Reluctant Models

by

Shaina Shetty

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of Bachelor of Science
With Honors in Psychology from the
University of Michigan

2015

Advisor(s): Dr. Harold Neighbors and Dr. Donna Nagata
Abstract

The term “Model Minority” was pushed upon Asian Americans, as a result of the transforming racial climate of the 1960’s. However, the term has continued to influence the experiences of individuals striving to define their dual identities, as Americans and as Asians, and achieve the American Dream. The Asian American community has become a reluctant model for the United States.

Unfortunately, there is little research on the psychological impact of this particular characterization. According to a study by the Asian and Pacific Islander American Health Forum, a higher percentage of South Asian Americans tested positive for depression, when compared to national rates of depression, though the same demographic utilizes mental health services the least (APIAHF, 2006).

This study, “Reluctant Models”, aimed to understand whether South Asian Americans who have internalized this model minority ideal are more vulnerable to depression. The sample consisted of 108 self-identified South Asian students. Data analysis included bivariate correlations and an Ordinary Least Squares regression. Results indicated immigrant generation status and goal-striving stress were significantly related to depressive symptomatology. These findings emphasize the need for culturally appropriate mental health services and further research.

Keywords: model minority, depression, goal-striving stress, South Asian American
Reluctant Models

Immigrants to this country and their children face unique challenges. On one hand, they are strongly connected to the cultural traditions of their country of birth. On the other, they must assimilate and raise their children as a product of the cultural traditions and in the social context of the United States. In understanding and crafting a conversation on mental health in South Asian Americans, it is essential that we begin by understanding the historical context of their migration to the United States. With this context, we can consider how themes of race based exclusion and cultural stereotyping, paired with strong communities and existing support structures, transform the creation of the South Asian American identity and mental health.

In the landmark 1923 case U.S v. Bhagat Singh Thind, the Supreme Court ruled that Thind, an Indian Sikh man, was ineligible for naturalization. Thind filed for citizenship under the Naturalization Act of 1906 by attempting to classify Indians as “white”. While the court agreed that Indians were “Caucasians”, they argued, “the average man knows perfectly well that there are unmistakable and profound differences” (U.S v. Bhagat Singh Thind, 1923). From 1923 to 1946, no person of Indian origin could become a naturalized American.

Tremendous lobbying efforts by Indians in the United States, combined with increasing public support for Indians through World War II and the promise of India’s independence from Great Britain, resulted in the 1946 Luce-Celler Bill. The Bill allowed for the naturalization of Indians in the United States. In 1947, Great Britain’s Indian empire was dissolved into four independent states: India, Pakistan, Sri Lanka, and Burma. Each new nation was given an annual quota of 105 immigrants. Indian independence and
the transformation of the naturalization process stimulated Indian immigration (Leonard, 1997, p. 66).

The 1965 U.S Immigration and Naturalization Act further accelerated Indian immigration by “reversing decades of discrimination and initiating the preferential admission of Asian immigrants” (Leonard, 1997, p. 67). The 1965 Act abolished the national origins quota system and replaced it with a preference system that selected for family reunification and occupational skills. It was a radical break from the previous policy: according to the 2000 U.S Census, roughly 11.1 percent of the American population was foreign-born, a drastic increase from 4.7 percent in 1970. While 66% of this immigrant population was from Latin America, 25% was from Asia. The 1965 Immigration and Nationality Act transformed the makeup of the United States.

Since the 1960’s, the American press has portrayed Asian Americans as the “model minority”, immigrants who arrived in the United States with no money, working long hours day after day to achieve their own American dreams. The term, model minority, often came with the implication that other ethnic minority groups should follow their example. It was a belief grounded in a sense of anti-Blackness, in a shifting social climate defined by the Civil Rights Movement. Asian Americans were and continue to be viewed as “experiencing increasing wealth, upward social mobility, and freedom from crime and mental health problems” (Wong et al, 2006, p. 38).

However, numerous studies have shown that this myth is simply not true, and when perpetuated, can be dangerous to the community itself. A study conducted by Toupin and Son (1991) paired 94 Asian-American students at a distinguished university with 94 non-Asian students from the same university with similar educational and family characteristics, such as
socioeconomic status, gender, and parental education. Toupin and Son found that the Asian American students performed worse than their non-Asian counterparts, with lower GPA’s and were more likely to withdraw, typically for issues relating to mental health.

