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Motivation in Minority Populations: Perceived Locus of Control and The Effect of Ethnic Matching

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**Motivation in Minority Populations: Perceived Locus of Control and
The Effect of Ethnic Matching**

Senior Project Submitted to
The Division of Science, Mathematics and Computing
Of Bard College

by
Matthew Agosto

Annandale-on-Hudson, New York
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Preface

This is a personal statement into a glimpse of the journey that brought me here. I am researching motivation, locus of control, role models, and ethnic matching because I am at a prestigious liberal arts college, and I am trying to figure out how the hell I got here. As far back as I can remember my mom would always repeat the same phrase to me, “Go to school, get good grades, so you can get a scholarship and go to college.” College was the end all be all. I effortlessly succeeded in school at a very early age, and I continued to do so with the notion in mind that this is what I am supposed to be doing. With the success of school, came award ceremonies, lonely award ceremonies, that left me feeling hurt by my father. My father had not made an appearance in my life until I was 12 years old. Up until then, the void of his absence filled my heart, and effected my mother’s ability to attend my celebrations. She was unable to take off work for the most part. I reflected on how I could change things.

I decided very early that I would never put my children through my experiences. I would make sure that they knew and felt my presence in their lives’. I used my father’s shortcomings to propel myself forward. He left an example of what not to be, the “Do Not Enter” sign. When I finally made it to college, I began to feel lost and unsure of myself. I was always told what to do up until this point as far as the big picture went, but I was faced with another challenge entirely. I would have to decide my course of study that would lead me into my career, and the mission I would be moving toward the rest of my life. I had never really been asked what I wanted out of life, but I knew I wanted to be a father and a man.

It was up to me to figure it out, but that’s the beauty about college. The liberty of living alone gives us the space to think, question, and reflect, but sometimes the thoughts surrounding us in the absence of physical company may push us to look to friends for support to validate

whether others have the same thoughts or questions. It was in a space meant for men of color on a predominantly white college where I found refuge. Brothers at Bard enlightened me to the understanding that young men of color could share their feelings and experiences with each other while being sensitive; it made me feel safe and inspired to redefine masculinity.

Young men of color in college are a minority, and I wondered how it was that I was able to make it to Bard College as I sat there in the Kingston Boys and Girls club mentoring the young men of color in the area. What motivated me to get to this point? In my senior year of high school, I was given the chance the interview for the Posse scholarship, and the scholarship, should I receive it, would have allowed me to stay in Louisiana, go to Grinnell college in Iowa, or come to Bard College in New York. Mentoring other young men made me reflect and ask what I do, as a mentor, need to do or say in order to help these young men.

I think what was most important for me to do was to listen. It was through listening that I managed to follow my mother's plan for my life in achieving a scholarship that would allow me to study at a small liberal arts college across the country. When deciding where to go for school, I listened to my inner desires to be in the north. Sitting there with the high schoolers, just hearing them out as they expressed the obstacles that they faced outside of school. I wondered, what if people had the social and emotional support that they needed in order to discover all that they wanted and what all they could be. I then figured a peer mentor, someone a couple of years older that could be a role model, someone that made the time to listen and be present with you- that person could be the difference, a push in the right direction to start all the necessary conversations.

This push to be there for others brought me to my senior project topic indirectly. I wanted to research whether ethnic matching role models were more influential than non-ethnic matching

role models. However, I thought that I would start a bit smaller; instead of trying to create a social experiment/intervention, I decided instead to look at motivation and how it can be identified by other people. More specifically, are people of color, such as hispanic people, who display motivational strategies, perceived differently across ethnicities? Additionally, can the type of motivational strategies (positive or negative) influence the amount of control one is perceived to have? I use achievement and avoidance of failure motivation to reach the same goal in the following study with the assumption that if an individual strategizes success as avoiding a goal that could be harmful (i.e. not failing), then they will be viewed as someone who has less control over their life.

I think that identifying exactly what other people are doing can be important because as humans we are natural imitators. I believe a successful role model can exemplify healthy behaviors for others to follow. Older individuals have experience that can be shared from a temporally advanced position that can aid young people.

Abstract

The aim of this study is to measure the differences in perception of the locus of control of a target individual in two motivational scenarios and discover the effect of ethnic/non-ethnic matching conditions. Two different motivational strategies were used to assess the role of ethnic matching in perceiving other people as well as identifying with them. Rotter's Internal External locus of control scale (I-E scale) is utilized in a novel way. Subjects were asked not to report their own control beliefs, but rather, the beliefs they perceive the target individual to hold true. The following study measures participants' perceived locus of control of targets within two scenarios that represent either pursuit of achievement or avoidance of failure motivational strategies, that incorporates ethnic matching as an enhancer of this effect.

Introduction

In the following paper, I will discuss the meanings of motivational strategies, locus of control, and ethnic matching, and then explain how I used these components to conduct my research. I will report the methodology, data collection, results, and explain my own interpretation of the study. The purpose of the study is to test whether or not people have a distinguished perception of different motivation strategies, and I use ethnic matching as an enhancer across differing ethnic populations.

I began this work with a personal statement that outlines the importance that I believe motivation and ethnic matching have. My curiosities about motivation have surfaced questions of how to motivate oneself when one gets lazy or is faced with an instrumental challenge. I say instrumental in the same idea that a presented obstacle can "make you or break you." I am

interested in the way in which a person chooses to push themselves to complete a goal. In chapter two, I will go more in depth in two specific motivation types: achievement and avoidance of failure. The motivational strategies are used in a similar context of a student and their experience in attending Bard College. My idea is that the motivational strategies will be perceived as having different levels of control beliefs.

Secondly, I will discuss the general expectancy of locus of control (Rotter 1966) as a component of my study. Rotter's Internal versus External locus of control scale measures the externality of an individual and how much control they believe the world around them has on their life. I use the Rotter I-E scale in an unusual way in so far as I ask subjects who have read one of the two scenarios to provide a perception of the target in the scenario. This is a novel use of the scale, for it is normally used to measure the beliefs of the individual filling out the assessment, but I ask participants to fill out the assessment about a target, the character, in a story. By doing so, I ask subjects to choose the beliefs that best align with that of the target. I believe the subjects will rate avoidance of failure motivation strategy as more external than the achievement motivation strategy.

Ethnic matching is the shared ethnic or racial identity shared by two people, typically in provider and patient relationships. The second chapter will explain previous literature on ethnic matching. I use ethnic matching as an enhancer for the study in order to question whether there is a difference in the perception of someone that matches or does not match the ethnic identity of a participant. In the post-experiment questionnaire, there is a confidence rating, and I believe that the subjects in the ethnic matching condition will rate their confidence level about filling out the I-E scale as higher than those in the non-matching condition.

The third chapter of the work will explain the hypothesis, methodology, and procedure. The chapter will explain everything from the type of subjects used, the way subjects were recruited, the study as taken by the subjects, and the presentation of the data.

The fourth and final chapter will analyze the data gathered in the study, the statistical breakdown of the tests used to measure and quantify data, the interpretation of the results as they relate to the hypothesis, and a discussion of the study's findings, possible confounds, future directions, and limitations.

Literature Review

Motivation

Motivation is the internal source of drive a person relies on in order to take action. There are different ways an individual can motivate themselves. These different forms of motivation can also be thought of as motivational strategies. Two motivational strategies are promotion or achievement motivation and prevention or failure avoidance motivation. Achievement motivation is a strategy that in which one sets a target goal and bases their success on attaining the goal. Failure avoidance is quite the opposite. However, instead of putting effort to attaining a goal, one actively puts effort in avoiding a negative outcome or consequence (Lockwood, Jordan, & Kunda, 2002). Individuals who favor one strategy over the other are more likely to be influenced by role models that highlight their preferred strategies.

A literature review (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001) argues that bad or negative outcomes, are more influential to an individual than good, wanted outcomes. The literature review focuses on results and outcomes and suggests that bad outcomes are more

motivating than good ones, for it is the negative experience that is more memorable and thus more impactful than positive outcomes in that people are six times more likely to recall negative outcomes than positive outcomes.

The reason being is that, people would rather avoid a negative consequence of the action as opposed to seeking the reward. The fear of failing at a goal suggests to be able to outweigh one's belief about their own ability to achieve a goal or self-efficacy (Eaton & Dembo, n.d.) as seen in Asian American students. Although this sample of Asian American 9th graders had rated their self-efficacy as low, they still seemed to outperform their non-Asian American counterparts in academic tasks. This speaks to the power of negative motivation. Different strategies in motivation are constantly demonstrated by other figures, and we can call these figures role models

A positive role model is a person that has achieved a goal or a substantial amount of success in their field of work and can be viewed as a person that may provide others that hope to accomplish similar goals with a route or method to do so. Unlike the positive role model, a negative role model is a person that is seen as the victim of a misfortune and has found themselves in an unwanted or harmful position. A negative role model is the opposite of a positive role model, for one would want to be like or achieve similar goals as the positive role model, but the negative role model is not in a desired position, so an individual would understand this figure as someone they would avoid ending up like. In order to avoid similar circumstances, one takes actions that will lead them to a position unlike the one suffered by the negative role model.

Negative motivation can resemble what is known as a punishment in operant conditioning; the changing of one's surroundings that follows an individual's behavior that

reduces the likelihood that an individual will repeat the behavior in order to avoid the unwanted outcome that is expected should the action be completed. I do not assume negative motivation and punishment to be the same thing, but the two are closely related. The distinction is that the punishment is a negative reinforcement, for it is the removal of a wanted stimulus. Michael argues that there is no distinction between the positive reinforcement and negative reinforcement and offers an example in relation to temperature: is it the (positive reinforcement) adding of cold, or the (negative reinforcement) removal of heat (Michael, 1975). The avoidance of a negative reinforcement is what would be the negative motivation; an individual that has experienced the negative reinforcement or punishment as the result of a specific behavior reduces that behavior (Iwata, 1987). Positive and negative reinforcements influence our motivations for behaviors and in turn, this influences our beliefs about how much control we have over our lives; otherwise known as locus of control.

