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It Takes Two: Compatibility of Perspectives between Students and Teachers and the Effects Effort has on Student Academic Achievement and Subjective Well-being

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It Takes Two: Compatibility of Perspectives between Students and Teachers and the Effects of Effort on Student Academic Achievement and Subjective Well-being

Senior Project Submitted to

The Division of Science, Mathematics, and Computing

Of Bard College

by

Leah Elizabeth Bracey

Annandale-on-Hudson, New York

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Dedication and Acknowledgements

This senior project is dedicated first and foremost to my God because I would not be anywhere without my faith in Him and His love for me.

Secondly, to my mother, whose presence I continue to feel and who I hope to make incredibly proud every day of my life.

Thirdly, to my Opa and Grammy, thank you for believing and investing in me even before I believed and invested in myself. I am forever grateful for your love and sacrifice.

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Abstract

This research study examined the unique matching of perspectives between teachers and students on the notion of who is assumed to be responsible for student academic achievement and subjective well-being. Students (N=190) in grades 9-11 and teachers (N=19) from a Newark, New Jersey public magnet high school completed various locus of control, classroom climate and well-being psychological questionnaires. Descriptive statistics and correlational tests were conducted for the analysis of the data. The surveys provided an in depth understanding of the distribution of perspectives which existed in this academic institution. Students found themselves, more often than not, feeling responsible for their own academic achievement. Most of the teacher population perceived themselves as not being accountable for the academic achievement of their students. Based on the results of the present study, pre-existing research and an innovative assessment for both students and teachers, a methodology for how an effort-based intervention can be an influencing factor for teacher performance in the classroom as well as student academic achievement and subjective well-being in school is proposed. Provided that the teachers and students put in the necessary effort to enhance the classroom experience for the student’s post-intervention, the expectation is that student effort will increase and consequently, so will student academic achievement and subjective well-being. The purpose of this study is to provoke thought from both students and teachers surrounding the student-teacher dynamic with regards to student academic achievement and well-being and to provide methodology via intervention for combating problems that stem from their complex relationship.

Keywords: academic achievement, locus of control, teacher-student interaction, effort, intervention
# Table of Contents

## Chapter 1: Introduction
- Educational Psychology Theory .................................................. 1
- Problem With Existing Research .................................................. 2
- Purpose, Significance and Main Question of the Study .................. 3
- Definitions of Terminology ......................................................... 4
- Organization of the Study ............................................................ 5

## Chapter 2: Literature Review
- Student Perception of Academic Abilities, Goals & Achievement .... 6
- Teacher-Student Interactions ....................................................... 7
- Teacher-Student Interactions and Academic Achievement ............. 8
- Teacher-Student Interactions and Student Subjective Well-being .... 9
- Teacher-Student Interactions, Academic Achievement & Subjective Well-Being ......................................................... 10
- Educational Psychology Instruments .......................................... 11
- Other Educational Questionnaires .............................................. 12
- Summary of Literature Findings ................................................. 13

## Chapter 3: Research Methods
- Research Questions ..................................................................... 14
- Research Hypotheses ................................................................... 15
- Population .................................................................................... 16
- Research Instruments .................................................................. 17
- Design of Research Experiment .................................................. 18
- Procedure ..................................................................................... 19
- Analysis ....................................................................................... 20
- Summary of Research Methods .................................................. 21

## Chapter 4: Results
- Descriptive Statistics ................................................................ 22
- Correlations .................................................................................. 23
- Research Questions ..................................................................... 24
- Research Hypotheses ................................................................... 25
- Discussion ..................................................................................... 26
- Summary of Results and Discussion ............................................ 27

## Chapter 5: Proposed Intervention
- Timeline and Significance ............................................................. 28
- Analysis of Open Responses ....................................................... 29
- Research Questions and Hypotheses .......................................... 30
- Teacher Methodology .................................................................. 31
- Student Methodology .................................................................. 32
- Logic ............................................................................................. 33
- Summary of Methods of Intervention ......................................... 34
## Chapter 6: Conclusion

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summary and Final Remarks</td>
<td>80</td>
</tr>
<tr>
<td>References</td>
<td>86</td>
</tr>
<tr>
<td>Appendices</td>
<td>92</td>
</tr>
</tbody>
</table>
“In order for education to be most effective, teachers must be willing to learn from students and students must be willing to educate teachers.” - Leah Elizabeth Bracey
Chapter I

Introduction

Children leave the care of their primary guardians each weekday to the care of their teachers. Children go from mainly physical care to receiving intellectual care, or at least that is what the educational system should be providing. Free and high quality education should not be inaccessible to any child, for it is absolutely fundamental for the intellectual growth of The United States of America (Banks, 2004). High quality education starts with the communal and national support of our public school systems and the teachers within them (Fine, 1947). The operation of charter, parochial, college preparatory and other private schools should not be an excuse for low quality public school education. Nor should the existence of these sorts of academic institutions be a reason why underqualified and disinvested teachers are employed and why resources are not as accessible to educate children in the public school system.

Several key figures are at the forefront of the decision-making surrounding the upkeep and progression or even regression of the United States school system (See Figure 1\(^1\)). From the macro-level of education, such as the role of the Secretary of Education, to the mid-level of education, such as administrative figures, and lastly to the micro-level of education, such as the role of the teachers. Each member of the education system makes decisions that have lasting effects on the students that are intended to be

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\(^1\) Depiction of the different degrees of influence of individuals involved in the education of students; from individuals who do not visit the schools they impact (Macro-level) to those who work directly with the students (Micro-level).
educated (Akiba & LeTendre, 2009) (p.43). As we have acknowledged the plethora of individuals that could be considered, for the specific scope of this thesis the focus will be on the micro-level individuals: the teachers and the students.

Several psychological theories guide the direction of this thesis towards the micro-level of education. Fritz Heider’s (1958) Attribution Theory is the main theory guiding this educational psychology exploration, which essentially asserts that as human beings we place responsibility and causality on ourselves, others and external forces for the various occurrences in day to day life (Heider, 1958). A plethora of phenomena derived from the Attribution Theory and consequently situated the theory into the academic setting. The Hedonic Bias (Fiske & Taylor, 1991) and Self-handicapping phenomena (Jones and Berglass, 1978), which derived from the Attribution Theory are of grave importance to the context of this study because of the support that is embedded in the very definitions of the terms.

The hedonic bias refers to when an individual takes responsibility for the successes in their life but does not take responsibility and even lays blame on others and external forces for the failures in their life (Fiske & Taylor, 1991) (Graham and Williams, 2009). This phenomenon demonstrates a combination of Crandall, Crandall and Katkovsky’s (1965) internal and external locus of control2 which is at the forefront of the methodology of this study and will be deconstructed in detail in the second chapter.

When an individual purposefully places a situational obstacle in the way of their own success so that they have something to blame for their failure is called the self-handicapping phenomenon (Jones and Berglass, 1978). The situational obstacle this definition refers to is best

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2 Intellectual Achievement Responsibility Questionnaire (1965) applies internal and external locus of control to the school setting by investigating the extent to which students feel they have control over their own academic achievement.
explained as some action that an individual does that they know will cause them to not perform well at a task in the near or distant future. An example of this in relation to educational psychology is if a student were to choose to play on their cellphone or computer during class and not pay attention after a teacher says to pay attention because that specific lesson will be on the exam. The student who actively chooses to not participate and pay attention to the lesson does this so he or she can blame their technology usage for why they failed that portion of the exam. The student blaming their technology as opposed to their own effort solidifies the self-handicapping phenomenon because that individual is initiating their own failure without claiming responsibility.

The effort of the student tends to be the blame for lack of student academic achievement, however, the role of the teacher should be included when developing theories on student academic success as well. The role of teachers is explored in theories such as the Pygmalion Theory (Rosenthal & Jacobson, 1968). It suggests that teacher expectations for a student’s academic achievement is typically a good and accurate predictor for the student’s actual academic achievement. Should teachers not outwardly express hope and promise for the academic success of all of their students? This draws into question the environment in which schools are providing for students; which should be one that encourages the fostering of the minds of today’s youth. Students, who all come from varying familial dynamics and neighborhoods before walking into the school doors, have differing perspectives on the importance of schooling and higher education influencing them (Froiland & Davison, 2016). This sort of disagreeing influence should be negated upon entry into school and persist once the child leaves back to the care of their guardians. In a world where the essentiality of education appears to be uncertain to some, it should never be uncertain to students when they are in school and when they leave school property-- especially not because the students sense that the teachers believe they will not succeed. Cognitively retraining
students by informing them that they can academically achieve with extra work, instead of allowing them think their failure and success is because of their innate abilities and inabilities, is a step in achieving the academic success of students (Weiner, 1986 and Hurner & Gaither, 2006).

It is the duty of the school system to ensure that students value, appreciate and yearn for more education (C. Wellington & J. Wellington, 1960) (p.99). Teacher perspective of what the school environment needs so that they are able to do their jobs more efficiently is only a fraction of what is needed from teachers (Rousmaniere, 1997) (p.111-112). Teacher behavior greatly influences the student’s academic achievement even more so than classroom size (Wright, Horn & Sanders, 1997). The complexities accompanying the development of the classroom teaching styles make an impact on student academic achievement\(^3\) without a doubt, but the degree of genuine concern, effort and support for students impacts academic performance\(^4\) (Ingels et al., 2008). While plenty of research has been conducted regarding the opinion of teachers and other mentoring adults, the perspective of students on the school environment and teacher performance is not as studied as it could be. Students are aware of teacher behavior and perceptions of them as a student, and this interest or lack thereof from teachers impacts student effort outcomes and consequently, student academic achievement (Weinstein, 2002). The student perspective is the other essential part of the equation to ensure the most productive and accommodating school environment and this thesis aims to demonstrate this notion: it takes two.

**The Problem**

Several researchers have conducted studies regarding the interaction between teachers and students and the effects that they have on student academic achievement. Additionally, studies

\(^3\) Achievement refers to success and reaching the set goal.

\(^4\) Performance refers to the process and method of completing the task.
concerning student-teacher interactions and the effects that they have on student subjective well-being have been tested. However, very few studies have addressed the effects of adolescent student-teacher interactions on student academic achievement, student subjective well-being and teacher and student effort after intervention. Henceforth, research that could be crucial and beneficial for educational policy and school reform has not been examined in enough depth and has unknown results.

**Purpose**

The purpose of this two-part study is to identify, in part one, the distribution of locus of control which exists in the academic institution under investigation. In other words, the degree to which teachers and students consider themselves to be responsible for student academic achievement and well-being. In part two, the aim is to develop an intervention to recommend and encourage the students and teachers to be willing to put forth effort and ensure student academic achievement and well-being after intervention based on feedback given and data collected in the first part of the study. Becoming aware of and implementing student and teacher positive input as well as constructive criticism is the most imperative function of this research because it sets the platform school reform.

**Significance**

Understanding the matchings between student and teacher locus of control, student and teacher effort, and considering the impact on academic achievement and student subjective well-being is a complex dynamic that needs to be explored further. Teacher investment and effort, as well as student effort, have been called into question for decades by parents, researchers, journalists and on a plethora of other media platforms. Following the failure of academic institutions’ abilities to meet state-wide testing standards and even the closing of several schools
nationwide, it is difficult to lay blame on one specific entity for these less than desirable results and their consequences. Studies like this have the potential to be essential for improving student and school academic achievement results, preventing school closings in the future, and transforming education.

The Question

Do students have a greater chance of academic achievement as well as being subjectively well when in the school environment if they have a high internal locus of control, are taught by teachers who have a high internal teacher locus of control, put in their own effort and have teachers who put in effort to ensure academic success?
Definitions of Terminology

**Academic Achievement:** The degree to which students subjectively believe that they have increased their knowledge and understanding, as measured by the Bracey Student Evaluation Form (2016).

**Teacher Effort:** Teacher willingness to actively change teaching behavior and method based on student feedback intervention.

**Student Effort:** Student willingness to actively change behavior based on feedback intervention.

**Internal Teacher Locus of Control:** Teacher believing, more often than not, that they are responsible for their students’ academic achievement, as measured by the Rose and Medway Teacher Locus of Control (1979).

**External Teacher Locus of Control:** Teacher believing, more often than not, that they are not responsible for their students’ academic achievement, as measured by the Rose and Medway Teacher Locus of Control (1979).

**Student Subjective Well-being:** Student level of security, comfort, happiness and self-esteem in the school environment, as measured by the Renshaw Student Subjective Well-being Questionnaire (2015).

**Student Internal Locus of Control:** Student believing, more often than not, that they are in control of their own academic achievement, as measured by the Crandall, Crandall and Katkovsky Intellectual Achievement Responsibility Questionnaire (1983).

**Student External Locus of Control:** Student believing, more often than not, that they are not in control of their own academic achievement, as measured by the Crandall, Crandall and Katkovsky Intellectual Achievement Responsibility Questionnaire (1983).
Organization of the Study

This dissertation is systematized into six chapters. The first chapter aimed to set the context for the study and described the importance of this topic within educational psychology and the larger society. In Chapter 2, there will be a focus on the previous literature and psychological instruments that embolden the research of this specific study. The third chapter conveys the methodology and procedures of the pilot testing of the study in detail. Chapter 4 describes in detail the research findings of the pilot study and provides a discussion. In Chapter 5, the proposed methodology and procedure for the intervention of the pilot study will be presented for consideration. Additionally, the reasoning behind the chosen proposed methodology will be explained as well as why it was not conducted in this study. Lastly, in Chapter 6, a summary, conclusions, references and appendices will complete this dissertation.
Chapter II

Literature Review

The following literature serves the purpose of shedding light on previous research that is related to the focus of this particular study. This literature review will demonstrate how teacher-student relationships influence academic achievement and student subjective well-being. The relationships that will be covered in this literature review are: student perception of academic abilities, goals & achievement, teacher-student interactions, teacher-student interaction and academic achievement, teacher-student interactions and student subjective well-being, academic achievement and subjective well-being, and lastly, teacher-student interactions, academic achievement and student subjective well-being. Additionally, this literature review will explore the history of the psychological instruments used in this study, as well as the development of other educational questionnaires used.
Student Perception of Academic Abilities, Goals & Achievement

Katz, Cole and Baron (1976) examined black and white late-elementary school children in hopes of discovering the relationship between social influence, self-perception of abilities and academic success. The researchers used three psychological questionnaires that tested anxiety, degree of perceived intellectual responsibility, and social support and deterring. The results of white students and black students were compared and it was found that white students tended to criticize their own work more and black students felt more criticized by their authoritative social surroundings such as by teachers and parents. This finding is interesting in the context of the current study because it addresses locus of control to an extent. For instance, the white students felt more responsible and in control of their academic work and the black students felt that regardless of the work they produced, teachers would be critical and have more control. The current study will aim to explore the aspect of control and effort of students and teachers further. A unique finding in this study was that students who were high achieving also criticized themselves and experienced more negative emotions. Both of these findings compliment the interests of the present study because of the persisting relationship among the variables of subjective well-being, academic achievement, perceived academic control, effort and the relationship between student and authoritative figures such as teachers.