The idea of Asians as a “model minority” is a myth that obscures the diversity of experiences within this community. The term Asian American encompasses South Asians, East Asians, and Southeast Asians. The sub-groups emerged as pan-ethnic identities in the 1980’s, with the rise of Asian American activism. Each group is characterized by distinct countries of origin, religious identities, languages, customs, values and immigration patterns. Taking these distinctions into account is essential in developing an understanding of these communities. Yet despite this empirical reality, Asian Americans continue to be viewed incorrectly as a homogeneous group lacking any sort of depth (Lee, 2009).

Furthermore, by characterizing Asian Americans as the model, we refuse to acknowledge the problems this community faces, from discrimination and crime to concerns surrounding academic achievement and mental health. Indian Americans reported the highest median household income in the 2000 U.S Census at $51,094. Some have utilized these statistics to argue that Asian Americans no longer experience discrimination or need public services, such as bilingual services and welfare. Yet, a full quarter of Indian Americans live with household incomes below $25,000 (Prashad, 2012, p. 24). In general, Asian Americans continue to have the highest long-term unemployment rate of any group in America (Garcia, 2013).

Delucchi and Do (1996) led a qualitative study at the University of California to examine the reactions of students and college administrators to examine reactions to two separate incidents regarding racial intolerance, one involving an Asian American student and one
involving a African American student. They found that students and administrators treated the two incidents differently: When the incident involved Asian Americans, individuals were less willing to denounce the actions as “racist”. In cultivating this mindset, the “model minority” label prevents Asian Americans from obtaining, or even seeking, the assistance they need.

According to a study by the Asian and Pacific Islander American Health Forum, a higher percentage of South Asian Americans tested positive for depression, when compared to national rates of depression, though the same demographic utilizes mental health services the least (APIAHF, 2006). The “model minority” ideal has often been cited as a personal barrier to seeking help for depression among Asian Americans who have internalized the myth (Leong & Lau, 2001; Wong et al, 2006). The reluctance among Asian Americans to seek help for depression is often tied to the internalization of perfection. Many Asian Americans believe “individual effort will be awarded by success and that failure if the fate of those who do not adhere to the value of hard work” (Lee, 2009, p. 21). With this understanding, it becomes increasingly difficult for these individuals to seek help for depression. Admitting to struggling with depression becomes equivalent to admitting to a flaw, a failure of the model minority ideal involuntarily assumed by many Asian Americans. As a result, many individuals feel their depression is a form of weakness, a result of their own lack of adherence to traditional values, like hard work, rather than a biological vulnerability.

The term “model minority” was pushed upon Asian Americans, as a result of the transforming racial climate of the 1960’s. However, the term has continued to influence the experiences of individuals striving to define their dual identities, as Americans and as Asians, and achieve the American Dream. The Asian American community has become a reluctant model for the United States.
This study, “Reluctant Models”, seeks to understand whether Asian Americans who have internalized this model minority ideal are more vulnerable to depression. This study will focus on University of Michigan self-identified South Asian American students to develop a stronger understanding of this particular community. For the purposes of this study, South Asia will be defined as India, Pakistan, Sri Lanka, Nepal, the Maldives, Bangladesh, Afghanistan, and Bhutan.

**The specific aims are to:**

1. Conduct a survey of the attitudes surrounding the American dream, goal-striving stress, ethnic identity and depression in a convenience sample of South Asian students at the University of Michigan.

2. Understand the extent to which the idea of the “model minority” image is internalized among South Asian students at the University of Michigan.

3. Measure the degree to which internalization of the model minority idea is related to depression among South Asian students at the University of Michigan.

4. Use findings to assist University of Michigan administrators and student groups in the development of resources for the unique needs of these students.

Based on prior work highlighting the danger of the model minority myth and previous qualitative work on South Asian mental health, we hypothesized the following:

1. The internalization of the model minority myth is related to higher depressive symptoms.

2. Our sample will exhibit high levels of goal-striving stress, which will be related to an increase in depressive symptoms.
Method

Overview

Participants were recruited through South Asian student organizations and asked to participate in an online survey on mental health. To find possible relationships between variables, data were analyzed using descriptive statistics, bivariate correlation analysis, and regression analysis.

