External Shame's Relationship with Mental Health Outcomes in Asian and White Americans

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Research exploring shame's relationship with mental health is under researched. Thus, factors contributing to mental health are not well understood cross-culturally. Additionally, research often does not differentiate between external and internal shame, which makes un clear the relationship between shame and mental health. This study examines the relationship between external and internal shame with mental health outcomes in Asians and White Americans. Asian and White American participants were recruited through an online survey platform. This study examined whether race moderated the relationship of internal and external shame with mental health outcomes and whether the differential experience of shame with mental health outcomes. Additionally, we hypothesized that internal shame and external shame mediated race's relationship with mental health outcomes. Results indicated that race was not a moderator of internal and external shame's relationship with mental health outcomes and internal shame and external shame were not mediators of race's relationship with mental health outcomes. However, exploratory analyses suggested that internal shame mediated the relationship of external shame with depression and future anxiety in both White Americans and Asians. Additionally, exploratory analyses revealed that external shame was a significant predictor of depression in Asians in the context of public failure. The results suggest that internal and external shame are important predictors of mental health outcomes for both Asians and Whites, and external shame may be especially important for Asians in the context of public (versus private) failure.

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Preface

My first thank you is to this project. It has been an amazing and enriching time that has really deepened my understanding of Asian culture. The knowledge I've gained through this project is sure to be a part of me for my lifetime and is sure to be valuable in helping me be more empathetic and culturally conscientious as a doctor.

I'd also like to thank my thesis advisor, Dr. Kevin Binning. This project would not have been possible without his expertise and support throughout this project. I'd also like to thank Beverly Conrique, a graduate student, who I've had the pleasure of being able to work with. Beverly's knowledge and morale support has been super helpful as I've struggled and persevered in this process. Finally, I'd like to thank my family for simply being present and providing simple moral support.

1.0 Introduction

Due to pressures in life, from school, family, and the inability to meet personal goals, suicide rates are high throughout the world. Failure is a part of life and recovering from it is essential for moving forward. When people cannot accept it, this can result in lingering effects that harm the mental health of individuals. Today, in particular, people find it more difficult to find the support they need to recover from failures they face in life. However, the extent that our mental health is affected is significantly different depending on which culture we are in. Thus, it is essential to understand how people emotionally react when confronted with failure in order to provide better mental health care. The vast majority of previous studies in Western countries largely focused on how feelings of guilt are associated with mental health. One of the common assumptions behind the trend was that guilt is typically associated with Western cultures, while shame is associated with Asian cultures (You, 1997). Consequently, the issue of shame has been under-researched not only in Western populations but also in Asians. This means that cultural and cross-cultural understanding of mental health is less established than it should be and mental health professionals are less equipped to assist people.

Failure often results in both feelings of guilt and shame (Stroeber et al., 2008), which requires us to look at both, instead of focusing on one, to better understand mental health issues. This study argue that by understanding how shame impacts mental health, we can mitigate its negative effects on mental health and overall promote better mental health in individuals across cultures. To that end, this study first investigates if Asians and White Americans react to failure differently. This comparison will allow us to recognize cultural differences as important factors for mental health. Then, this study probes how they experience and come to terms with internal

and external shame after failure to meet an important goal, which will help us major differences between social and cultural groups in coping with failure. Previous research, I argue, indicates that mental health studies need to take cultural environments into account, in that they are responsible to a great extent for differences in the experience of depression, self-esteem, anxiety, and other mental health outcomes between different racial or ethnic groups (Okazaki, 1997; Greenberger & Chen, 1996; Cassels, 2010; Bachman, 2012). Thus, in the present research, I focus on the feeling of shame and how shame is experienced differently for Asians and White Americans. In other words, I examine shame (both external and internal) as a key mediator that causes certain mental issues after experiencing failure. To measure internal and external shame and related mental symptoms, I will use the survey and various scales. Finally, through linear regression, mediation analyses, and moderation analyses, I will establish the relationships between internal shame, external shame, race, and mental health outcomes.

Many studies have not differentiated internal and external shame perhaps since both are highly correlated to each other (Balsamo et al, 2014; Gilbert, 1998; Misailidi, 2020). While internal shame originates within the self and involves self-generated criticism and self-evaluation (Gilbert, 1998; Goss et Al, 1994), external shame originates outside the self, largely along with a distressing awareness that others view him or her negatively (Gilbert, 1998). Yet it is often hard to draw clear distinction between the two and previous studies have often ignored differences between them. However, I predict that internal and external shame can be experienced differently by Asians and White Americans, and thus needs more research to understand the pathways in how it can affect mental health outcomes. This is critical for understanding how differences in cultural environments can lead to differences in mental health and subsequently how negative mental health can be mitigated.

This paper will explore how, in the context of failure, external and internal shame are related to various mental health outcomes between Asians and White Americans. I predict that shame will be associated with different mental health outcomes for Asian and White Americans. I expect that these differences will be due to shame (both internal and external) being a key mediator that causes certain mental issues after experiencing failure. In the following sections, I will outline the literature on internal and external shame and their relations to the mental health outcomes. I will present methods for investigating these links and discuss future directions and implications.

1.1 External Shame and Responses to Failure

Little discussion has been made in psychological literature to support the claim that external and internal shame have differential relationship with White and Asian Americans. Since the racial groups are Asians and White Americans, I expect for external shame to be significantly different due to major differences in collectivist and individualist cultures. Internal shame is studied in the study as a covariate, but I do not expect for there to be significant inherent differences between Asians and White Americans in regards to internal shame levels. Though there may be differences, I expect for external shame to be much more different between the groups. Thus, this study will be focusing on external shame affects mental health outcomes between the groups. Young's (1997) work on Korea's shame culture may serve as a starting point for our discussion of how external shame affects a specific ethnic group's perception of the world and reaction to it.

Specifically, he discusses how important shame is for Koreans and how they experience shame in conjunction with group orientation, family dynamics, ancestor veneration, social status, and reciprocal obligation (You, 1997). The differences Young establishes are similar to many of

the differences discussed in studies of individualism and collectivism. These specific values demonstrate how external shame is more prevalent in Asian populations as Asians focus more on the group. Then, a reflection on the individualism vs. collectivism debates can help further establish the potential reasons for why Asian and White Americans may experience shame differently. Individuals who are a part of a collectivist culture place more importance on groups and put the goals of the group over their individual goals (Liem, 2000; Triandis, 1995; You, 1997).External shame is linked to what one believes that others think about the self. The major difference between external and internal shame is the origin of the emotion. Internal shame is linked to negative self-evaluation (Misalaidi, 2020). Thus, in the context of a collectivist culture where the emphasis is on the goals of the group, one would expect that external shame would be more damaging to mental health outcomes than internal shame. Supporting that idea, a previous study exploring the differences in shame-focused attitudes to mental health problems found that Asians have higher external shame beliefs, but not internal shame beliefs compared to non-Asian students (Gilbert et al, 2007). This suggests that deficits in mental health care in collectivist cultures are due to individual's preoccupation with the opinions of others. Thus, I predict that external shame will be more significant in predicting mental health outcomes in Asians due to the environment of collectivist cultures.

Differences between Asian and American culture suggest differences in the experience of shame between the groups. A 1987 study found that Asian parents attributed children's low performance in mathematics mostly to lack of effort while American parents attributed responsibility for low performance to a variety of factors evenly (Hess et al, 1987). The focus on lack of effort in Asians shows the increased pressure on people to perform well and how this can subsequently affect mental health when faced with failure. Once again, this shows how Asians

may experience greater levels of external shame due to the fear of disappointing their parents. Overall, individual's awareness of the expectations of how their parents would attribute failure to lack of effort thus can lead to increases in external shame when individuals confront failure. In contrast, Caucasian participants of the study attributed failure to a variety of factors, internal and external. As a result, for them, there is less fear that failure would lead to parents making a judgement on their character which suggests Caucasian students would experience less external shame. Additionally, a 1981 study focusing on math performance for students found that Japanese participants were most internal in causal ascriptions for failure and least internal for successes (Chandler et al, 1981). This shows how individuals place great importance on taking responsibility for flaws. Additionally, this suggests the pressure individuals place upon themselves to succeed and how this can be damaging to their mental health. This can suggest how Asians can also have greater levels of internal shame as they attribute their failure more to themselves rather than external factors. I do not expect for there to be a significant difference between Asians and White Americans in regards to levels of internal shame. Being in an individualist culture means that individuals are more used to prioritizing one's individual goals and desires over that of the group. Thus, one might expect for the individual to have to take more personal responsibility when they face failure since the individual is more responsible for setting the goals and desires. However, as demonstrated in the 1987 study, Americans attribute to failure to external factors more than Asians. Thus, this mitigates the increased levels of internal shame that we'd otherwise expect as Americans can find other reasons to explain the failure and maintain a positive self image. Overall, these are some examples to illustrate how race is a significant factor in differences in the experience of shame.

