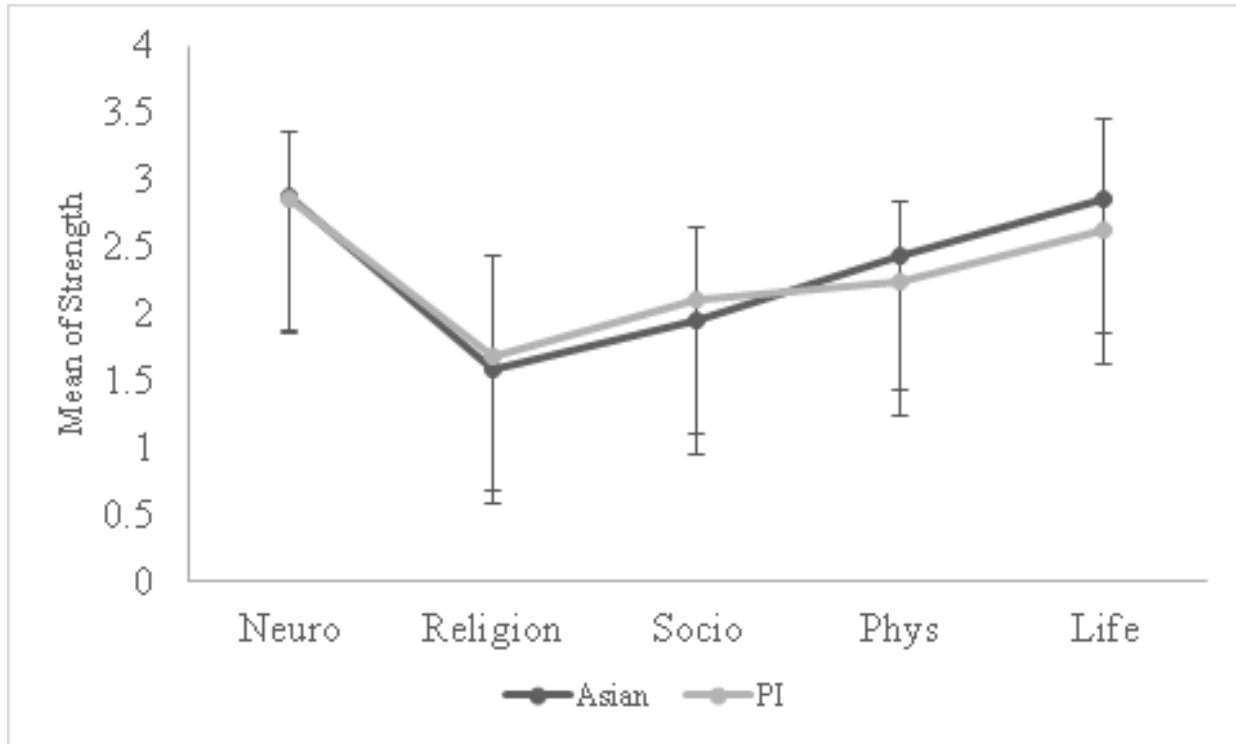
Social Distance from Vignettes

The effect of sex (vignette character), diagnosis (vignette character), and ethnicity (participant) on social distance was assessed using a 2 (sex: Jose, Maria) x 2 (diagnosis: depression, schizophrenia) x 2 (ethnicity: Asian or Pacific Islander) factorial ANOVA. The only significant effect on social distance was for diagnosis, $F(1, 92) = 9.28$, $p = .003$, $\eta_p^2 = .09$, with higher social distance reported toward the vignette character who exhibited symptoms of schizophrenia. The interaction term was not significant, indicating participants from both ethnic groups, Asian and Pacific Islanders, showed higher levels of social distance towards people with schizophrenia.

Treatability from Vignettes

The effect of sex (vignette character), diagnosis (vignette character), and ethnicity (participant) on the type of therapy was assessed using a 2 (sex: Jose, Maria) x 2 (diagnosis: depression, schizophrenia) x 2 (ethnicity: Asian or Pacific Islander) factorial ANOVA. There were no significant effects for both traditional and professional therapy. However, a factorial ANOVA conducted on self-help found significant differences based on diagnosis, $F(1, 92) = 15.3$, $p < .001$, $\eta_p^2 = .14$, with participants showing higher preference for the person with depression to practice self-therapy, compared to the person with schizophrenia.

