Self Confidence, Race, and Gender at MIT

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# Abstract

The importance of self-confidence in personal and professional settings has been well established, yet there is still much debate regarding what shapes and influences its development. Here we investigate the self-perception of students at MIT across different races and genders. Current literature suggests that self-perception is influenced by phenomena such as perceptions on preferential treatment, negative stereotypes, academic disidentification, and social reference groups. When considering the academically driven, highly diverse environment of MIT, we hypothesize that female and minority undergraduate students at MIT have less confidence then their majority counterparts.

We investigated our hypothesis by analyzing the results of a survey distributed to the undergraduate student body at MIT. Through this anonymous survey, demographic information as well as perceptions on academic performance were gathered. The survey also contained questions about students’ perceptions of race and gender stigmas. Results of this survey showed that there is a significant difference in male and female academic self-confidence scores, though no such difference exists in gender sigma. As contrasted with a Caucasian baseline, minority students did not have a statistically significant difference in academic self-confidence, though they did perceive a relatively significant amount of racial stigma. These findings can be used to identify factors that influence our self-confidence, which can in turn allow us to take measures to counteract or maximize these effects.

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# Introduction

## The Importance of Self-Esteem

People can be described in numerous ways; categorized by their physical appearance, personality, lifestyle choices or hobbies. However, one particularly important and notable trait is their level of self-confidence. Almost immediately, new acquaintances can be separated into two main groups: shy or outgoing, self-conscious or self-assured. Self-confidence is a vital component of an individual’s identity, affecting every aspect of his or her personal and professional life (Cokley, 2002). At a most basic level, self-confidence affects people individually. People who are very self-confident tend to be more driven, more passionate, and more accomplished. They have more friends and are generally more content with their lives (Stolz, 2009). Stemming from this, self-confidence has a large impact on academic and professional endeavors, influencing performance in interviews, networking ability, and other work-related interactions.

Self-confidence is a dynamic quality, influenced by many variables, few of which have been clearly identified. One evident relationship is the correlation between race, gender and self-confidence. Historically, women and minorities have been looked down upon by society, and this treatment has had lasting impacts on their overall self-concept and work performance (Boxil, 1984).

Although America has made vast progress toward racial and gender equality in the work place, there are still some undeniable inequalities present. Unemployment rates are still much higher for minorities than for Caucasians. In 2010 African Americans had an unemployment rate of 16.0%, Hispanics 12.5%, and Caucasians only an 8.7% unemployment rate (The Editor’s Desk, 2010). Although women had lower rates of unemployment than men, they were and are still vastly underrepresented in upper management (Osterman, 2012). Perhaps these historical differences have impacted the way women and minorities view themselves, influencing their self-perception which in turn influences their performance. Here we will look at two main theories regarding the self-perception of women and minorities as compared to their peers.

## Minorities might have a lower self-esteem

Current research has provided two divergent schools of thought on this matter. The first posits that minorities and women have a lower relative self-esteem as compared to their Caucasian and male peers.

### Stereotype Threat

This lower self-esteem is attributed to conformity to negative stereotypes that is explained by the stereotype threat (Marsh, 1997). For example, some people subscribe to the belief that women are worse at mathematics than English. As a result, women tend to be less confident in their math abilities (Marsh, 1997).

In 1992, Shelby Steele first explored the concept of a stereotype threat. Steele observed that all students begin school with academic performance relating to their self-confidence (Steele, 1992). However, the presence of constant negative societal messages about their minority group creates an awareness of negative stereotypes of the different minority groups (Steele, 1992). This awareness of the negative stereotype creates a fear in minority students that they will confirm the stereotype. Therefore, they do not try to perform as well. This decrease in effort and consequently performance is called the stereotype threat (Steel & Aronson, 1995). In 1997 Marsh did a study that confirmed the importance of prior academic achievement on academic self-concept (Marsh, 1997). In other words, a decrease in performance from the stereotype threat causes a subsequent decrease in academic self-confidence.

### Preferential Treatment

Other contributing factors to a lower self-confidence are the perception that women and minorities are personally benefiting from affirmative action, dissatisfaction with minority group’s status in the organization, negative attitudes on affirmative action, and awareness of personal discrimination (Tougas, 1996). Opponents of the affirmative action laws claimed that preferential treatment allowed for under-qualified minority candidates to get jobs over more qualified white males. Regardless of the veracity of these statements, in a society that values self-reliance and merit based achievement (Gordon, 1981), affirmative action has undermined the achievements of women and minorities (Boxill, 1984). This undermining has resulted in women and minorities questioning their abilities, which consequently has caused a loss of self-esteem (Boxill, 1984). This lower self-confidence was later discovered to be dependent on factors other than simply the perception of preferential treatment.

In 1987 Rupert Nacoste proposed that the self-esteem response of minorities to preferential treatment depended upon each individual’s dissatisfaction with the situation of their minority group in their organization, not just the presence of preferential treatment. Then in 1989, Nacoste conducted another study, which suggested that “responses to preferential treatment are contingent upon one’s pre-existing beliefs about the fairness of these procedures” (Nacoste, 1989). Essentially, Nacoste theorized that people’s self-esteem after preferential treatment depended on whether or not they agreed with the preferential treatment.

In 1996 Francine Tougas examined the validity of Nacoste’s hypotheses. She examined how the beliefs about the fairness of affirmative action, perceived discrimination in hiring, and personal dissatisfaction over the groups standing in the organization affected self-esteem of minorities. Tougas studied a Canadian bussing firm, which had underrepresented minorities and women and only considered group membership after qualification for the job had been determined. Thus the atmosphere of the firm was admittedly discriminatory and all employees were aware of it for the study. Tougas found that beliefs on affirmative action as well as personal dissatisfaction seemed to be the factors that were most influential on the self-esteem of minorities. Because everyone was made aware of the level of discrimination, Tougas’ study was unable to come to a definitive conclusion on the effect of perceived discrimination.