Locus of Control

The locus of control is the degree to which people believe they have control over their own lives as opposed to their lives being controlled by the external forces around them. Control beliefs are heavily influenced by expectancy, behaviors, and reinforcements (Rotter, 1975). There are two different control beliefs regarding locus of control, and they are internal and external locus of control.

Someone who has an internal locus of control is someone that believes that they are directly responsible for the outcomes in their life. In opposition, someone who has an external locus of control believes that their life is being controlled by forces outside of themselves such as fate, luck, chance, etc., to name a few of examples of external controlling factors (Rotter 1966).

The initial attempt to measure the differences in the generalized expectancies of external control as a variable led to the creation of the Internal versus External scale of locus of control (Phares, 1957). It was modified several times until Liverant, Rotter, and Crowne reduced the scale into the final 29- item (23 external items and 6 filler items) scale to measure generalized expectancies of control. The scale is typically administered as a self-rated assessment for the individual's generalized control beliefs. However, I use the scale differently. Self-perception is not always an accurate indication of the reality of circumstances. In a specific case, academic performance was compared to the self-perception (Stigler, Smith, & Mao, 1985) and evidence showed Chinese elementary school children underrated themselves by rating their levels of competence as low on Harter's Perceived Confidence scale for Children, but they out performed their American counterparts on all tasks.

Ethnic Matching

Ethnic matching is the pairing, particularly between client and therapist, in which both people share the same racial/ethnic identity with one another. Ethnic matching is used in other situations outside of therapy, and rightfully so, for it is supported by extensive literature regarding within-group interactions as a form of preference by means of identification (Stryker & Burke, 2000). Social identity theory suggests that social groups an individual identifies with guides the behavioral, beliefs, and attitudes of individuals (Tajfel, 1979). The ethnic identity of an individual is thought of as, "the subjective sense of ethnic group membership that involves self-labeling, sense of belonging, preference for the group, positive evaluation of the ethnic group, ethnic knowledge, and involvement in ethnic group activities" (Cokley, 2007, p. 225).

The effects of ethnic-matching in client and therapist relationships, specifically for Hispanic patients, suggests to increase the succession and completion of substance abuse therapy (Flicker, Waldron, Turner, Brody, & Hops, 2008), but was not a great enhancer for Anglo-Saxon patients. The preference for ethnic/racial matching has many complexities, and in a study about the preference for interviewers of the same race, evidence was found that suggests African-Americans with specific Afrocentric or black American identity components were more likely to say that they preferred a racially matching interviewer (Davis et al., 2013). While there is evidence that supports the importance for ethnic-matching counselors for African American college students, there were characteristics that were rated as even more important for the preference of counselors that were older and more educated than the student (Atkinson, Furlong, & Poston, n.d.). My aim is to identify the role of ethnic matching in this study

Overview of The Study.

This study investigates the perception of a target's control beliefs across two motivation strategies (achievement or avoidance of failure). A target is the individual, or main character, described in the scenario. There are four conditions in this experiment. The following experiment is a 2 (motivation strategy) X 2 (ethnic match) experiment. Subjects were randomly assigned to one of the two motivation conditions, and their self-reported ethnic identity acted as the label for the matching or non-matching condition

Next, subjects read a scenario about a target individual and their identified motivational strategy. The motivational strategies represented either a positive or negative motivation strategy. These strategies were the key difference between the scenarios in which the subject read about a similar gendered student who recently graduated from Bard College. The scenario

includes an advisor in the same academic program as the subject. This information is collected in the initial demographic sheet and inserted into the scenario in an automatic format. A computational program allows for the demographic information, specifically gender and academic program to be copied and pasted into the scenario. The scenarios are chosen at random between the achievement and failure avoidance motivation strategy, and the scenario selected explains the use of motivational strategies by the target.

The first indication of motivation explicitly stated in the form of an interview question: “How have you managed to continue to motivate yourself?” to introduce a motivational theme that remains consistent throughout the scenario. Then, the scenario elaborates on the origins for which the strategy came from before their college experience in advice that the target was given from their aunt or uncle (depending on the gender of the target which is contingent on the subject’s gender) as a framework for a motivational strategy. Again, the target receives advice during their hard times at college which comes from their college advisor who provides an additional level of motivation for the target that coincides with the previous strategies of motivation. Finally, the target explains their current motivational strategy in the form of their mindset moving forward. The idea of the motivational strategy of the target becomes clear as it is reinforced throughout the passage in the form of advice from a role model or a way of thinking.

I use advice in the sense that the phrase provided by the role model characters are instructions for ensuring a goal; those goals are going to college and graduating from college. Depending on the motivational strategy (achievement motivation or failure avoidance), the subject will be introduced to either phrases of “keep going; push through” or “don’t stop now; never quit”. Essentially the difference between the strategies are to pursue (achievement) goals or avoid (failure) giving up.

The ethnic match versus non-ethnic match condition lies within the subjects' demographic and the identity of the target of the scenario. The target is identified as Hispanic in the first sentence. Spanish words for aunt and uncle (tío/tía) are used in the scenario too. Also, the scenario uses traditionally Hispanic names for the target and two role models. For example, Juanito/Juanita, Carlos/Karla, Gabriel/Gabriela are the names used. The gender of the subject will decide which gender of the names the subject receives in that they will all be the same gender. The sample students were Hispanic and white students, but the scenario is about a Hispanic target, nonetheless. Therefore, all subjects will read about a target with two role models that are ethnic matches to the target. The subjects that self-reported their ethnic identity as Hispanic/Latinx were part of the matching condition and subjects that self-reported their ethnicity as white were part of the non-matching condition.

After reading the scenario, subjects were given the Internal versus External (I-E) scale of control. Subjects were instructed to complete the I-E scale about the target. Subjects used the I-E scale to report the beliefs they perceived the target to believe.

In the post-experiment questionnaire section, subjects were given a Likert-scale from 1-5 (1 being extremely confident and 5 being not confident at all) to rate how confident they felt about their judgment of the perceived I-E of the target. Following, subjects completed a Likert-scale that asks how important they believe ethnic matching is on a scale of 1-7 (1 being extremely important and 7 being not important at all).

I hypothesize that subjects that read the achievement motivational strategy will rate the target as having a more of an internal locus of control than the avoidance of failure strategy. If ethnic matching is more important to historically oppressed people of color, then the Hispanic subjects, whom are assumed to be an ethnic match with the target, will report having been more

confident than non-matching subjects about their perceptions of the target. I also hypothesize that the subjects in the ethnic matching condition will rate the value of ethnic matching mentorships as more important than subjects in the non-matching condition.

Method

Hypothesis

H₀1: There will be no difference in I-E scores between scenario 1 and scenario 2.

H₀2: There will be no difference confidence levels between the matching and non-matching conditions.

H₀3: Subjects in the matching condition and non-matching condition will not differ in their ratings of the value of ethnic matching in mentor relationships.

Participants.

91 Participants from the Bard College undergraduate population participated in the study (46 women, 42 men, and 3 other). 29 male and 31 female subjects were recruited as samples of Hispanic and white students from Bard College and participation in the study was completely voluntary. There were 25 Hispanic (14 in scenario 1) subjects and 35 (16 in scenario 1) white participants.

31 of the participants were excluded from this study for a variety of reasons. Eleven participants were initially excluded due to a debugging issue. Seven participants were excluded for not completing the study in full, these participants filled out the demographic sheet but did not complete the I-E scoring of the scenario. Seven participants were excluded because they did

not meet the population criteria for the study. Six participants responses were collected, but they were excluded from the data, for I was no longer accepting additional responses.

Subjects were recruited in person and in emails to students via email blasts sent out by club heads and resident attendants. In order to avoid alluding to any demand characteristics, no ethnic specifications were made as a requirement in the recruitment process. Instead, all people were given the option to participate in the study, but when it came to running the data, only the use of the first sixty (30 white and 30 Hispanic/Latinx) men and women that completed the experiment would find themselves in the data analysis. However, the Hispanic/Latinx population was not met.

Procedure

Demographics. Upon agreeing to participate in the study, students were emailed a link to an online platform where they were asked for their informed consent to participate in the study via electronic signature in a google form. Afterwards they were asked demographic information concerning their gender, class year, ethnicity, race, country of origin, and academic program. The script written for this study utilized the data from the demographic information and inserted it into the randomly assigned scenario the subject read about; specifically using gender and academic program. The script used information from the google form, coded this information into a google sheet, and then inserted the academic program into the scenario in order to create more compatibility with the target and the subject. The target in the scenario mentions that they are grateful for their advisor, who is a professor in the subject's indicated academic program. Also, the gender was used in a similar way in that subjects that identified as female, read a script

about a female target and other female characters, and if the subject identified as male, then he read about a male target and their interaction with male characters.

Scenario. One of two motivational strategies were chosen at random for the subject to read. The scenarios were almost identical except for the motivational strategy used. The target in any given scenario was a Hispanic student, therefore the population of Hispanic subjects were apart of the matching condition, and the white participants were apart of the non-matching condition.

The achievement motivational strategy (scenario 1) read as follows:

[Achievement Motivation] {Male} (1a)

Juan has recently graduated from Bard College, and he noted that he is very proud of himself. He graduated as a first-generation college student. In an interview that followed the reception of his degree, Juan was asked, "How have you managed to motivate yourself?" Juan answered, "I would set a goal, and then I did everything that I could to achieve that goal." The follow up question was "How did it feel to receive this degree?" and he responded, "Well, people where I am from often come from hard lives, so some people are lucky to be able to graduate from high school. When I received a scholarship to come to a prestigious institution, I felt honored and powerful. Now that I have received my degree, I am both happy and nervous." He explained, "I am overjoyed to have achieved this goal, but I knew I would do it all along. Ever since I was younger, my tio Carlos told me to go to school, get good grades, so that I could get a scholarship and go to college. I did my best to achieve each of these minor goals to get to the major goal, but there wasn't much of an outline for what to do when I got to college. Thankfully, I had my advisor. I was fortunate enough to be paired with Gabriel, a professor in (Insert the Academic major of subject). Gabriel could tell when I would have second thoughts about my capability to which he would respond, 'You have made it this far, I believe in you, you are an achiever! The tricky thing about success is that we do not realize that it is just beyond the horizon, so we never see it until it is in our hands.' I achieved my goal, and I will continue to do so. This nervous feeling is similar to that of which I had coming to college. The, 'Now what?' question arises. All it means is that the possibilities are endless, and I will allow achievement to continue to motivate me."