Participants

The sample consisted of 108 South Asian University of Michigan students and recent graduates, recruited through South Asian student organizations. Table 1 provides a summary of the demographics of this sample. Of the participants, 64% identified as “women” (n = 69), while 36% identified as “men” (n = 39). The mean age of participants was 20.08. Participants were asked to select their ethnicity. Our sample was comprised of 74% Indian (n = 82), 9.8% Pakistani (n = 11), 11.6%, 2.7% Bangladeshi (n = 13), 0.9% Sri Lankan (n = 3), 0.9% Afghani (n = 1), 0.9% Nepali (n = 1), and 0.9% Maldivian (n = 1) participants. While 69.4% of our sample identified as children of immigrants (n = 75), 22.2% identified as immigrants (n = 24) with 8.3% identifying as grandchildren of immigrants (n = 9).

Measures

Participants were asked to complete an online questionnaire with measures relating to a variety of topics, including demographics, internalization of the model minority myth, goal-striving stress, and an ethnic identity measure. The measures used primarily in analyses for this paper are described below and included in Appendix A.

Background Information. The Background Questionnaire addressed demographic information, including age, gender, educational attainment, ethnicity, and family income.
**Internalization of Model Minority Myth Measure (IM-4).** The IM-4 is a 15-item survey, with 2 subscales: “The model minority Myth of Academic Orientation” and “The model minority Myth of Unrestricted Mobility” (Burrola, Steger & Yoo, 2010). It allows researchers to assess the psychological implications for Asian Americans who have internalized this racialized ideal of perfectionism and is shown to be both reliable and valid. For the purpose of creating a research tool, *internalization of the model minority myth* is defined as “the extent to which individuals believe Asian Americans are more successful than other racial minority groups based on their values emphasizing achievement and hard work and belief in unrestricted mobility toward progress” (Burrola et al., 2010). Participants were asked to indicate whether they agreed or disagreed with a set of statements on Asian American academic orientation and unrestricted mobility in comparison to other racial minorities. The response form was a 7-point Likert-type scale ranging from 7 (*strongly agree*) to 1 (*strongly disagree*) and for each subscale, the mean score of the items was used to examine internalization.

**CESD-R.** The Center for Epidemiologic Studies Depression Scale Revised (CESD-R) is a revised screening test for depression and depressive disorder. It is primarily used in community-based settings to measure the level of depressive symptomatology in a general population, and is shown to have high reliability and validity (Radloff, 1977). The multiple-choice, self-report survey measures symptoms of depression. Participants are given a set of statements and asked to indicate how often they have felt this way over the past week. The 20 items in the CESD-R scale measure symptoms of depression in nine different groups: sadness, loss of interest, appetite, sleep, concentration, guilt, fatigue, agitation, and suicidal ideation. Each answer is scored on a scale value between 0 (*not at all or less than one day in the last week*) and 3 (*5-7 days in the past week, nearly every day for 2 weeks*). The resulting score can be examined
in two ways. First, three groups with increasing depressive symptomatology can be determined based on an algorithm with the logic described in Table 1. Second, the score can be seen as an interval scale variable—the higher the CESD-R score, the greater a participant’s symptoms of depression.

Table 1: Logic for CESD-R Groupings

<table>
<thead>
<tr>
<th>Group</th>
<th>CESD-R Category</th>
<th>Logic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>No Clinical Significance</td>
<td>CESD-R score of under 16.</td>
</tr>
<tr>
<td>2</td>
<td>Moderate Clinical Significance</td>
<td>CESD-R score of over 16; Anhedonia or Dysphoria nearly every day for the past 2 weeks; Symptoms in an additional 2-3 DSM category groups noted as occurring at least 5-7 days in the past week.</td>
</tr>
<tr>
<td>3</td>
<td>Serious Clinical Significance</td>
<td>CESD-R score of over 16; Anhedonia or Dysphoria nearly every day for the past 2 weeks; Symptoms in an additional 4 DSM category groups noted as occurring nearly every day for the past 2 weeks.</td>
</tr>
</tbody>
</table>

For the purpose of this study, we will be examining the score as an interval scale variable.

The Multigroup Ethnic Identity Measure (MEIM). The Multigroup Ethnic Identity Measure (Phinney, 1992) examines the structure of ethnic identity. It is comprised of two factors: ethnic identity search (5 items) and affirmation, belonging, and commitment (7 items). Participants are asked to respond to a set of 12 statements on their ethnicity or ethnic group using a 4-point Likert scale ranging from 1 (strongly agree) to 4 (strongly disagree). The survey is scored using the mean of the item scores and range from 1 to 4. Increased values indicate a greater sense of ethnic identity, affirmation, and belonging. The measure is consistently shown to have good reliability across a wide range of ethnic groups and age groups.