Attitudes Towards Mental Health Problems

A repeated measures ANOVA was conducted to test whether there was an interaction between ethnicity and attitudes towards mental health problems. There was a significant main effect, indicating group differences, between Asians and Pacific Islanders on attitudes, $F(1, 97) = 6.31$, $p = .01$, $\eta_p^2 = 0.06$ (Table 3). Asians showed scores that are more negative across all subscales of mental health attitudes (Figure 2). There were no significant effects in the interaction of ethnicity and attitudes, $F(2.7, 261.3) = 0.37$, $p = .76$, $\eta_p^2 = 0.004$ (Table 3). There was a significant main effect of attitude type, $F(2.7, 261.3) = 59.5$, $p = <.001$, $\eta_p^2 = .38$ (Table 3). Through a multiple comparison test, we found that participants scored external stigma greater than all other subgroups on the scale (Table 3). Mean scores and standard deviations can be found in Table 4 and Figure 2.

Table 3.

Repeated Measures ANOVA results for the effect of attitudes and ethnicity based on the Attitudes towards mental health problems scale

|	F	df	p	η_p^2	Group comparisons
Main effect of attitudes type	59.5	2.7, 261.3*	<.001	.38	ES > (AP = RSI) > IS > RSII
Main effect of ethnicity	6.31	1, 97	.01	0.06	Asian > Pacific Islander
Interaction	0.37	2.7, 261.3*	.76	0.004	----

* Sphericity assumption not met (Greenhouse-Geisser correction)

Note. ES = External stigma, AP = Attitudes towards mental health problems, RSI = Reflected Shame 1, IS = Internal stigma, RSII = Reflected Shame 2. Group comparisons based on multiple pairwise comparisons.

Table 4.

Mean and standard deviations of Asians and Pacific Islanders on Attitudes towards mental health problems scale

| | Asians | | Pacific Islanders | | Total sample | |
| | n = 63 | | n = 36 | | N = 99 | |
	M	*SD*	*M*	*SD*	*M*	*SD*
Attitudes towards mental health problems	12.84	7.27	10.19	7.35	11.88	7.37
External stigma	16.16	9.74	12.69	7.88	14.90	9.22
Internal Stigma	9.68	4.92	7.67	5.28	8.95	5.12
Reflected Shame 1	11.43	5.94	8.33	5.54	10.30	5.96
Reflected Shame 2	5.00	5.36	2.83	4.96	4.21	5.29