Locus of control and academic performance have an undeniable relationship and Messer (1972) furthers this research in educational psychology by studying late-elementary school children. There was a focus placed on gender differences as well which sets this study aside from others. Messer found the expected and consistent result that those with higher internal locus of control via the Intellectual Achievement Questionnaire developed by V. Crandall (1965) are more likely to achieve more academically as oppose to those with higher external locus of control.
Interestingly enough, among those internal locus of control fourth-graders who achieved more academically, boy students who assumed praise for their academic achievement in class had higher test scores and contrastingly, girls who internalized responsibility for not academically achieving in class also had higher test scores. This sort of gender difference will be interesting to observe in the present study because it may or may not demonstrate itself in adolescence the way that it did in early childhood.

Rebecca D. Cox interviewed several individuals in high school, college and faculty from both secondary and undergraduate institutions in her book The College Fear Factor (2009). Pertinent to this study is her exploration of the mentality of students and teachers on the subject of effort in the classroom. According to her data, teachers found that first-year college students exhibit a behavior that they learned in high school which is having the mindset that achieving the bare minimum of “passing” the class is the goal of the student. A student supported this notion by conveying that the intention is to pass so that you can advance to the next level and/or go someplace else (p.67). This literature is essential to the scope of this research because it demonstrates how behaviors and mindsets developed and nurtured in high school carry on. The present study aims to explore a high school in depth and identify behaviors like this one but goes a step further to explore the behaviors of students and teachers.

**Teacher-Student Interactions**

As was expressed in the Introduction, the student-teacher relationship is crucial for child development because students spend several hours a day, five days a week with their teachers when they are not in the care of their parents (Fine, 1947). Students’ perceptions of their own academic abilities and overall love for school and learning stem from student-teacher interactions (Riley, 2014). Nilda Flores-Gonzalez (2002) wrote a book called *Street Kids/ School Kids* which
explored the dual lives of Latino high school students inside and outside of the school environment and how they make strides to merge the two identities. Pertinent to this study, and more specifically to this portion of the literature review, is the expressed change in relationship between students and teachers as students age. A student shared his recollection of elementary school and how what he missed most his interactions with his teachers. Flores-Gonzalez asserted that most students she interviewed recalled having a favorite teacher. The student who was sharing his recollection of elementary school continued to speak highly and more specifically about his relationships with his teachers. For instance, he explained the mutual respect that was between students and teachers; the love, support, nurturing, warmth, safety from persecution, and being taught new, fun, and applicable information. Other students go on to say that they felt teachers cared less about them as they advanced to higher grade levels. Additionally, the students admitted to putting in less effort to excel and more to prove people wrong who did not believe in them. Based on these student reflections, it is evident that there are desired characteristics of teachers and students notice when relationships with teachers change. The student awareness of teachers demonstrated in this book influences the intervention aspect of the current study.

Focus is often placed on the perspective of the student for their understanding of their relationship with their teacher. Contrastingly, this study by Saft and Pianta (2001) takes a closer look at the perspective of teachers and how they view their relationship with their students. Studies such as this are invaluable to research such as the present study because exploring and receiving an understanding of both students and teachers is essential in school intervention. This multivariate analysis looks at variables such as the ethnicity, age and gender of students and assesses how these factors contribute to teacher perspective. The researchers focused primarily on the ethnicity of the teacher compared to the ethnicity of the student. Ultimately, Saft and Pianta uncovered a strong
relationship between student and teacher ethnicity which suggested that race impacted the teacher-student interactions; if the student shared the same race and the teacher then there was a perceived stronger connection and vice versa. This study demonstrates how significant likeness is to the teacher-student interaction and that it is something that should be researched further and intervened upon because physical likeness should not be a deciding factor in the world of academia. This finding is essential in the foundation of the current study because although physical likeness is explored in the discussion of the present thesis, likeness of perception of attribution in terms of academic achievement is at the forefront of the study. Likeness does have an undeniable impact on relationships in general, but in the classroom, academic achievement should be the main likeness shared by students and teachers and the reason why will be explored throughout the study.

**Teacher-Student Interactions and Academic Achievement**

Gehlbach and colleagues (2016) researched in how identifying similarities between teacher and student and making the similarities known improves their interaction and the student’s academic achievement. The researchers pooled together 25 teachers and 315 ninth grade students in the United States. The students were asked how similar they feel they are to their teachers. Teachers were also questioned about similarity to individual students. The teachers and students individually completed a Get-To-Know-You survey which was a multiple choice questionnaire regarding their interests and values. The researchers then selected some teachers and students and told them of five identified similarities between teacher and student. The study found that when teachers and students realized that they shared interests, teachers and students perceived their relationship as being more favorable, and consequently the students had higher grades in the class. Academic achievement in this study was correlated with similarities between student and teacher. There was an intervention in this study that helped to identify the similarities between student and
teacher. Although intervention of the researchers proved to be beneficial when mediating a positive relationship between student and teacher via similarities, it is still essential to explore the teaching methods in the classroom because remembering similarities may not maintain academic interests and effort of the students or the teachers. The current study uses a similar effort-based basis for the intervention in Chapter 5.

Rhona S. Weinstein (2002) wrote a book discussing her several case studies regarding teacher-student interactions and academic achievement. One study she conducted was involving fourth grade students and their teachers. Weinstein observed students in the classroom and the way in which some students did and did not interact with the teachers. Interested in the students who did not interact with the teachers when called upon, Weinstein interviewed these students about how they felt about the class and the teacher and then asked the students to rank themselves in comparison to their peers as far as being closer to the “top of the class” or the “bottom of the class”. Anonymously the teachers were made aware of the comments by the students and were embarrassed to find out what the students thought or noticed in teacher behavior. Teachers were embarrassed of the findings but also were upset that they do not have the time to really get to know the students more on an individual level. The essential takeaway from this study for the researcher and teachers was that encouraging, valuing and demanding the attention and contribution of each student is a key factor in accessing the true capacity of the students. Weinstein essentially grasped the need for intervention because if there are disconnects amongst the encouraging, valuing and demanding of the attention of students, then there is a loss of effort on not only the side of the student but the side of the teacher and both parties are cheated of intellectual stimulation. These three variables are essential in the development of an intervention that is geared toward student academic success which this study and proposed intervention hope to accomplish.
Teacher-Student Interactions and Student Subjective Well-being

Stevenson (2008) elaborated on the importance of the relationship between students and teachers in the classroom environment and how that dynamic influences student well-being. The focus of this study is students of color being removed from the classroom due to extenuating circumstances that are rooted in the student-teacher day-to-day interaction. Student and teacher mutual trust for one another is the causal variable of suspension rates in this sample high school. This analysis of the teacher-student interaction lays emphasis on the role of the teacher and how critical them being mindful of the student’s feelings, perspective and multiculturalism in the classroom is to the overall well-being of the student. In the discussion it is mentioned how this interaction dictates student interactions with other teachers as well as motivation to pursue academics further in the future. Negative teacher-student interactions like this are assessed in the intervening portion of the present study because as is presented in this existing literature, it is a determining factor in student well-being.

Students of color’s attachment to their teachers and the subjective well-being of the students was explored further by Murray, Kosty and Hauser-McLean in 2016. The two experiments within this study used over 300 children and adolescents of color in order to assess the significance of the teacher-student relationship on student well-being. Both studies found that students of color from urban neighborhoods relied on the social and emotional support of their teachers when discussing their well-being in the school environment on a self-report questionnaire with their parents. This study provides groundwork and support for the notion that students genuinely do rely on their teachers for more than academic purposes. The influence of teacher-student relationships on student subjective well-being is a factor that will continue to be validated
and explored in relation to academic achievement and student-teacher efforts in the classroom environment.

**Teacher-Student Interactions, Academic Achievement and Student Subjective Well-being**

Ali Eryilmaz (2012) conducted a study in Turkey where he identified which specific personality characteristics are essential for being an effective teacher. His understanding of what constituted being an effective teacher were the measurements of students’ subjective well-being and if they were academically successful. Eryilmaz hypothesized that by using the Big Five Personality Model (John and Srivastava, 1999), one could predict not only the likability of a teacher by his or her students, but also how the students will perform academically and see themselves as an individual. Accompanying the personality model was a qualitative questionnaire which essentially asked the students to list traits that would describe teachers they liked, felt neutral about, and disliked. The students were then asked how liked and disliked teachers make them feel about learning and the teachers’ specific lessons. The results showed that teachers who were seen as liked by their students, had students that achieved higher academically. Liked teachers possessed high agreeable, extraverted, conscientious and openness trait scores on the Big Five Personality Test. Neutral and Disliked teachers obtained significantly lower scores on the instrument and as a result their students did not achieve as high academically nor have positive affection. The honored perspective of the students is something that this study strives to embrace and place on a pedestal because the students are the ones who are in the classrooms every day and know what they are and are not receiving and starting with the students can only be beneficial when intervening in the practices of teachers and behaviors of students, which is the aim of the second portion of this study.
Rotter Internal/External Locus of Control Scale

In 1966, Julian B. Rotter developed a groundbreaking psychological instrument called the Internal/External Locus of Control Scale. This scale provided a way for measuring the extent to which an individual believed that they were in control of their own lives. The two subscales were internal locus of control and external locus of control. Internal locus of control signifies that an individual believes that they are in control of their own life. External locus of control signifies that an individual believes that the world around them is in control of their lives. The scoring of this 29-item force choice questionnaire only counts the external locus of control answer choices. Out of the 29 items, only 23 can receive scores and the greater the amount of external locus of control answers, the higher the amount of points. For instance, scores that are greater than 12 indicate a high external locus of control and scores that are less than 10 signify a low external locus of control which essentially means that the individual is higher in internal locus of control (Lefcourt, 1991).

It is imperative that one know that when scoring, scores are relative to what the mean of all scores in the sample are. The scoring parameters that classify an individual into the subscales are subject to change depending on the scores received. Rotter’s scale has been used in several studies for decades and is still used. In educational psychology, this scale was used to study the relationship among locus of control, academic achievement and both persona and academic self-esteem (Smith, Sapp, Farrell, & Johnson, 1998). The study found locus of control to be a good predictor of academic achievement in the private school setting. This psychological instrument will be used as a tool for understanding students’ locus of control because there is no existing student locus of control scale that measures the extent to which students believe that they are responsible for their academic achievement.
Intellectual Achievement Responsibility Questionnaire

A year prior to Rotter’s scale regarding individual’s perspectives of the world around them, Crandall, Katkovsky and Crandall (1965) invented a psychological questionnaire headed in a similar direction called the Intellectual Achievement Responsibility Questionnaire. This questionnaire attended to locus of control, same as Rotter, but narrowed the context to the school environment and the population from everyone to specifically focusing on students. This 34 itemed, forced-choice, a-b scale requires school children to select one of two options that they feel they identify with most. The options are scenarios in the form of questions where the student has to select one explanation for the reasoning behind an outcome. Essentially the students are being called to play a game of cause and effect. The following is an example from the questionnaire (Crandall et al., 1965).

3. When you have trouble understanding something in school, is it usually
   A. Because the teacher didn’t explain it clearly, or
   B. Because you didn’t listen carefully?

This sort of question provides the student with the opportunity to either claim responsibility for their academic achievement or to attribute their academic success or failure to external forces and other individuals. Students receive a score on a scale of 0-34 and the closer that they are to 0 they are more external and the score that is closer to 34 signifies that they are more internal in their locus of control in the school environment. Crandall et al. also provide a method for configuring the degree of hedonic bias in students by labeling which answers to each question should receive points for internal and external locus of control and based on the total number of points for each subscale of control, you can view their hedonic bias.
Rose & Medway Teacher Locus of Control Scale

The Rose and Medway Teacher Locus of Control Scale was developed in 1981 by Janet S. Rose and Frederic Medway. This scale measures the extent to which teachers believe that they are responsible for the academic achievement of their students. This 28-item scale (See Appendix E) contains force choice response selections; one answer is an external locus of control answer and the other is an internal locus of control answer. When scoring this instrument, only the internal locus of control items receive points. If over half of the answer choices are internal locus of responses, then the teacher would be considered a teacher who believes that they are, more often than not, responsible for student academic achievement. If under half of the answer choices are internal locus of control responses, meaning that the majority are external locus of control responses, then the teacher would be considered a teacher who believes that they are not typically responsible for the academic achievement of students. This psychological instrument has been used in a plethora of studies and Rose & Medway, the developers of the scale, utilized it in their study (1981) to demonstrate the effects of teacher and student behavior on student academic achievement. The scale helped to demonstrate how locus of control is a determinant of behavior and in turn student academic achievement. This psychological instrument is essential in the construction of this study because it provides a means of measuring teacher subjective claim of responsibility of student academic achievement and the ability to formulate pairings between teacher and student locus of control.

Student Subjective Well-being Questionnaire

The Student Subjective Well-being Questionnaire (SSWQ) is a new scale created in 2015 by Tyler Renshaw. This questionnaire examines the emotional, social and intellectual experiences of students while in the school environment (See Appendix B). There are 16 statements and the
students indicate, using the Likert Scale, the extent to which they agree with the corresponding statement on the left (1 = Almost Never, 2 = Sometimes, 3 = Often, and 4 = Almost Always). There are four subscales in this questionnaire and four questions related to the specific subscale that the student can receive a score for: Joy of Learning, Educational Purpose, School Connectedness, and Academic Efficacy. The maximum score for each subscale is 16 and the maximum total subjective well-being score is 64. Larger scale score numbers signify higher levels of student well-being. This scale has primarily been used to assess the psychological well-being of African American students (Renshaw, 2015). Although this scale has not been heavily used by other researchers, due to its novelty in the educational psychology field, it has still been proven to be a reliable and valid indicator of student subjective well-being in the school environment.

**Other Educational Questionnaires**

**Bracey Student Evaluation Form**

The Bracey Student Evaluation Form (Bracey, 2016) asks 16 questions on a Likert scale rating course material, self-performance, as well as teacher performance in the class, 4 other academically reflective questions regarding student subjective self-performance, and 2 open response questions pertaining to the classroom dynamic/environment (See Appendix C). There are no filler questions, for each question is equally important and holds the same weight as the question itself and the only weight applied is the response given. To score this questionnaire one assigns 1 point for strongly disagree, 2 points for disagree, 0 points for neutral, 3 points for agree, 4 points for strongly agree and 0 points for not applicable. The maximum score for the Likert scale portion of this questionnaire is a 64 which indicates an overall positive assessment of the academic institution. This questionnaire serves the purpose of understanding the climate of the school as perceived by students. Questions can also be singled out for correlational use in other
psychological instruments. The students evaluate the institution as a whole with specific focus on the curriculum, teacher efforts and their own efforts.