A prime example of the culturally determined differences is the mindset in how to perceive and react to failure. Experiencing failure often requires getting help. However, getting help varies greatly depending on which culture one is in. In an Asian culture, there is more prejudice towards getting help for mental health problems and thus a different dynamic in getting help. When getting help, Asian Americans need to consider not only what getting help means for themselves, but more importantly what effects it would have on those who are closely related to them. Asian Americans are taught to consider the social harmony of the group while White Americans are taught that their individual desires and interests can be of more importance than the group's interests (Markus and Kitayama, 1991). Getting professional mental health help in an Asian society means acknowledging one's weaknesses. Examples of the harmful consequences of not seeking professional mental health care include hikikomori (social recluses) in Japan and the high suicide rates in Asian countries (Rubinstein, 2016). Hikikomori are not simply an epidemic of isolated individuals, but a result of parents playing a key role in shaping their children's experiences of withdrawal (Rubinstein, 2016),

Prior literature found that there is a systematic difference in the frequency of help seeking between Asian and White Americans (Markus and Kitayama, 1991). A 2011 study found that Asian Americans had less favorable help-seeking attitudes, greater mental health stigma, and greater self-concealment compared to the European American participants (Masuda, 2011). This supports the idea that Asian Americans avoided seeking help and even concealed their mental health problems due to their feelings of mental health stigma. The feelings of mental health stigma are similar to the fear of the opinions of others that is the basis of external shame. This difference in help-seeking behaviors is related to coping behaviors such as problem recognition. Ultimately, such coping behaviors have implications on individuals' mental health (Shea & Yeh, 2008).

Generally speaking, internal shame is likely to have a greater impact on mental health since internal shame is directly related to internal judgement about oneself. In a collectivist context, however, the importance of maintaining harmony in a group entails the social pressure of adhering to the values of the group and individuals are more vulnerable to the pressure to conform to society and repress their individual desires. In other words, there is a larger personal responsibility for individuals to manage themselves, which triggers them to avoid bringing trouble or disgrace to the family and seeking outside help (Liem, 2000). Thus, I propose that this importance of maintaining the harmony in the group causes external shame to have a larger impact than internal shame on mental health outcomes for Asians.

A related concept is that of stigma consciousness where individuals fear being classified as a part of a stigmatized group (Gilbert, 2007). This fear of being ostracized elucidates why external shame could have a larger negative impact on mental health outcomes in Asian Americans. Additionally, a 2007 study of differences in attitudes toward mental health found that Asian students are more focused on external shame, but still experience internal shame at an equal level to non-Asian Americans (Gilbert, 2007). This supports the idea that external shame will have a greater impact than internal shame on mental health outcomes in Asian Americans.

Shim's study provides support for this mediation as in the study internal shame mediated external shame and smartphone addiction (Shim, 2018). Though smartphone addiction is not relevant to my analysis, it suggests that internal shame and external shame may act as mediators for mental health outcomes. Understanding these differences in mindset will help support how and why mental health outcomes differ in Asians and White Americans.

1.2 Mental Health Outcomes

Another reason why it is important to study internal and external shame separately for Asians and White Americans is because prior studies have established differences in various mental health outcomes between Asians and White Americans. These differences suggest that differences in how feelings, like shame, may be experienced differently due to cultural environment. A study exploring depression and emotional reactivity found that depressed Asian Americans showed a pattern of heightened emotional reactivity compared to non-depressed Asian Americans, while depressed European Americans showed a pattern of lower emotional reactivity compared to non-depressed European Americans (Chentsova-Dutton, 2007). This difference suggests that emotions are experienced differently by Asians compared to Whites when experiencing depression. Additionally, a meta-analysis of 108 studies demonstrated that shame was moderately related to depressive symptoms (r = .43) (S. Kim, Thibodeau, & Jorgensen, 2011). The study, however, did not differentiate between internal and external shame. This study will provide evidence for the idea that external shame will have a larger negative impact on mental health outcomes in Asian Americans as well as shed light on the nature of the relationship between internal shame, race, external shame, and mental health outcomes.

Self-esteem is broadly defined as how much a person values his/herself and has a favorable attitude toward his/herself. Low self-esteem is related to several outcomes related to mental health, such as emotional problems, substance abuse, and eating disorders. Self-esteem is being studied since internal shame is often defined by negative self-evaluations and is considered a self-critical emotion (Miceli, 2018). Thus, I expect that internal shame would have a strong relationship with self-esteem which is also focused on the self. I expect that internal shame will lower the level of self-esteem due to self-esteem's relationship with depression. Prior studies have not studied the

relationship between shame and self-esteem, so my prediction of how internal shame will affect self-esteem is based on depression's relationship with self-esteem. A meta-analysis of longitudinal studies on whether low self-esteem predicts greater depression and anxiety found that the effect of self-esteem on depression was significantly stronger than the effect of depression on self-esteem (Sowislo, 2013). However, there is still a relationship of depression predicting self-esteem, so I expect for self-esteem to be reduced as depression levels increase. As self-esteem levels are reduced, I expect for individuals who have more negative self-images of themselves to have greater levels of internal shame as they create a more negative self-image of themselves. As a result of this, I expect for the greater levels of internal shame to result in greater levels of depression as the individual feels less self-worth. In regards to external shame, I expect for individuals who experience greater levels of external shame to have lower self-esteem. However, I expect for internal shame to be a stronger predictor than external shame in reducing self-esteem. External shame originates from the awareness of other's negative evaluations of oneself. However, this awareness of other's negative evaluations might not necessarily translate to the individual believing that these negative evaluations are true or representative of who they are as individuals. Thus, individuals who are experiencing failures might try to find hope by comparing themselves to similar individuals and trying to relate to them. By finding individuals who are suffering similarly to them and empathizing with their perspective, the individual is finding social support in finding a group that is experiencing a similar failure. The individual is taking the perspective of others in order to preserve their own sense of self. This idea is similar to the concept of social comparison in which individuals often make downward social comparisons to individuals who are not performing as well as them to make themselves feel better. Empathy is often defined as the ability to be able to take another's perspective. A prior study found that guilt improved relationship

outcomes while shame harmed them and had no relationship with empathy (Leith and Baumeister, 1998). However, this study's participants were predominantly white and thus I expect the results might be different with individuals immersed in a collectivist culture. The study measures empathy as a means to see how strongly people feel that they can relate to others even in the midst of hardship. Along with that, this is a means of measuring how willing people are to look past their personal distress and relate to the struggles of others. Since this study is operationalizing shame differently by breaking it down into external and internal shame, I expect that internal shame will have a negative relationship with levels of empathy. As their internal shame increases, I expect for the individual's personal distress to increase and thus they are less willing to look beyond their own perspective and consider others. As external shame increases, I expect for people to have more empathy as when experiencing external empathy the individuals do not necessarily believe that these negative evaluations are representative of who they are. Thus, when recovering from their failure, they might be more willing to relate to people who failed similarly to them.

Depression is linked to thoughts of past losses (Cheung et al, 2004). Since failure revolves around the idea of not being able to meet goals and expectations you set for yourself, we would expect significant levels of depressive symptoms after not meeting one's goals. Depression is being studied as a mental health outcome due to it's relationship with suicide ideation. Individuals who often commit suicide have symptoms of being clinically depressed. Thus, studying depression can help provide insight on the greater suicide rates in East Asian countries like South Korea and Japan. Overall, depression is a strong predictor of mental health. A previous study examined moderation effects of family cohesion on depression and suicide ideation (Au et al, 2009). The study found that strong family support could weaken the relationship between depression and suicide ideation. Thus, I expect due to the concept of family being different between collectivist

and individualist cultures for external shame to be a greater predictor of depression than internal shame in Asian populations. As this study is concerned with helping preserve mental health, understanding if failure predicts different levels of depression between Asians and White Americans can help us with understanding pathways in which to subsequently reduce the symptoms of depression.

While depression is linked to past events, future anxiety is defined as thinking about the future with anxiety and uncertainty and to anticipate disasters in regards to one's future (Zaleski et al, 2017). Since this study is focused on failure, I expect that people often are worried about failure due to the implications that failure may have upon their future. For example, failing academically can have negative impacts upon the college one can get into and even their future job. Thus, I expect for the participants to experience greater levels of future anxiety. Future anxiety can serve as a means of measuring the longer term impacts of failure upon the mental health of individuals.

2.0 The Present Study

2.1 Research Questions and Hypotheses

RQ1: Are differences in race predictive of experiencing internal and/or external shame differently?

RQ2: Are differences in the experience of shame predictive of differences in mental health outcomes?

H1: Due to expected differences in the experience of external and internal shame between Asians and White Americans, external shame and internal shame will act as mediators for the relationship between participant race and mental health outcomes, as shown in Figure 1. Given that there is greater importance placed on maintaining group harmony in collectivist cultures, external shame will have a larger negative impact on mental health outcomes in Asians while internal shame will have a larger negative impact on mental health outcomes in White Americans.

H2: Differences in participant race will moderate the effects of external shame and internal shame on mental health outcomes, as shown in Figure 2. Being Asian will result in greater negative mental health outcomes than White-Americans due to the prejudice against mental health services and the fear of reflecting negatively on one's family.