Figure 2

Mean scores for five attitudes' subscales between Asians and Pacific Islanders (PI) based on the Attitudes towards mental health problems scale. Vertical lines indicated the standard deviation of mean.
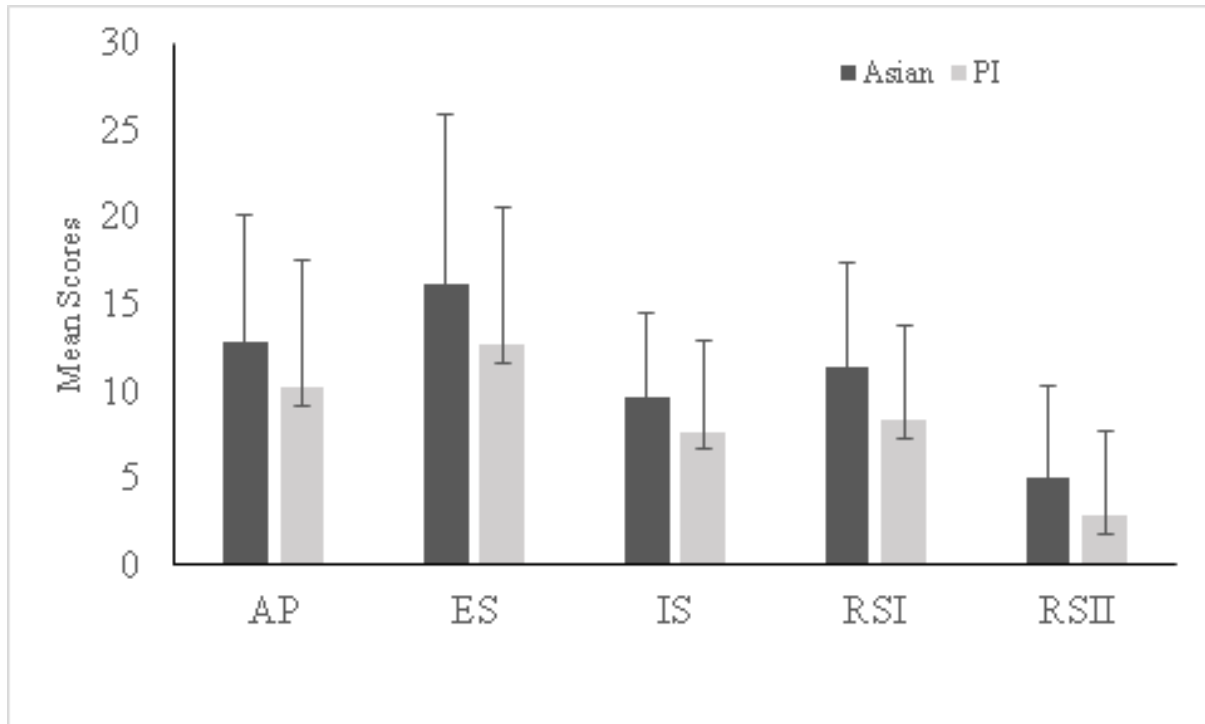
Note. Abbreviations in the figure are as follows AP: Attitudes towards mental health problems, ES: External stigma/stigma awareness, IS: Internal shame, RSI: Reflected Shame 1, RSII: Reflected Shame 2

Barriers to Seeking Mental Health Counseling

A repeated measures ANOVA was conducted to examine potential interaction between barriers in help-seeking and ethnicity. Results found there was no significant interaction of barriers and ethnicity, $F(4.1, 394) = 1.45$, $p = .22$, $\eta_p^2 = 0.012$. It also showed that there were no between-subjects effects, as there were no significant differences between Asians and Pacific Islanders on the barriers they faced in help-seeking, $F(1, 94) = 0.55$, $p = .46$, $\eta_p^2 = 0.006$ (Table 5). However, there was a main effect for barriers, $F(2.7, 261.3) = 59.5$, $p = <.001$, $\eta_p^2 = 0.38$. Multiple comparisons showed that discomfort with emotions was the strongest barriers faced by the participants followed by cultural barriers. However, lack of access was viewed less of a

barrier than discomfort with emotions and cultural barrier, and was rated the same as negative

perceptions and internal stigma. Lack of knowledge was the least viewed as a barrier (Table 5).

All means and standard deviations for each barrier can be found in Table 6 and a graph

comparing the means and standard deviations in Figure 3.

Table 5.

Repeated Measures ANOVA results for the effect of barrier and ethnicity based on the Barriers towards mental health counseling scale

	F	*df*	*p*	η_P^2	*Group comparisons*
Main effect of barrier type	59.5	2.7, 261.3*	<.001	0.38	DE > CB > (NP = IS = LA) > LK
Main effect of ethnicity	0.55	1, 94	.46	0.006	Asian = Pacific Islander
Interaction	1.45	4.1, 394*	.22	0.01	----

* Sphericity assumption not met (Greenhouse-Geisser correction)

Note. DE = Discomfort of emotions, CB = Cultural Barrier, NP = Negative perceived value, IS = Internal stigma, LA = Lack of access, LK = Lack of knowledge; Group comparisons based on Post Hoc test (multiple pairwise comparisons)

Table 6.