**Bracey Teacher Evaluation Form**

The Bracey Teacher Evaluation Form (Bracey, 2016) is a 19 item survey that asks the teacher to assess the extent to which they agree with statements regarding their performance as a teacher as well as their perceived influence in the classroom environment. There are 15 Likert Scale questions and the remaining four are open response questions (See Appendix D). The Likert Scale questions assess teacher perceptions of themselves in the classroom environment with regards to their preparedness with course materials, engagement with students and overall comfort in their school setting. The four open response questions call on the teacher to reflect on a more personal level using specific detail what they feel their strengths and weaknesses are in the classroom, what they favor most about teaching, as well as how they feel that they can improve in their teaching methods. There are no filler questions, for each question is equally important and holds the same weight as the question itself and the only weight applied is the response given. To score this questionnaire one assigns 1 point for strongly disagree, 2 points for disagree, 0 points for neutral, 3 points for agree, 4 points for strongly agree and 0 points for not applicable. The maximum score for the Likert scale portion of this questionnaire is a 60 which indicates an overall positive teacher subjective sense of control over their own classroom environment and teaching abilities. This questionnaire serves the purpose of understanding the climate of the classroom as perceived by teachers. Questions can also be singled out for correlational use in other psychological instruments. The teachers contribute in the evaluation of the institution as a whole with specific focus on teacher comfort in relation to student interaction, organization of curriculum, teacher efforts and well-being.
The measuring of student-teacher interactions in regards to academic and subjective well-being is proven to be essential in developing a productive school environment for both students and teachers, as was demonstrated in the previous research explored in this chapter. With the existing research as a guide, this study was developed in the hopes of uniting the perspective of the student and the teacher with equal measure which is evidently not as common in educational psychology research. The research mentioned above portrays either the importance of the existing student-teacher interaction or ways of achieving it and the present study aims to provide both in one two-part study utilizing one sample school. An emphasis was placed on the aspect of the intervention in the Gehlbach and colleagues (2016) study which inspired the duality of the actual experiment and proposed intervention of the present study. All studies stress the importance of like-mindedness, whether that be in extracurricular activities, perceptions of the world, moral beliefs and various opinions about education. On the same hand, the detriment that comes with not sharing similar beliefs on some of these topics has presented itself not only in regards to academic achievement but also to subjective well-being. The motivation and effort of both teacher and student, as proved in the above studies and using the above psychological scales, has resulted in the highest academic achievement and subjective well-being.
Summary

This literature review aimed to situate the present study into the educational psychology context using existing research and texts. Several articles pertaining to student-teacher relationships/interactions, academic achievement, well-being and student and teacher distinct perceptions were recapped and connected to the present study. The three foremost findings of the explored existing research essentially stressed (1) that teacher and student compatibility of perspectives/ likeness heavily influenced the student-teacher relationship, (2) the importance of both student and teacher putting forth effort to ensure student academic achievement and subjective well-being. The psychological instruments and other educational questionnaires to be used in the current study were summarized and reviewed, and (3) the need for intervention between students and teachers because teacher initiated intervention is not typically feasible.
Chapter III

Research Methods

Part one of this study is examining the possible matches between teacher and student locus of control and the perceived effects that these matches have on perceived student academic achievement and student subjective well-being in the school environment. The locus of control descriptive statistics of one high school is configured and assessed. In this chapter, the research questions, research hypotheses, population and specific sample are explained. Additionally, psychological instruments and non-psychological questionnaires that are used in the study are examined in the context of this study. Lastly, the design of the study, procedure and analysis will be covered in fine detail.


**Research Questions**

This study is divided into two parts and for clarity, only the research questions relevant to the first part, the experimental section, are presented below. The research questions pertaining to the second part of the study, the intervention, are presented in Chapter 5.

1) What variations of locus of control matchings can exist between student and teacher, and which ones exist in this specific high school?

2) What are the effects of student-teacher interactions on student and teacher effort in pursuit of academic achievement and student subjective well-being in school?

**Research Hypotheses**

This study is divided into two parts and for clarity, only the research hypotheses relevant to the first part, the experimental section, are presented below. The research hypotheses pertaining to the second part of the study, the intervention, are presented in Chapter 5.

\( H_1 1: \) Teachers with high internal locus of control, as measured by Rose & Medway’s Teacher Locus of Control Scale, will most likely agree that they tailored their teaching methods to accommodate their students, as measured by the Bracey Teacher Evaluation Form.

\( H_1 2: \) Teachers with low internal locus of control, as measured by Rose & Medway’s Teacher Locus of Control Scale, will most likely have low job satisfaction, as measured by the Bracey Teacher Evaluation Form.
\( H_1.3: \) Teachers with high internal locus of control, as measured by Rose & Medway’s Teacher Locus of Control Scale, will most likely agree that they have positive interactions with their students, as measured by the Bracey Teacher Evaluation Form.

\( H_1.4: \) Teachers with low internal locus of control, as measured by Rose & Medway’s Teacher Locus of Control Scale, will most likely not demonstrate a need for self-improvement to aid in a more successful classroom environment, as measured by the Bracey Teacher Evaluation Form.

\( H_1.5: \) Students with high internal locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, will have a more positive rating of subjective well-being, as measured by the Student Subjective Well-Being Questionnaire.

\( H_1.6: \) Students with low internal locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, will have a less positive rating of subjective well-being, as measured by the Student Subjective Well-Being Questionnaire.

\( H_1.7: \) Students with high internal locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, will most likely agree that they participate often in class, as measured by the Bracey Student Evaluation Form.

\( H_1.8: \) Students with low internal locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, will most likely spend less time studying outside of class, as measured by the Bracey Student Evaluation Form.
\( H_19: \) Students with high internal locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, will most likely indicate having a subjectively higher mean grade for all of their classes, as measured by the Bracey Evaluation Form.

\( H_110: \) There will be a significant relationship between student locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, and student subjective well-being, as measured by Renshaw’s Student Subjective Well-Being Questionnaire.

**Population**

Students and teachers from a magnet public school in Newark, New Jersey were recruited for this pilot study. The campus was contacted via email and personal visit. There are a chain of similar magnet public schools throughout the country, which all offer a unique take on public school education offering college level courses for 11\(^{th}\) and 12\(^{th}\) grade students who are labeled in the school and in this study as Year 1 and Year 2 students to indicate that they are enrolled in college and accepting college credits. Those students in 9\(^{th}\) and 10\(^{th}\) grades abide by an advanced level of the existing city public school curriculum. This chain of public magnet schools undoubtedly raise the standard of secondary education which make them phenomenal research participants. The students and teachers who attend and work for this magnet public school network all arrive at the institution with the common belief that the gap between high school and college should be smaller than it is currently in your average public high school.
Newark Public Magnet High School

This Newark, NJ public magnet high school is the pioneer of the chain of similar public magnets school as well as a for public high schools nationally because of their willingness to explore the perspectives and expressed needs of their students and faculty members. This high school is comprised of about 30 teachers, 10 counselors and administrators, and 275 students. Of that population, 26 teachers and 209 students participated in the study; 19 teachers and 184 students completed all materials to fruition. One hundred and ninety students completed the first two questionnaires placed before them. The majority of the participants were 9th and 10th grade students and only 34 participants were Year 1 students and there were no Year 2 participants for they were not available during the time of research conducting. Some teachers occupy other administrative roles in the school so about 32 faculty/staff members teach students. Each classroom on average had about 17 students and the students have around 5 instructional classes per day. The classroom student to teacher ratio is 1 teacher per 17 students per class period, 1 teacher instructing an average of 3-4 courses per day which leaves them responsible for about at least 60 students. Furthermore, the teachers accommodate students of various special learning needs and provide additional resources and time for these students. The majority of student participants were in the 9th and 10th grades. The compensation for participation in this pilot study was entrance into two raffles for a chance to win Bard College apparel and other merchandise.

Psychological Instruments

A total of 3 psychological instruments were involved in the conducting of this experiment. The teachers completed the Teacher Locus of Control Scale (Rose & Medway, 1981) as their only psychological test. The students were administered two psychological assessments during this
experiment which are the Intellectual Achievement Responsibility Questionnaire (Crandall et al., 1965) and the Student Subjective Well-being Questionnaire (Renshaw, 2015).

Other Educational Questionnaires

Two non-psychological questionnaires were completed by the student and teacher participants of the academic institutions. Both questionnaires were created for the specific purpose of this study. One questionnaire is called the Bracey Student Evaluation Form which was administered to the students and the other is called the Bracey Teacher Evaluation Form which was distributed to the teachers (Bracey, 2016).

Design

The design of this study was to present the students and teachers with their appropriate questionnaires to be completed within the fifty minutes of their class period. The first part was when the students and teachers took the Locus of Control Questionnaires. Secondly, both completed their respected Bracey Evaluation Forms and the students also took the Well-being Questionnaire. Following the categorization of teachers and students into locus of control and evaluation groups, scientific conclusions, based on the matchings of the students with the teachers and the evaluation results, are drawn. This design lays the groundwork for the second portion of the study; the proposed intervention which starts at Chapter 5.

Procedure

Teachers

All teachers were informed about the study being conducted at their school during their weekly afternoon faculty meeting. After the participants inquired about the study either in person or via email, and expressed interest, they received the link to the online version of study via email
with the option to complete it. Data collection for the teachers was conducted over the course of a week. The questionnaires were administered via Survey Monkey\(^5\). The teachers who felt comfortable, consented and completed the whole of or a portion of the two questionnaires. The teachers completed the questionnaires during their free-time and the response rate was typically highest during the lunch or free-periods of the teachers. The first page of the online version of the study had a few demographic questions regarding the gender and campus location of the teacher were requested. Furthermore, the name of the teacher was requested for input into the compensatory raffle. The teachers were reminded on numerous occasions that their responses were confidential, anonymous and would not have any effect on their employment. The first questionnaire that was completed was the Teacher Locus of Control Questionnaire (Rose and Medway, 1975). Next, the teacher went to the following online page and completed the Bracey Teacher Evaluation Form (Bracey, 2016). If the teacher still felt comfortable, they had the option to submit their responses or to click exit without submitting. The average completion time for the teacher questionnaires was 10 minutes with the least amount of time being 7 minutes and the longest amount of time being 28 minutes.

**Students**

The students were informed during their English classes about the study being conducted at their school. The students who participated in the study completed the study using school provided laptops. They were given a web-link that would connect them directly to the survey which was administered via Survey Monkey. Upon arrival to the online version of the questionnaires, the students were presented with a home page of with a recitation of their rights which were spoken

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5 Survey Monkey is a surveying and data collection website. SurveyMonkey Inc. of San Mateo, California, USA [www.surveymonkey.com](http://www.surveymonkey.com)
to them several times, as well as the option to stop at any time during the questionnaire. Twenty students stopped a portion of the way through and around 75 students did not wish to participate or did not have permission. The names of the students were also requested before the beginning of the first questionnaire so that the students could be entered into the raffle to receive Bard College merchandise. Students were reassured on numerous occasions that their names would not be tied to this study whatsoever and that their names would be deleted and not traceable by anyone affiliated with their academic institution nor by any other party. Even with the emphasis on anonymity, some students still did not feel comfortable putting their name in the raffle and their decision was respected. Students were asked demographic questions regarding their grade and gender and then the following pages were the three questionnaires. The students were allotted 50 minutes, the duration of their class period, to complete the questionnaires once they had read the instructions and asked any questions regarding the instructions. The first questionnaire completed was the Intellectual Achievement Responsibility Questionnaire (Crandall et al., 1965). Following the first questionnaire, the students took the Student Subjective Well-being Questionnaire (Renshaw, 2015). Lastly, the students took the Bracey Student Evaluation Form (Bracey, 2016). The average completion time for the three questionnaires was about 25 minutes with the least amount of time being 15 minutes and the longest being 45 minutes.

**Data Analysis**

The student and teacher participants were given a number that was used to identify them but to keep their results anonymous. Each student Intellectual Achievement Questionnaire response and each Teacher Locus of Control response was marked and categorized into either being labelled Internal or External for that specific participant’s locus of control. The scores of the Student Subjective Well-being Questionnaire were also placed with the results of the student
participants, followed by the totals from the Bracey Student Evaluation Form. Similarly, the scores from the Bracey Teacher Evaluation Form were computed and assigned to the respected teachers. The scores of all of the questionnaires completed by the teachers and students were condensed into two IBM SPSS files. The document was organized as follows:

Table 1

Proposed Organization of Collected Student Data

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Grade Level</th>
<th>Gender</th>
<th>Average Grade</th>
<th>Locus of Control</th>
<th>Hedonic Bias</th>
<th>Well-being</th>
<th>Bracey Evaluation</th>
<th>Open Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>9th</td>
<td>She/Her/Hers</td>
<td>B</td>
<td>Internal</td>
<td>No</td>
<td>60</td>
<td>55</td>
<td>I felt……</td>
</tr>
<tr>
<td>2.00</td>
<td>10th</td>
<td>They/Them</td>
<td>A</td>
<td>External</td>
<td>Yes</td>
<td>34</td>
<td>38</td>
<td>More….</td>
</tr>
<tr>
<td>3.00</td>
<td>9th</td>
<td>He/Him/His</td>
<td>C</td>
<td>External</td>
<td>No</td>
<td>42</td>
<td>30</td>
<td>Nothing…</td>
</tr>
<tr>
<td>4.00</td>
<td>Year1</td>
<td>She/Her/Hers</td>
<td>A</td>
<td>I/E</td>
<td>Yes</td>
<td>50</td>
<td>45</td>
<td>Teacher…</td>
</tr>
</tbody>
</table>

The data below is not actual data from this study but rather an example of how data may look.

Table 2

Proposed Organization of Collected Teacher Data

<table>
<thead>
<tr>
<th>Respondent</th>
<th>Campus</th>
<th>Gender</th>
<th>Teacher Locus of Control</th>
<th>Bracey Evaluation</th>
<th>Open Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1.00</td>
<td>Newark</td>
<td>He/His</td>
<td>Internal</td>
<td>53</td>
<td>Improve….</td>
</tr>
<tr>
<td>T2.00</td>
<td>Newark</td>
<td>He/His</td>
<td>External</td>
<td>40</td>
<td>Include…..</td>
</tr>
<tr>
<td>T3.00</td>
<td>Newark</td>
<td>She/Her</td>
<td>External</td>
<td>38</td>
<td>Teach at….</td>
</tr>
<tr>
<td>T4.00</td>
<td>Newark</td>
<td>They/Them</td>
<td>Internal</td>
<td>56</td>
<td>Slow….</td>
</tr>
</tbody>
</table>

The data above is not actual data from this study but rather an example of how data may look.
Summary

Chapter 3 explained an in depth report of the performed methodology. Via online and paper format, three questionnaires were administered to 190 students at the public magnet high school in Newark, New Jersey. Over the course of a week, data was collected from students and teachers. The students first completed the Intellectual Achievement Responsibility Questionnaire (1965), followed by the Student Subjective Well-being Questionnaire (2015) and concluded with the Bracey Student Evaluation Form (2016). Nineteen out of thirty teachers participated in the study by completing two questionnaires. First, the teachers completed the Rose and Medway Teacher Locus of Control (1975) and then finished their participation by completing the Bracey Teacher Evaluation Form (2016). Data was collected for analysis using Survey Monkey, exported into a Microsoft Excel document and finally imported into IBM SPSS24.

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6 Microsoft Excel of Microsoft Corporation of Albuquerque, New Mexico, U.S. www.microsoft.com
Chapter IV

Results

This chapter aims to discuss, in depth, the findings of the present study. This will be accomplished by examining the distribution of perspectives of students and teachers found at this Newark public magnet high school. Furthermore, the research questions and hypotheses pertaining to this portion of the study will be addressed. Intercorrelations between different variables will be reviewed and significant correlations and lack thereof will be discussed at length.
Descriptive Statistics

Students

Ninth, tenth and eleventh grade students from this public magnet high school in Newark, New Jersey, after completing three questionnaires (IARQ\textsuperscript{8}, SSWQ and Bracey Student), made it possible to understand the lay of the land of the school from the perspective of the student-body.