Goal-striving Stress Measure (GSS). Goal-striving stress (Neighbors & Sellers, 2011; Parker & Kleiner, 1966) is a 4-item tool, which measures the gap between socially derived aspirations and achievements and examines the psychological pain associated with this
disappointment. Participants were asked to “Imagine a ladder with 10 steps, where step 10 represents your best way of life and step 1 represents your worst way of life” (Parker and Kleiner, 1966) and select a number that describes where they would like to be in 10 years (aspirations) and a number that describes where they are at the moment (achievement). They were then asked to indicate how disappointed they would be if they were never to reach that goal (importance). Goal-striving stress is calculated using the equation (aspirations – achievement) x importance of goal (Neighbors & Sellers, 2011).

**Analysis Plan.** The analysis proceeded in three stages. First, univariate statistics (mean, standard deviation, sample N) were gathered for each variable. Next, bivariate correlations were conducted between each variable. CESD-R scores are measured on a continuous interval scale. As such, the final stage of analysis was an Ordinary Least Squares regression, in which sex, immigrant status, ethnic identity, goal-striving stress, and IM-4 score were introduced as independent variables.

**Results**

Table 2 presents univariate statistics (mean, standard deviation, sample N) for each of the measures: internalization of the model minority myth (academic orientation and unrestricted mobility), ethnic identity, CESD-R, and goal-striving stress.

**Internalization of the Model Minority Myth**

Table 2 shows that the mean score for the internalization of the model minority myth of academic orientation was 4.10 ± 1.35, with a range of 1.0 to 6.9. On a 1 (*strongly disagree*) to 7 (*strongly agree*) scale, a mean score of 4.10 indicates the average response for the items was “neither agree nor disagree”. A high score would suggest the participant
has internalized the idea that Asian Americans perceived success is associated with their stronger work ethics, perseverance, and drive to succeed.

In a range of 2.0 to 6.2, the mean score for the internalization of the model minority myth of unrestricted mobility was $2.93 \pm 1.21$. A mean score of 2.93 indicates the average response was “slightly disagree”. A high score would suggest the participant has internalized that idea that Asian Americans do not face the burden of racism or barriers at school or work. Taken together, these results imply our sample, on average, did not internalize the model minority myth.

**CESD-R**

Table 2 reports that the mean total score for the CESD-R scale was $18 \pm 15.63$, with a range of 0 to 57. In addition to reporting the CESD-R as a continuous interval scale, CESD-R scores can be grouped into three categories of clinical significance following the logic outlined in Table 1. For this sample, 86.8% were categorized as Group 1 (“no clinical significance”), while 3.3% were categorized as Group 2 (“moderate clinical significance”) and 9.9% were categorized as Group 3 (“serious clinical significance”). “No clinical significance” means that the symptoms of these participants do not amount to probable or possible depression. Since CESD-R is simply a screening tool, this categorization is not equivalent to a diagnosis. It simply provides an understanding of the level of depressive symptoms present in a participant. Since the CESD-R is not formally a diagnostic tool, the analyses below will focus on the CESD-R as an interval scale using Ordinary Least Squares (OLS) regression.

**Ethnic Identities**
Table 2 shows that the mean score for the MEIM was 1.73 ± 0.58, ranging from 1.0 to 3.0. On a 1 (strongly agree) to 4 (strongly disagree), a mean of 1.73 indicates the average response was “agree”. This suggests the sample had a strong sense of ethnic identity, affirmation, belonging, and commitment within their ethnic community.

**Goal-striving Stress**

As indicated in Table 2, the mean goal-striving stress score was 7.28 ± 4.83, ranging from 1 to 28. Goal-striving stress brings together three variables through the expression: (aspirations – achievement) x importance. These results suggest participants experienced modest levels of goal-striving stress.

**Bivariate Correlations**

Table 3 presents the bivariate correlations among internalization of the model minority myth, goal-striving stress, ethnic identity, and depressive symptomatology. These exploratory analyses suggest there is no evidence for correlation between the internalization of the model minority myth and the depressive symptomatology. Next, these analyses imply there is a significant correlation between goal-striving stress and ethnic identity ($p = 0.045$). As a sense of ethnic identity increases, goal-striving stress increases. Finally, analyses indicate a significant correlation between goal-striving stress and depressive symptomatology ($p = 0.045$). As goal-striving stress increases, symptoms of depression also increase. Furthermore, there is no evidence for correlation between sense of ethnic identity and depressive symptomatology.