Means and Standard Deviations of Asians and Pacific Islanders on the Barriers towards mental health counseling scale

	Asians		Pacific Islanders		Total sample	
	n = 60		n = 36		*N* = 96	
	M	*SD*	*M*	*SD*	*M*	*SD*
Negative perceived value	15.97	5.49	15.17	4.47	15.67	5.12
Internal stigma	14.97	5.14	13.61	4.81	14.46	5.03
Discomfort of emotions	19.28	5.61	17.53	6.57	18.63	6.02
Lack of knowledge	11.28	4.39	12.26	4.14	11.66	4.30
Lack of access	15.60	3.79	15.56	3.90	15.58	3.90
Cultural barrier	16.87	3.17	17.28	3.33	17.02	3.22

Figure 3

Mean scores of strength towards six Barriers of mental health help-seeking between Asians and
Pacific Islanders based on the Barriers to mental health counseling scale.
Vertical lines represent standard deviation of mean.
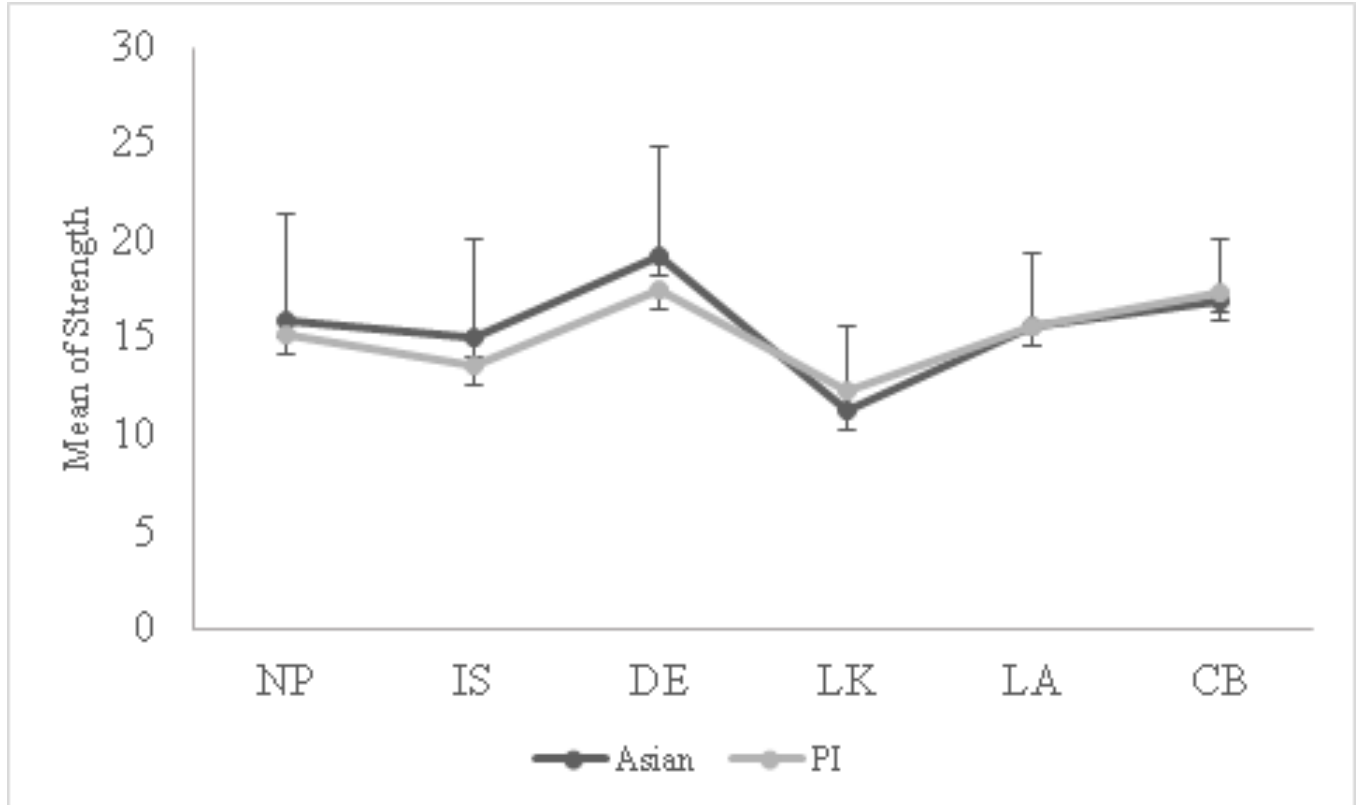
Note. NP = Negative perceived value, IS = Internal Stigma, DE = Discomfort of emotions, LK =
Lack of knowledge, LA = Lack of access, CB = Cultural Barrier