The achievement motivation strategy scenario puts an emphasis on creating a goal and obtaining that goal. I believed that the achievement motivation strategy would be rated as more internal on the I-E scale because the target has an intrinsic desire to achieve, in this case, academic excellence.

The avoidance of failure motivation strategy read similarly except that target's motivation was framed by that of which they knew about failure and what it would mean or look

like, so they would put their efforts towards not failing. The avoidance of failure strategy (scenario 2) read:

[Failure Avoidance] {Male} (2A)

Juan has recently graduated from Bard College, and he noted that he is very proud of himself. He graduated as a first-generation college student. In an interview that followed the reception of his degree, Juan was asked, "How have you managed to motivate yourself?" Juan answered, "I would picture what failure looks like, and I would do everything that I could to avoid failing." The follow up question was "How did it feel to receive this degree?" and he responded, "Well, people where I am from often come from hard lives, so some people are lucky to be able to graduate from high school. When I received a scholarship to come to a prestigious institution, I felt honored and powerful. Now that I have received my degree, I am both happy and nervous." He explained, "I am overjoyed that I didn't fail, but I knew I would do it all along. Ever since I was younger, my tio Carlos told me to go to school, make sure never to fail, stay out of trouble, so that I can go to college. I did my best not to fail at each of these minor goals to get to the major goal, but there wasn't much of an outline for what to do when I got to college. Thankfully, I had my advisor. I was fortunate enough to be paired with Gabriel, a professor in (Insert the Academic major of subject). Gabriel could tell when I would have second thoughts about my capability to which he would respond, 'You have made it this far, I believe in you, do not give up, you are not a quitter! The tricky thing about success is that we do not realize that it is just beyond the horizon, but many people quit right before they are there. Do not be one of those people.' I didn't quit and I do not plan on doing so anytime soon. This nervous feeling is similar to that of which I had coming to college. The, 'Now what?' question arises. All it means is that the possibilities are endless, and I will avoid failure at all costs."

I believed that the emphasis that this strategy places on avoiding a failed outcome would be seen as external. By directing the focus towards not wanting an outcome to be the result of one's efforts, I thought that there would be more weight given to the belief that external forces control were in control of the target's life.

I-E Scale. Next subjects were given 29 paired statements (23 internal-external items and 6-filler items) taken directly from the Internal versus External locus of control scale (I-E scale) (Rotter 1966). Subjects were given the I-E scale to fill out, not about their own control beliefs, but rather choose between the paired statements the statement that best coincides with the target's beliefs based off the scenario that they read. The 23 internal-external items are valued at 0-1 point in which case each point adds to the externality of an individual, in this case the target. The I-E score is then calculated by finding the sum of the points over the 23 items that ranges from 0 being the most internal a person can be to 23 the most external a person could be. I

hypothesize that scenario 1 (achievement motivation) will be rated as more internal than scenario 2 (avoidance of failure).

Post-Experiment Questionnaire. Subjects were then given a confidence rating in the form of a Likert scale from 1-5 (1 being very confident and 5 being not confident). They were asked if role models are important in a simple yes or no form. Lastly subjects were asked to rate the value of importance for ethnic matching mentorships on a Likert-scale from 1-7 (1 being very important and 7 being not important at all). I asked all three questions looking for a more explicit effect of ethnic matching. My second hypothesis is that subjects that were in the matching condition would rate having higher confidence levels in their perception of the target's control beliefs than those in the non-matching condition. My third hypothesis is that the matching condition participants will rate ethnic matching as more important than subjects in the non-matching condition.

Results

Data Preparation

Although 92 participants data were collected, I will focus on those that completed the study in full, met the grouping requirements, and participated within the time allowed. This reduces the data discussed below to 60 subjects, and I will from this point refer to only these subjects. The data that I will discuss refers to the I-E scores, confidence rating, and the rating of the value of importance of ethnic matching in mentor-mentee relationships.

The I-E score was calculated by using the key Rotter provides (Rotter 1966) as previously discussed. The Rotter scale is a forced answer choice scale that provides two statements, and the subject is obligated to choose the statement that, specifically in this study,

best aligns with the target's control beliefs. I converted the statements into numeric values of 0 or 1. Then after numerically labeling each response, I summed the response score for each subjects' individual I-E scoring of the target.

I-E Scores

A t-test analysis was used in comparing the mean I-E scores of scenarios 1 and 2. The subjects in scenario 1 ($N=30$, $M=8.80$, $SD=4.41$) rated the I-E score of the target as more external than subjects in scenario 2 ($N=30$, $M=6.80$, $SD=3.70$), but the results were not statistically significant; $t(58)=1.9$, $p=.55$. I used the ethnic matching and non-matching conditions as enhancers of I-E scores. The I-E scores across both scenarios 1 and 2 suggested that subjects in the matching condition rated the target ($N=25$, $M=8.20$, $SD=3.7$) as more external than subjects in the non-matching condition ($N=35$, $M=7.68$, $SD=4.45$), however, this difference was not statistically significant; $t(57)=.48$, $p=.38$.

The results for scenario 1 (the achievement motivation strategy) of the average I-E score for those in the matching condition ($N=14$, $M=7.16$, $SD=3.65$) was rated as more internal than those in the non-matching condition ($N=16$, $M=9.63$, $SD=4.93$); however, the test was not statistically significant; $t(28)=-1.01$, $p=.29$.

In scenario 2 (the avoidance of failure motivation strategy) the average I-E score for those in the matching condition ($N=11$, $M=8.64$, $SD=3.88$) was rated as more external than the non-matching condition ($N=18$, $M=5.74$, $SD=3.23$); however the results were not statistically significant; $t(28)=2.2$, $p=.29$.

Confidence Rating

A t-test analysis was run for the confidence ratings in the matching and non-matching conditions. On a Likert-scale of 1-5 (1 being extremely confident and 5 being not confident at all) subjects rated their level of confidence felt about filling out the I-E scale about the target. There was no difference in the confidence levels between subjects in the matching condition ($N=25$, $M=3.44$, $SD=.96$) and the non-matching condition ($N=35$, $M=3.49$, $SD=.95$) across both scenarios, and results were not statistically significant; $t(58)=-1.83$, $p=.94$.

In the first scenario, there was no real difference in subject's confidence level between the matching condition ($N=14$, $M=3.64$, $SD=.93$) and the non-matching condition ($N=16$, $M=3.56$, $SD=.85$) for the data were not statistically significant; $t(28)=.25$, $p=.73$.

The second scenario showed no difference in confidence level between the matching condition ($N=11$, $M=3.18$, $SD=.98$) and non-matching condition ($N=19$, $M=3.37$, $SD=1.12$), and the results were not statistically significant; $t(28)=-.460$, $p=.40$.

Value of Ethnic Matching

Subjects were asked to rate the value of importance of ethnic matching in mentor and mentee relationships on a Likert-scale from 1-7 with (1- being extremely important and 7-not important at all). The value of ethnic matching within both scenarios was rated as more important by the matching condition ($N=25$, $M=2.80$, $SD=1.49$) than the non-matching condition ($N=35$, $M=4.14$, $SD= 1.77$), but the results were not statistically significant; $t(58)=-3.10$, $p=.26$.

The value of ethnic matching in the first scenario was rated as more important by subjects in the matching condition ($N=14$, $M=2.36$, $SD=1.27$) than those in the non-matching

condition ($N=16$, $M=3.94$, $SD=1.65$), but the results were not statistically significant; $t(28)=-2.98$, $p=.35$.

The subjects that read the second scenario rated the value of ethnic matching as more important in the matching condition ($N=11$, $M=3.36$, $SD=1.57$) than the non-matching condition ($N=19$, $M=4.32$, $SD=1.89$); however, the results were not statistically significant; $t(28)=-1.412$, $p=.36$.

Conclusion

The following study did not yield any significant results for any of the analysis run. While I must admit that the evidence fails to reject all three of the null hypotheses, I would like to look at the relationships of the provided data and then discuss possible confounds, future directions, and limitations of this work.

As provided earlier, the first null hypothesis- H_01 : Subjects will not differ in how they rate the achievement motivational strategy (scenario 1) and the avoidance of failure motivational strategy (scenario 2) using Rotter's I-E scale- fails to be rejected by the evidence (see **Figure 1a**). Although there is no significant difference between the ratings of externality between the scenarios, the matching condition across the two scenarios shared the relationship I hypothesized, for scenario 1 was rated as more internal than the matching condition of scenario 2; whereas, the non-matching condition displayed the opposite in the rating of scenario 1 as more external than the non-matching condition of scenario 2 (see **Figure 1b**). I found this to be interesting, and I will discuss possible ways to investigate these relationships in the future.

I failed to reject the second null hypothesis - H_02 : Subjects in the ethnic matching and non-matching conditions will not differ in their ratings of confidence levels- for the results were

not significant, nor did they display any relationship in their insignificance worth looking into (see **Figure 2**), but I will discuss why this may be the case for confidence levels in the limitations.

I failed to reject the third null hypothesis- H_03 : Subjects in the matching and non-matching condition will not differ in the rating of the value of importance of ethnic matching in mentor relationships- because results were not significant. However, all three scenarios showed a slight difference in the rating of importance for ethnic matching mentorships (see **Figure 3**). I will discuss reasons that possibly inhibited a greater difference in the ratings across the matching/non-matching conditions.

Possible Confounds

In general, there were several possible confounds that I believe may have influenced the data gathered. The first being that the study was available and distributed online. I sacrificed control of the environment in which subjects participated in the study. The data collection was done over the course of several weeks, so in order to accumulate the population necessary, I made the choice to allow the subjects access to participate in the study at any given moment and location that was most convenient for them. It could be that subjects' responses were influenced in the presence of other people, and I will speculate more on this matter in the future directions section. The online representation of the study may not have affected subjects enough to reach a level of salience that is required in identifying with the target and ethnic matching.