Matheson further explored this variable in 1994. She did a series of experiments in which she had women read situational material. These situations varied in the amount of discrimination against women and then gave the subjects options on how to fix the problem. Each solution implemented a varying level of affirmative action. Despite the perceived amount of discrimination, the women still chose options that discouraged preferential treatment (Matheson, Taylor, and Chow, 1994). Only when Matheson chose women who had personally experienced discrimination and gave them situations that they could potentially encounter, did they favor higher levels of affirmative action. This study showed that the perception of personally being discriminated against affects attitudes towards affirmative action, which in turn affects self-esteem (Tougas, 1996). In conclusion, perception of personally benefiting from preferential treatment in combination with dissatisfaction with one’s own minority group’s status in the organization, negative attitudes on affirmative action, and awareness of personal discrimination will result in a lower self-esteem for minorities and women.

## Minorities might have a same or higher self-esteem

The second school of thought hypothesizes that minority males will have a similar or higher self-esteem than their Caucasian male peers. In this case, females are still predicted to have a lower self-esteem. Although minorities generally perform worse than Caucasians, the gap in self-confidence is much smaller than the academic gap (Cokley, 2002). When the gap in performance is minimized in academically homogeneous groups, such as college institutions, minority males tend to have similar or even higher academic self-esteem than their peers (Cokley, 2002).

### Academic Disidentification

The concepts of academic disidentification and the social reference theory can help to explain this phenomenon. Academic disidentification was theorized by Steele in 1992 and states that minorities tend to not link their academic achievements with their self-esteem. Therefore, despite their lower achievement, they can maintain a similar level of self-esteem as compared to their Caucasian peers (Steele, 1992). In a later study done on African Americans in high school it was found that this academic disidentification occurred mainly in males and not females (Osborne, 1997).

### Social Reference

The social reference theory states that self-image depends more on comparisons made within your social group than on comparisons made with all of your peers (Rosenberg, 1979). Also it has been found that these reference social groups are usually intra-racial (Martinez & Duke, 1991). In a 2002 study done at the Southern University of Illinois, social reference theory was confirmed and expanded (Cokley, 2002). Cokley examined academic self-confidence at two predominantly white colleges and two historically black colleges. He found that at both types of colleges, African American males had similar academic self-confidence to Caucasian males even though the African American students had a slightly lower GPA. However, the GPAs and academic self-confidence of African Americans at the historically black colleges were on average higher than those of the African American students at the predominantly white colleges (Cokley, 2002).

## At MIT

Given that self-confidence is vital to multiple planes of human activity and is largely formed during adolescent and young adult years, we decided to examine the relationship between academic self-confidence and gender and race at MIT. After evaluating the premises presented in each school of thought we compared them to MIT’s unique culture.

MIT is a very prestigious institution with strong meritocratic attitudes. Many of students at MIT value academic achievement heavily and have incorporated it into their self-esteem. Because of this, we hypothesized that MIT students would not be affected by Steele’s academic disidentification theory. Secondly, it was found that MIT’s demographics represent America’s minorities quite accurately (Hanada, 2007). The only major difference in representation is that MIT is 47% Caucasian and 28% Asian while Caucasians make up 66% of America’s population and Asian’s make up only 4.4% (The Editor’s Desk, 2010). Overall in the United States, Caucasians comprise of 82.6% of college students, These representative demographics are only possible through MIT’s Equal Opportunity and Affirmative action policies whose mission states that “the Institute's objectives are both to achieve representation of minorities and women in the student body that reflects their current availability and interests” (“General Employment Policies”, 2012). MITs strong support of the use of preferential treatment has not gone unnoticed. In February 2012 MIT’s newspaper The Tech published an article titled, “The policy for hiring women and underrepresented minorities hurts MIT’s mission of being merit-based institution” (Briscoe, 2012). This article highlighted MIT’s affirmative action programs to the students and sparked debate across campus (Kruayatidee, 2012) . As mentioned in Tougas’s study, this awareness and negative attitude toward affirmative action could vastly undermine self-confidence in minorities and women at MIT (Tougas,1996).

Thus, due to MIT’s academically ambitious students, accurately representative demographics, and strong support of affirmative action practices, we came to our experimental hypothesis that minorities and women at MIT will have a lower academic self-confidence than their peers. To test this hypothesis, we surveyed the current undergraduate student body.

Through the rest of this paper we will explore our hypothesis, its validity and its potential implications. First, we describe the creation and distribution of our survey. Next, we present and analyze our data, searching for potential differences in students’ self-esteem, specifically based on their gender and race. Finally, we interpret the results of our analysis in order to form a conclusion on the relationship between academic self-confidence and gender and race at MIT. Furthermore, we discuss the limitations of our experiment and areas for further exploration in this subject as part of this comprehensive conclusion.

# Method

## Large-scale Survey

We survey MIT undergraduates about their academic self-confidence and perceptions of race and gender stigmas.

To gather our data, we decided to use a survey for several reasons. First, it allowed us to reach a broad audience through electronic distribution, which would not have been possible through in person interviews or discussions. Second, it enabled us to ask a large number of questions in a short amount of time, increasing students’ willingness to actually complete the task while simultaneously allowing us to measure many different parameters.