Discussion

Summary

The first hypothesis that Pacific Islanders would have higher levels of self and public

stigma and lower levels of help-seeking than Asians was not supported by the data. Results from

a repeated measures ANOVA and a multiple comparisons test indicated that Asians had higher

levels of external stigma, but they did not significantly differ from Pacific Islanders on internal

stigma. In line with previous studies, Asians and Pacific Islanders (API) did put more emphasis

on stigma projected from the community rather than stigma from oneself. The second hypothesis

that Pacific Islanders would be more likely to attribute mental illness to sociomoral and spiritual

reasons and state higher social distance when presented with schizophrenia was not supported.

Both groups attributed mental illness to neurological reasons along with the normal ups and

downs of life. Although results did find that participants were more likely to exhibit higher social

distance toward an individual with schizophrenia, there were no significant differences between

the two ethnic groups. Both groups indicated higher social distance toward the individual with

schizophrenia regardless of the sex of the individual. Hypothesis 3 (which stated that Asians

would be more open to seeking professional help than Pacific Islanders) was not supported, as

both groups showed high levels of support for professional therapy over self or traditional help.

However, results found that both groups would recommend self-therapy more for individuals

with depression than schizophrenia. Differing from previous research (Subica et al., 2019), this

study shows that there is no preference for traditional help and higher attribution to neurological

rather than sociomoral or religious/supernatural. However, Lin (2012) also found in her research

with Chinese immigrants that there was also no reference for traditional help and no reference to

religious/supernatural causes, a result which she attributed to participants' exposure to

psychoeducation classes and access to public mental health services. This could also be the

reason for the results in the current study, which used college students as participants.

The data from the study partly supported the fourth hypothesis that barriers including

accessibility, cultural barriers, and public opinions (external stigma) will have greater effect than

personal or family beliefs for both ethnic groups. There were no significant differences between

the groups on barriers, which supports our hypothesis that the barriers would be present in both

groups. However, based on the Barrier to Seeking Mental Health Counseling Scale, discomfort

of emotions (revealing their emotions to professional counselors) was the barrier most

participants scored the highest followed by cultural barriers. A lack of accessibility was not

viewed as a barrier to the participants of the current study. The Attitudes towards Mental Health

Problems scale indicated that public opinions (external stigma) were important to both groups.

Participants showed higher worry when the subscales asked how their community would react if

they or their family member had a mental illness. Subscales on the Attitudes towards Mental

Health Problems Scale highlighted that participant did not feel as much worry when it came to

their personal opinions on themselves or their family members' opinion. Overall, both ethnic

groups showed less stigma towards mental health issues than previous studies have found.

Current Study vs Previous Studies

Previous studies have found that Asians and Pacific Islanders exhibit high levels of

stigma towards mental illness, but mean scores for many of the subscales in the current study

showed that API did not have high levels of mental illness stigma as in previous studies.

Differences from this current study to previous studies could be attributed to the participants' age

and education level. Attitudes towards mental illness change over time, and elder individuals

express higher negative attitudes towards people with mental illness than do younger individuals

(Schomerus et al., 2015). Our study was conducted on a college campus with many of the

students being within the age range of 18-30. There were only two participants in their late 30s

and one participant in their 50s. With Schomerus and colleagues' (2015) research in mind, this

could explain why the data showed lower levels of stigma compared to previous research. Subica

et al. (2019) found that Pacific Islanders reported higher levels of mental illness stigma, but their

study included mostly PI adults with a mean age of 46.25 whereas the current study had a mean

age of 20.98. Despite the overall lower negative attitudes toward mental illness, both groups

showed higher social distance from individuals with schizophrenia. This could be because people

tend to hold more negative perceptions of schizophrenia and associate them with higher levels of violence (Penn et al., 1994; Penn et al., 1999). Schomerus (2015) found that social distance towards individuals with mental illness tends to increase throughout a life span, but they did not report a specific age in which it increases more. The high level of social distance towards individuals with schizophrenia could be attributed to the fact that stigma exists among young people, but some of their stigma towards individuals with severe mental illnesses are less observable when compared to older people (Do et al., 2019). Lower levels of stigma could also be attributed to the education level of participants.