The target population was not reached in terms of the ethnic matching condition. The effect of ethnic matching may have been greater if there were 30 participants in each matching

condition for both scenarios which would demand double the subjects acquired in this study. In this case, the small sample size may have been the cause of yielding insignificant results.

The I-E scores for the non-matching condition across the two scenarios displayed a relationship that was opposite from what was hypothesized. This may be due to the negative motivation or avoidance of failure strategy coinciding more in relation with the idea of “pulling oneself up by their bootstraps” instead of emphasizing the external control of the world around them. If subjects resonated with the “never give up” mentality, then they may have seen this motivation as more internal and given more power to the target as an internally controlled individual. By avoiding “quitting” or “giving up,” the target is not avoiding anything external, but rather the emphasis is in overcoming one’s own will. Thus, the scenario may be framing a different idea than intended about the avoidance of failure by giving the target more of a persistent and intrinsic assertion of will. On the other hand, results from the matching condition suggest, not significantly anyway, to follow the hypothesized relationship. This difference in direction of relationships may be due to cultural factors.

On the note of cultural factors, it is possible that those that were placed in the matching-condition did not have a salient identification with the target in the scenario, for their self-reported ethnicity was used as the only classification for an ethnic match, whereas, ethnicity is much more complicated as seen in (Davis et al., 2013), where a 34-items query was given to African Americans. In this study, the black identity classification scale was administered to accurately classify one of sixteen ethnic identities. In future research, one could spend more time identifying ethnicity of participants to increase the compatibility of target and subject.

It is also worth noting that the I-E scale as stated previously, is a self-assessment, and no prior literature was found that depicted the use of the I-E scale as a measure to rate the control

beliefs of other people, let alone targets in scenarios. However, there is literature (Lockwood et al., 2002) that supports the rating of motivation about targets, individuals in scenarios, but I took the idea of rating scenarios, and I applied, a possibly inaccurate, measure to investigate differences between motivational strategies.

Possible Future Directions

No study is perfect, but in order to get closer to answers in whether or not ethnic matching can affect the perception of motivational strategies, it may be useful to include a rating of the target's motivation to determine if the scenarios differentiate in perceived motivation, for this study looks as whether or not the motivational strategies differentiate in the perceived control beliefs of the target. It would be useful to take a step back to determine what motivational strategy is perceived to be more motivated because the scenarios should be assessed for the difference between them, if there is one to begin with. Also, previously existing scenarios that depict the same motivational strategies would suffice in place of the creation of a new scenario. In addition, adding more examples of how the target encounters and deals with presented external beliefs may be helpful to express the attitude of the target and give subjects more information to assess and distinguish between the two scenarios.

Asking subjects whether they felt they could identify with the target of the scenario might aid the researcher in comparing those that do relate versus those that do not. For example, a possible confound mentioned was that the avoidance of failure scenario may have resonated with subjects that identify with the negative motivational strategy, and they may view such a strategy as an internal control. It could be worth asking subjects to define or fill out a forced answer questionnaire that assesses their preferred motivation strategy. In this case, one could even

compare preferred motivation strategies to I-E scores to investigate whether there is a difference in control beliefs within subjects that prefer positive or negative motivational strategies. This approach may be able to offer support for the role ethnic matching plays, for it could be the case that subjects identify more with ethnic matching scenarios; on the other hand, the preference for motivation strategy may very well outweigh the effect of ethnic matching.

Another interesting direction to think about is having participants fill out the study in a controlled environment. Specifically, coordinating two groups of confederates (all Hispanic/Latinx and all white people) and having subjects (Matching and non-matching) complete the study in the room with a randomly assigned group to test whether people of the similar/different ethnicities influence the responses by increasing or decreasing salience of ethnic identity.

Moving forward, I believe targeting younger populations for their input would be critical to the intention of this study. While this study is far removed from mentoring others, the ultimate aim is to ensure that youth are provided with the best support systems that will help them to foster their own motivation. This study attempts to add to previous literature by offering how the scenarios are perceived with racial and ethnic identity in mind. The population used in this study are educated subjects and assumed to be racially conscious. Subjects likely understand the history behind racial politics, and this knowledge may influence the honesty of their answer. It may be worth looking into the answers of young people whose biases may be more readily honest and uninfluenced by pressures that stem from liberalism. The perception and accuracy of the perception of motivational strategies are important in order for people to adopt these strategies for themselves. It would be useful to understand if young people also perceive the target in the scenario differently than college students.

Limitations

A limitation of the study may be that the motivational strategies depicted in the scenario, have the same attitude about the world except for how they frame their motivation. Otherwise, the scenarios are almost identical. I believe one of two things may have occurred. The first being the possibility that the scenarios were simply not powerful enough to create a difference in the perception of the target's control beliefs. The scenarios could have been written more strongly, but I was not sure how to measure the strength of the scenarios that I created.

The second points to the frame of motivation. The target emphasizes what they want (to achieve or avoid failure); however, the origins of these motivations come from an internal desirability to achieve or not fail. There is no emphasis of control from the outside world, nor how the target deals with such situations. There is an allusion to life or external control when the target refers to the people that they grew up around and there being a lack of opportunities. Therefore, either scenario lacked the presence of external factors (i.e. the decision of who receives the scholarship award), and this can be a plausible explanation for why there was no significant difference between scenarios.

Additionally, the confidence rating may be skewed, for the lack of coherence between the scenario and the I-E scale. The scenarios (see appendix) do not offer many answers or beliefs for the subject to be able to answer the I-E scale accurately about the individual. This was partly intentional to investigate whether the subjects would either identify or disassociate with the target simply based off of the mention of ethnicity. If subjects were entering their own beliefs as a substitute for the lack of information, I assumed this would cause higher confidence levels. However, I am unsure if this was the case, but one could simply ask whether subjects did in fact

substitute their own control beliefs for the targets. This assumption may have led me to put too much emphasis on the reliability of the confidence rating, for if the scenario had little relevance to the questionnaire, then low confidence ratings overall could be expected.

Moreover, by having individuals fill out a forced choice questionnaire about a target based of their own perceptions of the target's beliefs, subjects may have been subject to some cognitive dissonance. In order to believe that their answers about the target individual must have been somewhat accurate, they may have felt the need to mark higher confidence ratings even they had not actually experienced the confident attitude that they expressed in their rating.

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Figures

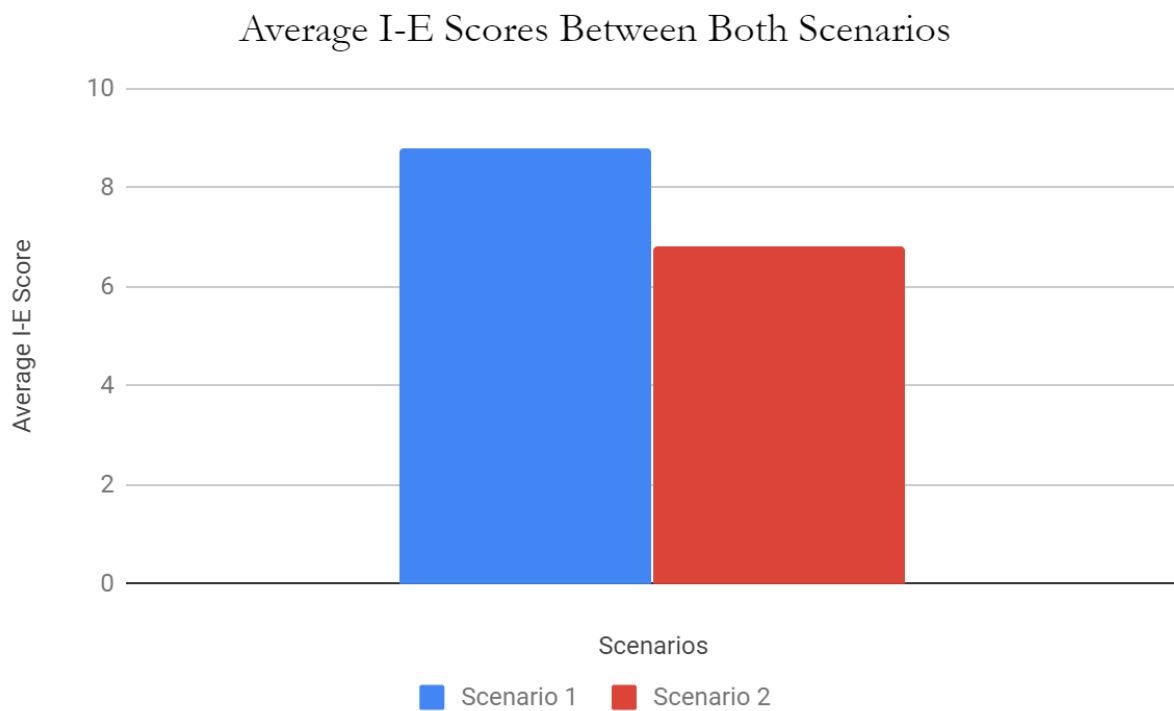


Figure 1a). The initial hypothesis is tested in this graph in the difference between average I-E scores in the two different motivational scenarios. The achievement motivation scenario (1) is rated as more external than the avoidance of failure motivation scenario (2).