Table 3
Descriptive Statistics of Student Locus of Control, Well-being and Perception of Classroom and School Climate

<table>
<thead>
<tr>
<th></th>
<th>IARQ</th>
<th>SSWQ</th>
<th>Bracey Student</th>
</tr>
</thead>
<tbody>
<tr>
<td>$N$</td>
<td>190</td>
<td>190</td>
<td>182</td>
</tr>
<tr>
<td>$\bar{x}$</td>
<td>24</td>
<td>46.50</td>
<td>37.25</td>
</tr>
<tr>
<td>$\sigma_x$</td>
<td>3.42</td>
<td>7.43</td>
<td>10.57</td>
</tr>
<tr>
<td>Md</td>
<td>25</td>
<td>46</td>
<td>38</td>
</tr>
<tr>
<td>Mo</td>
<td>27</td>
<td>48</td>
<td>35</td>
</tr>
<tr>
<td>Possible Range</td>
<td>0-32</td>
<td>0-64</td>
<td>0-64</td>
</tr>
<tr>
<td>Range</td>
<td>13-32</td>
<td>28-64</td>
<td>12-61</td>
</tr>
</tbody>
</table>

One hundred and ninety students took the Intellectual Achievement Responsibility Questionnaire (IARQ) (Crandall et al., 1965). Out of the 190 student participants, 129 were

\textsuperscript{8} Intellectual Achievement Responsibility Questionnaire, Student Subjective Well-being Questionnaire and Bracey Student Evaluation Form
classified as internal locus of control\(^9\), which means that a little over two/thirds of the sample population believes that they are responsible for their own academic achievement. The remaining 61 student participants were classified as external locus of control, signifying that they believe that other people and external forces are responsible for their academic achievement. The lowest possible score, as mentioned in Chapter 2, is a 0 and the highest score 34; closer to 0 meaning an external locus of control and the closer to 34 then the individual has an internal locus of control. The range of the student body locus of control was 13 as the minimum locus of control and 32 being the highest, most internal locus of control. The average locus of control score for the student sample population was a 24, thus the school sample population had a primarily internal locus of control student body. The standard deviation was a 3.42, indicating that the individual results were relatively close and similar to the mean locus of control. Additionally, the median score was 25 and the mode score was 27.

Based on the individual locus of control results from the Intellectual Achievement Responsibility Questionnaire (Crandall et al., 1965), it was possible to identify hedonic biases in the sample population. The IARQ by Crandall et al. provided a way of configuring the hedonic bias, explored further in the discussion section, of the individual participants based on assigned points to specific answers to the questions. Fifty-eight of the 190 student participants displayed a hedonic bias, which as was mentioned in Chapter 1, is the possession of the mentality that one is responsible for all of the positive occurrences in their life but not responsible for the negative occurrences in their life (Fiske and Taylor, 1991). In relation to this specific school context, the hedonic bias of the 58 students essentially means that those 58 students believe that when they do well academically in school that they are responsible for those successes, and when they do not do

\(^9\) Classifications for Internal and External Locus of Control were determined based on Crandall et al.’s (1965) method of scoring as detailed in Chapter 2.
well academically, it is the fault of external forces such as teachers, administrators, parents, friends, physical ailments and any and all other causes.

The following questionnaire that the students took was the Renshaw Student Subjective Well-being Questionnaire (SSWQ) (Renshaw, 2015) which explored the overall well-being of the student in the school environment. The lowest possible score for Questionnaire is a 16 and the highest possible score is a 64. The sample population received a range of well-being scores that were including and between 28-64; some members of the student population are fully happy in the school environment and some are unhappy in the school environment. Placing these two polarizing scores into context, it is essential to note that the mean score was a 46.50 with a standard deviation of 7.43. The students are for the most part subjectively well. The median score was 46 which is close to the demonstrated mean. The most common score amongst the students was a 48 and the least common score was a tie amongst the four lowest scores (28,30,32 and 33) and they all had one. The lowest scores are mentioned because it is imperative that one understands when understanding these results that a few low scores out of the 190 participants brings down the average well-being score of the students.

Out of the 182 participants who took the Bracey Student Evaluation Form (Bracey, 2016) to portray the classroom and school climate, the range of scores demonstrated a low of 12 and a high of 61. The possible score range was 0 to 64. As was the case for the Student Subjective Well-being Questionnaire (Renshaw, 2015), the lowest frequency scores were the lowest scores in the range of student submitted scores (12,13,16,23 and 24) which all had one participant ratings. The highest frequency score was a 35, demonstrating a mid-range satisfaction with the classroom and school climate with regards to self-performance, teacher performance and school course material. The mean score was a 37.25 which was close to the highest frequency score and the standard
deviation was 10.57 which is a relatively high standard deviation indicating significantly varying individual results. The demonstrated median for the student population was 38 which, similarly to the Renshaw Student Subjective Well-being Questionnaire (2016), is close to the mean. The Bracey Evaluation score also provided the students an opportunity to indicate what level of achievement they believe that they are at in school if they were to take the average of all of their cumulative grades for all of their classes. The question essentially asked students “What type of student are you: primarily A-grades student, B-grades student, C-grades student, D-grades student, or F-grades student?” The highest frequency response, with 79 responses, was students indicating that they are primarily B-grade earning students. The lowest responses were D-grades and F-grades which were both about 10 responses collectively out of 182 responses to the questionnaire. The students also indicated the amount of time that they spent studying per week outside of class and homework assignments and the students primarily indicated that they spend between 0-3 hours a week studying for their classes, which was the response of 145 students. The students also had open responses which will be discussed at length in Chapter 5: The Intervention.
Teachers

Thirty professors teach at the public magnet high school in Newark. The teachers completed two questionnaires regarding their locus of control and perception of their classroom climate. Based on the responses, understanding the faculty-body became feasible and the results are as follows.

Table 4

<table>
<thead>
<tr>
<th></th>
<th>TLC</th>
<th>Bracey Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td><strong>X</strong></td>
<td>12.89</td>
<td>40.89</td>
</tr>
<tr>
<td><strong>σX</strong></td>
<td>6.63</td>
<td>16.10</td>
</tr>
<tr>
<td><strong>Md</strong></td>
<td>12</td>
<td>46</td>
</tr>
<tr>
<td><strong>Mo</strong></td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td><strong>Possible Range</strong></td>
<td>0-28</td>
<td>0-60</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>0-28</td>
<td>0-56</td>
</tr>
</tbody>
</table>

Out of 30 teachers, 19 completed the Teacher Locus of Control and the Bracey Teacher Evaluation Form. After understanding the student body locus of control, attention is now placed on the locus of control of the faculty-body. The range of possible scores are from 0 to 28, typically scores that are below 14 are considered to be under the external locus of control subscale and the results at or above 14 are considered internal locus of control subscale scores. The range of scores of two thirds of the faculty are between 0 to 28, this is a faculty of diverse perspectives on educational achievement of students. The faculty is comprised of majority external locus of control.
faculty members with 11 external and 8 internal locus of control perspectives. This ratio indicates that the majority of the faculty who participated in the study believe that student academic successes and failures are the cause of student performance most of the time. The mode Teacher Locus of Control score was an 8 which occurred four times. The mean score of the faculty was 12.89 with a large standard deviation of 6.63 which is due to the fact that one person had a score of 0 and another individual had a score of 28 and that polarization demonstrated its effect on the average score.

The other questionnaire the faculty members completed was the Bracey Teacher Evaluation Form. The lowest possible score was a 0 and the highest was a 60 and of that boundary, the faculty had a range of scores with a minimum of 0 and a maximum of 56. It is essential to note that in scoring the Teacher Locus of Control, the 0 score stemmed from a faculty member who selected all “Neutral” responses which all individual “Neutral” responses received a 0 score because they are neither in support or negation of the statement. The mean score was a 40.89 with a standard deviation of 16.10, similarly to the Teacher Locus of Control results, this is a relatively high standard deviation which shows a large amount of variance in the scores of the faculty. The score most received by teachers was a 53 rating of the classroom climate. Based on the mean and mode scores of the faculty, it is concluded that the classroom climate from the teacher perspective is a relatively positive one. The teachers were presented with the opportunity to answer open-response questions regarding their own evaluation of their performance in the classroom. These responses are discussed at length in Chapter 5: The Intervention.
Correlations

The student results displayed additional intercorrelational results. The Intellectual Achievement Responsibility Questionnaire, Student Subjective Well-being Questionnaire, and The Bracey Student Evaluation Form were all tested for intercorrelational significance. Intercorrelational results were examined for the purpose of exploring relationships among the responses to the various scales. Presented in the table below are the correlations among the psychological instruments as well as a few variables. Those with significance contain asterisks next to them.

Table 5

Intercorrelations among Student Well-being, IARQ, and Bracey Student Score

<table>
<thead>
<tr>
<th>Well-Being Assessment</th>
<th>IARQ</th>
<th>Bracey Student Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>-.028</td>
<td>.158*</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>ns</td>
<td>.033</td>
</tr>
<tr>
<td>N</td>
<td>190</td>
<td>190 182</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IARQ</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>-.028</td>
<td>-.039</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.700</td>
<td>.601</td>
</tr>
<tr>
<td>N</td>
<td>190</td>
<td>190 182</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bracey Score</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.158*</td>
<td>-.039</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.033</td>
<td>.601</td>
</tr>
<tr>
<td>N</td>
<td>182</td>
<td>182 182</td>
</tr>
</tbody>
</table>

*Indicates significances at the .05 level (two-tailed)

The Intellectual Achievement Responsibility Questionnaire which coded for internal and external locus of control yielded no significant results when correlated with the other variables, which was a unique finding. However, there was a positive correlation between The Bracey Student Evaluation Form, coding for classroom and school climate, and The Student Subjective
Well-Being Questionnaire, coding for student well-being at school (graphed below). The positive correlation had a significance level of $r (N=182) = .158, p=.03$ at the 0.05 two-tailed level. This correlation essentially means that students who were subjectively happy as a student at school also believed the school itself to be a positive place with good teacher interactions, a strong academic curriculum and an overall great classroom and school climate.
EFFECTS OF ATTRIBUTION ON ACADEMIC ACHIEVEMENT AND WELL-BEING

Relationship between School Climate and Student Well-being

SPSS24 (2017)
There was a significant negative correlation demonstrated between the Bracey Student Evaluation Form scores and the student subjective grade averages $r (N=182), = -.35, p < .01$ with significance at the 0.01 level. What this negative correlation signifies is that the better the student perceived their grade averages to be, those same students perceived the classroom and school climate to be less satisfactory. To that same respect, students who predicted their average grades to be lower, felt that the classroom and school climate was a positive and productive one. This correlation essentially points to the idea that the better the student performs in school, the less they actually enjoy the school environment.

With regard to teacher measures, there was a strong positive correlation between Rose and Medway’s Teacher Locus of Control Scale (1975) and the Bracey Teacher Evaluation Form (2016) scores, $r (N=19) = .53, p=.02$ with significance at the 0.05 level. This correlation indicated that the more teachers felt themselves responsible for the academic achievement of their students, the more they perceived their classroom climate to be positive.
Research Questions

Research Question 1:

*What variations of locus of control matchings can exist between student and teacher, and which ones existed in this specific high school?*

The table below demonstrates the possible matches between student and teacher locus of controls and this specific high school has representation of each type of possible match.

<table>
<thead>
<tr>
<th>High Internal Locus of Control Match</th>
<th>Low Internal/High Internal Locus of Control Mismatch</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Internal Teacher Locus of Control paired with High Internal Student Crandall Locus of Control.</td>
<td>Low Internal Teacher Locus of Control paired with High Internal Student Crandall Locus of Control.</td>
</tr>
<tr>
<td><strong>High Internal/Low Internal Locus of Control Mismatch</strong></td>
<td><strong>Low Internal Locus of Control Match</strong></td>
</tr>
<tr>
<td>High Internal Teacher Locus of Control paired with Low Internal Student Crandall Locus of Control.</td>
<td>Low Internal Teacher Locus of Control paired with Low Internal Student Crandall Locus of Control.</td>
</tr>
</tbody>
</table>

Research Question 2:

*What are the effects of student-teacher interactions on student and teacher effort in pursuit of academic achievement and student subjective well-being in school?*

Students with an internal locus of control who reported positive interactions with teachers had higher average grades and subjective well-being scores than external locus of control students who reported less positive interactions with teachers in the classroom environment. Interestingly, students who had lower grade averages enjoyed the classroom and school climate more as a whole than those with higher grades and more positive interactions.
Hypotheses

\( H_1 \): Teachers with high internal locus of control, as measured by Rose & Medway’s Teacher Locus of Control Scale, will most likely agree that they tailored their teaching methods to accommodate their students, as measured by the Bracey Teacher Evaluation Form.

Seven of the eight high internal locus of control faculty members indicated that they either agree or strongly agree that they tailor their teaching methods to accommodate the learning needs of their students.

\( H_2 \): Teachers with low internal locus of control, as measured by Rose & Medway’s Teacher Locus of Control Scale, will most likely have low job satisfaction, as measured by the Bracey Teacher Evaluation Form.

Two out of eleven low internal locus of control/high external locus of control faculty members demonstrated low job satisfaction. There was no correlation between low internal/high external locus of control of teachers and job satisfaction.

\( H_3 \): Teachers with high internal locus of control, as measured by Rose & Medway’s Teacher Locus of Control Scale, will most likely agree that they have positive interactions with their students, as measured by the Bracey Teacher Evaluation Form.

All eight high internal locus of control faculty members on average believed that they had positive interactions with their students, scoring most of those statement items at a 3=agree and 4=strongly agree.
$H_14$: Teachers with low internal locus of control, as measured by Rose & Medway’s Teacher Locus of Control Scale, will most likely not demonstrate a need for self-improvement to aid in a more successful classroom environment, as measured by the Bracey Teacher Evaluation Form.

Contrary to this hypothesis, low internal/high external faculty members more often than not, 7 out of 11, believed that there were things that they themselves could improve upon to aid in a more successful classroom environment. These improvements will be discussed at length in Chapter 5: The Intervention.

$H_15$: Students with high internal locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, will have a more positive rating of subjective well-being, as measured by the Student Subjective Well-Being Questionnaire.

There was no significant correlation between locus of control and student subjective well-being. However, more students who have been categorized under the internal locus of control subscale had more positive scores on the student subjective well-being questionnaire. Seventy-five students out of the 129 students who are under the internal locus of control subscale scored above a 45 on the student subjective well-being questionnaire.

$H_16$: Students with low internal locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, will have a less positive rating of subjective well-being, as measured by the Student Subjective Well-Being Questionnaire.

There was no significant correlation between locus of control and student subjective well-being. Twenty-two people with an external locus of control scored above a 45 on the student subjective well-being out of the 61 external students.
$H_{17}$: Students with high internal locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, will most likely agree that they participate often in class, as measured by the Bracey Student Evaluation Form.