Education level may play a role in the level of stigma as educational and professional experience provides individuals with different perspectives on the cause and effect of mental illness (Chaudhry & Chen, 2018). There are mixed findings with some showing higher education reduces negative attitudes while others finding that they produce higher stigma among families with higher education due to fear of losing their reputation (Chaudhry & Chen, 2018; Nugent et al., 2020). However, there have been findings that the type of education the individual receives affects their stigmatizing views as higher education on specific topics like psychology tend to lower stigma (Chaudhry & Chen, 2018). In Subica's study (2019), about 11% completed college or went past their undergraduate degree while 31% completed some college requirements but did not graduate with an undergraduate degree. With the current study, many of the students were college students and were part of a psychology course, which may have caused lesser stigmatizing views because they are being exposed to information on mental illness.

Limitations

A limitation present in the current study that is often found in past research with Pacific Islanders is the relatively small number of participants for the PI group. Although, the study was

conducted on a Pacific Island, the population of Saipan has more Asians than Pacific Islanders due to immigration from Asian countries. The small sample size of Pacific Islanders is not representative of all PI. The uniform age and education level are also concerns as they limit the generalization of the results, which may not apply to other age groups of Asians or Pacific Islanders.

A second limitation is that this was a self-report survey. Self-bias may have been present as participants may have demonstrated a social desirability in hopes of showcasing positive results rather than negative results to researchers.

Implications and Future Studies

Future research should continue to explore differences between Asians and Pacific Islanders as there is limited research on the topic and future studies should begin treating Asians and Pacific Islanders as different ethnic groups rather than combining them under one demographic variable. Even within these ethnic populations, there are various ethnic subgroups that have diverse cultural backgrounds, countries of origin, and circumstances - with Asians having more than 20 ethnic subgroups and Pacific Islanders having about 10 ethnic subgroups (Takeuchi et al., 1992). These differences get hidden when they are all grouped under AAPI or API. Moreover, research could also focus on the ethnic subgroups within each population, solely look at Asians or solely look at Pacific Islanders and compare the subgroups with one another. Future research could study the differences between the two ethnic groups throughout various ages rather than just young adults, as the current study used mostly college-aged participants. Generational and age differences on mental health stigma could be studied as there is also a lack of research on the topic.

Despite the lack of differences between Asians and Pacific Islanders in some subscales of attitudes and barriers of mental illness stigma, organizations and resources should continue to provide targeted service for each population. As shown in the current study, cultural barriers are one of the top barriers both Asians and Pacific Islanders face. Offering programs and services specific to their culture may reduce termination of help-seeking and increase the length of treatment in clinics (Takeuchi et. al, 1992), although this may be difficult to execute as ethnic therapists for Pacific Islanders are limited. Some of these services could include having psychologists or psychiatrists who speak the native language or understand the customs of the cultural community. Targeted service has shown positive effects for minority groups and treating API as independent groups could cause more utilization of services.

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Appendix A:

Vignette of Pacific Islander

Participants will be randomly assigned to read one of the four combinations (Depression-Male, Depression-Female, Schizophrenia-Male, Schizophrenia-Female).

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Depression: Male or Female

Read the scenario below and answer the following questions.