### Survey Mechanics

We created an online, web-based survey, using the Forms feature in the Google Docs office suite. An online survey allowed us to efficiently reach a large part of the undergraduate population. Email is the principal form of communication at MIT. Traditional mail is often ignored because students simply do not check traditional mailboxes as often. Additionally, a web survey allows for near perfect anonymity, which is important to a topic as personally sensitive as self-esteem or self-evaluation.

### Survey Distribution

We distributed the survey to several undergraduate dormitory email lists, on and off-campus sororities and fraternities, as well as some student groups. The full list of organizations is listed in Figure 1. Living group email lists are the primary way to distribute surveys at MIT because of their comparably broad reach, coupled with their permissive mailing policy.

|  |
| --- |
| Nu Delta |
| Baker |
| Interphase 07 |
| Interphase 08 |
| Medlinks |
| Pi Phi |
| MITES 07 |
| East Campus |
| Burton Connor |
| UA Council |
| Simmons |
| MacGregor |
| Maseeh |
| McCormick |
| SK |
| New House 2 |
| AXO |
| ZBT |
| Pi Lambda Phi |
| TDC |
| Course 20 |
| Kappa Sig |
| PKT |
| Swim team |
| 2013 FB Group |

Figure 1: The list of groups at MIT we contacted to distribute the survey.

### Survey Composition

The survey is made up of four components. First, are the 10 questions that make up the Academic Self Concept (ASC) scale (Liu, Wang, Parkins 2005). Next, we ask for demographic information. We ask for this information in the middle because we do not want to bias the ASC section by prompting students to think of their race and gender. However, we need this information in order to set up the next section, Stigma Consciousness (SCQ) (Pinel 1999). We ask two sets of SCQ questions, one for gender and one for race.

## Academic Self Concept Questionnaire

The ASCQ (Academic Self-Concept Questionnaire) was developed by W. C. Liu and C. K. J. Wang of Nanyang University in Singapore and E. J. Parkins of the University of Nottingham in the United Kingdom. ASC, Academic Self Concept, is the set of personal beliefs that a person develops about his or her academic abilities or skills. Liu, Wang, and Parkins validated the questionnaire in their study of 4th graders in Singapore. Their study included 645 students, whom were observed and studied for three consecutive years. This study included tracking changes in academic self-concept on various different variables and how this affected the students.

Liu and Wang wrote the ASCQ using research from Battle (1981 Academic self-esteem subscale), Marsh (1983 School subjects self-concept scale), and Piers and Harris (1964 General and academic status scale). Since these scales all measured different aspects of self-concept, the combinations of them allowed for a much more multifaceted and comprehensive overview of self-concept. We modified the questions slightly to substitute primary school terms for university terms. For example, we replaced the words “lessons” with “lectures” and “tests” with “exams.”

We provided a seven-point scale for respondents ranging from 1 “Strongly Disagree” to 7 “Strongly Agree.” We believe that a seven point scale provides enough granularity without overwhelming users.

For example, sample questions are, “I am able to do better than my friends in most subjects,” and “I do not give up easily when I am faced with a difficult question in my problem sets.”

In order to prevent the respondents from being pushed to answer a specific way, the questions were mixed into both positive and negative questions. For example, a positive version of a question would be, “I usually do well on my exams,” while the negative version would be, “I usually do poorly on my exams.” The existence of both styles of questions allowed us to have a more convergent and accurate view of the participant’s opinions.

To compute the ASC scale we averaged the responses from all of the questions. For negative questions, we subtracted the respondents answer from 8 in order to compute the ASC Scale.

## Demographics

After the ASC section, but before the SCQ section, we asked respondents to provide demographic information. We asked students to identify themselves as either male or female. We allowed students to select their year (1, 2, 3, 4, or Graduate/Other). Students entered their living group into a free-form text field. Next, we asked if the student was affiliated with the Greek Community. Students then selected their major, followed by their race. Options for race were African American, Caucasian, Asian, Hispanic, or Other.

## Stigma Consciousness Questionnaire

The Stigma Consciousness Questionnaire (SCQ) was developed by Elizabeth Pinel of University of Texas at Austin in 1999. The study was published in the Journal of Personality and Social Psychology. Pinel validated the test-retest reliability on women, and tested the generalizability of the SCQ on gay men and lesbians, men, women, Whites, Blacks, Asians, and Hispanics.

Stigma consciousness is the degree in awareness that a person has about the difference between genders and whether they believe their actions can be attributed to their gender. Stigma consciousness resembles the notion of a *stereotype threat*. As Pinel describes, “Stereotype threat refers to a concern about one's own behavior (e.g., "Am I going to confirm the stereotype?"); high levels of stigma consciousness reflect an expectation that one will be stereotyped, irrespective of one's actual behavior” (Pinel 1999).

Sample questions for SCQ Female include: “When interacting with men, I feel like they interpret all my behaviors in terms of the fact that I am a woman” and “When interacting with men, I feel like they interpret all my behaviors in terms of the fact that I am a woman.” Questions cover both the general role of gender stereotypes and the specific effect those stereotypes have had on the respondent.

We asked the SCQ questions twice. The first time we asked the questions relating to their gender. We showed a different set of questions for males and females, with the proper gender filled in for clarity. The second time we asked the same questions but about the respondents’ race. We use one set of questions that referred to a generic “your ethnicity” rather than the specific race the respondent told us on the previous page. We don’t believe this would cause a material effect in the survey results.

Again we provided respondents with a seven-point scale ranging from 1 Strongly Disagree to 7 Strongly Agree. Many of the stigma consciousness questions are negative, so we adjusted for these by subtracting the response from 8 in order to compute the SCQ. In order to compute the SCQ, we averaged the scores from each of the questions.