There was no significant correlation between student participation in class and student locus of control. However, because there was twice the amount of high internal locus of control students than there are low internal/high external locus of control students, twice as many internal students agreed and strongly agreed that they participate often in class.

$H_{18}$: Students with low internal locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, will most likely spend less time studying outside of class, as measured by the Bracey Student Evaluation Form.

Out of the 61 low internal/high external locus of control subscale students, 84%, which is 51 out of 61 students spend less than three hours a week. Whereas 72%, which is 94, of the 129 high internal locus of control students spent less time studying outside of class. These results did not prove to be significant.

$H_{19}$: Students with high internal locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, will most likely indicate having a subjectively higher mean grade for all of their classes, as measured by the Bracey Evaluation Form.

Although the results were not significant, 73% of high internal locus of control students versus 67% of low internal/high external locus of control students indicated having a mean grade of an “A” or a “B”. Regardless of locus of control, the students report perceived high academic achievement.
$H_10$: There will be a significant relationship between student locus of control, as measured by Crandall’s Intellectual Achievement Responsibility Questionnaire, and student subjective well-being, as measured by Renshaw’s Student Subjective Well-Being Questionnaire.

Contrary to this hypothesis, there was no significant relationship between locus of control and student subjective well-being. However, there was a significant relationship between student subjective well-being and Bracey classroom and school climate score.

**Discussion**

**Conjectures**

The hedonic bias which presented itself in both students and teachers was a unique additional finding. It provided a more in depth understanding of the various locus of controls of the sample population of this Newark high school. In particular, those individuals who were close to being internal or external locus of controls and had possessed a hedonic bias were the more interesting perspectives of the school. This is because the students and teachers felt only partially responsible for student academic progress, regression and stagnancy. The finding that both students and teachers had members among them who felt it was not their fault if a student did not academically succeed is puzzling to an extent and can be detrimental to student academic success. This perspective implies a distance between individual action or lack of action and outcome, which in this instance is student success. If students and teachers blame one another for student academic failures, then recognizing individual responsibility for the problems at hand, applying effort and improvement will be all the more challenging.
Limitations

After the completion of the pilot experiment for part one of this study, it was noticed that a few more elements would have solidified the reliability of this study and reduced uncertainty. For instance, requesting from students the estimated number of absences that they had for the current semester would have contributed to the character of the student. For instance, if a student reported that they skip classes frequently because they do not like the course or if a student simply is not a regular attendee of the school, then it would demonstrate poor effort on behalf of the student when it came to ensuring that they are academically successful.

Furthermore, some students skipped questions or simply did not continue past the demographics page which could’ve been because they no longer wanted to participate, which could be for a plethora of reasons (e.g. still having access to the raffle without completing the study, not feeling comfortable continuing, laziness, they needed to finish other more important work etc.) which all work to the detriment of the student because this sort of research is for their benefit and the benefit of several other students.

Students are not the only ones who attempted to preserve their own images during the study. Some teachers skipped around certain questions from the two questionnaires. Of those teachers who did not fully complete the questionnaires, their method of incompletion was either to not answer questions that could make the teacher appear less favorable or to complete one questionnaire but to not complete another. A few teachers decided to answer the first demographic page but did not complete either of the questionnaires. As was said previously in regards to student lack of participation, the same is said for the lack of participation of teachers, where not putting forth effort hurts both students and the teachers. Vito Perrone (1991) wrote a book called A Letter to Teachers where he said “I believe we know how to construct better schools. But the
commitments to do what is necessary to bring them about are not yet high enough.” This understanding seems most evident in this circumstance where teacher and student effort to improve the overall school dynamic, with as small of a step as completing questionnaires, is lacking.

It is recognized that in any self-report study, such as this one, that a participant has the benefit of skewing their responses to make themselves, others or a situation appear more favorable or even less favorable. However, as such, we researchers rely on the expectation that all participants are as honest as they can be and respond to the best of their ability.

Along the lines of self-reporting, another weakness and/or limitation to this study is the measure of academic achievement. Because this study is best and most accurately completed in the form of a longitudinal study, which will be depicted in Chapter 5: The Intervention, the measure of academic achievement in the present study is not as reliable of a measure. The students indicated the mean grade of all of their current mid-term grades for the semester which they could have inflated or deflated.

The responses of the sample population are one aspect of concern but the sample population itself is also slight cause for concern. This is because the responses of this sample population are not reflective of most public schools because of the unique and advanced level of education that this magnet public school offers. The average high schooler in the United States unfortunately is not eligible to receive college level credits while still in high school and having the possibility of graduating with a high school diploma and an Associate’s degree. However, this concern can be dismissed to a degree because this school still displays a variety of results that have been found in a plethora of previous studies that explored various academic institutions.
Lastly, with regard to the statistical analyses of this study, it is fundamental to understand that correlation does not imply causation. Other extenuating circumstances could be the cause just as easily and probable causes are presented in the following Additional Consideration section.

Additional Consideration

The students of focus in this study happen to be mostly African American. Although this research is not primarily focused on race relations between student and teacher, it is still worth consideration. Educational psychology and a plethora of other educational researching fields do not focus on the under-heard African American student population as often as they appear to focus on the White American student population. African American students are more than aware of the lack of attention that their race receives in the educational system (Howard, 2010). Maulana, Opdenakker, Stroet & Bosker (2012) found that positive student-teacher relationships for students of color has a profound impact on their continued engagement in academics and consequently yields high academic achievement.

Most teachers are middle class white women (Howard, 2010). This fact is significant because most students are not middle class white girls. Delgado and Stefancic (2001) argue that phenotypical likeness, specifically race plays a role in how teachers perceive students. In 1998, Palmer conducted a series of interviews that explored how teachers saw their phenotypical traits and character traits as impacting their teaching and one teacher said “We teach who we are”. This statement encourages the thought process that not all students will be like their teachers and if teachers have a bias towards students like them and will teach accordingly, then some students who are not like the teacher will be cheated out of their education. Ware (2006) asserted that it is important for teachers to be cognizant of their phenotypical and cultural traits, specifically race, in relation to their students and understand that race has an influence on the ways in which teachers
educate, discipline and interact with their students. Ware then goes on to say that it is the responsibility of the teacher to foster positive and respectful relationships with students that establish an environment where everyone feels that they can teach and be taught regardless of phenotypical and cultural differences.

This dissertation focuses on the notion that it takes the two micro-level characters of teacher and student to achieve academic success and student subjective well-being. However, it is imperative to address the fact that these students do have other influences in their academic lives such as their parents. Parental support has proven to be one of the most influential predictors of student academic success and failure with equal measure (Jiang, Song, Lee & Bong, 2014). Based on the family dynamic a child has had in infancy and early childhood, this parent-child relationship sets the tone for student relationships with other authoritative figures such as teachers. Students with insecure attachments to their caretakers tend to not do as well academically or behaviorally in the academic setting as students with secure attachments (Charalampous, Kokkinos, Apota, Iliadou, Iosifidou, Moysidou & Vriza, 2016).

Second to the influence of parents is the influence of peers on student academic success and student academic effort (Ryan, Stiller & Lynch, 1994). Ryan and colleagues found that students looked to their friends more than their teachers for academic motivation and effort. This finding seems to hold true, based on unintentional observation of the student body. As some students were participating in the present study they were interrupted by peers who felt comfortable enough to either walk into the testing room or stand by the door trying to get the student participant’s attention. Shortly after, those students testing no longer wanted to participate in the study and withdrew. This demonstrates how impressionable adolescents are and how
important it is to provide a stable and safe environment for them to flourish, in this case academically (Ma, Shek & Cheung, 2002).

Summary

Two-thirds of the student and teacher population fully participated in the present study. Students were classified as being mainly internal locus of control individuals, which means that they believe more often than not that they are responsible for their own academic achievement. The majority of faculty members were characterized as possessing an external locus of control; which signifies that teachers more often than not did not find themselves as being responsible for the academic achievement of their students. Some students and teachers demonstrated a hedonic bias where they took credit for success but not for failure. Students reported a good collective subjective well-being, with a mean score of 46.50 out of 64 and students additionally reported a moderate collective classroom climate score, with a mean score of 37.25 out of 64. Teachers reported a good collective perception of classroom management and school environment with a mean score of 40.89 out of 60. The Bracey Student Evaluation Form (2016); perception of classroom climate, was positively correlated with The Renshaw Student Subjective Well-being Questionnaire (2015); well-being in the school environment. Rose and Medway’s Teacher Locus of Control Scale (1975) measuring teacher attribution and the Bracey Teacher Evaluation Form (2016) measuring perception of classroom management and school environment were positively correlated. In the discussion, research methods that could have enhanced this study further are reflected on. Additionally, other external factors, such as race and parental influence, are considered as having further impact on the study and results.
Chapter V

The Intervention

Context and Outline

Understanding the school climate, classroom climate, and the varying perspectives of the students and the teachers within the academic institution was the first step in developing an intervention that is geared towards solving the equation of producing academic achievement and subjective well-being. With the fundamental comprehension of which levels of attribution and locus of control exist within a school environment, we will then be able to explore the other essential part of the academic achievement equation: effort. It is hypothesized that without combined student and teacher effort, student academic achievement will not be as high as it has the potential to be. The purpose of this chapter is to propose an intervention that will accomplish the end goals of producing high academic achievement and subjective well-being. This chapter will utilize the results from the first part of this study as well as the short answer responses from the Bracey Student Evaluation Form and the Bracey Teacher Evaluation Form in order to guide the intervention. The proposed intervention methodology will be supported by various existing research studies and theories that are internationally benefitted from in the classroom setting.
The Timeline and Significance

Carrying out this intervention would require this portion of the study to be longitudinal which the allotted time frame to complete this dissertation was not in line with the public high school days of operation. As a result of the inability to overlap times, following the gathering of the demographics of the high school, the remaining half of this study is proposed for completion in the future. The suggested timeline to complete the following portion of the study in its entirety would be over the course of a semester. This timeline is recommended because students and teachers are provided with the opportunity to become fully acquainted over the course of several weeks. What is meant by this is that students become familiar with teacher requirements, course work, pace of work given to complete and given back with a grade and teacher personality. To that same respect, teachers also have an understanding of their students as far as their work ethic, demonstrated abilities and student personality.

The results from the first portion of the study let us know the demographics of the school in regards to locus of control of the students, locus of control of the teachers, student subjective well-being, school climate as perceived by students and classroom climate as perceived by teachers. After collecting this data, the results demonstrated correlations that this intervention will address, such as the negative correlation between student subjective mean grades and school climate. As was stated in Chapter 4: Results, this correlation essentially indicated that as students perceived themselves to have higher grade averages, the less favorable they perceived the school climate to be. Furthermore, in this chapter, the Bracey Student Evaluation Form and the Bracey Teacher Evaluation Form responses will be utilized in order to better assess the comments and concerns of the students and teachers. The open responses will truly set the framework for the proposed procedures of the intervention.
Analysis of Open Responses

Student Responses

It is essential for this intervention to assess the positive items that the students had written about their classes and the school as a whole, as well as to explore the items that the students believed should be improved in their academic institution. The following frequency table shows the 169 student responses and how often they were said. This is displayed in order to better understand what should be continued and what should be added or removed from the perspectives of the students.

<table>
<thead>
<tr>
<th>Enjoy Student Responses</th>
<th>Frequency</th>
<th>Not Enjoy Student Responses</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning something new.</td>
<td>24</td>
<td>Teachers not disciplining kids.</td>
<td>29</td>
</tr>
<tr>
<td>Teachers are willing to help if you ask.</td>
<td>21</td>
<td>Teachers not explaining clearly.</td>
<td>25</td>
</tr>
<tr>
<td>Passionate teachers.</td>
<td>18</td>
<td>The overwhelming workload.</td>
<td>20</td>
</tr>
<tr>
<td>Peer interactions.</td>
<td>16</td>
<td>Not having different teaching methods for different learners.</td>
<td>19</td>
</tr>
<tr>
<td>Open class discussions.</td>
<td>16</td>
<td>Fast paced curriculum.</td>
<td>19</td>
</tr>
<tr>
<td>Interesting course material.</td>
<td>13</td>
<td>Existing teaching methods</td>
<td>17</td>
</tr>
<tr>
<td>Being intellectually challenged.</td>
<td>12</td>
<td>Teachers not being empathetic.</td>
<td>15</td>
</tr>
<tr>
<td>The teachers are not strict.</td>
<td>10</td>
<td>Not learning things that are beneficial for “real life”.</td>
<td>14</td>
</tr>
<tr>
<td>Examples that are used in everyday life.</td>
<td>9</td>
<td>Grading system.</td>
<td>13</td>
</tr>
<tr>
<td>Interacting with teachers.</td>
<td>9</td>
<td>Sometimes teachers are too busy helping other students they cannot help me.</td>
<td>10</td>
</tr>
<tr>
<td>Office hours.</td>
<td>9</td>
<td>Course material not being interesting.</td>
<td>10</td>
</tr>
<tr>
<td>Hands on and visual learning.</td>
<td>6</td>
<td>Challenging work.</td>
<td>9</td>
</tr>
<tr>
<td>Safe learning space.</td>
<td>6</td>
<td>Having tests so soon after learning new material.</td>
<td>8</td>
</tr>
</tbody>
</table>
Students displayed a range of perspectives in the open-response questions from the Bracey Student Evaluation Form. The most common response regarded student interest in learning new course material. The second most enjoyable aspect of the classroom and school environment they indicated was that the teachers were available, if the students asked, to help them understand work they did not understand in class. To a similar respect, the students ranked less frequently, that they enjoy that office hours exist at their school. Office hours are designated times that the professor vows to be in their office to meet with students. Complementary to the presence of teachers, the students explained 18 times that they most enjoy school when their teachers are passionate about teaching certain subjects, interacting with students and about the success of their students.

As was mentioned, students most often found enjoyment when they were learning new information in class. However, this was balanced negatively when the students, with slightly less measure, explained that they did not enjoy the fast pace work environment. Most often the students said that they loved learning new information but had wished they could spend more time learning it without rushing to the next new subject. The most common item that the students did not enjoy was that teachers did not discipline students. What was meant by this, based on the several responses, was that certain students will be disruptive to the class during lessons and take the attention away from the teachers who are trying to teach and the students who want to listen and learn. This may have a domino effect and cause teachers to not be able to explain things clearly, which is the second highest least enjoyable thing that students mentioned about their classes. Teachers will not be able to teach efficaciously if certain students are disrupting the learning environment. To that effect, teachers will not be able to get through lessons thoroughly nor in their
entirety if time is used competing with students who are not focused on the lesson, which can result in the fast-paced curriculum.

**Teacher Responses**

Teachers were also presented, via the Bracey Teacher Evaluation Form, with the opportunity to disclose their subjective strengths and weaknesses/areas in need of improvement. The following frequency table shows the segmented responses by 17 teachers and how often they were said. This is displayed in order to better understand the perceptions of the teachers and what should be continued or changed. Following the analysis of the frequency table, the data from the student frequency and teacher frequency tables will be compared and guide the framework of the intervention.