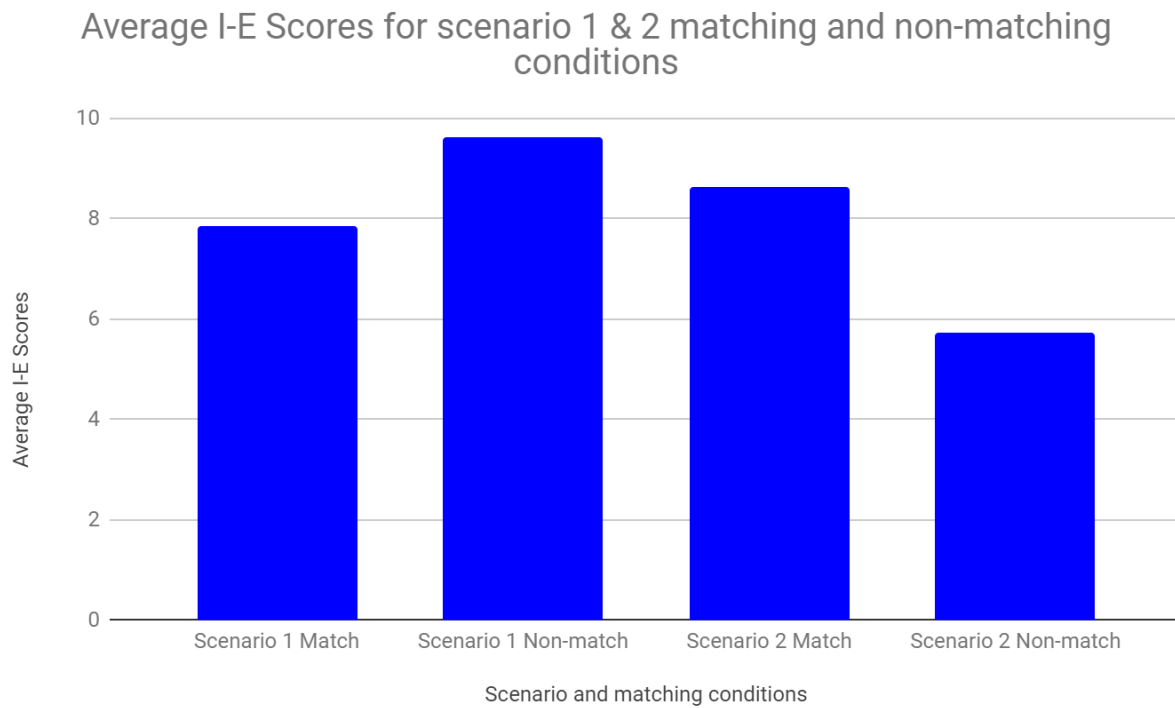


Figure 1b). Ethnic matching was used as an enhancer in the study to get a better understanding of cultural differences of perception of the target's control beliefs. The scenario 1 and scenario 2 matching conditions display a very small relationship that was hypothesized to come about, but the scenario 1 and scenario 2 non-matching conditions did the opposite.

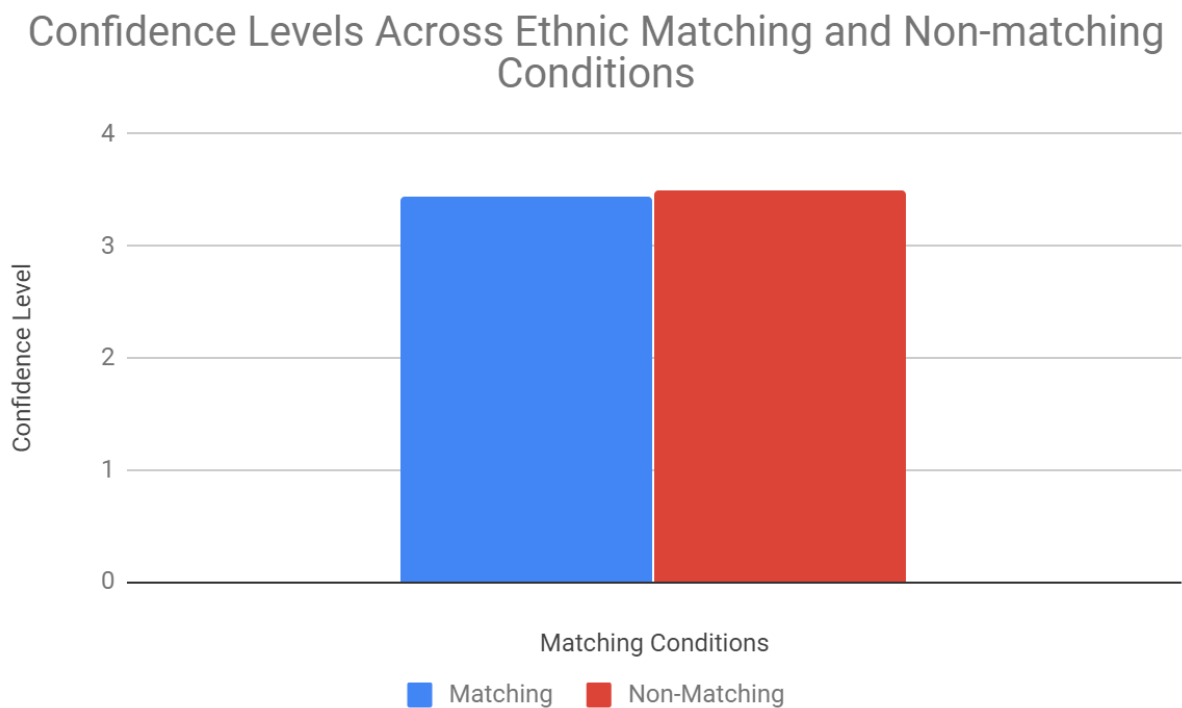


Figure 2). The confidence levels between the ethnic matching and non-matching conditions address the second hypothesis. The matching condition has a slightly higher (1 rating signifying extreme confidence) confidence level than the non-matching condition, but the result was not significant.

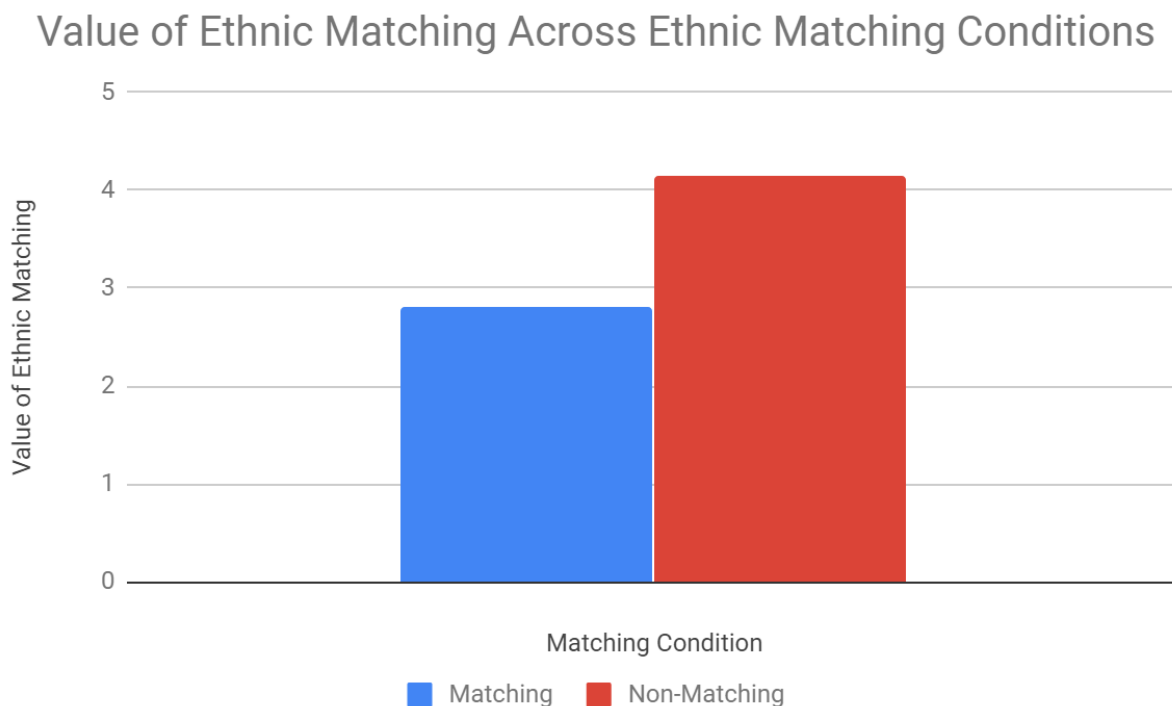


Figure 3). The third hypothesis expected the matching condition subjects to rate the value of ethnic matching as more important (1- being extremely important) than the non-matching condition; however, the results were not significant.

Appendix

IRB Application Receipt

Name	Matthew Agosto
Email	ma0244@bard.edu
Phone	(504) 699-8168
Your academic program: :	Psychology

Your status (faculty, grad, undergrad):	undergrad
ADVISER or FACULTY SPONSOR (if applicable, otherwise leave blank):	Stuart Levine
Today's date:	Mar 19, 2019
I have read the IRB's Categories of Review, and my proposal qualifies for a	Expedited Review
Do you have external funding for this research?	No
When do you plan to begin collecting data for this project? (begin date):	Mar 19, 2019
When do plan to end your data collection for this project? (end date):	Apr 15, 2019
What is the title of your project?	
Motivation in Minority Populations: Perceiving the Control of Different Motivation Strategies Among Ethnic Matches	
Describe your research question briefly (approximately 250 words or less):	
<p>This study was designed to investigate whether different motivational strategies are perceived to be aligned with an internal or external locus of control. More specifically, are individuals that use achievement motivation strategies perceived as more internally controlled than failure avoidance motivation strategies? While it is has been shown that achievement motivation strategies are perceived as more motivating than failure avoidance strategies, this experiment aims to identify whether these strategies are perceived to have different levels of control by others. Also, is ethnic matching, the preference for patients to be treated by therapists of their same race/ethnicity, more important for historically oppressed people than others? Is ethnic matching noticed in contexts of mentorship?</p>	
<p>H1: If promotion motivational strategies are seen as more motivating, then scenarios that illustrate an achievement motivation strategy will be rated as more internally controlled on the I-E Scale as opposed failure avoidance motivational strategies.</p>	
<p>H2: If ethnic matching is more important to Hispanic subjects, then Hispanic subjects</p>	

will rate ethnic matching as more important, and Hispanic students will rate being more confident about the rating of the survey.

Will your participants include individuals from vulnerable or otherwise protected populations (e.g., children, pregnant women, prisoners, or the cognitively impaired)? **no**

If your participants will include individuals from specific populations, please specify the population(s) and briefly describe any special precautions you will use. I will be including students from Bard College, but I will be focusing on Hispanic and White students' responses as they are the comparison groups of this study.