**Multivariate Regression Analyses**

Table 4 presents regression coefficients for the Ordinary Least Squares regression analyses using the CESD as the dependent variable. These analyses suggest there is no
relationship between the CESD-R and either IM-4 of academic orientation subscale \( (p = 0.501) \) or the IM-4 of unrestricted mobility subscale \( (p = 0.298) \). In other words, as IM-4 scores increase, the level of depression symptomatology does not appear to increase. In addition, sex \( (p = 0.227) \) and ethnic identity \( (p = 0.395) \) are not related to symptoms of depression. Table 4 shows that both immigrant status \( (p = 0.004) \) and goal-striving stress \( (p = 0.017) \) are significantly related to depressive symptomatology. The more generations an individual has lived in the United States, the lower their depressive symptoms; and the higher an individual’s goal striving stress, the greater their depressive symptoms.

**Discussion**

The primary purpose of this study was to understand whether individuals who have internalized the model minority myth are more vulnerable to depression. Secondarily, the study aimed to examine the relationship between goal-striving stress, symptoms of depression, and a strong sense of ethnic identity. After surveying 108 South Asian young adults, we did not find significant evidence to suggest that the internalization of the model minority myth is linked to depression. However, our data did show a relationship between goal-striving stress and depressive symptomatology, as well as immigrant status and depressive symptomatology. The longer one lived in the U.S., the lower their depressive symptoms; the higher the goal-striving stress experienced, the higher were depressive symptoms.

Stress is intricately linked to depression, and our results add to the depth of knowledge in the field (Dressler, 1988; Mui & Kang, 2006; Sellers & Neighbors, 2008; Tummala-Narra, Alegria, & Chen, 2012). The existence of this dynamic in South Asian mental health is worth noting, particularly given the very specific types of stress.
immigrants and their children often face in assimilating to this country and striving for the American Dream (Tummala-Narra, Alegria, & Chen, 2012). Furthermore, our results suggest immigrants are more likely to struggle with depression than their children or their grandchildren. Previous research on Latin@ youth suggests first-generation youth are more likely to attempt suicide and engage in problematic alcohol use than foreign-born youth (Brown, Hartel, Matthieu, Olivares, Pena, Wyman, & Zayas, 2008). Our results present the opposite association. South Asian immigration patterns offer one explanation: Since South Asian immigrants are generally highly educated, their children are often afforded tremendous privilege and have the ability to assimilate easily. Acculturative stress, which is positively correlated with increased symptoms of depression (Brown et. al, 2008), is lessened as more generations successfully settle in the United States. Future studies might further examine the relationship between ethnic identity, immigrant status, acculturation processes, and depressive symptomatology. However, given the findings reported here, it is all the more important to address the need for culturally sensitive resources for South Asian immigrants.

This study is the first time the goal-striving stress measure has been applied to this particular sample, South Asian students. Our results are consistent with more general findings on goal-striving stress and mental health found in large national samples (Neighbors and Sellers, 2011). Neighbors and Sellers write, “Goal-striving stress measures discrepancies between socially derived aspirations and achievements” (Neighbors & Sellers, 2008, p. 92). The model minority myth, shaped by socio-historical factors, forces Asian Americans to adopt high aspirations, particularly in the academic sphere (i.e. “Asians
are always good at math”). The high aspiration-achievement discrepancies that result can contribute depressive symptoms, as evidenced by our results.

**Limitations**

Our results may have been rooted in the limitations of this study. Given this study was conducted as a senior thesis, there were limited resources. Participants were not compensated and both the scope of the survey and data analyses were relatively limited. Participants were recruited through identity-based student organizations, such as the South Asian Awareness Network and the Indian American Students Association. Since these students had already found identity-based networks, they were more likely to have a stronger sense of ethnic identity than the general population. Since mental health is a particularly stigmatized issue in the South Asian community and our recruitment strategy utilized social networks, it is possible that using a self-report survey, like the CESD-R, would lead to inaccurate results. The South Asian community at the University of Michigan can be particularly tight knit. While such a community can be a tremendous source of support and affirmation, it can also be the source of stigma and shame. In addition, it is worth noting: While our study was aimed at “South Asian American” students, nearly 75% of our sample identified as “Indian”. It is important to emphasize the heterogeneity of the South Asian identity, heterogeneity our sample was not representative of.