<table>
<thead>
<tr>
<th>Teacher Strengths</th>
<th>Frequency</th>
<th>Teacher Weaknesses</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapting lesson plans to meet diverse student needs.</td>
<td>4</td>
<td>Classroom management.</td>
<td>7</td>
</tr>
<tr>
<td>Keeping a positive classroom.</td>
<td>3</td>
<td>Not having enough class time.</td>
<td>5</td>
</tr>
<tr>
<td>Building positive student relationships.</td>
<td>3</td>
<td>Creating interesting lesson plans.</td>
<td>3</td>
</tr>
<tr>
<td>Encouraging multiple perspectives/ways of thinking.</td>
<td>2</td>
<td>Being clear when assigning work.</td>
<td>2</td>
</tr>
<tr>
<td>Making lessons relevant.</td>
<td>1</td>
<td>Class size.</td>
<td>2</td>
</tr>
<tr>
<td>Having high expectations for student effort.</td>
<td>1</td>
<td>Giving students too many chances.</td>
<td>1</td>
</tr>
<tr>
<td>Caring about student success.</td>
<td>1</td>
<td>Motivating students.</td>
<td>1</td>
</tr>
<tr>
<td>Fostering peer collaborations.</td>
<td>1</td>
<td>Making greater use of visuals.</td>
<td>1</td>
</tr>
</tbody>
</table>
Teachers in some instances, when filling out the open responses, demonstrated similarities in strengths and weakness but also seemed to vary to a degree with no general agreement. Four out of the 17 teachers who submitted open responses, which was the highest frequency of common strength, believed that one of the strengths as a teacher was their ability to adapt lesson plans to accommodate diverse student needs. Keeping a positive classroom and building positive student-teacher relationships were tied for the second most frequent responses.

As far as teacher weakness and need for improvement are concerned, 7 teachers agreed that classroom management was the item that they needed to improve on. This was addressed in a plethora of different ways from saying “getting student attention”, “not raising my voice to make them listen”, and “controlling student behavior.” Similar to the analysis made for the student frequency table, there is an evident domino effect in teacher weaknesses, where inability to manage a classroom can negatively affect a plethora of other areas of the classroom environment.

Correlations between Student and Teacher Open Response

Student and teacher responses separately provide an understanding of the student and faculty bodies as two distinct entities. It is essential to predict probable correlations between the student and faculty body and understand how they influence one another. This is because in order to satisfy both entities and create a more positive school environment that allows for academic achievement and subjective well-being, students and teachers must share mutual locus of control. This is not the case currently since students primarily believe that it is their responsibility to achieve and the teachers also believe that it is the students’ responsibility to ensure their own achievement; the teachers primarily take little responsibility for the academic success of their students.
There are a few positive items that both teachers and students designated as being teacher strengths and what students enjoy most. For instance, a popular teacher strength was building positive relationships and interactions with students. The students also agreed in two similar remarks that teacher character positivity and positive teacher interactions were among the higher frequency statements made by students when discussing things that they enjoy in the classroom. Two students also mentioned that when teachers a fun/ funny and smiling that they feel more comfortable around their teachers.

Secondly, students and teachers, although with less frequency, mentioned that a teacher strength was including relevant examples for student understanding and students reciprocated this same feeling by indicating that they enjoy class when something relevant is presented as a class example. The relatable aspect is something that some of the students have responded well to and is something that has evidently stuck in their memory as being positive in their learning.

Students and teachers both agree that teacher classroom management is lacking in the school environment. Students and teachers also both agree that managing the students who are disruptive is no easy task and disturb the learning environment. One student has gone as far as to say “I feel that this school lacks disciplinary action, that the students control the teachers.” The number one issue for students was discipline and the number one weakness for teachers was classroom management, so this would be a primary focus of the intervention.

Not having enough class time was a common remark made by teacher open respondents. Similarly, students explained in a plethora of ways that the courses were way too fast-paced which left no time to “digest” the material presented to them before moving on to the next topic. One student said “Advisory cuts much needed class-time… every minute counts”. 
There is a speculative relationship between classroom management and student and teacher perception of having enough productive class-time. For instance, it is incredibly probable, based on student and teacher individual responses, that when students are well-behaved and attentive, that there are less occurrences of lessons being interrupted and teachers running out of time to teach their lessons and consequently students are learning more often. A student response that was made that corroborates this correlation was “The teachers don’t remove the distracting students who are keeping us from learning and usually they would be loud or shouting out over the class. This affects my courses/grades.”

Student respondents commented that two seemingly related aspects that they did not enjoy about their classroom experiences were the lack of real life examples in course work and interesting lessons. A few teachers noted difficulty in lesson planning and creating lesson plans that were interesting and would keep the students engaged. “I feel as if my courses could improve if we actually had something that would further help us in life. Instead of learning all this geometry and chemistry we could be learning home economics, or about how laws work, paying mortgage, owing the government, having credit, taking loans.” This is a full circle relationship because if the students are not interested then they will not pay attention but also if they are not engaged to begin with then the lesson may not seem interesting compared to whatever else has their attention which points the road back to classroom management techniques.

Second highest on what students do not enjoy, and on the lower level of what some teachers believed that they could improve on was teacher clarity when giving assignments to students. This agreed upon cause and effect relationship, where teachers do not explain lessons further and students do not understand the explanation, leads to several students seeking additional help outside of the classroom environment, as reported by several students in their open responses.
Based on the responses by both students and teachers and the relationships presented, the intervention can be proposed. There is now a thorough understanding of the attributional personalities/ locus of control, that have existed in the school environment as well as a written expression of the individualized perspectives of the teachers and students.

**Research Questions**

1) How do the different types of student-teacher interaction effect adolescent student’s final grades and subjective well-being in school post midterm intervention?

2) What is the correlation, if any, between Teacher Locus of Control and teacher willingness to adopt innovative teaching skills?

3) What is the correlation, if any, between teacher experience and teacher willingness to adopt innovative teaching skills?

**Research Hypotheses**

$H_{11}$: Students who have higher final grades after intervention will have an improved rating on the Student Subject Well-Being Questionnaire.

$H_{12}$: Students who have stagnant or lower final grades after intervention will have a stagnant or not improved rating on the Student Subjective Well-Being Questionnaire.

$H_{13}$: Students who have a higher internal locus of control will be more likely to adopt innovative behavior methods/put forth more effort to ensure their own success and the success of their peers.
$H_4$: Students who have a low internal/high external locus of control will be less likely to adopt innovative behavior methods/put forth less effort to ensure their own success and the success of their peers.

$H_5$: The students who put forth effort post-intervention will have higher scores on the Bracey Student Evaluation Form (2016).

$H_6$: The students who do not put forth effort post-intervention will have stagnant or lower scores on the Bracey Student Evaluation Form.

$H_7$: Teachers who have a higher internal locus of control will be more likely to adopt and commit to innovative teaching practices/put forth more effort to ensure academic success of their students, post-intervention.

$H_8$: Teachers who have a low internal/ high external locus of control will be less likely to adopt and commit to innovative teaching practices/put forth less effort to ensure academic success of their students, post-intervention.

$H_9$: Students of teachers who adopt and implement new teaching methods after intervention will give more positive ratings of their teachers on the Bracey Student Evaluation Form (2016) at the end of the semester.
$H_110$: Students of teachers who do not adopt or implement new teaching methods after intervention will give either no difference in or negative ratings of their teachers on the Bracey Student Evaluation Form (2016) at the end of the semester.

$H_111$: Students’ grades will improve provided that the teachers adopt and continuously implement innovative teaching methods post-intervention.

$H_112$: There will be a significant relationship among student academic achievement, student subjective well-being, as measured by the Renshaw Student Subjective Well-being Questionnaire (2015) and teacher adoption of innovative teaching methods.

$H_113$: There will be a significant relationship between teacher locus of control, as measured by the Rose & Medway Teacher Locus of Control scale, and teacher willingness to adopt innovative teaching methods.

**Proposed Procedure**

The intervention starts a week after the teachers and their students have completed the first round of questionnaires, as was completed in the first portion of the presented study. There are two separate portions of the intervention, one for the teachers and the other is for the students. This is because the effort of both students and teachers are required to improve the nature of the school and the classroom environment. There is a need for both students and teachers to feel equally personally responsible for student academic achievement.
**Teacher Intervention**

The teachers are called one by one into a room. Teachers will be informed what their Rose and Medway (1975) Teacher Locus of Control scale score suggests about their teaching. Following the explanation of the teacher’s subscale, then the teacher will understand what their score is in comparison to other teachers, however, the names of teachers will not be revealed but just the scores will be in order to set context. The faculty body ratio will be revealed to the individual teachers so they know what exists in teacher population, such as how many internal and how many external teachers there are.

The researcher will then let the teachers know, anonymously, what the students disclosed in their Bracey Student Evaluation Forms as being the positive and negative things about general teaching methods and their perceptions of the classroom environment. The researchers will make a specific effort to relay the feedback that students who were not academically achieving highly and different from them in locus of control recommended that the teacher do. This is done so that teachers learn what is needed to best accommodate a student who is different from them in regards to locus of control and a student who is not achieving well in their class. It is hypothesized that extended teacher effort, partnered with student effort will increase student academic achievement and subjective well-being.

Following the specific feedback, the researcher will let the teacher know the general student evaluation form which depicts the perceived school environment and the general consensus regarding teacher effort. The average scores will have been computed for each questionnaire and the mean number and corresponding label will be told to the teacher. The open ended responses on the Bracey Student Evaluation Form where the student indicate say what they enjoyed and believed needed improvement will be discussed with the teacher. The teacher will then be asked
by the researcher to reflect on what the students personally said they felt the teachers should continue doing and then also what the students felt the teachers could improve upon.

As most of the teachers, 17 out of 19, completed the open-response portion of the Bracey Teacher Evaluation Form, the open responses will be anonymously shared with each teacher. First, the strengths will be shared by the researcher and the teachers will be presented with the opportunity to comment on the results. Secondly, the weaknesses will be explained to teachers and they will again be presented with the opportunity to comment on the results.

To conclude the feedback portion of the intervention, the researcher provides the teacher with a paper of a summary of things that they could improve on and should continue to do as reported from the perspective of the students. Additionally, the teachers will work with the researcher to create a customized miniature binder of techniques to address the concerns that they believe they should address in their classrooms. In the binders, teachers will all also have classroom management techniques in each binder because that was the most desired improvement requested by the students and also the highest frequency weakness as reported by the teachers.

Suggested Teacher Script

“Hi! Good (Morning |Afternoon)! Are you continuing participation in the study?”
“Great! Welcome back!”

“Today I will be reviewing some information with you regarding a Student Evaluation Form that some of your students anonymously completed. If any point you decide that you do not wish to continue, you can let me know at any time.”

*Share Necessary Information from the Bracey Student Evaluation Form Report with Teacher*

“Do you have any questions, comments or concerns?”

“Now we will take a few minutes to prepare a little binder that will contain useful resources to help turn your subjective weaknesses and the weaknesses that the students perceive
teachers at this institution to possess into strengths. Is there anything presented here [referring to the available resources] that you especially would like in your personal resource binder?"

“That is all for today. I will reach out to you via email in about a week or two to schedule our meeting when you will complete the final questionnaire.”

“Please take another look at the consent form and if you have any further questions, comments or concerns. If you would like to withdraw from the study at this point you may do so at any time.”

“Thank you for your participation today and I hope you have a great day!”

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Over the course of the remainder of the semester, the teachers will be periodically monitored in their classrooms by administrators and researchers to recognize changes or stagnancy in teacher teaching methodology and classroom management. The teachers will then be asked to complete another Bracey Teacher Evaluation Form towards the end of the semester which will be administered via Survey Monkey and the teachers will complete it in their own time over the course of a week. A week after the end of the semester, when grades have been completed, the teachers will individually meet with the researchers for a final meeting. In this meeting the teachers will discuss their own individual responses and be able to comment. The researcher will interview the teachers on a few more questions regarding what methods they felt were most beneficial and which ones they do not believe worked for them and their students. Finally, the researcher will discuss results from the Bracey Student Evaluation Form responses that were directly in response to one that teacher’s courses. This serves the purpose of informing the teaching the perspective of the students and is a point of reflection for the teachers as they can see what they have improved on and still need to work on for the following semester.

______________________________________________________________________________
Suggested Teacher Script

“Hi! Good (Morning | Afternoon)! Are you continuing participation in the study?”

“Great! Welcome back!”

“Today will be the final meeting for this research study. During this session we will be discussing your results from your second Bracey Teacher Evaluation Form. We will compare them to your responses from the first evaluation form. Following this comparison, we will deliberate. After the deliberation we will discuss the student responses to your existing classroom environment and teaching methods and compare them to what was previous said during the last session.”

*Place the consent form that they previously signed in their sight and reassure them of their rights and that this is completely voluntary and does not affect their job at the institution.*

“Are you willing and ready to continue the final part of the study?”

*Depending on their response you either stop here or continue on with the remainder of the study.*

*Present the before and after intervention Bracey Teacher Evaluation Form questionnaire results to the teacher participant and inform them of any notable differences and behaviors that have stayed the same. Provide them with the opportunity to give their own personal feedback.*

*Present the anonymous results from the Bracey Student Evaluation Form that was completed by students in that specific teacher’s course that was geared towards the evaluation of that specific teacher, course, and classroom environment. After going over the student responses from the before and post intervention Bracey Student Evaluation Forms and encourage teacher response.*

“Is there anything you would like to discuss? Do you have any further questions?”

*If so, answer their questions to the best of your ability. If you cannot answer a question, refer them to the resources provided in the consent form.*

“Now we will begin the debriefing process.”

*Begin the debriefing process.*

*Conclude the study by thanking the participant for participating in the study and offering.*
Student Intervention Methodology

Students who have participated in the study will be spoken to during their English classes and those who did not participate in the study will be redirected to the library to work on class assignments. Those who are participating in the intervention portion of the study will be in the room with the researcher and their teachers will not be present. The students will speak with the researcher only, in order to assure the students that their responses will not have negative consequences for their academic standing or their admission into the academic institution. The form of the student intervention takes the shape of a focus group. In this focus group, the students will be reminded before answering each question that answering is completely optional and researcher recording of the information is purely for data analysis and will be kept anonymous.

During the first portion of the focus group, the researcher will explain to the students what the results of the Intellectual Achievement Responsibility Questionnaire were of the sample population were. The students will be asked questions regarding the results and asked their own thoughts and if they had questions of their own. Next, students will be informed of the results of the Renshaw Student Subjective Well-being Questionnaire and asked the same questions as was done for the Intellectual Achievement Responsibility Questionnaire. Lastly in review, the researcher will go over the responses of the Bracey Student Evaluation Form, demonstrating student perception of the school and classroom climate. The individual open responses to the Bracey Student Evaluation Form will be anonymously reviewed for their frequency of responses and sometimes student responses will be quoted. Comparable to the previous questionnaires, the students will reflect on the results and individual responses.

Following the same format as the examining of the student responses to the student questionnaires, the researchers will then explore the anonymous responses of the teachers to the
students. Students will hear the perceived strengths and weaknesses of faculty members at their academic institution and will comment.