Briefly describe how you will recruit participants. (e.g., Who will approach participants? What is the source of the participants?)

I will email students: I am emailing you as a struggling senior in need of your participation. I am asking for 15 minutes of your time to help me conduct research for my senior project. I understand your time is precious and uncompromising, so I will not ask that you come to any specific location. I will, however, ask that you complete the following experiment in a quiet location with minimal distractions.

Please let me know if you are interested in participating in this study or not, so that I may send you the link to participate. The link will ask for your informed consent via electronic signature as well as demographic information, and your UNIQUE beliefs about the study.

Briefly describe the procedures you will be using to conduct your research. Include descriptions of what tasks your participants will be asked to do, and about how much time will be expected of each individual. NOTE: If you have supporting materials (recruitment posters, printed surveys, etc.) please email these documents separately as attachments to IRB@bard.edu. Name your attachments with your last name and a brief description (e.g., "WatsonConsentForm.doc").

I will have students fill out a demographic sheet that asks for their name, email, gender, academic major, country of origin, race, ethnicity, and year in college. They will then be given a randomized scenario to read of one of two motivational strategies. The scenario will include a target individual who is of the same gender as the subject participating in the scenario. The target of the scenario will also be in the same academic major as the subject. This will be made possible through coding of the demographic sheet. After reading the scenario, participants will fill out a 32- item questionnaire, regarding their beliefs about the scenario, ethnic matching, and how confident they felt in filling out the questionnaire.

Students will read one of the four scenarios:

Read the following story about a student that recently graduated. Attend to the details, for you will be asked to make a judgement about the target of the story when you are finished.

[Achievement Motivation] {Male} (1a)

Juan has recently graduated from Bard College, and he noted that he is very proud of himself. He graduated as a first-generation college student. In an interview that followed the reception of his degree, Juan was asked, "How have you managed to motivate yourself?" Juan answered, "I would set a goal, and then I did everything that I could to achieve that goal." The follow up question was

"How did it feel to receive this degree?" and he responded, "Well, people where I am from often come from hard lives, so some people are lucky to be able to graduate from high school. When I received a scholarship to come to a prestigious institution, I felt honored and powerful. Now that I have received my degree, I am both happy and nervous."

He explained, "I am overjoyed to have achieved this goal, but I knew I would do it all along. Ever since I was younger, my tio [uncle] Carlos told me to go to school, get good grades, so that I could get a scholarship and go to college. I did my best to achieve each

of these minor goals to get to the major goal, but there wasn't much of an outline for what to do when I got to college.

Thankfully, I had my advisor. I was fortunate enough to be paired with Gabriel, a professor in (Insert the Academic major of subject). Gabriel could tell when I would have second thoughts about my capability to which he would respond, 'You have made it this far, I believe in you, you are an achiever! The tricky thing about success is that we do not realize that it is just beyond the horizon, so we never see it until it is in our hands.'

I achieved my goal, and I will continue to do so. This nervous feeling is similar to that of which I had coming to college. The, 'Now what?' question arises. All it means is that the possibilities are endless, and I will allow achievement to continue to motivate me."

[Achievement Motivation] {Female} (1B)

Juanita has recently graduated from Bard College, and she noted that she is very proud of herself. She graduated as a first-generation college student. In an interview that followed the reception of her degree, Juanita was asked, "How have you managed to motivate yourself?" Juanita answered, "I would set a goal, and then I did everything that I could to achieve that goal." The follow up question was

"How did it feel to receive this degree?" and she responded, "Well, people where I am from often come from hard lives, so some people are lucky to be able to graduate from high school. When I received a scholarship to come to a prestigious institution, I felt honored and powerful. Now that I have received my degree, I am both happy and nervous."

She explained, "I am overjoyed to achieve this goal, but I knew I would do it all along. Ever since I was younger, my tia [aunt] Karlita told me to go to school, get good grades, so that I could get a scholarship and go to college. I did my best to achieve each of these minor goals to get to the major goal, but there wasn't much of an outline for what to do when I got to college.

Thankfully, I had my advisor. I was fortunate enough to be paired with Gabriela, a professor in (Insert the Academic major of subject). Gabriela could tell when I would have second thoughts about my capability to which she would respond, 'You have made

it this far, I believe in you, you are an achiever! The tricky thing about success is that we do not realize that it is just beyond the horizon, so we never see it until it is in our hands.’

I achieved my goal, and I will continue to do so. This nervous feeling is similar to that of which I had coming to college. The, ‘Now what?’ question arises. All it means is that the possibilities are endless, and I will allow achievement to continue to motivate me.”

[Failure Avoidance] {Male} (2A)

Juan has recently graduated from Bard College, and he noted that he is very proud of himself. He graduated as a first-generation college student. In an interview that followed the reception of his degree, Juan was asked, “How have you managed to motivate yourself?” Juan answered, “I would picture what failure looks like, and I would do everything that I could to avoid failing.” The follow up question was

“How did it feel to receive this degree?” and he responded, “Well, people where I am from often come from hard lives, so some people are lucky to be able to graduate from high school. When I received a scholarship to come to a prestigious institution, I felt honored and powerful. Now that I have received my degree, I am both happy and nervous.”

He explained, “I am overjoyed that I didn’t fail, but I knew I would do it all along. Ever since I was younger, my tio [uncle] Carlos told me to go to school, make sure never to fail, stay out of trouble, so that I can go to college. I did my best not to fail at each of these minor goals to get to the major goal, but there wasn’t much of an outline for what to do when I got to college.

Thankfully, I had my advisor. I was fortunate enough to be paired with Gabriel, a professor in (Insert the Academic major of subject). Gabriel could tell when I would have second thoughts about my capability to which he would respond, ‘You have made it this far, I believe in you, do not give up, you are not a quitter! The tricky thing about success is that we do not realize that it is just beyond the horizon, but many people quit right before they are there. Do not be one of those people.’

I didn’t quit and I do not plan on doing so anytime soon. This nervous feeling is similar to that of which I had coming to college. The, ‘Now what?’ question arises. All it means is that the possibilities are endless, and I will avoid failure at all costs.”

[Failure Avoidance] {Female}(2B)

Juanita has recently graduated from Bard College, and she noted that she is very proud of herself. She graduated as a first-generation college student. In an interview that followed the reception of her degree, Juanita was asked, “How have you managed to motivate yourself?” Juanita answered, “I would picture what failure looks like, and I would do everything that I could to avoid failing.” The follow up question was

“How did it feel to receive this degree?” and she responded, “Well, people where I am from often come from hard lives, so some people are lucky to be able to graduate from high school. When I received a scholarship to come to a prestigious institution, I felt honored and powerful. Now that I have received my degree, I am feeling happy and nervous.”

She explained, “I am overjoyed that I didn’t fail, but I knew I would do it all along. Ever since I was younger, my tia [aunt] Karlita told me to go to school, make sure never to fail, stay out of trouble, so that I can go to college. I did my best not to fail at each of these minor goals to get to the major goal, but there wasn’t much of an outline for what to do when I got to college.

Thankfully, I had my advisor. I was fortunate enough to be paired with Gabriela, a professor in (Insert the Academic major of subject). Gabriela could tell when I would have second thoughts about my capability to which she would respond, ‘You have made it this far, I believe in you, do not give up, you are not a quitter! The tricky thing about success is that we do not realize that it is just beyond the horizon, but many people quit right before they are there. Do not be one of those people.’

I didn’t quit, and I do not plan on doing so anytime soon. This nervous feeling is similar to that of which I had coming to college. The, ‘Now what?’ question arises. All it means is that the possibilities are endless, and I will avoid failure at all costs.”

Will it be necessary to use deception with your participants at any time during this research? Please note: withholding details about the specifics of one's hypothesis does not constitute deception. However, misleading participants about the nature of the research question or about the nature of the task they will be completing does constitute deception. *

Deception will not be used in the experiment as I am being completely honest and direct about what I need from participants.

Approximately how many individuals do you expect to participate in your study? **80**

Please describe any risks and benefits your research may have for your participants. (For example, one study's risks might include minor emotional discomfort and eye strain. The same study's benefits might include satisfaction from contributing to scientific knowledge and greater self-awareness.)

There are no health risks associated with this study and most participants report having a positive experience. Experiment sessions are kept as short as possible, and every attempt is made to ensure that participants are kept as comfortable as possible throughout.

While this research experiment may not provide participants with any direct benefits, the data collected from this study may help improve the scientific understanding of how to improve possible interventions in mentoring, therapeutic, and educational programs. Moreover, the researchers hope that participants gain insight into the research process at Bard College through their involvement with this work.

Have you prepared a consent form and emailed it as an attachment to IRB@bard.edu? **Yes**

Please note: you must submit all necessary consent forms before your proposal is considered complete.

Please include here the verbal description of the consent process (how you will explain the consent form and the consent process to your participants):

Hello and thank you for participating in this experiment today. As you know, participation in this study is completely optional, so if at any moment you feel you are unwilling to continue or complete the experiment that you are free to end participation at any moment without penalty. Today, you will be asked to complete a demographic sheet, read a short scenario, and then complete a scale of beliefs about the scenario. This should take no more than 20 minutes of your time.

What procedures will you use to ensure that the information your participants provide will remain confidential?

Participants will be distributed a link to complete the experiment in a google form, and no information outside of participating will be able to be obtained by the participant. In order to receive the link, students must sign an informed consent sheet via electronic signature in order to receive the online link to the experiment. Upon completion of the experiment, participants will receive a debriefing statement electronically that they will be asked not to share and to keep for their personal reference as the information, if shared, may contaminate the sample size at Bard. Participants will not receive a copy of their responses, for only I will have access to individuals' responses for confidential purposes.

Will it be necessary to use deception with your participants at any time during this research? Please note: withholding details about the specifics of one's hypothesis does not constitute deception. However, misleading participants about the nature of the research question or about the nature of the task they will be completing does constitute deception.