## Survey Population

We had 397 responses to the survey. 261 (65.5%) of the responses were female, while 137 (34.4%) of the responses were male. As a comparison, MIT 2011-2012 enrollment is 55% male.[[1]](#footnote-2) 208 (52.3%) of our respondents were Caucasian, while 75 (18.8%) were Asian, 48 (12.0%) Hispanic, and 35 (8.8%) identified themselves as African American. 32 (8.0%) listed their race as “Other.” At MIT, 50% of undergraduates are Caucasian, 25.7% Asian, 13.9% Hispanic, 8.5% African American and 1.3% other. 124 (31.2%) of survey respondents were freshmen, 99 (24.9%) sophomores, 77 (19.3%) juniors, and 86 (21.6%) seniors. At MIT, 25.7% of students are freshmen, 25.1% sophomores, 23.9% juniors, and 22.5% seniors. 12 (3.0%) were listed as Grad/Other. These students received the email through undergraduate email lists, so we included them in the data analysis. MIT lists 2.1% of students as 5th years, which is one component of the other category in our survey. 213 (53.5%) of the respondents were members of a Greek organization while 185 (46.5%) were not. The exact percentages of Greek and non-Greek students on campus currently is unknown.

|  |  |  |
| --- | --- | --- |
| **Population** | **Survey** | **MIT Enrollment[[2]](#footnote-3)** |
| Men | 34.5% | 55% |
| Women | 65.5% | 45% |
| Caucasians | 52.3% | 50% |
| African Americans | 8.8% | 8.5% |
| Asians | 18.8% | 25.7% |
| Hispanics | 12.0% | 13.9% |
| Other Races | 8.0% | 1.3% |
| Freshmen | 31.2% | 25.7% |
| Sophomores | 24.9% | 25.1% |
| Juniors | 19.3% | 23.9% |
| Seniors | 21.6% | 22.5% |
| Other Years | 3.0% | 2.1% |

Figure 2: The population of our survey compared with MIT enrollment. Our survey population closely tracked MIT enrollment, except for gender.

## Analysis

### Variables

The dependent variables we looked at were ASC, SCQ Gender, and SCQ Race. The independent variables we looked at were primarily the gender and race of the respondents. We also looked at the Greek affiliation status of the respondent to evaluate whether an alternate hypothesis could explain the results. We did not use the living group or major because we did not have a large enough sample size in each subgroup.

### Statistics

We processed statistics in R 2.15 for Windows. We used the R Commander plug in to assist with data processing. We preprocessed results in Microsoft Excel 2010.

We ran an independent-sample t-test or an ANOVA between many of independent variable and many of the dependent variables. We used an independent-sample t-test when the independent variable had only two options (for example male or female and Greek or not). We used an ANOVA test when the independent variable had multiple possible values (ex. race). For race we also ran an independent-sample t-test between Caucasians and each race individually. For these t-tests we excluded the other races that were not presently being tested.

We also ran a linear regression on each of our dependent variables: ASC, SCQ Gender, and SCQ Race. This gave us the effect that each of the independent variables had on that dependent variable, controlling for all other independent variables.

# 

# Results

## Gender

We found there was a significant difference (t: -4.59; p < .0001) in Academic Self-Confidence (ASC Scale) between males and females at MIT. The mean ASC Scale score for males was 4.98 while the mean ASC Scale for females was 4.65. Remember a higher ASC score indicates higher self-confidence.

|  |  |  |  |
| --- | --- | --- | --- |
| **ASC Scale** | **Mean** | **St Dev** | **n** |
| Male | 4.98 | .68 | 137 |
| Female | 4.65 | .68 | 261 |
| All | 4.77 | .70 | 397 |

Figure 3a and 3b: ASC by Gender. Males had a statistically significant greater level of academic self-confidence than females.

We found no significant difference (t = -1.35; p = .175) in stigma consciousness (SCQ) between males and females at MIT. Each gender sees a stigma surrounding their gender. There is not an imbalance between males and females in that they perceive their own actions as stereotypical male or female, or perceive that others view their actions as stereotypical male or female. Thus the null hypothesis, that there is no difference, cannot be rejected.

|  |  |  |  |
| --- | --- | --- | --- |
| **SCQ Gender** | **Mean** | **St Dev** | **n** |
| Male | 4.08 | .68 | 137 |
| Female | 3.95 | .68 | 261 |
| All | 3.99 | .68 | 397 |

Figure 4a and 4b: SCQ Gender by Gender: Males and females perceived almost the same levels of stigma consciousness.

## Race

There is no statically significant difference in ASC Scale between races overall. (F = 1.03; p = .387). There are also no significant differences between Caucasian and each minority race. Asians were higher than Caucasians by .07 points (t=.787; p = .43). The largest negative gap existed between Caucasians and Hispanics where there was a .16 point gap (t=1.29; p=.19). There was a .11 gap between Caucasians and African Americans (t=.99; p =.325). There was a slight .09 point (t=.65; p=.51) gap between Caucasians and the Other category. This shows that there is not a significant gap in self-confidence between the races at MIT.

|  |  |  |  |
| --- | --- | --- | --- |
| **ASC Scale** | **mean** | **St Dev** | **n** |
| African American | 4.68 | .56 | 35 |
| Asian | 4.86 | .66 | 75 |
| Caucasian | 4.79 | .71 | 208 |
| Hispanic | 4.63 | .76 | 48 |
| Other | 4.70 | .74 | 32 |
| All | 4.77 | .70 | 398 |

Figure 5a and 5b: ASC by Race: There was not a statistically significant difference between the races in academic self-confidence.