Exploratory Analyses: In addition to these hypotheses, additional features were included to help probe and understand the results. We included an item asking participants about whether their failure was public or private. We asked this question as we were interested in seeing how the nature of the failure would be important for qualifying the hypotheses above and we planned on exploring this variable as another potential moderator. We additionally included questions to gauge

the feelings associated with the failure. We asked these questions in order to gauge the emotions most associated with the failure and how these feelings were related to race, internal shame, and external shame.

2.2 Methods

Participants from the age of 18 to 30 composed of Asians and White Americans were recruited on Prolific. 125 Asians and 125 White Americans were recruited. The average age of the Asian participants was 23.91 with a standard deviation was 3.73. The average of the White participants was 24.50 with a standard deviation of 3.500. In the White participant pool, there were 56 males, 62 females, and 6 non-binary participants. In the Asian participant pool, there were 80 male, 45 female, and 1 non-binary participant. The Asian participants nationality varied widely while the White participants were American. The descriptive statistics for nationality and ethnicity are shown in Table 1. The participants were asked to recall the worst failure they've experienced in the past year and to write about how they felt in that moment. After the participant shared their experience, follow up questions pertaining to that experience were asked to further gauge how external and internal shame related to that event.

2.2.1 Measures

To measure internal shame and external shame, questions were adapted from the Internal Shame Scale (del Rosario, 2006) and Other As Shamer scale (Balsamo et al, 2014) to measure internal and external shame, respectively. To measure mental health outcomes as a downstream

consequence of internal and external shame, questions were adapted from Toronto Empathy Scale (Spreng et al, 2009), PHQ-9 Depression Inventory, (Beck, 1996), Dark Future (Anxiety) Scale (Zaleski, 2017), and Rosenberg Self Esteem Scale (Rosenberg, 1965). Rather than have the items phrased more generally, the items for this study will be adapted to be more applicable to the specific failure the participant wrote about. For example, an item from the Other As Shamer scale was "I feel other people see me as not good enough" would be changed to "In the midst of this failure, I felt that other people did not see me as good enough."

2.2.1.1 Internal and External Shame

The Internalized Shame Scale measures shame based on multiple internalized feelings. Specifically, the scale consists of one dominant factor, inferiority, and two lessor factors, Fragility/Exposed and Empty/Lonely, (del Rosario, 2006). Higher scores indicate greater internal shame. Item responses are scored on a 5-point Likert scale ranging from "never" (0) to "almost always" (4). The Other As Shamer scale conceptualizes external shame as rising from the perception of negative judgements about the self in the minds of others (Balsamo et al, 2014). The scale consists of only one factor and was adapted from the Internalized Shame scale. The scale has been shown to have high internal consistency, concurrent, and divergent validities. Item responses are scored on a 5-point Likert scale from "never" (0) to "almost always" (4). Higher scores indicate greater external shame.

2.2.1.2 Area of Failure

A single item question was asked to categorize the types of failures that participants were experiencing. The question asked participants "In what area did the failure occur" and participants were given the options of "School", "Work", "Friends/Family", "Religious", and "Other".

2.2.1.3 Public or Private Failure

Additionally, a question was included to categorize whether participants would describe the failure as "private" or "public". The participants were given the item "To what extent do people you care about know about this failure". Participants could respond with "Nobody know about it", "Very few people know about it", "A lot of people know about it", and "Practically everyone I care about knows about it".

2.2.1.4 Feelings Associated with Failure

The feelings table measures the emotions associated with the failure the participants experienced. The purpose of the table is to help with coding the emotions individuals felt in association to the failure they expect. Specifically, the table asks for participants to rate various emotions (sad, anxious, angry, shame, guilt, embarrassment, joy, happiness, fearful) on a scale of 0 to 2 with options of "not at all", "somewhat", and "very much" based on how they had felt during the failure.

2.2.1.5 Mental Health Outcomes

The Toronto Empathy Scale is included as a means of measuring the participants' tendency to look beyond their self even in the midst of crisis. The scale conceptualizes empathy as a primarily emotional process and was designed as a brief measure of empathy. The scale consists of only one factor and was developed by reviewing other available empathy instruments. The scale has been shown to have high internal consistency, construct validity, and test-retest reliability (Spreng et al., 2009). Item responses are scored on a 5-point Likert scale from "never" (0) to "always" (4). Higher scores indicate greater empathy. Scores can range from 0 to 28.

The PHQ-9 Depression scale is utilized as it is anticipated that the emotions that an individual would face after failure would be very similar to those of depression. The scale consists of only one factor and is widely used (Martin, 2006). The scale has been shown to have high internal consistency, construct validity, and test-retest reliability. The participant is asked given a series of similar statements that are given a value ranging from "0" to "3." At the end, the participant adds up all of the statements and is given a rating of their level of depression. The original inventory is 9 items. Scores from 5-9 indicate minimal depression symptoms, 10-14 indicate minor depression, 15-19 indicates major depression, and scores greater than 20 indicate severe depression. Higher scores indicate greater levels of depression.

The Dark Future Scale is used since it is anticipated that the fear of the future would be a likely emotion for one who experiences failure. The scale measures the tendency to think about the future with anxiety and uncertainty and to anticipate disasters in the future. It was originally adapted from the Future Anxiety Scale and is meant to be a short form of that scale. Future anxiety is conceptualized as "attitudes toward the future in which negative cognitive and emotional processes outweigh positive ones and in which fear is stronger than hope" (Zaleski, 2017). Item responses are scored on a 7-point Likert scale from "Decidedly false" (0) to "Decidedly true" (6). Higher scores indicate greater future anxiety.

The Rosenberg Self Esteem Scale is utilized as it is anticipated that internal shame will be related to low levels of self-esteem (Rosenberg, 1965). The scale consists of only one factor and is widely used. The scale has been shown to have high internal consistency, construct validity, and test-retest reliability. Item responses are scored on a 4 point scale ranging from "Strongly Agree" (1) to "Strongly Disagree" (4). Certain items however are reverse scored. Higher scores indicated

higher self-esteem. Scores below 15 are considered low self-esteem, scores about 25 are considered high self-esteem and scores between 15 and 25 are considered to be average.

2.2.1.6 Control Variables and Demographics

The age of participants was controlled in this study since I expect for there to be differences in levels of shame due to generational differences. For example, previous generations placed higher value on family harmony and filial piety, but younger generations do not always share these values (Mo Yee Lee, 2007). Thus, this difference can suggest that external shame might not be at a high level compared to previous generations since there could be less emphasis on family harmony and filial piety in later generations. Thus, the participants were limited to the ages of 18-30 and their specific age was asked for in a survey question. Additionally, gender was controlled for in this study since there are differences in shame proneness between sex, with women reporting higher levels of shame proneness (Benetti-McQuoid & Bursik, 2005). A survey question asked participants to specify their sex as male, female, or nonbinary was asked.

Participants were asked questions to specify their ethnicity and nationality. White participants were prescreened to ensure that they were White and American, so ethnicity and nationality questions only verified that the prescreening was successful. Asian participants were not screened by nationality due to the concern that not enough data from participants of a specific nationality could be collected. Thus, Asian participants were asked to specify their nationality and ethnicity, so exploratory analyses could potentially be conducted based on this information.

2.3 Data Analysis

In order to examine the research questions and hypotheses of the current study, I conducted linear regressions on race, external shame, and internal shame to see the associations between these variables and mental health outcomes (i.e. depression, self-esteem, empathy, future anxiety). Mediation analyses were conducted to investigate whether mental health outcomes in Asian and White Americans can be explained through external and internal shame. Moderation analyses were conducted to investigate whether race affected the relationship of internal and/or external shame with mental health outcomes.

3.0 Results

Table 1 presents the descriptive statistics for the samples of Asian and White American participants. For both Asians and Whites, they had average self-esteem and empathy relative to what is expected of the population. In regards to their failure, both Asians and Whites scored as having severe depressive symptoms. Regression analyses revealed significant differences in both Asian and White American participants only on the depression mental health outcome dimension, as shown in Table 1. The data showed that Asian participants had a greater level of depression compared to White American participants (*B*=3.452, p=.001). This means that Asian participants had a depression score that was greater than 3.452 compared to White Americans. This supports previous studies about the differences in levels of depression in Asian and White American populations. In regards to mental health outcomes, there were no significant differences between the groups except for the outcome of depression.

3.1 Research Questions

RQ1: Are differences in race predictive of experiencing internal and/or external shame differently?

Differences in race are not predictive of experiencing internal and/or external shame differently. Race was not predictive of internal shame (*B*=-0.029,p=.65) or external shame (*B*=-.048, p=.45) since the analyses were not significant.

RQ2: Are differences in the experience of shame predictive of differences in mental health outcomes?