No

If you will be conducting interviews in a language other than English, will you conduct all of the interviews yourself, or will you have the assistance of a translator?

Not applicable

If you will be using the assistance of a translator, that individual must also certify that he or she is familiar with human subject protocol and has completed the online training course. Please respond whether you have found an

Not applicable

IRB-certified translator.

If you have not yet found a translator, do you agree that when you do find a translator, you will make sure that person will also agree to use standard protocol for the treatment of human subjects, and that the individual's training certificate will be submitted to the IRB records before you begin collecting data?

Not applicable

If your recruitment materials or consent forms will be presented in languages other than English, please translate these documents and email copies as attachments to IRB@bard.edu. I have submitted all of my translated materials, together with the completed [certificate of translation](#)

Not applicable

If you are using video recording, please email as an attachment a copy of the video consent form you will use to IRB@bard.edu (e.g., "WatersVideoConsent.doc"). I have submitted a copy of my video consent form.

Not applicable

If you are a graduate or undergraduate student, has your adviser seen and approved your application?

Yes

Research Ethics Certification



FHI 360

certifies that

Matthew Agosto

has completed the

RESEARCH ETHICS TRAINING CURRICULUM

March 4, 2019

IRB Approval

Bard College

Institutional Review Board

Date: March 25, 2019

To: Matthew Agosto (ma0244@bard.edu)
Cc: Stuart Levine (levine@bard.edu)
From: Sanjay DeSilva, IRB Chair

Re: Motivation in Minority Populations: Perceiving the Control of Different Motivation Strategies Among Ethnic Matches

Dear Matthew,

DECISION: APPROVED

Dear Matthew,

The Bard Institutional Review Board reviewed the revisions to your proposal. Your proposal is approved under expedited category 7 through March 25, 2020. Your case number is 2019MAR25-AGO.

Please notify the IRB if your methodology changes or unexpected events arise.

We wish you the best of luck with your research.



Sanjay DeSilva
desilva@bard.edu
IRB Chair

Email Blast Script.

“I am emailing you as a struggling senior in need of your participation. I am asking for 15 minutes of your time to help me conduct research for my senior project. I understand your time is precious and uncompromising, so I will not ask that you come to any specific location. I will, however, ask that you complete the experiment in a quiet location with minimal distractions.

Please let me know if you are interested in participating in this study by email. The link will ask for your informed consent via electronic signature as well as demographic information, and your UNIQUE beliefs about the study.”

Experiment Link

“Hey,

Thank you for participating in my experiment! It means a lot to me. Please read all instructions carefully. If you have any questions, please let me know, and I will get back to you as soon as possible. Please take it seriously. Good luck!

https://docs.google.com/forms/d/e/1FAIpQLSe8fHyPNvdbA8SJiQmvWS5MhnmXPUr4qRh-BxSdA41KBC-uzw/viewform?usp=sf_link”

Platform

Consent Form

“You are being asked to take part in a research experiment at Bard College that seeks to learn more about the perception of individuals and their motivational strategies.

To decide whether or not you wish to participate, you should know enough about its risks and benefits to make an informed judgment. This consent form gives you information about the research study, and the experimenter will provide you with additional information about the specific tasks that you will be performing. Once you are ready, you will be asked if you wish to participate and, if so, you will sign the consent form by filling the Electronic Signature field below. You can choose not to participate, and you can choose to end your participation at any time during the study without penalty.

Background: In my study, I hope to learn more about the strategies people use to motivate themselves, and the connections those strategies have about one’s control beliefs in regard to the individual they are perceiving.

What you will do in this study: You will be asked to fill out a demographic sheet that asks for your name, gender, academic major, country of origin, race, ethnicity, and year in college. You will then be given a scenario to read about a target individual that exemplifies a motivational strategy. After reading the scenario, you will be redirected to a 32- item questionnaire, regarding your beliefs about the scenario, ethnic matching, and how confident you felt in filling out the questionnaire.

Risks and benefits: There are no health risks associated with this study and most participants report having a positive experience. Experiment sessions are kept as short as

possible, and every attempt is made to ensure that participants are kept as comfortable as possible throughout.

While this research experiment may not provide participants with any direct benefits, the data collected from this study may help improve the scientific understanding of how to improve possible interventions in mentoring, therapeutic, and educational programs. Moreover, the researchers hope that participants gain insight into the research process at Bard College through their involvement with this work.

Your rights as a participant: Your participation in this experiment is completely voluntary, and you may withdraw from the experiment at any time without penalty. You may withdraw by informing the experimenter that you no longer wish to participate.

The experimenter will tell you more about the study and our hypotheses at the end of the session. If you wish, you can send an email message to the principal investigator, Matthew Agosto (ma0244@bard.edu), and he will send you a copy of any manuscripts based on the research (or a summary of the results).

Confidentiality: Your data will be kept in a private location to which only the experimenter and a collaborator will have access. Research records will be stored securely on a password-protected computer. Otherwise, I will be the only party that will have access to your data. Unless required by law, only the study investigator, and Bard's Institutional Review Board, will have authority to review your study records. We are required to maintain confidentiality regarding your identity.

Results of this study may be used in research, publications, or presentations at scientific meetings. If your individual results are discussed, your identity will be protected by using a study code number rather than your name or other identifying information.

If you have questions about this study, please ask your researcher or contact Matthew Agosto, Bard College, Annandale-on-Hudson, NY 12504, ma0244@bard.edu. If you have questions about your rights as a research participant, please contact the Bard College Institutional Review Board at irb@bard.edu.

STATEMENT OF CONSENT:

"The purpose of this study, procedures to be followed, and the risks and benefits have been explained to me. I have been given an opportunity to ask questions, and my questions have been answered to my satisfaction. I have been told whom to contact if I have additional questions. I have read this consent form and agree to be in this study, with the understanding that I may withdraw at any time."

By signing below, I agree with the above statement of consent and further certify that I am at least 18 years of age."

Demographic

Gender

- Male
- Female
- Non-Gender binary

Class Year

- First
- Second
- Third
- Fourth

Country of Origin

- (Short Answer Response)

Ethnicity

- American Indian or Alaska Native
- Asian
- Black or African American
- Latinx or Hispanic
- Native Hawaiian or Pacific Islander
- White

Race

- Caucasoid (White) race
- Negroid (Black) race
- Capoid (Bushmen/Hottentots) race
- Mongoloid (Oriental/Amerindian)
- Australoid (Australian, Aborigine, Papuan) race
- Unsure
- Other

Academic Program

- American Studies
- Anthropology
- Art History
- Asian Studies
- Biology
- Chemistry and Biochemistry
- Classical Studies
- Computer Science
- Dance
- Economics
- Environmental and Urban Studies
- Film and Electronic Arts
- Foreign Languages, Cultures and Literature

- French Studies
- German Studies
- Global and International Studies
- Historical Studies
- Human Rights
- Italian Studies
- Literature
- Mathematics
- Middle Eastern Studies
- Multidisciplinary Studies
- Music
- Philosophy
- Physics
- Political Studies
- Psychology
- Religion
- Russian and Eurasian Studies
- Sociology
- Spanish Studies
- Studio Arts
- Theater Performance
- Written Arts
- Other

Confirmation Message

“Please continue to the experiment by clicking on the following link:

https://docs.google.com/forms/d/e/1FAIpQLSfyUINuof0D64BxULwlce8XfBkFnKh8vxb_aE5SXJ0HSggr45Q/viewform?usp=sf_link”

Scenario Assignment

“Target!

Click on the link below to be presented with a short story to read. The individual that the story is about is the target individual. You will be questioned about the target's beliefs in the next section. Note: the link will open a new tab. You may leave the scenario tab open in order to help you answer the questionnaire, but make sure to proceed with the experiment in its entirety!

https://script.google.com/a/bard.edu/macros/s/AKfycbzfRskOSifWpPP0tSxMkn14OfiTvmd_3IZQivPiZUYQ0GPbL7U/exec”

Possible Scenarios:

[Achievement Motivation] {Male} (1a)

Juan has recently graduated from Bard College, and he noted that he is very proud of himself. He graduated as a first-generation college student. In an interview that followed the reception of his degree, Juan was asked, “How have you managed to motivate yourself?” Juan answered, “I would set a goal, and then I did everything that I could to achieve that goal.” The follow up

question was “How did it feel to receive this degree?” and he responded, “Well, people where I am from often come from hard lives, so some people are lucky to be able to graduate from high school. When I received a scholarship to come to a prestigious institution, I felt honored and powerful. Now that I have received my degree, I am both happy and nervous. “He explained, “I am overjoyed to have achieved this goal, but I knew I would do it all along. Ever since I was younger, my tio Carlos told me to go to school, get good grades, so that I could get a scholarship and go to college. I did my best to achieve each of these minor goals to get to the major goal, but there wasn’t much of an outline for what to do when I got to college. Thankfully, I had my advisor. I was fortunate enough to be paired with Gabriel, a professor in (Insert the Academic major of subject). Gabriel could tell when I would have second thoughts about my capability to which he would respond, ‘You have made it this far, I believe in you, you are an achiever! The tricky thing about success is that we do not realize that it is just beyond the horizon, so we never see it until it is in our hands.’ I achieved my goal, and I will continue to do so. This nervous feeling is similar to that of which I had coming to college. The, ‘Now what?’ question arises. All it means is that the possibilities are endless, and I will allow achievement to continue to motivate me.”