Jose/Maria is a Saipanese/Guamanian man/woman. For the last two weeks Jose/Maria has been feeling really down. S/He wakes up in the morning with a flat, heavy feeling that sticks with him/her all day long. S/He isn't enjoying things the way he/she normally would. In fact, nothing seems to give him/her pleasure. Even when good things happen, they don't seem to make Jose/Maria happy. S/He pushes on through his/her days, but it is really hard. The smallest tasks are difficult to accomplish. S/He finds it hard to concentrate on anything. S/He feels out of energy and out of steam. And even though Jose/Maria feels tired, when night comes s/he can't get to sleep. Jose/Maria feels pretty worthless, and very discouraged. Jose/Maria family has noticed that s/he hasn't been him/herself for about the last month, and that s/he has pulled away from them. Jose/Maria just doesn't feel like talking.

Schizophrenia: Male or Female

Read the scenario below and answer the following questions.

Jose/Maria is a Saipanese/Guamanian man/woman. Up until a year ago, life was pretty okay for Jose/Maria. But then, things started to change. S/he thought that people around him/her were making disapproving comments and talking behind his/her back. Jose/Maria was convinced that people were spying on him/her and that they could hear what s/he was thinking. Jose/Maria lost his/her drive to participate in his/her usual work and family activities and retreated to his/her home, eventually spending most of his/her day in his/her room. Jose/Maria became so preoccupied with what s/he was thinking that s/he skipped meals and stopped bathing regularly. At night, when everyone else was sleeping, s/he was walking back and forth in his/her room. Jose/Maria was hearing voices even though no one else was around. These voices told him/her what to do and what to think. S/he has been living this way for six months.

Questions given with each vignette rated on a four-point Likert scale ranging from 1 (*very unlikely*) to 4 (*very likely*).

Attribution of causation questions:
1. Jose/Maria's condition is due to genetic or inherited problems.

2. Jose/Maria condition is due to chemical imbalance in the brain.

3. Jose/Maria's condition is due to God's will.

4. Jose/Maria's condition is due to their bad character.

5. Jose/Maria's condition is due to the way they were raised.

6. Jose/Maria's condition is due to a mental illness.

7. Jose/Maria's condition is due to a physical illness.

8. Jose/Maria's condition is due to the normal up and downs of life.

Severity

How serious would you rate Jose/Maria's condition?

Select an answer on how likely Jose/Maria's condition would improve through the following

treatments.

9. Jose/Maria handles it on their own.

10. Jose/Maria go through a mental health treatment (i.e. seeing a therapist, psychologist, or doctor).

11. Jose/Maria go to a traditional/cultural treatment.

Violence

Select an answer to how likely Jose/Maria would do the following action.

12. Jose/Maria would act violently toward people and him/herself.'

Social Distance

Select an answer to how willing you are to engage in the following behaviors with Jose/Maria.

13. Jose/Maria move next door.

14. Jose/Maria want to hang out for the night.

15. Jose/Maria wants to make friends with you.

16. Jose/Maria works closely on a job with you.

17. Jose/Maria is to marry into the family.

18. Jose/Maria helps out local community events or celebrations (e.g., serve food, host)

19. Jose/Maria speak or perform at local community events or celebrations (e.g., wedding, funerals, or births).

Appendix B:

Attitudes Towards Mental Health Problems Scale (ATMHP)

Below are a series of statements about how you, your community, and your family may think

about mental health problems. Read each statement and carefully mark the number that best

describes how much you agree with each statement. Please use the following scale: 0 (*Do not

agree at all*); 1 (*Agree a little*); 2 (*Mostly Agree*); 3 (*Completely Agree*).

Attitudes towards Mental Health Problems

*For this first set of questions please think about how your community and family view mental

health problems such as depression and anxiety with a difficulty to cope in everyday life.*

1. My community sees mental health problems as something to keep secret.

2. My community sees mental health problems as a personal weakness.

3. My community would tend to look down on somebody with mental health problems.

4. My community would want to keep their distance from someone with mental health

   problems.