Differences in experience of shame are predictive of differences in mental health outcomes. Internal shame has a moderate positive relationship with depression in both White ($r=.697$, $p<.001$) and Asian ($r=.656$, $p<.001$) participants. Internal shame also has a strong positive linear relationship with future anxiety in Whites ($r=.701$, $p<.001$) and a moderate positive linear relationship in Asian ($r=.509$, $p<.001$) participants. External shame has a moderate positive relationship with depression in both Whites ($r=.591$, $p<.001$) and Asians ($r=.492$, $p<.001$). External shame has a significant moderate positive relationship with dark future, a measure of future anxiety, in Whites ($r=.586$, $p<.001$) and Asians ($r=.403$, $p<.001$). Other correlations between variables are shown in Table 2. Overall, these analyses showed that internal shame and external shame were both more greatly correlated to depression and future anxiety in Whites than in Asians.

3.2 Mediation Analyses

Hypothesis 1 is not supported by the results of the mediation analyses. There is no significant difference in levels of external and internal shame between Asians and White Americans as shown in Table 1. Thus, external and internal shame cannot be mediators for race's relationship with depression levels. This is shown in Table 3. Additionally, all mediation analyses for the study were conducted with only the mental health outcome of depression as the dependent variable since depression was the only mental health outcome that varied differentially due to race. Future anxiety, empathy, and self-esteem did not differ racially, so these variables were not

included in the mediation analyses. Age and sex were controlled as covariates in the mediation analyses. Since internal shame and external shame were significantly correlated, I conducted two additional mediation analyses in which internal shame was the mediator of external shame and external shame was the mediator of internal shame.

The analysis in which internal shame was the mediator of external shame's relationship with depression levels was found to be significant. This significant model is shown in figure 4. A regression analysis was used to investigate the hypothesis that internal shame mediates external shame's relationship with depression levels. Race was controlled in this analysis since I was only testing to see internal and external shame with mental health outcomes. Results indicated that internal shame was a significant predictor of depression (pathway b), B= .8182, SE = .0950, $p < .001$, and that external shame was a significant predictor of internal shame (pathway a), B = 1.0124, SE = .0657, $p < .001$. This means that for every increase in internal shame by one, depression levels would increase by .8182 and for every increase of external shame by one, internal shame levels would increase by 1.0124. These results support the mediational hypothesis that internal shame mediates the relationship between external shame and depression. External shame was no longer a significant predictor of depression levels after controlling for the mediator (pathway c'), internal shame, B = .2277, SE = .1437, p=.0960, which is consistent with full mediation. It is not considered a significant predictor since p>.05. Approximately 49.11% of the variance in depression was accounted for by the predictors (R^2 = .4911). The indirect effect was tested using a percentile bootstrap estimation approach with 10000 samples (Shrout & Bolger, 2002), implemented with the PROCESS macro Version 3 (Hayes, 2019). These results indicated the indirect coefficient was significant, B = .8283, SE = .1177, 95% CI = .6096, 1.0722. The 95% confidence interval did not include zero indicating a significant mediation. Increases in external

shame by one was associated with increases in depression scores that were approximately .8283 points higher as mediated by internal shame.

Based on this model of internal shame being a mediator between external shame and depression, I conducted an additional mediation analysis after separating the participants based on race. The results of these analyses are shown in figures 5 and 6. In both models, the mediation pathway was significant. External shame alone is not a significant predictor in Asians for depression (*B*=.0383, p=.8568). In Whites however, though external shame does have a direct significant influence on depression levels (*B*=.3569, p=.0412). This means that for every increase in external shame, depression levels increase by .3569 for White Americans.

Results indicated that internal shame was a significant predictor of future anxiety (pathway b), *B*= .5640, SE = .0817, p < .001, and that external shame was a significant predictor of internal shame (pathway a), *B* = .9945, SE = .0654, p < .001. This means that for every increase in internal shame by one, future anxiety levels would increase by .5640 and for every increase of external shame by one, internal shame levels would increase by .9945. These results support the mediational hypothesis that internal shame mediates the relationship between external shame and depression. External shame was no longer a significant predictor of depression levels after controlling for the mediator (pathway c'), internal shame, *B* = .2119, SE = .1162, p=.0693, which is consistent with full mediation. It's not considered a significant predictor since p>.05. Approximately 39.37% of the variance in depression was accounted for by the predictors (R^2 = .3937). The indirect effect was tested using a percentile bootstrap estimation approach with 10000 samples (Shrout & Bolger, 2002), implemented with the PROCESS macro Version 3 (Hayes, 2019). These results indicated the indirect coefficient was significant, *B* = .5609, SE = .0977, 95% CI = .3807, .7589. The 95% confidence interval did not include zero indicating a significant

mediation. Increases in external shame by one was associated with increases in future anxiety scores that were approximately .5609 points higher as mediated by internal shame.

Based on this model of internal shame being a mediator between external shame and future anxiety, I conducted an additional mediation analysis after separating the participants based on race. The results of these analyses are shown in figures 8 and 9. In both models, the mediation pathway was significant. External shame is not a significant predictor in Asians for future anxiety (*B*=.1134, p=.5440). In Whites, however, external shame does have a direct significant influence on future anxiety, (*B*=.3074, p=.0368). For Whites, this means that for every increase of external shame by one, future anxiety increases by .3074.

3.3 Moderation Analysis

Hypothesis 2 is not supported by the results of the moderation analysis. Race is not a moderator for internal shame and external shame's shame relationship with any of the mental health outcome variables. The interaction variable did not have a significant influence on the slopes of the relationship of external shame with depression, F=.1459, p=.7028 or the slope of the relationship of internal shame with depression, F=.3282, p=.5673. The p value was too high so we fail to reject the null hypothesis which means that race is not a moderator of internal or external shame. Thus, figures 2 and 3 which are models in which race is a moderator were not supported.

3.4 Exploratory Analyses

Exploratory Analyses included coding the written responses of participants' most recent failures to see if there is a difference in the kinds of goals and respective failures that Asian American and White Americans report. Figures 12 and 13 present descriptive statistics for the areas in which the failures fell in for Asians and Whites. After conducting a linear regression, there is a significant difference between Asian and White participants in levels of school failure (B=.172, p=.005). Asians classified more failures as being in the area of school compared to White participants. The other differences between Asian and White participants for which area the failures fell in are not significant. The results of this linear regression analysis are shown in Table 4.

The graph in Figure 10 shows how the level of external shame had no effect on the experience of depressive symptoms in white populations. However, as shown in figure 11, external shame did impact depressive symptoms among Asian participants. In particular, Asians had particularly high levels of depressive symptoms when they recalled a public failure. Whites on the other hand did not show a difference in levels of depression between private and public failures. This result illustrates the impact of external shame on the mental health of Asians. The combination of feeling shame over a public failure is particularly problematic for Asians compared to Whites.

A correlation analysis was conducted to observe the relationship between the feelings associated regarding the failure and race, external shame, and internal shame. The results of this analysis are shown in Table 5. Significant results from this analysis included internal shame and external shame having significant positive correlations with embarrassment(r=.588,p<05). Thus, a further analysis was conducted with a linear regression to see embarrassment's relationship with internal shame and external shame. The linear regression, shown in Table 6, found that internal

shame had a significant positive relationship with embarrassment in only Whites (*B*=.034, p=.020) and external shame did not have a significant relationship in either Asians or Whites. This means that for every increase of internal shame by one, embarrassment increases by .034 for Whites.

4.0 Discussion

The study's purpose was to explore the relationship of race with external and internal shame and subsequently how this different relationship influences mental health outcomes. While the primary hypotheses were not supported, exploratory analyses found that internal shame mediates external shame's relationship with depression and that race does not influence levels of external and internal shame. Additionally, exploratory analyses revealed that in Asians external shame predicted greater levels of depression when exposed to public failure compared to private failure. A discussion of these findings appears below.

First, the study found that race only has a significant relationship with depression levels and not with any other mental health outcome. This supports the positive correlation between race and depressive symptoms that has been found in previous studies (S. Kim, Thibodeau, & Jorgensen, 2011). Since race does not have a significant relationship with internal or external shame, this means that internal shame and external shame cannot be mediators between race for these levels of depression. This means that race's relationship with depression might be explainable by other variables that were not measured in this study such as guilt. Additional analyses need to be conducted to observe why depression levels increase more in Asians compared to white participants. It is also important to note that this study is unique in differentiating between external and internal shame and measuring these specific mental health outcomes in regards to external and internal shame. As a result, though many of the relationships were not statistically significant, this provides evidence that a relationship does not exist between race and these other mental health outcomes. Additionally, hypothesis 2 that race would be a moderator of internal and external shame's relationship with mental health outcomes was not supported. Overall, this

suggests that race might not be as significant of a factor in regards to mental health outcomes after experiencing a failure.

There was no relationship found with internal shame and empathy. This goes against the prediction made earlier that with increased levels of internal shame, empathy would be decreased as the individual is more preoccupied with their own personal distress. A potential explanation for why no relationship was observed is due to cognitive dissonance counteracting the negative relationship. Individuals likely wish to view themselves as people who are not selfish and are willing to help others even in the midst of suffering.