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Suggested Student Script

“Hello everyone and welcome to the intervention portion of the psychology study that you have decided to participate in. I, the researcher, remind you all that your participation is completely optional and you can stop participation at any time. Your responses to any and all questions will not be reported to your teachers or administrators unless you demonstrate that you may pose a threat to yourself or to others, which you have previously agreed to this stipulation in the consent form that you signed.”

*Begin the intervention.*

“The purpose of this intervention is to help you students understand your fellow classmates and know what it is that can be done by you, your classmates and teachers to improve the classroom environment to make it more productive and enjoyable for you all.”

*Go over each individual questionnaire and their results with the students. Encourage the students to respond with their thoughts on the results.*

“If you would like to comment on or question something that has been said, raise your hand to receive the “talking ball” which is a ball that gives the individual holding it the opportunity to talk. This is to create a mutual respect in this space so that the person speaking is heard and respected. Furthermore, if you do not agree with something that has been said, we do not attack the individual, instead we challenge the ideas being said in a respectful manner.”
During the second portion of the focus group, the students will engage in a group discussion regarding what they believe are solutions to the concerns of their peers and their teachers. This is where the researchers place responsibility on the students to put forth effort and effect positive change in their classrooms and their schools. The researchers subtly ask students what they believe that they can do to improve the classroom environment and what they will do.

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**Suggested Student Script**

“Now that you all have an understanding of the various perspectives of the students and teachers at your school, what do you believe should be improved on most?”

*Provide the students with the opportunity to respond. This should only take about three–five minutes.*

“Now that we have addressed what you all feel should be improved, what is it that you think that you personally can do to improve the classroom environment for yourself and for others?”

*Provide the students with the opportunity to respond. This should take about five minutes.*

The students will then be presented with a folder of methods to improving the classroom environment which are actions that the student can take themselves to ensuring a positive and productive learning environment. The folder will also contain time management tools, improving well-being ideas, and a complimentary scheduling planner to help students better organize their work schedules.
Suggested Student Script

*Hand each student a folder containing resources to help improve the classroom environment, their subjective well-being and their time-management.*

“Each of you has in front of you a folder containing a few papers that are ways in which you can help improve the learning environment of your various classrooms and also help you with your time management. In the other pocket of the folder is a scheduling planner that will help you all better organize your time further for the remainder of the semester.”

Towards the end of the semester, the students will be asked to continue with final portion of the intervention. Students will be asked to complete the Renshaw Student Subjective Well-being Questionnaire one final time. This is to be completed so that the researcher can compare the subjective well-being prior to the intervention to the well-being after the intervention. The hypothesis was that student subjective well-being would improve after the intervention, provided that the students and teachers both put forth effort and utilized the provided tools.

Following the completion of the well-being questionnaire, students will finally complete their last questionnaire which is the Bracey Student Evaluation Form. This, like the Renshaw Student Subjective Well-being Questionnaire, will be completed using the Survey Monkey link on the school provided computers. The purpose of the retaking the questionnaires is to analyze any differences in student perception of the school and classroom environment. It is hypothesized that the classroom environment and overall school climate will improve post-intervention. The Bracey Student Evaluation Form also looks at student subjective grade averages and taking the questionnaire a final time will be a measure of student perception of their learning post-intervention. The difference in this second Bracey Student Evaluation Form is that in the open response section of the form, the students will be assigned one of their teachers’ names who they, the student, will have to evaluate the strengths and weaknesses of and provide an understanding of the current classroom environment.
Suggested Student Script

“Hi! Good (Morning | Afternoon)! Are you continuing participation in the study?”
“Great! Welcome back!”

“Today, you will be completing the final two questionnaires. After you have read the instructions, you will have 50 minutes, your class period, to complete them. You can alert me by saying my name that you have finished or wish to stop.”

“In the folder next to you is the name of the professor which you will be evaluating at the end of the Bracey Student Evaluation Form. Please be as thoughtful and honest as you can be.”

*Sit in the same part of the room that is sort of out of sight but still in peripheral view so that the participant is not distracted by presence but also close enough that they feel comfortable enough to ask a question or stop the study.*

“The study is now complete. Thank you for your full participation, it is greatly appreciated! Do you have any questions, comments or concerns?”

“Now we will begin the debriefing portion of the study where I tell you what this study was aiming to find and the purpose behind the questionnaires.”

The researchers then compare the Renshaw Student Subjective Well-being Questionnaire and the Bracey Student Evaluation Form again to see if the students have a change in their perceptions of their subjective well-being, the classroom environments, student effort and effort of the teacher. Researchers also compare the student actual midterm grades with student actual final grades in the classes that they evaluated a specific teacher and class that they have during in the Bracey Student Evaluation Form. However, if there is no access to actual midterm and final grades, student perceived grades, as recorded in the Bracey Student Evaluation Form will suffice for measuring academic achievement.
Logic

There is a plethora of reasons as to why the above study was not feasible to conduct. The incapacities were caused by practical complications that would have compromised the pure nature of the proposed study. The primary issue was the lack of time to complete the desired study in its entirety. This study is ideally done over the course of an academic semester so that the intervention can be done shortly after the midterm period. The high school academic calendar and the undergraduate academic calendar do not overlap and the time allotted to complete the present research was not sufficient enough to complete the proposed portion in addition to the completed experimental portion in part one. Furthermore, this study is more feasible with a greater number of researchers completing it so that time management becomes less of an issue.

The time period of the midterm is chosen because it is believed that students will have had a chance to become accustomed to their teacher’s teaching style as well as their own ability to understand their learning needs. Moreover, the researchers would be able to hopefully see the midterm letter grade of the students and have a more stringent measurement of academic achievement and improvement, stagnancy or even regression in the final letter grades. This would all be possible theoretically, provided the researchers had the duration of the semester to study.

In addition to time restraints, recruiting participants is a concern. For instance, it would be best if an entire school participated in this type of research. It is difficult to have corresponding students and teachers who have an established classroom relationship to participate in the study if only a few students from that class participate or in the event that several students of a teacher participate in the study but the teacher chooses to not participate. If a few students in a class participate along with their teacher there would be a few limitations such as confidentiality being breeched, making appropriate and accurate matchings between teacher and student and students
may have a personal bias for or against a teacher. Additionally, the limited student response would not be an accurate representation of what the teacher may need to work on/what should be addressed in the intervention.

Having the students and teachers complete their questionnaires online as opposed to hand-written copies is the most ideal methodology. For instance, researchers will be able to track progress and easily transfer and analyze data. Furthermore, using the link, the researchers will have all data in one location and there will be little chance of losing or accidentally separating individual student or teacher data. Teachers will also conveniently be able to complete the survey on their own time and not take away from instructional time. The researcher also has the convenience of re-emailing the link to the questionnaires and reminding teachers to take the questionnaires.

The logic behind the sharing of the data results of teacher and student questionnaires to both students and teachers is to create empathy and understanding of perspective. The goal being to allow both parties to see what the current state of their institution is and how it contributes to the weaknesses and strengths of the classroom and overall school environment. Students and teachers are called to respond to the perspectives of their fellow body-members as well as their counterparts and claim individual responsibility. This aspect of the intervention signifies the first step in enhancing an internal locus of control and, more importantly, striving to decrease the external locus of control and lean them towards an internal locus of control, ultimately placing as many members of the school towards claiming responsibility for the academic achievement and subjective well-being of students.

The student folders being provided to the students serve the purpose of encouraging student action toward their own academic and personal well-being. The papers that are in the folder reflect student concerns and provide solutions that are well within the grasp of student capabilities (See
Appendix J). Teaching students how to schedule their time better, meditate, write down their thoughts, take care of themselves, utilize the available resources that their school has to offer and to utilize other students are all steps in improving the school environment.

Teacher binders include methods for classroom management as that was the biggest concern of the teachers as well as the students (See Appendix I). This binder can serve as a reference point for the teachers when in situations that call for better classroom management. Furthermore, the binder set a general understanding for all teachers which should make it easy for student discipline that is consistent for all teachers. There should be no confusion where behavior and school rules are concerned; all teachers should share the same understanding and implement accordingly. This consistency allows for students to be aware of the expectations for all teachers and administration. Structure is most beneficial for any institution or organization and is essential in child, adolescent and adult development.
Summary

This intervention uses the data collected in Part 1 of the study to depict the distribution of perspectives that existed within the school to the students and teachers. Specific attention is given to the items that students and teachers both conveyed as being weaknesses/things that were not enjoyable in the school environment. The difficulty appears to lie in what should be done and who should do it. The answers according to this proposed intervention are: everything that needs to be done and everyone involved. Based on the data, the researcher, with the help of the students and teachers, develop ways of improving the nature of the classroom and school environment. After exploring what needs to be improved upon from each perspective, students and teachers are then held accountable and asked what they believe they can do to help improve each item of concern. Following, the researcher provides suggestions as to what they can do and lastly, the students and teachers are provided with resources to aid in their efforts. Several weeks later towards the end of the semester, students and teachers meet once more with the researcher to complete the Bracey Student Evaluation Form and the Bracey Teacher Evaluation Form. The Bracey Student Evaluation Form is completed differently than it was in part one of the study; post-intervention the questionnaire is observing a specific teacher’s performance and classroom environment. The researcher then compares results pre and post-intervention and shares differences and similarities with students and teachers.
Chapter VI

Conclusion

The present study and proposed intervention contribute to the equation of achieving high student academic success and student subjective well-being by exploring the importance of student and teacher compatibility of perspectives. It is evident that the student-teacher interaction is at risk and has even become detrimental to student academic achievement and subjective well-being in schools nationwide according to a plethora of researchers over the past few decades. Educational psychology theories dating back to the 1950’s and other research studies demonstrate effort in identifying the causes behind the present issue. However, few studies both identify the problems in United States schools and actually propose detailed solutions that accommodate the students and the teachers. Additionally, studies do not typically hold teachers and students equally accountable for the success of the students and the school as a whole. The present study gathered data from a public magnet high school in Newark, New Jersey with the intended goal of presenting the understanding that the academic achievement and well-being of students is a joint process where teacher and student come together.

Collecting data from the entire school population was my intention and would have been ideal for this dissertation, however, I was only able to collect from two-thirds of the student and the teacher population which is still a large sample. The high volume of participants made it possible to gain an understanding of the dynamic that has existed in the school environment between students and teachers and how both parties believe it has impacted student academic achievement and subjective well-being. Within this particular school, teachers mainly possessed an external locus of control and fewer teachers had an internal locus of control. This meant that teachers largely believed it was the responsibility of the student to ensure their own success and
teachers did not feel that they had as much control in their student’s success or academic failures. The students were primarily internal locus of control students meaning that they believed it was their own responsibility to ensure their own success and their own fault if they did not succeed. Along with the findings regarding locus of control, an analysis of the school climate was developed based on student and teacher evaluation of the classroom climates and their various perspectives of their behavior and experiences interacting in the school environment. Students and teachers demonstrated a similar understanding of the issues in their school that have hindered the education process as well as made forming positive relationships between students and teachers difficult. Following this understanding, the proposed intervention was developed to address and aim to solve the existing problems, explained by students and teachers, in the school which hold both student and teacher accountable. Intervening in the relationship between students and teachers allows them to see the other’s perspective, become involved, and act in order to improve the dynamic. This occurs all in hopes of achieving the common goal of academic success and well-being.

The essential findings from this study rest on the notion that student academic success and subjective well-being are achievable with the effort of both student and teacher with similar measure. There is an implied urgency to address the welfare of the micro-level individuals within the United States school system. As was mentioned in the introduction, the micro-level individuals refer to teachers and students, the mid-level members of education are superintendents, school boards and school administrations, and lastly the macro-level which is the most outer layer of education is represented by policy makers and the United States Department of Education. We need to overhaul the current school system and teaching methods. The motives behind teaching are not always geared towards student success and producing the next generation of young adults who are well educated and prepared to lead. Instead, school systems are allowing citizens the
opportunity to bypass receiving the proper education, training and certifications that have been required to educate children. Some individuals enter into the teaching profession for the salary and benefits more than for the purpose of educating students, which can take away from student learning opportunities. Former Harvard Graduate School Professor Vito Perrone (1991) argued in his book (p.133):

“Children and young people, wherever they are, need our best efforts. But, regardless of setting, teachers need to construct for themselves a more powerful voice. That is perhaps my overriding message. I remain convinced that we would not have the same external pressures—for accountability rooted in standardized tests, a regulatory orientation to schools governed by persons and groups who stand far away from particular schools and their students—if teachers themselves were clearer and more articulate about their purposes, speaking and writing about their hopes for children, young people, and communities. But it is not impossible to reverse such directions, and it is not too late.”

A unique perspective on the relationship between student and teacher and how it can make or break a school environment has been provided in this thesis. This interaction dictates the desire of the student to pursue higher education as well as influences student perception of their own mastering of subjects as being within and even out of their capabilities. Student input and reflection on their educational environment demonstrates how aware students are of the effects of the classroom and school climate on their academic achievement and well-being. Along a similar line, teacher reflection on their time within an academic institution indicates how aware teachers are of their weaknesses and how they may not feel equipped with the necessary resources to improve. The overlaps in the desires of both students and teachers to have a better classroom and school
climate show just how necessary it is for both students and teachers to hold personal responsibility and individually act on what needs to be improved.

Not only do students and teachers need to hold similar objectives when it comes to student academic success and well-being, there is also a need for teachers to have an improved and united relationship and for students to have the same with their peers. In terms of teachers having a united relationship, there is an evident need for teachers to be on the same page as far as discipline. There must be consistency among the faculty to ensure that there is no confusion for students with regards to what the school expectations are. Students also need to be reminded that the goal in the school should be improving themselves and helping their peers achieve success as well—both inside and outside of the academic institution. Students and teachers should not be cheated: they should not cheat each other, be cheated by the mid and macro level of education and should not cheat themselves. What is meant by the notion of cheating is that students, teachers and other stakeholders in education should not put forth less effort or pose a threat to the education of students.

The findings of this two-part study are also situated outside of the school environment and have the ability to impact educational policy for the United States. For instance, this thesis was partially inspired by two conversations that I had with two different political figures. One representative was unaware, so I educated him, of the fact that 4 schools had been closed over the course of two years in the districts that he represented and that the advanced level placement classes offered in the higher achieving schools did not yield academically successful students. The other representative asked why he should support the Go To High School, Go To College Act of 2015 which essentially aimed to allow high school students to be dually enrolled in high school and college for free using their Pell Grants (Civic Impulse, 2017). In response to this question, I
explained to the politician how in the future, it is essential to recognize that the seats being occupied by politicians currently, may be one day occupied by students from schools that are currently failing. Those same students may take office and see education as something that is not a top priority because the current generation in power did not seem to take it seriously. The Go To High School, Go To College Act of 2015 was not passed.

In the President Trump era, Secretary of Education is a position that has been purchased and bargained for by Betsy DeVos who has not demonstrated an interest in the development and enhancement of public schools but instead called it “a dead end” and would rather dismantle the public school system and invest in private and charter schools (Bryan, 2017). Albeit if today’s youth in underserved schools decide to take steps in the future towards a better education system because of the neglect that they experienced during their primary and secondary academic life, that is still not a fight that students should have to prepare for. Having more power and being higher up in a job position that impacts many should not mean that one looks down on those with less, it should mean that one looks out for and guides in the best interest of those with less.