**Looking Ahead**

While our results for this study provide only partial support for our hypotheses (i.e., for goal-striving stress), the idea that internalization of the model minority myth is related to higher depressive symptoms merits further study with a larger and more representative sample, stronger measures of mental health, and more sophisticated data analysis
techniques. Future quantitative studies must be further grounded in qualitative work, to compensate for the tremendous lack of literature on this topic. Qualitative work can better guide survey design and execution by providing a stronger understanding of the community’s perception of depression and stress. To better understand the relationship between immigrant status and depressive symptomatology, further studies on the association between goal striving stress, ethnic identity, and immigrant status are recommended. Furthermore, given our understanding of the American dream, it would be worth exploring the role of socioeconomic status as a mediator of goal-striving stress.

**Importance**

Asian Americans are the fastest-growing racial group in the United States. The term itself encompasses many communities with unique struggles, needs, and cultures, from Chinese Americans to Bengali Americans. This diversity highlights the need for an increase in research focused on particular sub-groups.

While Asian Americans became reluctant models more than 50 years ago, the characterization continues to reduce the narratives of a diverse community into a narrow set of categorizations. It delegitimizes movements for necessary social change, such as the call for an increase in culturally appropriate mental health services. While the term was externally imposed, it is internalized. By internalizing the myth, we continue to perpetuate existing power structures. This paper serves as a call to action, a call for our community to begin to reclaim the complexity of our narratives. In doing so, we can move past serving as the “reluctant model” for the United States.
References

APIAHF. (2006, August). South Asian in the United States. APIAHF.


Table 2: Descriptive Statistics for Measured Characteristics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N</th>
<th>%</th>
<th>Mean ± S.D</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>69</td>
<td>64%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>39</td>
<td>36%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>108</td>
<td></td>
<td>20.08</td>
<td>18 - 30</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indian</td>
<td>83</td>
<td>74%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pakistani</td>
<td>11</td>
<td>9.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bangladeshi</td>
<td>13</td>
<td>11.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sri Lankan</td>
<td>3</td>
<td>2.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maldivian</td>
<td>1</td>
<td>0.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nepali</td>
<td>1</td>
<td>0.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afghani</td>
<td>1</td>
<td>0.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant Status(^1)</td>
<td>108</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immigrant</td>
<td>24</td>
<td>22.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>First Generation</td>
<td>75</td>
<td>69.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Second Generation</td>
<td>9</td>
<td>8.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Model Minority Myth</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Orientation</td>
<td>96</td>
<td></td>
<td>4.10±1.35</td>
<td>1.0 - 6.9</td>
</tr>
<tr>
<td>Unrestricted Mobility</td>
<td>96</td>
<td></td>
<td>2.93±1.21</td>
<td>2.0 - 6.2</td>
</tr>
<tr>
<td>Multigroup Ethnic Identity Measure</td>
<td>89</td>
<td></td>
<td>1.73±0.58</td>
<td>1.0 - 3.0</td>
</tr>
<tr>
<td>CESD-R Score(^2)</td>
<td></td>
<td></td>
<td>18±15.63</td>
<td>0 - 57</td>
</tr>
<tr>
<td>No clinical significance</td>
<td>79</td>
<td>86.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate clinical sig.</td>
<td>3</td>
<td>3.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Serious clinical sig.</td>
<td>9</td>
<td>9.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal-striving Stress</td>
<td>88</td>
<td></td>
<td>7.28±4.83</td>
<td>1 - 28</td>
</tr>
</tbody>
</table>

\(^1\) First generation refers to the children of immigrants, while second generation refers to the grandchildren of immigrants.

\(^2\) CESD-R scores are grouped into three categories by the logic outlined in table 1: “no clinical significance”, “moderate clinical significance”, and “serious clinical significance”
Table 3: Zero-Order Correlations among depressive symptomatology, IM-4, ethnic identity (MEIM Score), and goal-striving stress

<table>
<thead>
<tr>
<th></th>
<th>CESD-R Score</th>
<th>IM-4 Academic Orientation</th>
<th>IM-4 Unrestricted Mobility</th>
<th>Ethnic Identity</th>
<th>Goal Striving Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>CESD-R Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM-4 Academic Orientation</td>
<td>0.009</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM-4 Unrestricted Mobility</td>
<td>0.086</td>
<td>0.342**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethnic Identity</td>
<td>0.055</td>
<td>-0.076</td>
<td>0.097</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal Striving Stress</td>
<td>0.230*</td>
<td>-0.272</td>
<td>-0.135</td>
<td>0.231*</td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed)
**Correlation is significant at the 0.01 level (2-tailed)
Table 4: Summary of Linear Regression with CESD-R as dependent variable