Secondly, exploratory analyses revealed a unique relationship of how internal shame is a mediator for external shame in its relationship with depression. Internal shame acting as a mediator for external shame suggests that due to one's concerns about how others perceive his/ her failure, this concern becomes internalized and the individual starts to believe that his/her concerns about how others view him/her are in fact reflective of who he/she is. For example, after failing an interview, one might be concerned about how others perceive his/her failure and thus continue to think about how others perceive him/her. Over time, these thoughts become more internalized and thus increase the levels of internal shame. This is reflected in the high correlation between internal and external shame as shown in Table 2. Along those lines, regression analyses revealed that external shame has a significant direct effect only in White American populations for depression and future anxiety and not in Asians. The significance of this is that it suggests that being in a collectivist culture can result in different perceptions of internal shame and can help explain the greater levels of depression and suicide rates in Asian countries. A potential explanation for external shame having direct effects on Whites could be differences in the prevalence of social media culture. Social media might be more prevalent in Whites in the U.S. and thus people put

greater emphasis on what others think, but might not consider the opinion of others enough that it leads to more negative affirmations regarding their self.

Finally, exploratory analyses also revealed that Asians experience greater levels of depression in regards to failure when the failure is public in nature. In contrast, whites do not experience a difference in levels of depression whether the failure is public or private. This difference shows how external shame has greater influence in disturbing mental health in Asians. This shows how damaging public failures can be for individuals of Asian descent and can help inform mental health care. Thus, this suggests that in order to mitigate the negative effects of external shame in increasing depression in Asians, it might be better to try to make failures more private if possible. Overall, this differential relationship of external shame between Asian and White populations might be associated with collectivist culture. Additionally, the different relationship between Asian and white populations in regards to feelings of embarrassment suggests that internal shame's pathway to affecting depression in Whites could be due to feelings of embarrassment. This supports the idea that the different feelings that Asians experience when faced with failure lead to greater increases in depression compared to White participants.

5.0 Limitations

The present study has limitations due to being conducted entirely in English. Thus, all of the Asian participants had to be English speakers. Being fluent in English suggests that the individuals had access to a certain level of education and thus is also an indication of social economic status (SES) depending upon the country. Additionally, the Asian participants being English speakers means that they could have had more exposure to Western culture and thus are more acculturated to Western values. Also, the participants had to be individuals who were familiar with the Prolific platform. Finally, we did not include any measure of social economic status and could not control for the effects of SES. We'd expect for there to be differences in regards to the types of failure that are most relevant for individuals based on their social economic status. Individuals who are high SES may report family failures more compared to individuals who are low SES who are more concerned with their performance in school and work. Thus, the participants in this study may not be a representative sample.

Additionally, the present study has sampling limitations, so further research can be conducted to expand the demographic group to sample more participants with a wider age range. If the sample size was increased, the power of the analyses regarding the area the failure fell in would increase. Some of the nonsignificant results might have simply been due to the lack of the power of the test as some areas of failure did not have enough participants. If the number of participants increased, an additional analysis could be conducted to see if the type of failure reported had a differential effect on mental health outcomes. For example, such an analysis could find that school failure had more impact on depressive symptoms than family failure. This analysis could also find that the effect these types of failure had on depressive symptoms varied by race as

well. Moreover, more participants of specific Asian nationalities could be sampled at a larger number, so analyses can be conducted based on nationality. Currently there are not enough participants of different Asian nationalities in order to conduct statistical analyses with sufficient power. Another limitation of this study is the age group. The participants were all in their 20s, so the results might not be true for individuals of other age groups.

Because this study is correlational, we cannot make any causal claims. A survey like this cannot rule out alternative explanations explained by unmeasured variables. In future studies, we can rule out alternative hypotheses by using more covariates such as SES and acculturation. An acculturation variable helps with mitigating the effects of globalism as ethnicities share more cross-cultural values. For example, twenty seven of the Asian participants were of European nationality. This suggests that those participants are more accustomed to Western values and thus their responses to the questions might have been more similar to the White American participants in this study. An acculturation scale can help with controlling for this extraneous variable.

6.0 Future Research

Future studies can further explore this model for a greater understanding of why Asians experience more depression than White participants. Additionally, a future study could focus on the ways in which participants cope with accepting their failure to see if there are differences in coping mechanisms between races. Additionally, as mentioned in the introduction, hikikomori are a unique cultural phenomenon in japan where individuals withdraw from society and become social recluses. According to a study, hikikomori symptoms share similarities with depressive symptoms (Kato, 2019). Thus, a future study could try to see if the depressive symptoms individuals feel after a failure are similar to the symptoms experienced by hikikomori and are even a potential predictor for the behavior of hikikomori.

7.0 Conclusion

Overall, these findings can have important implications on care in regards to dealing with failure. The findings help with explaining the pathways in which shame can affect mental health outcomes and the differences in these pathways between cultures. Interventions that help with reducing the public nature of certain failures can prove beneficial to helping adults with dealing with the failure. Internal and external shame were also highly correlated with future anxiety. Thus, interventions that focus on lowering the anxiety individuals face in regards to failure can help them with recovering from failure's negative effects.

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Table 1: ***Descriptive Statistics of Mental Health Outcomes and Demographic Variables Divided by Race***

			White N=125		Asian N=125	
			M or %	SD	M or %	SD
Mental Health Outcomes						
	EXTSHAME		11.92	4.17	11.54	3.8
	INTSHAME		19.14	5.95	18.81	5.4
	DEP		23.51*	7.77	26.96*	8.1
	SELF		23	2.06	22.71	2.2
	EMPATHY		15.1	2.46	15.45	2.6
	DARK FUTURE		25.22	6.72	23.91	6.2
Nationality						
	American		120		18	
	Korean		0		4	
	Japanese		0		1	
	Indian		0		16	
	Chinese		0		17	
	European		4		23	
	Other		1		52	
Ethnicity						
	White		123		2	
	Black		1		0	
	Other		0		4	
	Asian		2		120	
		Korean	1		5	
		Japanese	0		2	
		Indian	0		25	
		Vietnamese	0		15	
		Chinese	0		44	
		Filipino	1		10	
		Other	0		21	
Age			24.5	3.5	23.91	3.7
Gender						
		Male	56		80	
		Female	62		45	
		Nonbinary	6		1	

Table 2 Correlation Table of Internal Shame, External Shame, and Mental Health Outcomes Divided based on Race

Race		INTSHAME	EXTSHAME	DEP	SELF	EMPATHY	DARKFUTURE
White	INTSHAME	1	.700**	.697**	-0.143	-0.095	.701**
	EXTSHAME	.700**	1	.591**	-0.117	-0.051	.586**
	DEP	.697**	.591**	1	-0.137	-0.07	.452**
	SELF	-0.143	-0.117	-0.137	1	-0.001	-0.161
	EMPATHY	-0.095	-0.051	-0.07	-0.001	1	-0.175
	DARKFUTURE	.701**	.586**	.452**	-0.161	-0.175	1
Asian	INTSHAME	1	.723**	.656**	-0.126	-0.097	.509**
	EXTSHAME	.723**	1	.492**	-0.019	-0.109	.403**
	DEP	.656**	.492**	1	-.282**	-0.043	.370**
	SELF	-0.126	-0.019	-.282**	1	-0.097	-0.085
	EMPATHY	-0.097	-0.109	-0.043	-0.097	1	-0.135
	DARKFUTURE	.509**	.403**	.370**	-0.085	-0.135	1

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

Table 3 Direct Effects of Mediation Analysis Pathways for Race, External Shame, Internal Shame, and Depression

Path	Coefficient	SE	t	p
Race-> Internal Shame	-0.0136	0.7377	-0.0184	0.9853
Internal Shame -> Depression	0.8182	0.095	8.6118	.0000***
Race-> Depression	4.0634	0.7961	5.2834	.0000***
Race-> External Shame	-0.1109	0.5145	-0.2156	0.8295
External Shame -> Depression	0.2277	0.1362	1.6714	0.096
External Shame -> Internal Shame	1.0124	0.0657	15.4129	.0000***
Internal Shame -> External Shame	0.4924	0.0319	15.4129	.0000***

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

Table 4: Regression Analysis for Area Failure Occured in Based on Race

Area	Coefficient	Standardized Coefficient	SE	t	N	p
School Failure	0.172	0.176	0.061	2.829	98	.005**
Work Failure	0.014	0.015	0.058	0.235	74	0.814
Family/Friends Failure	-0.057	0.08	0.045	-1.272	37	0.205
Other Failure	0.23	0.11	0.14	1.67	41	0.096

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

Table 5 Correlation Table of Internal Shame, External Shame, and Race with Feelings Associated with Failure