[Achievement Motivation] {Female} (1B)

Juanita has recently graduated from Bard College, and she noted that she is very proud of herself. She graduated as a first-generation college student. In an interview that followed the reception of her degree, Juanita was asked, “How have you managed to motivate yourself?” Juanita answered, “I would set a goal, and then I did everything that I could to achieve that goal.” The follow up question was “How did it feel to receive this degree?” and she responded, “Well, people where I am from often come from hard lives, so some people are lucky to be able to graduate from high school. When I received a scholarship to come to a prestigious institution, I felt honored and powerful. Now that I have received my degree, I am both happy and nervous.” She explained, “I am overjoyed to achieve this goal, but I knew I would do it all along. Ever since I was younger, my tia Karlita told me to go to school, get good grades, so that I could get a scholarship and go to college. I did my best to achieve each of these minor goals to get to the major goal, but there wasn’t much of an outline for what to do when I got to college. Thankfully, I had my advisor. I was fortunate enough to be paired with Gabriela, a professor in (Insert the Academic major of subject). Gabriela could tell when I would have second thoughts about my capability to which she would respond, ‘You have made it this far, I believe in you, you are an achiever! The tricky thing about success is that we do not realize that it is just beyond the horizon, so we never see it until it is in our hands.’ I achieved my goal, and I will continue to do so. This nervous feeling is similar to that of which I had coming to college. The, ‘Now what?’ question arises. All it means is that the possibilities are endless, and I will allow achievement to continue to motivate me.”

[Failure Avoidance] {Male} (2A)

Juan has recently graduated from Bard College, and he noted that he is very proud of himself. He graduated as a first-generation college student. In an interview that followed the reception of his degree, Juan was asked, “How have you managed to motivate yourself?” Juan answered, “I would picture what failure looks like, and I would do everything that I could to avoid failing.” The follow up question was “How did it feel to receive this degree?” and he responded, “Well, people where I am from often come from hard lives, so some people are lucky to be able to graduate from high school. When I received a scholarship to come to a prestigious institution, I felt honored and powerful. Now that I have received my degree, I am both happy and nervous.” He explained, “I am overjoyed that I didn’t fail, but I knew I would do it all along. Ever since I was younger, my tio Carlos told me to go to school, make sure never to fail, stay out of trouble, so that I can go to college. I did my best not to fail at each of these minor goals to get to the major goal, but there wasn’t much of an outline for what to do when I got to college. Thankfully, I had my advisor. I was fortunate enough to be paired with Gabriel, a professor in (Insert the Academic major of subject). Gabriel could tell when I would have second thoughts about my capability to which he would respond, ‘You have made it this far, I believe in you, do not give up, you are not a quitter! The tricky thing about success is that we do not realize that it is just beyond the horizon, but many people quit right before they are there. Do not be one of those people.’ I didn’t quit and I do not plan on doing so anytime soon. This nervous feeling is similar to that of which I had coming to college. The, ‘Now what?’ question arises. All it means is that the possibilities are endless, and I will avoid failure at all costs.”

[Failure Avoidance] {Female}(2B)

Juanita has recently graduated from Bard College, and she noted that she is very proud of herself. She graduated as a first-generation college student. In an interview that followed the reception of her degree, Juanita was asked, “How have you managed to motivate yourself?” Juanita answered, “I would picture what failure looks like, and I would do everything that I could to avoid failing.” The follow up question was “How did it feel to receive this degree?” and she responded, “Well, people where I am from often come from hard lives, so some people are lucky to be able to graduate from high school. When I received a scholarship to come to a prestigious institution, I felt honored and powerful. Now that I have received my degree, I am feeling happy and nervous.” She explained, “I am overjoyed that I didn’t fail, but I knew I would do it all along. Ever since I was younger, my tia Karlita told me to go to school, make sure never to fail, stay out of trouble, so that I can go to college. I did my best not to fail at each of these minor goals to get to the major goal, but there wasn’t much of an outline for what to do when I got to college. Thankfully, I had my advisor. I was fortunate enough to be paired with Gabriela, a professor in (Insert the Academic major of subject). Gabriela could tell when I would have second thoughts about my capability to which she would respond, ‘You have made it this far, I believe in you, do not give up, you are not a quitter! The tricky thing about success is that we do not realize that it is just beyond the horizon, but many people quit right before they are there. Do

not be one of those people.' I didn't quit, and I do not plan on doing so anytime soon. This nervous feeling is similar to that of which I had coming to college. The, 'Now what?' question arises. All it means is that the possibilities are endless, and I will avoid failure at all costs."

Did you read a scenario?

- Yes
- No

What scenario did you read?

- 1A
- 1B
- 2A
- 2B

I-E Scale

In the following section, you will be presented with 29 pairs of statements. Select one of the two options that is more in line with what the target (the individual you previously read about) would believe.

1. Select the Target's Beliefs

- A. Children get into trouble because their parents punish them too much. (Filler)
- B. The trouble with most children nowadays is that their parents are too easy with them.

2. Select the Target's Beliefs

- A. Many of the unhappy things in people's lives are partly due to bad luck. ----
- B. People's misfortunes result from the mistakes they make.

3. Select the Target's Beliefs

- A. One of the major reasons why we have wars is because people don't take enough interest in politics.
- B. There will always be wars, no matter how hard people try to prevent them. ----

4. Select the Target's Beliefs

- A. In the long run people get the respect they deserve in this world.
- B. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries. ----

5. Select the Target's Beliefs

- A. The idea that teachers are unfair to students is nonsense.
- B. Most students don't realize the extent to which their grades are influenced by accidental happenings. ----

6. Select the Target's Beliefs

- A. Without the right breaks one cannot be an effective leader. ----

B. Capable people who fail to become leaders have not taken advantage of their opportunities.

7. Select the Target's Beliefs

A. No matter how hard you try some people just don't like you. ----

B. People who can't get others to like them don't understand how to get along with others.

8. Select the Target's Beliefs

A. Heredity plays the major role in determining one's personality. (Filler)

B. It is one's experiences in life which determine what they're like.

9. Select the Target's Beliefs

A. I have often found that what is going to happen will happen. ----

B. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. Select the Target's Beliefs

A. In the case of the well-prepared student there is rarely if ever such a thing as an unfair test.

B. Many times exam questions tend to be so unrelated to course work that studying is really useless. ----

11. Select the Target's Beliefs

A. Becoming a success is a matter of hard work, luck has little or nothing to do with it.

B. Getting a good job depends mainly on being in the right place at the right time. ----

12. Select the Target's Beliefs

A. The average citizen can have an influence in government decisions.

B. This world is run by the few people in power, and there is not much the little guy can do about it . ----

13. Select the Target's Beliefs

A. When I make plans, I am almost certain that I can make them work.

B. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow. ----

14. Select the Target's Beliefs

A. There are certain people who are just no good. (Filler)

B. There is some good in everybody.

15. Select the Target's Beliefs

A. In my case getting what I want has little or nothing to do with luck.

B. Many times we might just as well decide what to do by flipping a coin. ----

16. Select the Target's Beliefs

A. Who gets to be the boss often depends on who was lucky enough to be in the right place first. ----

B. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.

17. Select the Target's Beliefs

A. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control. ----

B. By taking an active part in political and social affairs the people can control world events.

18. Select the Target's Beliefs

A. Most people don't realize the extent to which their lives are controlled by accidental happenings. ----

B. There really is no such thing as "luck."

19. Select the Target's Beliefs

A. One should always be willing to admit mistakes. (Filler)

B. It is usually best to cover up one's mistakes.

20. Select the Target's Beliefs

A. It is hard to know whether or not a person really likes you. ----

B. How many friends you have depends upon how nice a person you are.

21. Select the Target's Beliefs

A. In the long run the bad things that happen to us are balanced by the good ones. ----

B. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. Select the Target's Beliefs

A. With enough effort we can wipe out political corruption.

B. It is difficult for people to have much control over the things politicians do in office.---

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23. Select the Target's Beliefs

A. Sometimes I can't understand how teachers arrive at the grades they give. ----

B. There is a direct connection between how hard I study and the grades I get.

24. Select the Target's Beliefs

A. A good leader expects people to decide for themselves what they should do. (Filler)

B. A good leader makes it clear to everybody what their jobs are.

25. Select the Target's Beliefs

A. Many times I feel that I have little influence over the things that happen to me. ----

B. It is impossible for me to believe that chance or luck plays an important role in my life.

26. Select the Target's Beliefs

A. People are lonely because they don't try to be friendly.

B. There's not much use in trying too hard to please people, if they like you, they like you. ----

27. Select the Target's Beliefs

- A. There is too much emphasis on athletics in high school. (Filler)
- B. Team sports are an excellent way to build character.

28. Select the Target's Beliefs

- A. What happens to me is my own doing.
- B. Sometimes I feel that I don't have enough control over the direction my life is taking.--

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29. Select the Target's Beliefs

- A. Most of the time I can't understand why politicians behave the way they do.-----
- B. In the long run the people are responsible for bad government on a national as well as on a local level.

*Note. All statements that are followed with "----" receive a score of 1-point for externality.

Post-Experiment Questionnaire

How confident were you in filling out the previous scale of beliefs about the target?

1- Extremely Confident 2 3 4 5-Not Confident in the least

Are mentors important?

- Yes
- No
- I am not sure

How important is it that an individual's mentor has the same racial/ethnic identity as the individual?

1- Very Important 2 3 4 5 6 7- Not important at all

Debriefing Statement

"Hello,

Thank you for participating in my study!

Important Information: You participated in a study that looked at the differences in the perception of motivational strategies. If you were given a scenario about a target that was the same gender as yourself then you were randomly assigned a motivation strategy. Your gender, ethnicity, and academic program were all used for determining the scenario you read. The scenario you read was tailored specifically to you by generating a scenario that included an

adviser character that was a professor in your academic major. Your data was used to create more compatibility with the target in the scenario.

My study investigated the effects of ethnic matching on the perception of a Hispanic target. Your data was either compiled into an ethnic matching or non-matching condition and were then given a positive or negative motivation scenario to read and assess. You completed the I-E scale about the target, a measure that is traditionally used to assess one's own internal vs external control beliefs of locus of control. I had you fill out this scale about the target as you may recall to get a score between 0-23 (0 being the most internal and 23 being the most external). I then asked you several post-experiment questions about your confidence and the value of importance of ethnic matching in mentorships.

All of this data was crucial to my study.

If you have any questions about your data or would like to know more about this subject, please feel free to contact the primary researcher, Matthew Agosto at ma0244@bard.edu.

If you have any questions about the Bard Psychology Program, you can reach Associate Professor Stuart Levine, adviser to this project, at levine@bard.edu.

If you have questions or concerns about your rights as a research participant, please contact the Bard College Institutional Review Board at irb@bard.edu.