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE(B)</th>
<th>β</th>
<th>t</th>
<th>Sig.(p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immigrant Status</td>
<td>-0.362</td>
<td>0.123</td>
<td>-0.326</td>
<td>-2.950</td>
<td>0.004*</td>
</tr>
<tr>
<td>Sex</td>
<td>-0.197</td>
<td>0.162</td>
<td>-0.138</td>
<td>-1.218</td>
<td>0.227</td>
</tr>
<tr>
<td>IM-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Orientation</td>
<td>0.042</td>
<td>0.062</td>
<td>0.079</td>
<td>0.677</td>
<td>0.501</td>
</tr>
<tr>
<td>Unrestricted Mobility</td>
<td>0.067</td>
<td>0.064</td>
<td>0.120</td>
<td>1.049</td>
<td>0.298</td>
</tr>
<tr>
<td>Ethnic Identity</td>
<td>0.117</td>
<td>0.137</td>
<td>0.099</td>
<td>0.856</td>
<td>0.395</td>
</tr>
<tr>
<td>Goal Striving Stress</td>
<td>0.024</td>
<td>0.010</td>
<td>0.287</td>
<td>2.443</td>
<td>0.017*</td>
</tr>
</tbody>
</table>

*Significant, p < 0.05

Appendix A: Copy of Reluctant Models Survey

Reluctant Models Survey
PI: Shaina Shetty
You are being asked to participate in a survey to discuss your Asian American identity, your dreams and aspirations, and your mental health. This study, “Reluctant Models”, seeks to understand whether Asian Americans who have internalized this model minority ideal are more vulnerable to depression.

If you agree to participate in this interview, you will be asked to answer questions about your thoughts and feelings on the American Dream and immigration. The risks associated with participating in this study are minimal. However, it may be difficult to reflect on some of the thoughts and feelings that may arise during the session. We do think that these difficulties, if they come up at all, will be minimal. There are no direct benefits of your participation. If you decide to participate, you are free to refuse to answer any of the questions that may make you uncomfortable. You can also choose to drop out at any time.

The information obtained in this survey is confidential. Your name will not be included in any report that might be written nor will you be identified in any way by name as a result of any public presentations of these results. Information will be stored securely and only the project staff will have access to the information. Your responses to the questions will be stored at the University of Michigan for about 1 year and will contribute to further research on this important subject.

If you have questions about this research, including questions about scheduling or your compensation for participating, you may contact the PI, Shaina Shetty at 248-303-2591, or the project’s academic advisor, Dr. Harold W. Neighbors at 734-647-6665.

If you have questions about your rights as a research participant, or wish to obtain information, ask questions or discuss any concerns about this study with someone other than the researcher(s), please contact the University of Michigan Health Sciences and Behavioral Sciences Institutional Review Board, 540 E Liberty St., Ste 202, Ann Arbor, MI 48104-2210, (734) 936-0933 [or toll free, (866) 936-0933], irbhsbs@umich.edu.

By selecting “I agree”, you agree to participate in this survey.

☐ I agree

Q1 What is your class standing?
☐ Freshman
☐ Sophomore
☐ Junior
☐ Senior
☐ Other

Q2 Please write your cumulative GPA: __________

Q3 Please write your major(s): ______________________________________________________
Q4 Please select the level of education you hope to attain.
- Some college
- Bachelor’s Degree
- Master’s Degree
- Professional Degree
- Doctorate

Q5 Please write the following information.
   Age: __________
   Gender: ______________

Q6 Please select the statement that best applies to you.
- I immigrated to the United States.
- My parents immigrated to the United States.
- My grandparents immigrated to the United States.
- Other

Q7 Please select your ethnicity (check all that apply).
- Indian
- Pakistani
- Bangladeshi
- Sri Lankan
- Afghani
- Nepali
- Maldivian
- Bhutanese
- Other (please describe): ______________

Q8 Please select your median family income.
- Less than $25,000
- $25,000 - $50,000
- $50,000 - $100,000
- $100,000 - $150,000
- $150,000 - $200,000
- Above $200,000
Q9 What is the highest level of education your mother has completed?
- Some high school
- High School
- Some college
- 4-year College
- 2-year College
- Graduate Degree

Q10 What is the highest level of education your father has completed?
- Some high school
- High School
- Some college
- 4-year College
- 2-year College
- Graduate Degree
Q11 Instructions: Using the scale below, indicate the extent to which you agree or disagree with each item. Please be open and honest in your responding. In comparison to other racial minorities (e.g., African American, Hispanics, Native Americans)...  