Correlations

	INTSHAME	EXTSHAME	Race	How did this failure make you feel? - Sad	How did this failure make you feel? - Anxious	How did this failure make you feel? - Angry	How did this failure make you feel? - Shame	How did this failure make you feel? - Guilt	How did this failure make you feel? - Embarrassment	How did this failure make you feel? - Joy	How did this failure make you feel? - Happiness	How did this failure make you feel? - Fearful
INTSHAME	1	.711**	-0.029	.267**	.313**	.134*	.362**	.350**	.324**	-0.087	-.153*	.314**
EXTSHAME	.711**	1	-0.048	.236**	.300**	.165**	.261**	.204**	.307**	-0.098	-0.1	.282**
Race	-0.029	-0.048	1	0.072	-0.025	0.065	-.125*	-0.083	-.136*	-0.028	-.140*	0.036
How did this failure make you feel? - Sad	.267**	.236**	0.072	1	.263**	.295**	.331**	.199**	.326**	-.203**	-.322**	.211**
How did this failure make you feel? - Anxious	.313**	.300**	-0.025	.263**	1	.136*	.293**	.261**	.356**	-.137*	-.229**	.386**
How did this failure make you feel? - Angry	.134*	.165**	0.065	.295**	.136*	1	.211**	.137*	.237**	-.159*	-.193**	.197**
How did this failure make you feel? - Shame	.362**	.261**	-.125*	.331**	.293**	.211**	1	.562**	.588**	-.143*	-.211**	.276**
How did this failure make you feel? - Guilt	.350**	.204**	-0.083	.199**	.261**	.137*	.562**	1	.434**	-.154*	-.141*	.254**
How did this failure make you feel? - Embarrassment	.324**	.307**	-.136*	.326**	.356**	.237**	.588**	.434**	1	-0.05	-0.093	.393**
How did this failure make you feel? - Joy	-0.087	-0.098	-0.028	-.203**	-.137*	-.159*	-.143*	-.154*	-0.05	1	.636**	-0.002
How did this failure make you feel? - Happiness	-.153*	-0.1	-.140*	-.322**	-.229**	-.193**	-.211**	-.141*	-0.093	.636**	1	-0.072
How did this failure make you feel? - Fearful	.314**	.282**	0.036	.211**	.386**	.197**	.276**	.254**	.393**	-0.002	-0.072	1

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

Table 6: Linear Regression between Embarrassment and Internal and External Shame divided by Race

Coefficients[a]

Race		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
White	EXTSHAME	0.032	0.020	0.181	1.567	0.120
	INTSHAME	0.034	0.014	0.272	2.351	0.020
Asian	EXTSHAME	0.019	0.024	0.100	0.790	0.431
	INTSHAME	0.024	0.017	0.178	1.407	0.162

a. Dependent Variable: How did this failure make you feel? - Embarrassment

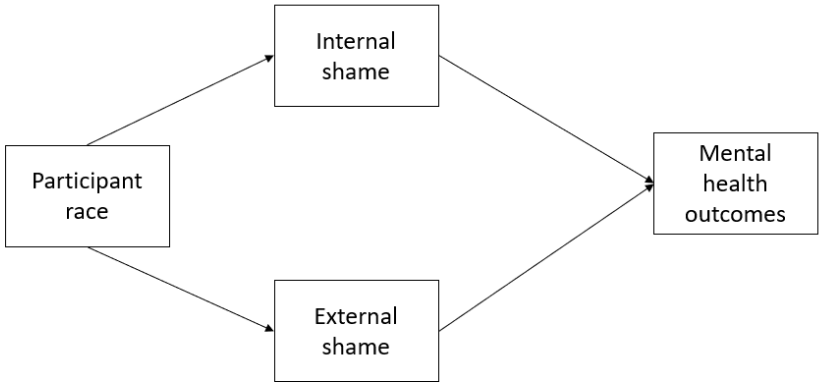

Figure 1: Model of Mediation of Internal & External Shame on Participant Race and Mental Health Outcomes

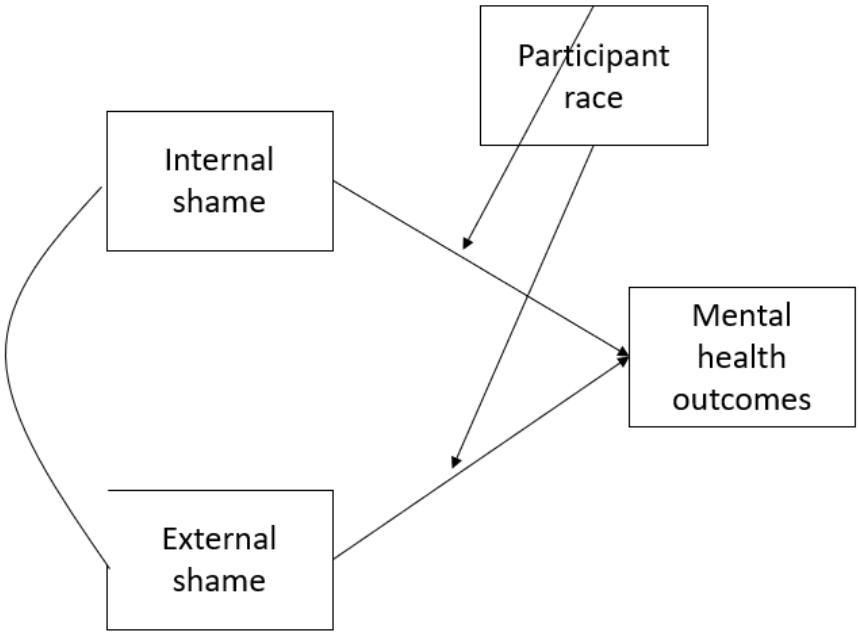

Figure 2: Model of Moderation of Participant Race on Internal Shame and External Shame's Relationships with Mental Health Outcomes

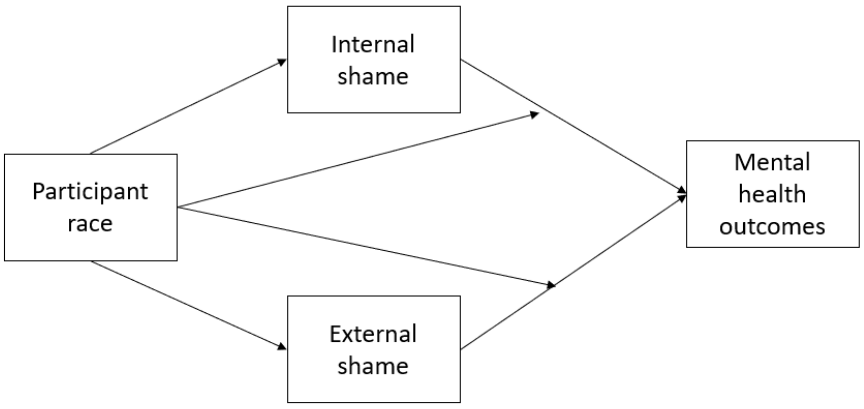

Figure 3: Mediation of Internal and External Shame on Participant Race and Mental Health Outcomes and Moderation of Participant Race on Internal Shame and External Shame's Relationships with Mental Health Outcomes

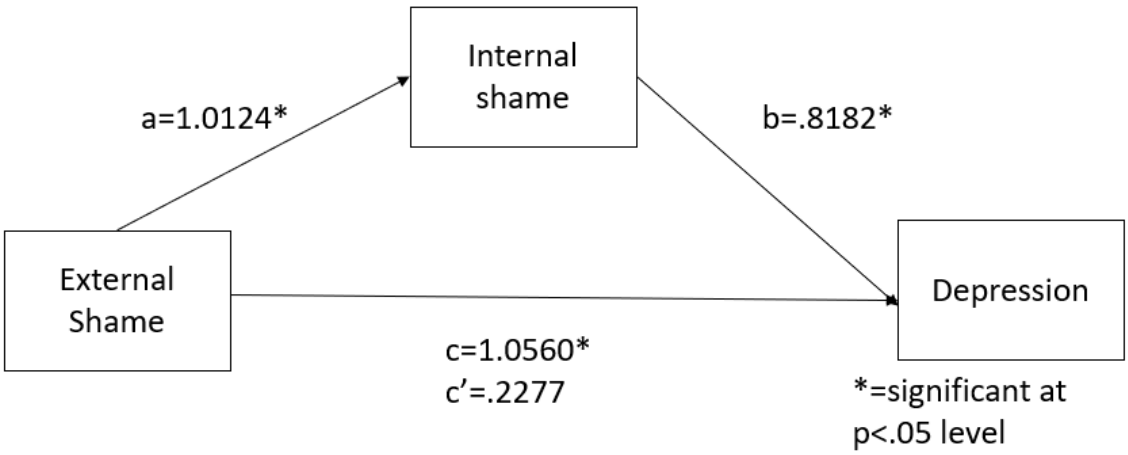

Figure 4: Mediation of Internal Shame on External Shame and Depression with Race controlled

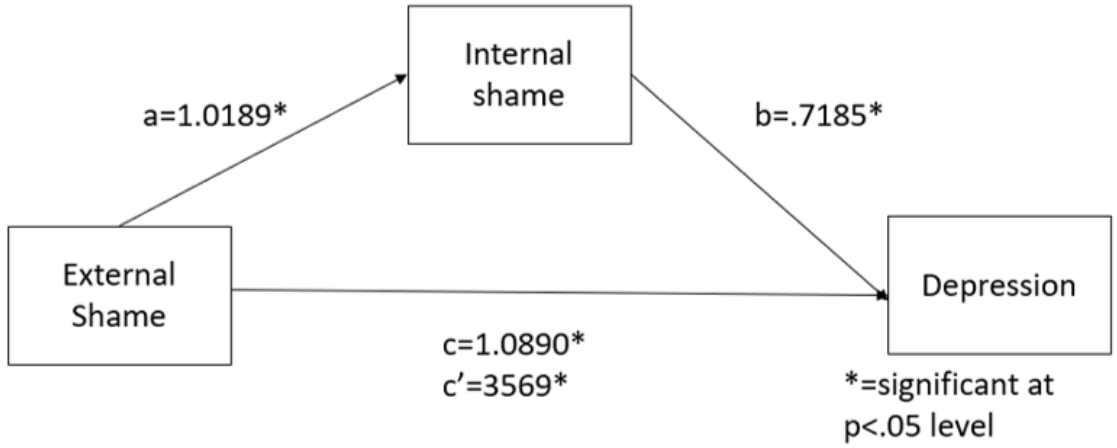

Figure 5: Mediation of Internal Shame on External Shame and Depression in White Americans