We also found a significant amount of difference in race stigma consciousness at MIT (F=7.53; p < .0001). A low number, indicating a low amount of sigma consciousness, is preferable. African Americans reported the highest amount of stigma consciousness versus the Caucasian baseline. They reported a .98 point (t=10.34; p < .0001) difference. Next were Hispanics with a .30 point (t=-2.691; p = .008) difference. Asians were .16 points (t=1.9227; p < .056) higher than Caucasians. The Other group showed little difference with a .04 (t=-.33; p=.73) point difference. This shows that the racial groups still perceive either that their own actions are stereotypical of their race or they believe that others view their actions as stereotypical of their race.

|  |  |  |  |
| --- | --- | --- | --- |
| **SCQ Race** | **mean** | **St Dev** | **n** |
| African American | 4.96 | .48 | 35 |
| Asian | 4.14 | .57 | 75 |
| Caucasian | 3.98 | .67 | 208 |
| Hispanic | 4.28 | .67 | 48 |
| Other | 4.02 | .56 | 32 |
| All | 4.14 | .68 | 398 |

Figure 6a and 6b: SCQ Race by Race: African Americans, Asians, and Hispanics experienced a higher level of stigma consciousness than the Caucasian baseline.

## Greek

To confirm that alternate hypotheses do not explain the difference, we tested one to verify that it does not make a difference.

There is almost no difference between Greek-affiliated members and otherwise in both ASC (t = .1696, p = .86) SCQ Gender (t = -1.03; p = .299), and SCQ Race (t = -1.09; p = .275). A person is Greek-affiliated if they are a member of a fraternity or sorority, regardless of whether the person lives in their fraternity or sorority’s housing.

|  |  |  |  |
| --- | --- | --- | --- |
| **ASC Scale** | **mean** | **St Dev** | **n** |
| Greek | 4.77 | .66 | 185 |
| Not Greek | 4.76 | .74 | 213 |
| All | 4.77 | .70 | 397 |

|  |  |  |  |
| --- | --- | --- | --- |
| **SCQ Gender** | **mean** | **St Dev** | **n** |
| Greek | 4.05 | .93 | 185 |
| Not Greek | 3.95 | 1.04 | 213 |
| All | 3.99 | .68 | 397 |

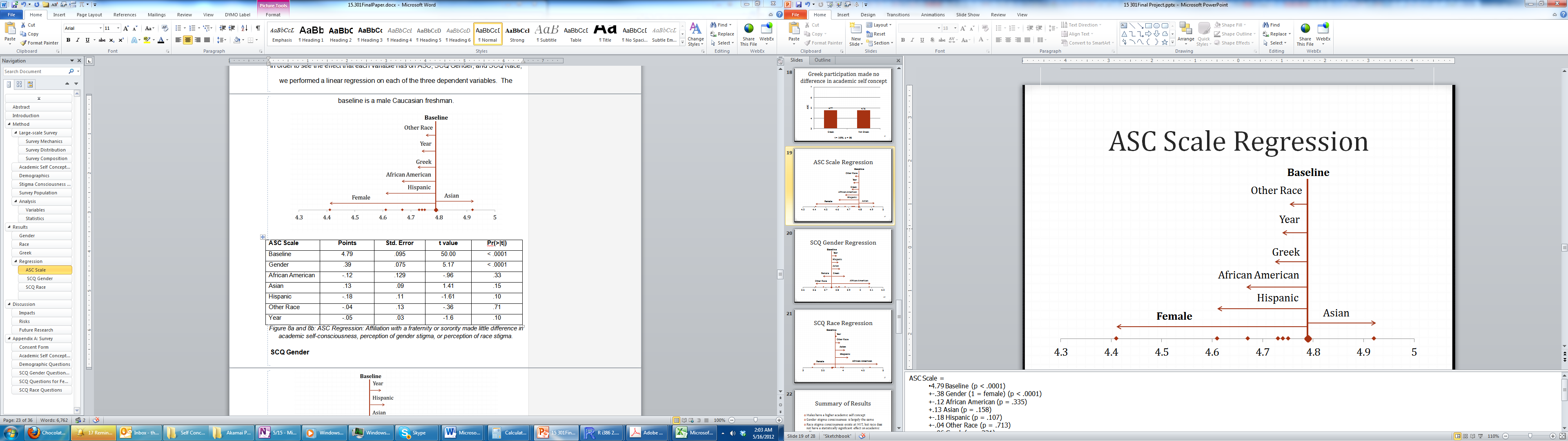
|  |  |  |  |
| --- | --- | --- | --- |
| **SCQ Race** | **mean** | **St Dev** | **n** |
| Greek | 4.18 | .69 | 185 |
| Not Greek | 4.10 | .68 | 213 |
| All | 4.14 | .68 | 397 |

Figure 7a, 7b, 7c, and 7d: ASC, SCQ Gender, and SCQ Race by Greek Participation: Affiliation with a fraternity or sorority made little difference in academic self-consciousness, perception of gender stigma, or perception of race stigma.

## Regression

### ASC Scale

In order to see the effect that each variable has on ASC, SCQ Gender, and SCQ Race, we performed a linear regression on each of the three dependent variables. The baseline is a male Caucasian freshman.