<table>
<thead>
<tr>
<th>Asian Americans generally perform better on standardized exams (i.e. SAT) because of their values in academic achievement.</th>
<th>Strongly disagree (1)</th>
<th>Disagree (2)</th>
<th>Slightly disagree (3)</th>
<th>Neither agree nor disagree (4)</th>
<th>Slightly agree (5)</th>
<th>Agree (6)</th>
<th>Strongly agree (7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian Americans are less likely to face barriers at work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Americans make more money because they work harder.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Americans are more likely to persist through tough situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Americans are more likely to be treated as equal to European Americans.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Americans are more likely to be good at math and science.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Americans get better grades in school because they study harder.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Americans are less likely to experience racism in the United States.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian Americans are harder workers. Despite experiences</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
with racism, Asian Americans are more likely to achieve academic and economic success.

__________

Asian Americans are more motivated to be successful.

__________

Asian Americans have stronger work ethics.

__________

It is easier for Asian Americans to climb the corporate ladder.

__________

Asian Americans generally have higher grade point averages in school because academic success is more important.

__________

Asian Americans are less likely to encounter racial prejudice and discrimination.
Q12 Below is a list of ways you might have felt or behaved. Please check the boxes to tell me how often you have felt this way in the past week or so.

<table>
<thead>
<tr>
<th></th>
<th>Not at all or Less than one day in the last week (1)</th>
<th>1 - 2 days in the last week (2)</th>
<th>3-4 days in the last week (3)</th>
<th>5 - 7 days in the last week (4)</th>
<th>Nearly every day for 2 weeks (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>My appetite was poor.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I could not shake off the blues.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I had trouble keeping my mind on what I was doing.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I felt depressed.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>My sleep was restless.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I felt sad.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I could not get going.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Nothing made me happy.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I felt like a bad person.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I lost interest in my usual activities.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I slept much more than usual.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I felt like I was moving too slowly.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I felt fidgety.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
I wished I were dead.  
_________________

I wanted to hurt myself.  
_________________

I was tired all the time.  
_________________

I did not like myself.  
_________________

I lost a lot of weight without trying to.  
_________________

I had a lot of trouble getting to sleep.  
_________________

I could not focus on the important things.
Q13 In this country, people come from many different countries and cultures, and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups are Hispanic or Latino, Black or African American, Asian American, Chinese, Filipino, American Indian, Mexican American, Caucasian or White, Italian American, and many others. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it. Indicate below how much you agree or disagree with each statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree (1)</th>
<th>Agree (2)</th>
<th>Disagree (3)</th>
<th>Strongly Disagree (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am active in organizations or social groups that include mostly members of my own ethnic group.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I have a clear sense of my ethnic background and what it means for me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I think a lot about how my life will be affected by my ethnic group membership.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I am happy that I am a member of the group I belong to.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I have a strong sense of belonging to my own ethnic group.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>I understand pretty well what my ethnic group membership means to me.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>In order to learn more about my ethnic</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
background, I have often talked to other people about my ethnic group.

I have a lot of pride in my ethnic group.

I participate in cultural practices of my own group, such as special food, music, or customs.

I feel a strong attachment towards by own ethnic group.

I feel good about my cultural or ethnic background.
Imagine a ladder with 10 steps where step 10 represents your best way of life and step 1 represents your worst way of life.

Q14 With this in mind, please use the scale below to answer the following questions.

_____ Please write the step number that best describes where you would like to be in 10 years.

_____ Please write the step number that best describes where you are at the moment.

Q15 How likely are you to achieve your goal?

☐ Very Unlikely

☐ Somewhat Unlikely

☐ Somewhat Likely

☐ Very Likely

Q16 How disappointed would you be if you were to never reach the step to which you aspire?

☐ Very Disappointed

☐ Somewhat Disappointed

☐ Neutral

☐ Not at all Disappointed

Thank you so much for taking the time to respond to this survey. If you have any questions or concerns, please do not hesitate to contact the Principal Investigator, Shaina Shetty, at ssshetty@umich.edu.