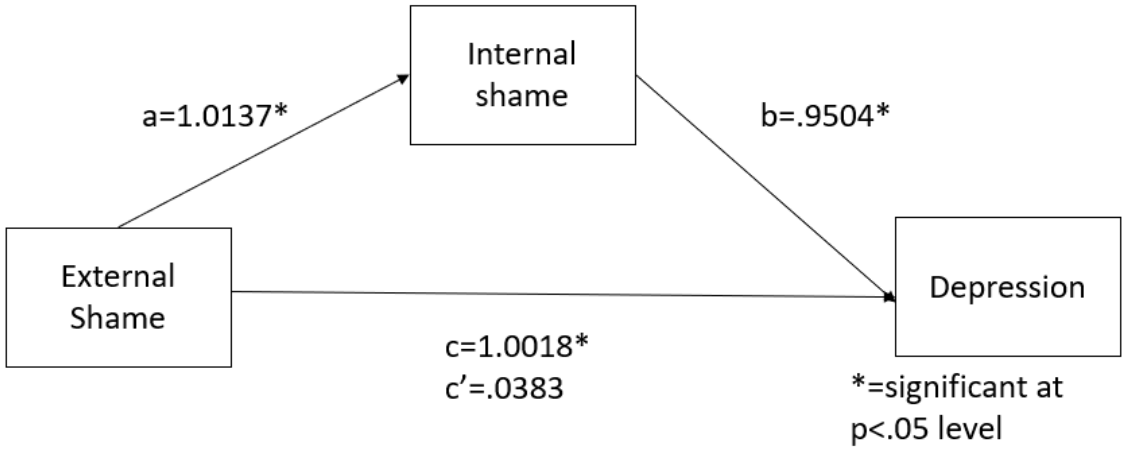

Figure 6: Mediation of Internal Shame on External Shame and Depression in Asians

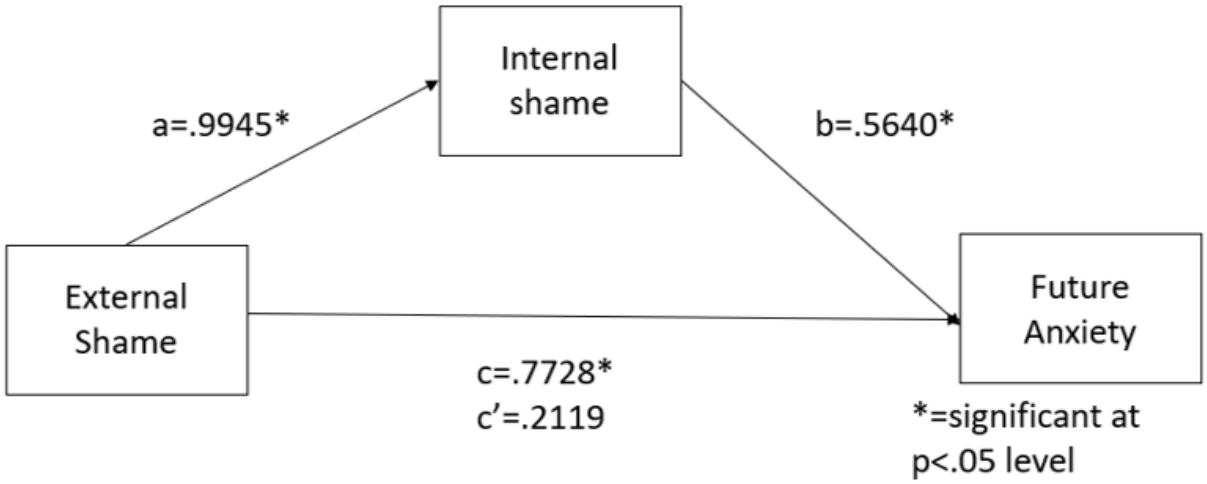

Figure 7: Mediation of Internal Shame on External Shame and Future Anxiety with Race controlled

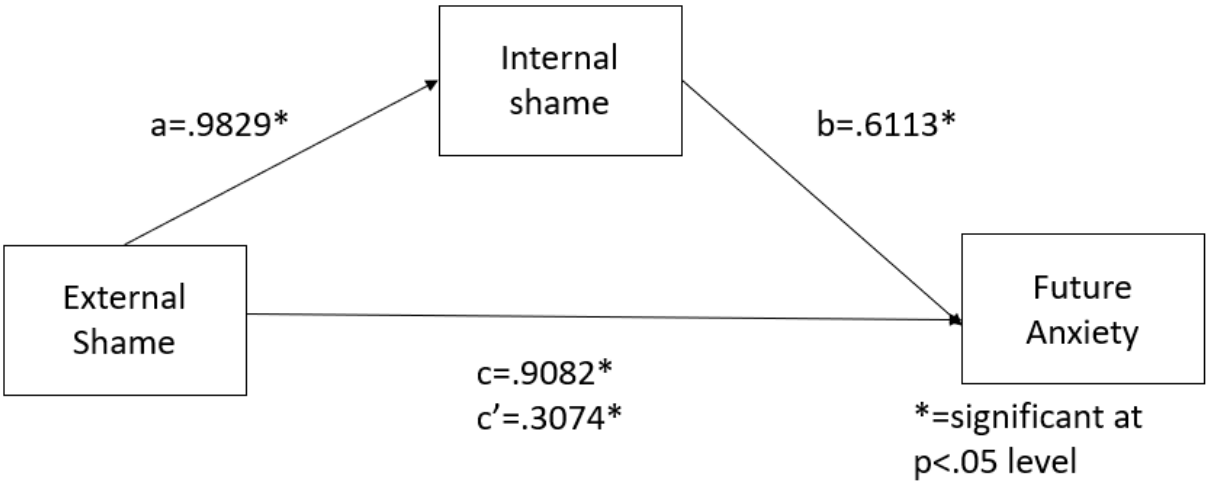

Figure 8: Mediation of Internal Shame on External Shame and Future Anxiety in White Americans

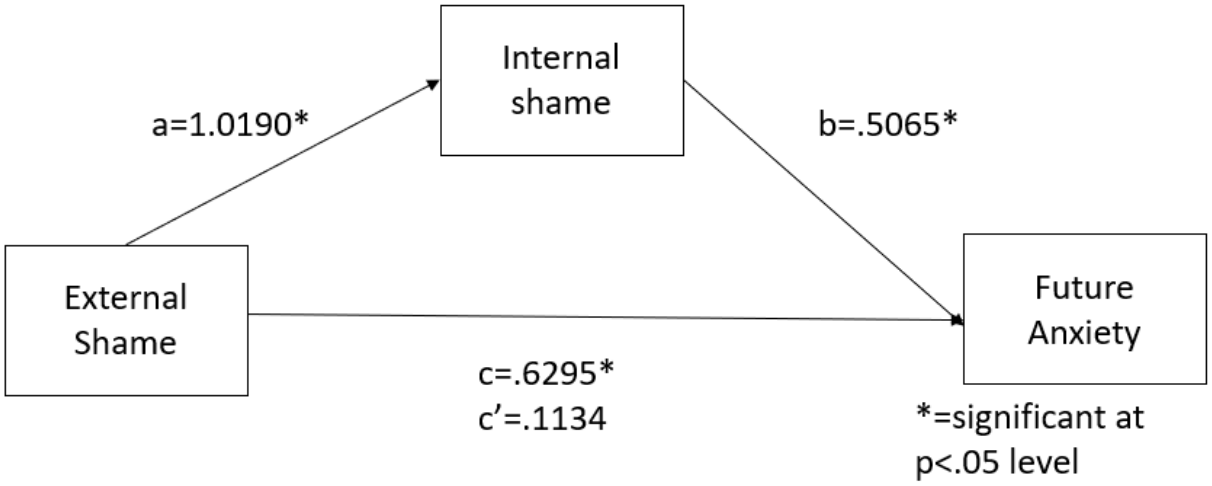

Figure 9: Mediation of Internal Shame on External Shame and Future Anxiety in Asians