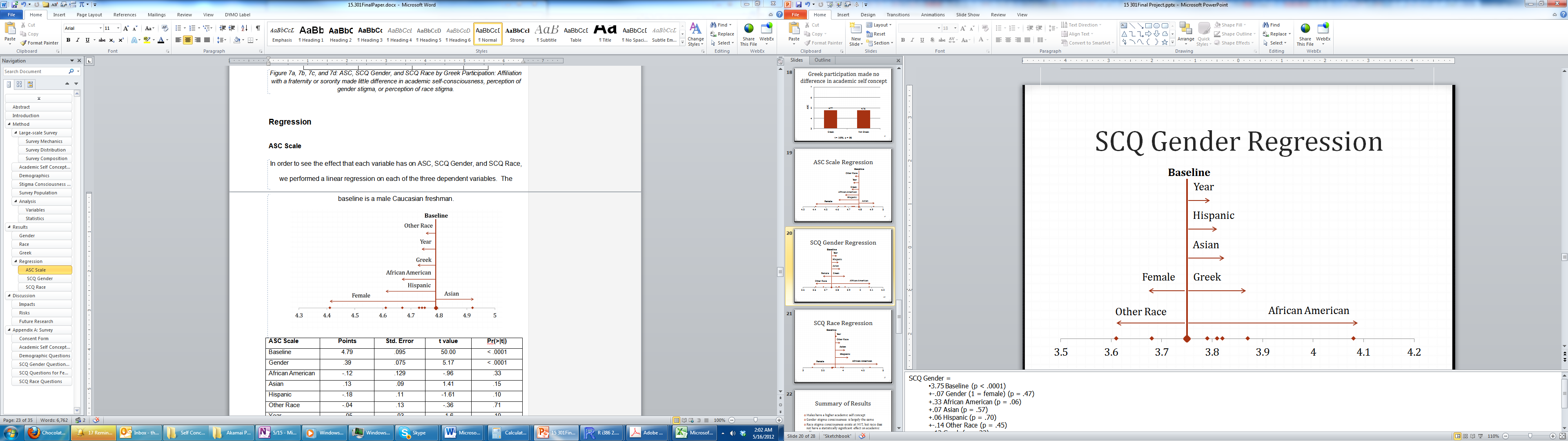


|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ASC Scale** | **Points** | **Std. Error** | **t value** | **Pr(>|t|)** |
| Baseline | 4.79 | .095 | 50.00 | < .0001 |
| Gender | .39 | .075 | 5.17 | < .0001 |
| African American | -.12 | .129 | -.96 | .33 |
| Asian | .13 | .09 | 1.41 | .15 |
| Hispanic | -.18 | .11 | -1.61 | .10 |
| Other Race | -.04 | .13 | -.36 | .71 |
| Year | -.05 | .03 | -1.6 | .10 |

Figure 8a and 8b: ASC Regression: Affiliation with a fraternity or sorority made little difference in academic self-consciousness, perception of gender stigma, or perception of race stigma.

### 

### SCQ Gender

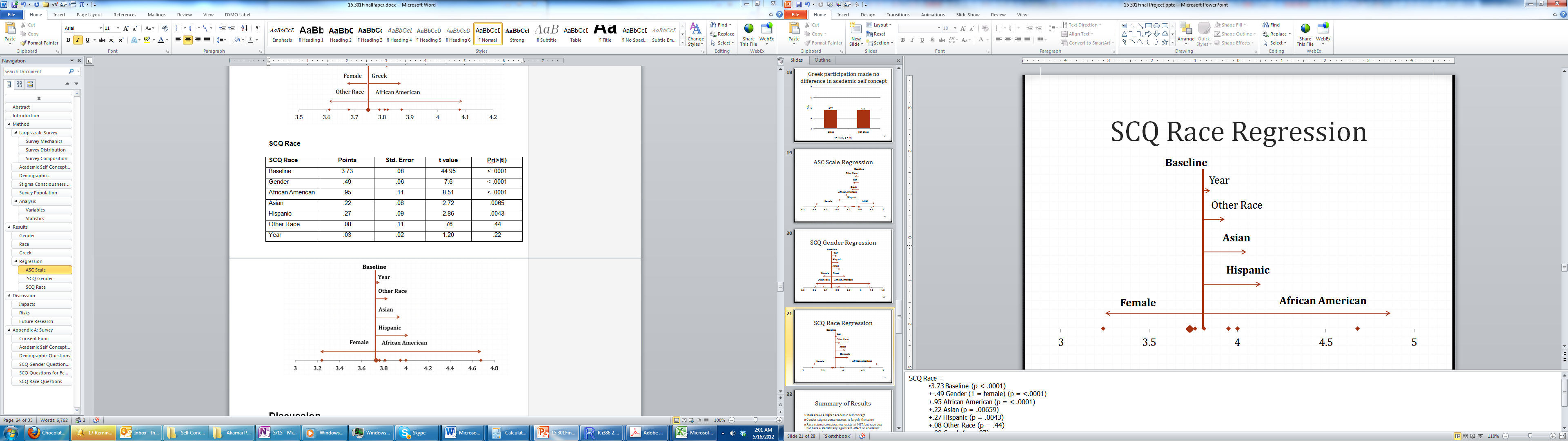


|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SCQ Gender | | Points | Std. Error | t value | Pr(>|t|) |
| Baseline | 3.75 | .13 | 27.35 | < .0001 |
| Gender | .07 | .10 | .72 | .47 |
| African American | .33 | .18 | 1.8 | .06 |
| Asian | .07 | .13 | .56 | .57 |
| Hispanic | .06 | .16 | .38 | .70 |
| Other Race | -.14 | .18 | -.75 | .45 |
| Year | .04 | .04 | .97 | .33 |

Figure 9a and 9b: SCQ Gender Regression: No independent variable made a statistically significant contribution to SCQ Gender.