5. My family see mental health problems as something to keep secret.

6. My family see mental health problems as a person weakness.

7. My family would tend to look down on somebody with mental health problems.

8. My family would want to keep their distance from someone with mental health problems.

External Shame/Stigma Awareness

*For the next set of question please think about how you might feel if you suffered from mental

health problems such as depression and anxiety with a difficulty to cope in everyday life.*

9. I think my community would look down on me.

10. I think my community would see me as inferior.

11. I think my community would see me as inadequate.

12. I think my community would see me as weak.

13. I think my community would see me as not measuring up to their standards.

14. I think my family would look down on me.

15. I think my family would see me as inferior.

16. I think my family would see me as inadequate.

17. I think my family would see me as weak.

18. I think my family would see me as not measuring up to their standards.

Internal Shame

For the next set of questions please think about how you might feel about yourself if you suffered

from mental health problems such as depression and anxiety with a difficulty to cope in everyday

life.

19. I would see myself as inferior.

20. I would see myself as inadequate.

21. I would blame myself for my problems.

22. I would see myself as a weak person.

23. I would see myself as a failure.

Reflected Shame 1

For the next set of questions we would like you to think about how you might feel if you suffered

from mental health problems such as depression and anxiety with a difficulty to cope in everyday

life. This time consider how worried or concerned you would be about the impact on your family.

24. My family would be seen as inferior.

25. My family would be seen as inadequate.

26. My family would be blamed for my problems.

27. My family would lose status in the community.

28. I would worry about the effect on my family.

29. I would worry that I would be letting my family's honour down.

30. I would worry that my mental health problems could damage my family's reputation.

Reflected Shame 2

For the next set of questions, we would like you to think about how you might feel if one of your close relatives suffers from mental health problems such as depression and anxiety with a difficulty to cope in everyday life. This time consider how worried or concerned you would be about the impact on you.

31. I would worry that others will look down on me.

32. I would worry that others would not wish to be associated with me.

33. I would worry that my own reputation and honour might be harmed.

34. I would worry that if this were known I would lose status in the community.

35. I would worry that others might think I might also have a mental health problem.

Appendix C:

Barriers to Seeking Mental Health Counseling Scale (BSMHCS)

For the following question mark whether you agree or disagree to the statement.

1 (Strongly Disagree)   2 (Somewhat disagree)   3 (Disagree)   4 (Agree)

5 (Somewhat agree)   6 (Strongly agree)

Negative Perceived Value

1. I don't think talking with a mental health counselor would be useful.

2. I like to count on my friends or family for support rather than reach out to a mental health

3. counselor.

4. I think talking with a mental health counselor would only make me dwell on the problem
without necessarily resolving the issue.

5. Because I have enough social support, I would not need to seek mental health counseling
for my personal problems.

6. I don't like to rely on a mental health counselor to tell me what to do about my problems.

Ingroup Stigma

7. My family or significant other would judge me poorly if I disclose my problems to a
mental health counselor.

8. Most people in my cultural group would not approve of my decision to seek mental
health counseling.

9. My friends would think less of me if they knew I sought mental health counseling.

10. Seeking mental health counseling would bring shame to my family.

11. My family or significant other would not see me negatively if I share my problems with a
mental health counselor. (R)

Discomfort with Emotions

12. I would feel embarrassed about sharing my feelings with a mental health counselor.

13. I would feel nervous about showing the emotional side of me during the mental health counseling process.

14. I feel comfortable expressing my feelings to a mental health counselor. (R)

15. It would be awkward for me to talk about my feelings in counseling.

16. I fear going to counseling because I don't like to reveal my feelings.

Lack of Knowledge

17. I don't know how to where to seek mental health counseling.

18. I don't know what kind of mental health counseling services are available.

19. I don't know how mental health counseling works.

Lack of Access

20. I don't have the time to seek or stay in counseling.

21. I have no financial means (e.g. insurance, money) to afford mental health counseling services.

22. I have too many responsibilities to other people (e.g. family, friends, significant others) that would prevent me from seeking mental health counseling.

23. I have too many academic or work-related obligations that would deter me from talking to a mental health counselor.

Cultural Barrier

24. I perceive that most mental health counselors would not be sensitive to issues related to my cultural identity.

25. I don't think that most mental health counselors would understand my cultural values.

26. I doubt that most mental health counselors have adequate training to explore issues related to my cultural identity.

27. I don't think culture would be an obstacle to my seeking help from a mental health counselor. (R)

28. I think that cultural differences between most mental health counselors and myself would be a barrier in counseling.