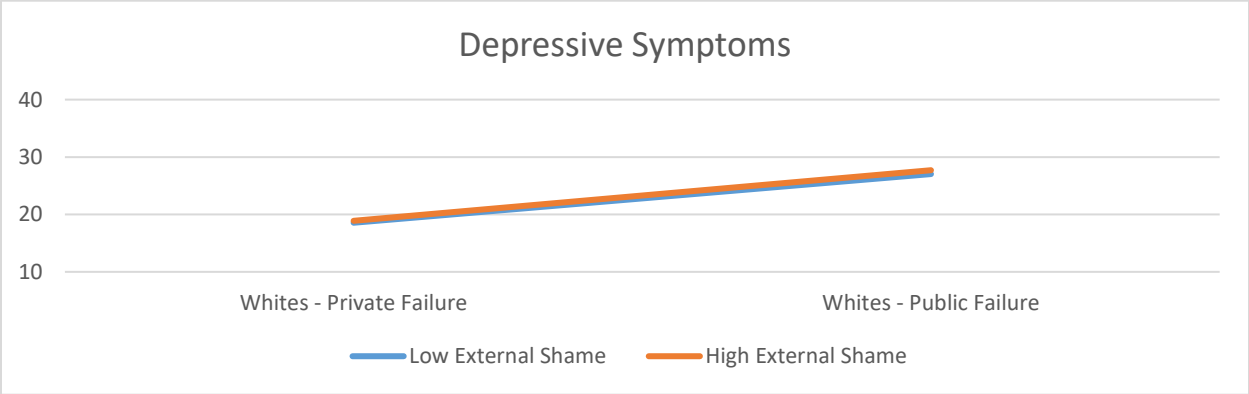

Figure 10: External Shame and Depressive Symptoms when failure is public or private in Whites

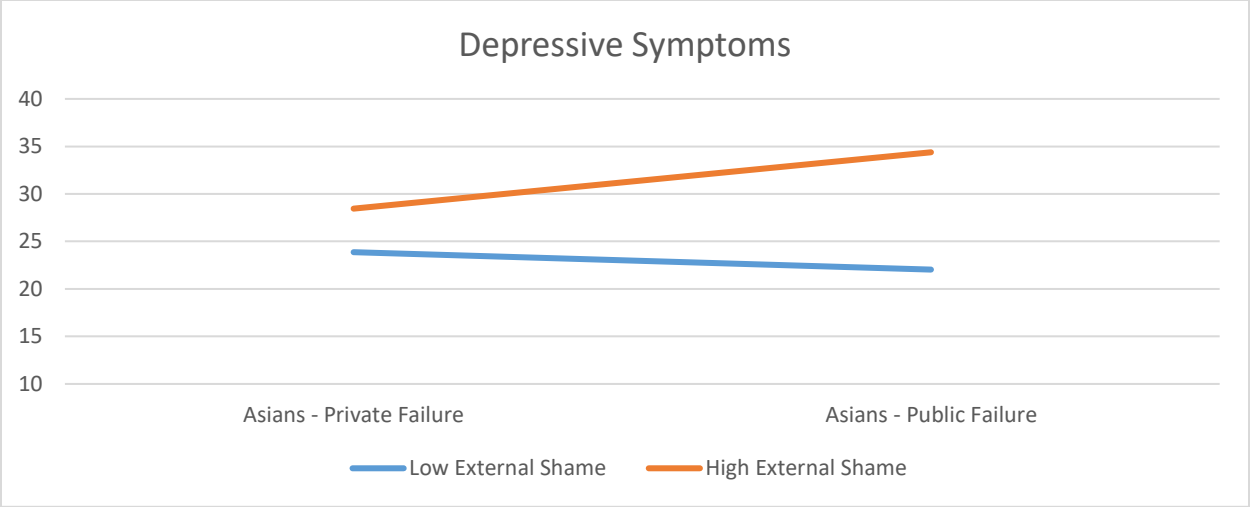

Figure 11: External Shame and Depressive Symptoms when failure is public or private in Asians

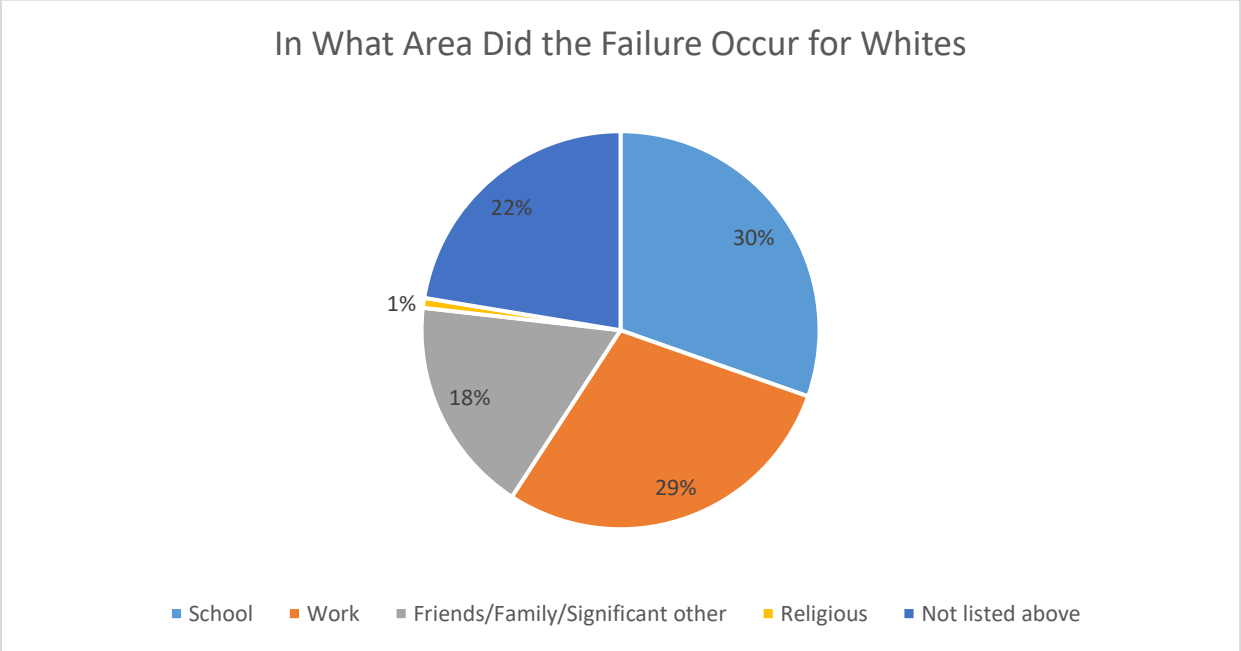

Figure 12: Pie Graph of Area Failure Occurred in for Whites

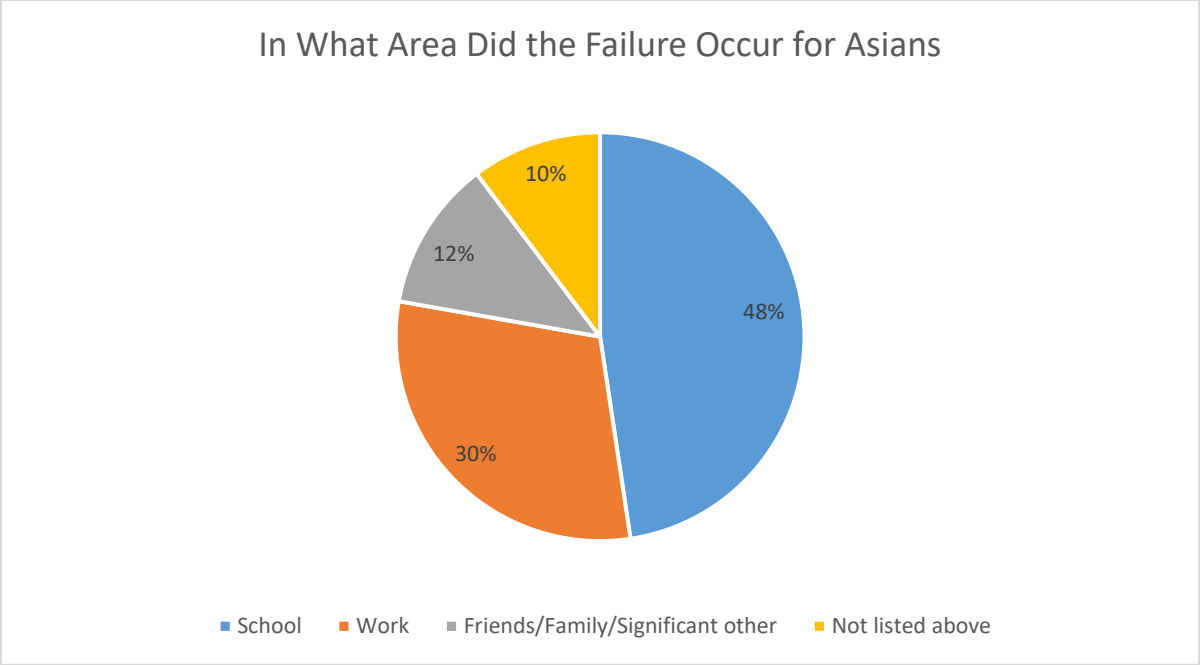

Figure 13: Pie Graph of Area Failure Occurred in for Asians