### 

### SCQ Race



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| SCQ Race | Points | Std. Error | t value | Pr(>|t|) |
| Baseline | 3.73 | .08 | 44.95 | < .0001 |
| Gender | .49 | .06 | 7.6 | < .0001 |
| African American | .95 | .11 | 8.51 | < .0001 |
| Asian | .22 | .08 | 2.72 | .0065 |
| Hispanic | .27 | .09 | 2.86 | .0043 |
| Other Race | .08 | .11 | .76 | .44 |
| Year | .03 | .02 | 1.20 | .22 |

Figure 10a and 10b: SCQ Race Regression: African Americans, Asians, and Hispanics reported a significant amount of difference in stigma consciousness versus the Caucasian baseline. Females also reported statistically significantly more race stigma consciousness than their male peers.

# Discussion

## Impacts

Due to MIT’s highly competitive, academically focused environment, we proposed that the self-perception of the student body at large would best fit with the idea that both women and minorities have a lower relative self-esteem, as compared to their peers. While several sources discuss the merits of alternative hypotheses (Tougas, 1996), our direct observations of MIT culture led us to believe that this model most closely represents the campus. While we did find evidence to support the claim that women have lower relative self-esteem, we did not find any substantial data to conclude that minorities at MIT have less self-confidence than their peers.

As seen in the previous section, we gathered several statistically significant results. First, we found that women at MIT have a lower relative self-confidence than their male peers by almost half a point on the ASC scale. This supports all previous research done on the matter, suggesting that there is some strong societal impact on women’s self perception that affects them across the board. At least in a science, mathematics, engineering, and technology (STEM) setting such as MIT, which has historically been a male-dominated environment, these results are not surprising. One would expect that women would perceive themselves as less capable at tasks that they have always been told they are generally less capable of, such as math or engineering.

Furthermore, our results showed that several race groups, particularly African Americans and Asians, perceived a high racial stigma on campus. This is not abnormal as compared to other schools and yet it is still something worth addressing. Stigma, even if it is only perceived, can have far-reaching influential effects. It can cause people to remain in groups of other similar and like-minded people, preventing diversity, and it can cause people to feel uncomfortable or self-conscious in their everyday lives, which is not conducive to fostering a sense of community on campus.

Conversely, several of our results were null, resulting in an inability to reject the null hypothesis or to prove our hypothesis. There are several possible interpretations of these results. Most obviously, these results could mean that MIT is no different than the other schools studied in terms of its impact on self-confidence. If this is the case, it suggests that academic environment may not have a significant impact on a student’s self-concept. This could mean that self-worth is largely developed prior to arriving at college, or that it is only minimally shaped by academic environment. On the flip side, these null results could be slightly more complex. Academic environment may have a strong impact on self-confidence, but this impact may be masked, or cancelled out, by opposing influences such as socioeconomic status. For example, attending a prestigious institution could, in fact, increase a student’s self-confidence, but coming from a lower class household, which happens statistically more often for minorities, could decrease a student’s self-confidence, resulting in a lack of net change.

Our results do have several important implications for the MIT community. First and foremost, they indicate that the Institute’s Minority programs, such as Interphase and other programs run by the Office for Minority Education (OME), are working. Minority students showed about the same level of academic self-confidence in their studies as their peers, suggesting that they feel adequately prepared to succeed at MIT, regardless of their backgrounds or prior experience.

Culture groups, such as the Black Student Union (BSU), the Chinese Students Club (CSC), and others may reinforce gender and race stereotype. In addition, gender-or culture-oriented housing that only attracts a narrow segment of the population, such as Chocolate City, may also reinforce these stereotypes, preventing true diversity. By segmenting off part of the population and creating visible reminders of gender and culture stereotypes, MIT could be furthering a perception that certain races and genders are somehow different, and certain actions are somehow stereotypical to a certain gender or group. Perhaps it would be worthwhile for the Institute to establish programs that actively combat stigma on campus, identifying why students feel such stigmas exist and taking measures to dispel them.

## Limitations

One major concern with our method of data selection was self-selection bias. In distributing a voluntary survey, we ran the risk skewing the results toward highly opinionated students, friends, or students who are notably helpful or constantly checking their emails, who may not represent the institution at large. We tried to offset this potential effect by distributing the survey multiple times to email lists that would reach the broadest selection of students possible, in this case dormitory and housing lists. However, even this provided a limiting factor, in that it did not reach students living off campus in apartments or independent living groups. In the future, it may be more helpful to provide some sort of incentive to those invited to participate, and to distribute at a level that truly has the potential to reach the entire undergraduate population, such as through the official undergraduate email address, which we did not have access to for this study.

Likewise, our study was not as comprehensive as it could have been. Due to time constraints, our sample size was limited. We also did not ask for parameters such as GPA, which prevented us from examining the connection between reported self-concept and actual performance. The prior literature we found did not provide the names of the schools that participated in the studies, further limiting our ability to draw comparisons between those results and the results of our own study. All of these factors limited our ability to identify singular explanations for our data, given that we were unable to rule out alternate explanations.

## 

## Future Research

There are three key directions that future research could go. First, it would be worthwhile to study MIT on a larger, more comprehensive scale. While we did get almost 400 responses, that only represents about 10% of the undergraduate population, which leaves many opinions unaccounted for. As mentioned before, additional parameters would also allow for a deeper analysis of potential patterns and connections that may not be apparent within our current data. Many adults cite college as one of the most influential time periods of their lives, so the idea that it has no impact on a person’s self-concept is doubtful, especially at a place like MIT, where so many students base their worth on their academic achievements. Delving deeper into analyzing this relationship may prove worthwhile in helping us learn how this unique environment does shape and change the individuals who attend the institution.

Second, one could directly compare MIT to a less prestigious institution. We attempted to do this using the literature we found (Cokley, 2005) but the schools in this study were kept anonymous. For this reason, we were unable to evaluate differences in class size, academic performance, or racial and gender make-up amongst the various schools, all of which could impact the results of the study. If we were able to distribute the same survey to MIT and a second less prestigious institution, controlling for variables such as student body size and geographic location, we could draw more direct links between the results.

An alternative to this would be a comparison between MIT and another prestigious institution such as Harvard or Princeton. MIT is proud of its unique environment, humbling and challenging students instead of patting them on the back, while other prestigious institutions have a reputation for doing the latter. Comparing these two supposedly different environments might shed light on whether they are actually different as well as whether this difference has any substantial impact on students’ self-confidence.

**In Conclusion**

Overall, our results providedseveral insights into potential factors that influence self-confidence. These results, while far from comprehensive, lay a foundation we can build upon with further research. If we implement these additional research projects, we have the potential to gain a greater understanding of how self-confidence develops and what measures we can take, if any, to improve the self-confidence of students who may start at a lower baseline than their peers.

# Appendix A: Survey

## Consent Form

Self Concept at MIT

You have been asked to participate in a research study conducted by O. Gierlich, M. Plasmeier, E. Albany, and P. Lee from Sloan at the Massachusetts Institute of Technology (M.I.T.). The purpose of the study is to examine self-confidence at MIT. The results of this study will be included in a group project for 15.301. You were selected as a possible participant in this study because you attend MIT as an undergraduate.

• This survey is voluntary. You have the right not to answer any question, and to stop the survey at any time or for any reason. We expect that the survey will take under 10 minutes to complete.

• You will not be compensated for this survey.

• All information you disclose will remain confidential and anonymous.

This project will be completed by the end of May 2012 and all individual information will then be destroyed.

By answering the questions below, you agree that you understand the procedures described above, and you consent to participating in this research project.

Please contact Olivia Gierlich at ojg484@mit.edu with any questions or concerns.

If you feel you have been treated unfairly, or you have questions regarding your rights as a research subject, you may contact the Chairman of the Committee on the Use of Humans as Experimental Subjects, M.I.T., Room E25-143b, 77 Massachusetts Ave, Cambridge, MA 02139, phone 1-617-253-6787.

**Do you wish to proceed with this survey? \***By clicking yes, you consent to voluntary participation.

  Yes

## Academic Self Concept Questions

I can follow the material in class easily \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I am able to help my classmates in their schoolwork. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I often do my homework without thinking. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I day-dream a lot in class. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

If I work hard, I think I can graduate from MIT. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I pay attention to lectures. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Most of my classmates are smarter than I am. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I study hard for my exams. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I get good grades. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I am usually interested in my schoolwork. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I often forget what I have learned. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I will do my best to pass all of my subjects. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I often feel like quitting school. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I am good in most of my school subjects. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I am always waiting for lecture to end. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I always do poorly on exams. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I do not give up easily when I am faced with a difficult question in my problem sets. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I am able to do better than my friends in most subjects. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I am not willing to put in more effort in my schoolwork. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

## Demographic Questions

Gender \*

*   Male
*   Female

Year \*

*   1 (Freshman)
*   2 (Sophomore)
*   3 (Junior)
*   4 (Senior)
*   G (Graduate/Other)

**Dormitory/Living Group \***

Are you affiliated with a Greek community? \*

*   Yes
*   No

**Major \***

**Race \***

Choices:

* Caucasian
* African American
* Asian
* Hispanic
* Other

## SCQ Gender Questions for Men

Stereotypes about men have not affected me personally. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I never worry that my behaviors will be viewed as stereotypically male. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

When interacting witih women, I feel like they interpret all my behaviors in terms of the fact that I am a man. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Most women do not judge men on the basis of their gender. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Me being male does not influence how women act with me. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I almost never think about the fact that I am a man when I interact with women. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

My being male does not influence how people act with me. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Most women have a lot more sexist thoughts than they actually express. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I often think that women are unfairly accused of being sexist. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Most women have a problem viewing men as equals. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

## SCQ Questions for Females

Stereotypes about women have not affected me personally. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I never worry that my behaviors will be viewed as stereotypically female. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

When interacting with men, I feel like they interpret all my behaviors in terms of the fact that I am a woman. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Most men do not judge women on the basis of their gender. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Me being female does not influence how men act with me. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I almost never think about the fact that I am a female when I interact with men. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

My being female does not influence how people act with me. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Most men have a lot more sexist thoughts than they actually express. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I often think that men are unfairly accused of being sexist. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Most men have a problem viewing women as equals. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

## SCQ Race Questions

Stereotypes about my ethnicity have not affected me personally. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I never worry that my behaviors will be viewed as stereotypical of my ethnicity \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

When interacting with other people, I feel like they interpret all my behaviors in terms of my ethnicity \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Most people do not judge other people on the basis of their ethnicity. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

My ethnicity does not influence how others act with me. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I almost never think about my ethnicity when I interact with others. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Most people have a lot more racist thoughts than they actually express. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

I often think that people are unfairly accused of being racist. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

Most people have a problem viewing all races as equal. \*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |  |
| Strongly Disagree |  |  |  |  |  |  |  | Strongly Agree |

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1. http://web.mit.edu/facts/enrollment.html [↑](#footnote-ref-2)
2. http://web.mit.edu/facts/enrollment.html [↑](#footnote-ref-3)