It is crucial for politicians to take the present study into serious consideration because investing in the development of schools along with the teachers and students within them contributes to the success of the nation (Fine, 1947). Every child’s education needs to be seen as something that should never have the possibility of being cut short or limiting of a child’s never ending potential. As politicians set laws that impact student academic achievement and well-being student and teacher input should be a requirement when lawmakers proceed with impacting the lives of the teachers and students.

Continuing outward from the micro level out to the mid and macro levels, the roles of the administrations of schools, superintendent and even as high as the Secretary of Education are
impacted as a result of studies such as this. The pressure should be placed on the previously mentioned roles to take the necessary steps to improve the education. There should be an encouragement of the schools by the stated parties to hold interventions that are geared towards the improvement of student academic achievement and subjective well-being. Recognizing and admitting that schools are in need of an intervention is the first step and should be without negative consequence. Schools should not be closed when test scores are not met, students exhibit negative behavior, teachers disinvest, or schools lose funding. The response of the members of the mid and macro levels of education need to be geared towards looking for a way through and not a way out.

Work aimed at the improvement of school systems, the students and teachers within them, and more specifically, academic achievement and well-being in school, is work that will never be complete. However, starting with students and teachers, the essential two, is a great place to begin.
References


Maulana, R., Opdenakker, M. C., Stroet, K., & Bosker, R. (2013). Changes in teachers’ involvement versus rejection and links with academic motivation during the first year of


Appendix A

Crandall Intellectual Achievement Responsibility Questionnaire

1. If a teacher passes you to the next grade, would it probably be
   a. because she liked you, or
   b. because of the work you did?

2. When you do well on a test at school, is it more likely to be
   a. because you studied for it, or
   b. because the test was especially easy?

3. When you have trouble understanding something in school, is it usually
   a. because the teacher didn't explain it clearly, or
   b. because you didn't listen carefully?

4. When you read a story and can't remember much of it, is it usually
   a. because the story wasn't well written, or
   b. because you weren't interested in the story?

5. Suppose your parents say you are doing well in school. Is this likely to happen
   a. because your school work is good, or
   b. because they are in a good mood?

6. Suppose you did better than usual in a subject at school. Would it probably happen?
   a. because you tried harder, or
   b. because someone helped you?

7. When you lose at a game of cards or checkers, does it usually happen?
   a. because the other player is good at the game, or
   b. because you don't play well?

8. Suppose a person doesn't think you are very bright or clever.
   a. can you make him change his mind if you try to, or
   b. are there some people who will think you're not very bright no matter what you do?

9. If you solve a puzzle quickly, is it
   a. because it wasn't a very hard puzzle, or
   b. because you worked on it carefully?

10. If a boy or girl tells you that you are dumb, is it more likely that they say that
    a. because they are mad at you, or
    b. because what you did really wasn't very bright?
11. Suppose you study to become a teacher, scientist, or doctor and you fail. Do you think this would happen?
   a. because you didn't work hard enough, or
   b. because you seeded some help, and other people didn't give it to you?

12. When you learn something quickly in school, is it usually
   a. because you paid close attention, or
   b. because the teacher explained it clearly?

13. If a teacher says to you, "Your work is fine," is it
   a. something teachers usually say to encourage pupils, or
   b. because you did a good job?

14. When you find it hard to work arithmetic or math problems at school, is it
   a. because you didn't study well enough before you tried them, or
   b. because the teacher gave problems that were too hard?

15. When you forget something you heard in class, is it
   a. because the teacher didn't explain it very well, or
   b. because you didn't try very hard to remember?

16. Suppose you weren't sure about the answer to a question your teacher asked you, but your answer turned out to be right. Is it likely to happen
   a. because she wasn't as particular as usual, or
   b. because you gave the best answer you could think of?

17. When you read a story and remember most of it, is it usually
   a. because you were interested in the story, or
   b. because the story was well written?

18. If your parents tell you you're acting silly and not thinking clearly, is it more likely to be
   a. because of something you did, or
   b. because they happen to be feeling cranky?

19. When you don't do well on a test at school, is it
   a. because the test was especially hard, or
   b. because you didn't study for it?

20. When you win at a game of cards or checkers, does it happen
   a. because you play real well, or
   b. because the other person doesn't play well?
21. If people think you're bright or clever, is it
   a. because they happen to like you, or
   b. because you usually act that way?

22. If a teacher didn't pass you to the next grade, would it probably be
   a. because she "had it in for you," or
   b. because your school work wasn't good enough?

23. Suppose you don't do as well as usual in a subject at school. Would this probably happen
   a. because you weren't as careful as usual, or
   b. because somebody bothered you and kept you from working?

24. If a boy or girl tells you that you are bright, is it usually
   a. because you thought up a good idea, or
   b. because they like you?

25. Suppose you became a famous teacher, scientist or doctor. Do you think this would happen
   a. because other people helped you when you needed it, or
   b. because you worked very hard?

26. Suppose your parents say you aren't doing well in your school work. Is this likely to happen more
   a. because your work isn't very good, or
   b. because they are feeling cranky?

27. Suppose you are showing a friend how to play a game and he has trouble with it. Would that happen
   a. because he wasn't able to understand how to play, or
   b. because you couldn't explain it well?

28. When you find it easy to work arithmetic or math problems at school, is it usually
   a. because the teacher gave you especially easy problems, or
   b. because you studied your book well before you tried them?

29. When you remember something you heard in class, is it usually
   a. because you tried hard to remember, or
   b. because the teacher explained it well?

30. If you can't work a puzzle, is it more likely to happen
   a. because you are not especially good at working puzzles, or
   b. because the instructions weren't written clearly enough?
31. If your parents tell you that you are bright or clever, is it more likely
a. because they are feeling good, or
b. because of something you did?

32. Suppose you are explaining how to play a game to a friend and he learns quickly. Would that happen more often
a. because you explained it well, or
b. because he was able to understand it?

33. Suppose you’re not sure about the answer to a question your teacher asks you and the answer you give turns out to be wrong. Is it likely to happen
a. because she was more particular than usual, or
b. because you answered too quickly?

34. If a teacher says to you, "Try to do better," would it be
a. because this is something she might say to get pupils to try harder, or
b. because your work wasn’t as good as usual?
### Appendix B

**Student Subjective Well-Being Questionnaire**

**SSWQ**

<table>
<thead>
<tr>
<th>Name:</th>
<th>Age:</th>
<th>Gender:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td>Grade:</td>
<td>Race/ethnicity:</td>
</tr>
</tbody>
</table>

Here are some questions about what you think, feel, and do at school. Read each sentence and circle the **one** best answer.

<table>
<thead>
<tr>
<th>Sentence</th>
<th>Almost Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Almost Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I get excited about learning new things in class.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I feel like I belong at my school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I feel like the things I do at school are important.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. I am a successful student.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I am really interested in the things I am doing at school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I can really be myself at my school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I think school matters and should be taken seriously.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I do good work at school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. I enjoy working on class projects and assignments.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. I feel like people at my school care about me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. I feel it is important to do well in my classes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. I do well on my class assignments.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. I feel happy when I am working and learning at school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. I am treated with respect at my school.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. I believe the things I learn at school will help me in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>16. I get good grades in my classes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
### Appendix C

**Bracey Student Evaluation Form**

Student Evaluation Form

Course Title: __________

Professor: __________

Indicate, by placing a check in the box, your opinion regarding the statements on the left.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1) Strongly Disagree</th>
<th>2) Disagree</th>
<th>3) Neutral</th>
<th>4) Agree</th>
<th>5) Strongly Agree</th>
<th>9) Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>The course objectives were clear.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The grading criteria was clear.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The course was challenging.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I learned a lot of new information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The course was thought-provoking.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My peers and I discussed material outside of class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I worked to the best of my ability.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The course material was interesting.</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>I participate often in class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Circle your level of knowledge at the start of the course: Poor Fair Satisfactory Good Excellent

Circle your level of knowledge at the end of the course: Poor Fair Satisfactory Good Excellent

Circle how many hours per week outside of class did you spend studying: 0-3 hrs 4-6 hrs 6+ hrs

What grade range do you believe you will receive: A B C D F
<table>
<thead>
<tr>
<th>Statement</th>
<th>1) Strongly Disagree</th>
<th>2) Disagree</th>
<th>3) Neutral</th>
<th>4) Agree</th>
<th>5) Strongly Agree</th>
<th>9) Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>The professor was accessible when I needed help.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The professor provided an inclusive environment.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>The professor was well-prepared.</td>
<td></td>
<td></td>
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<tr>
<td>The professor was firm.</td>
<td></td>
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</tr>
<tr>
<td>The professor was knowledgeable.</td>
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</tr>
<tr>
<td>The professor explained further when I expressed misunderstanding.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Please use the space below to describe what you enjoyed most about the course.

Please use the space below to describe in a constructive manner what you did NOT enjoy/what you feel could be improved upon.
**Appendix D**

**Bracey Teacher Evaluation Form**

Teacher Evaluation Form
Indicate, by placing a check in the box, your opinion regarding the statements on the left.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1) Strongly Disagree</th>
<th>2) Disagree</th>
<th>3) Neutral</th>
<th>4) Agree</th>
<th>5) Strongly Agree</th>
<th>9) Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>I enjoy my time working for my school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>As a teacher I am well organized.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My students feel comfortable asking me for help.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I make sure that my students are aware of my expectations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I tailor my teaching methods to accommodate my students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel respected by my students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am accessible to my students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am firm and direct with my students.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student participation is essential in my class.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>My class is primarily lecture-based.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I respect my students.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am aware of power-differentials in my classroom.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My classroom is a safe space for students to express ideas.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The students learned a lot of new information.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I’ve worked to the best of my ability.

Please use the space below to indicate what you believe your strengths were/are in the classroom.

Please use the space below to indicate what you believe your weaknesses were/are and how you plan to improve for the remainder of the semester (if applicable).

Please use the space below to describe any favorable teaching moments.

Please use the space below to offer any constructive criticism and suggestions for improvement in your classroom.


Appendix E

Rose and Medway Teacher Locus of Control Questionnaire (1976)

1. When the grades of your students improve, it is more likely
   a. because you found ways to motivate the students.
   b. because the students were trying harder to do well.

2. Suppose you had difficulties in setting up learning centers for students in your classroom. Would this probably happen
   a. because you lacked the appropriate materials.
   b. because you didn't spend enough time in developing activities to go into the center.

3. Suppose your students did not appear to be benefitting from a more individualized method of instruction. The reason for this would probably be
   a. because you were having some problems managing this type of instruction.
   b. because the students in your class were such that they needed a more traditional kind of approach.

4. When a student gets a better grade on his report card than he usually gets, is it
   a. because the student was putting more effort into his school work
   b. or, because you found better ways of teaching that student?

5. If the students in your class became disruptive and noisy when you left them alone in the room for five minutes, would this happen
   a. because you didn't leave them with interesting work to do while you were gone, or, because
   b. the students were more noisy that day than they usually are?

6. When some of your students fail a math test, it is more likely
   a. because they weren't attending to the lesson,
   b. or, because you didn't use enough examples to illustrate the concept.

7. Suppose you were successful at using learning centers with your class of 30 students, Would this occur
   a. because you worked hard at it,
   b. or, because your students easily conformed to the new classroom procedure.

8. When a student pulls his or her grade up from a "C" to a "B", it is more likely
   a. because you came up with an idea to motivate the student,
   b. or, because the student was trying harder to do well.

9. Suppose you are teaching a student a particular concept in arithmetic or math and the student has trouble learning it. Would this happen
   a. because the student wasn't able to understand it, or,
   b. because you couldn't explain it very well?
10. When a student does better in school than he usually does, is it more likely
   a. because the student was trying harder, or
   b. because you tried hard to encourage the student to do better.

11. If you couldn't keep your class quiet, it would probably be
   a. because the students came to school more rowdy than usual, or
   b. because you were so frustrated that you weren't able to settle them down.

12. Suppose a play put on by your class was voted "Best Class Play of the Year" by students and
    faculty in your school. Would it be
   a. because you put in a lot of time and effort as the director, or,
   b. because the students were cooperative.

13. Suppose it were the week before Easter vacation and you were having some trouble keeping
    order in your classroom. This would more likely happen
   a. because you weren't putting extra effort into keeping the students under control, or,
   b. because the students were more uncontrollable than usual.

14. If one of your students couldn't do a class assignment, would it be
   a. because the student wasn't paying attention during the class lesson, or,
   b. because you gave the student an assignment that wasn't on his or her level?

15. Suppose you wanted to teach a series of lessons on Mexico, but the lessons didn't turn our as
    well as you had expected. This would more likely happen
   a. because the students weren't that interested in learning about Mexico, or,
   b. because you didn't put enough effort into developing the lessons.

16. Suppose a student who does not typically participate in class begins to volunteer his or her
    answers. This would likely happen
   a. because the student finally encounter a topic of interest to him or her, or,
   b. because you tried hard to encourage the student to volunteer his or her answers.

17. Suppose one of your students cannot remain on task for a particular assignment. Would this
    be more likely to happen
   a. because you gave the student a task that was somewhat less interesting than most tasks, or,
   b. because the student was unable to concentrate on his or her schoolwork that day?

18. Suppose you were unable to devise an instructional system as requested by the principal,
    which would accommodate the "needs of individual students" in your class. This would most
    likely happen
   a. because there were too many students in your class, or,
   b. because you didn't have enough knowledge or experience with individualized instructional
      programs.
19. If the students in your class perform better than they usually do on a test, would this happen
   a. because the students studied a lot for the test, or,
   b. because you did a good job of teaching the subject area?

20. When the performance of a student in your class appears to be slowly deteriorating, it is usually
   a. because you weren't trying hard enough to motivate him or her
   b. or because the student was putting less effort into his or her schoolwork.

21. Suppose a new student was assigned to your class, and this student had a difficult time
    making new friends with his or her classmates. Would it be more likely
    a. that most of the other students did not make an effort to be friends with the new student, or,
    b. that you were not trying hard enough to encourage the other students to be more friendly
       toward the newcomer?

22. If the students in your class performed better on a standardized achievement test given at the
    end of the year compared to students you had last year, it would probably be
    a. because you put more effort into teaching this year, or
    b. because this year's class of students were somewhat smarter than last year's.

23. Suppose, one day, you find yourself reprimanding one of your students more often than usual. Would this be more likely to happen
   a. because the student was misbehaving more than usual that day, or
   b. because you were somewhat less tolerant than you usually are?

24. Suppose one of your underachievers does his or her homework better than usual. This would
    probably happen
    a. because the student tried harder to do the assignment, or
    b. because you tried hard to explain how to do the assignment.

25. Suppose one of your students began to do better schoolwork than he usually does. Would this
    happen
    a. because you put much effort into helping the student do better, or
    b. because the student was trying harder to do well in school?

26. Suppose you ask two students to work together on an activity and the students were able to
    work together well. It is more likely
    a. that they were some of your better students, or
    b. that you gave the students explicit instructions on what to do?

27. If a student who is usually very quiet begins to talk in class, it is more likely
    a. because the student finally found something that interests him or her, or
    b. because you tried hard to encourage the student to talk in class.

28. If the students in your class remained quiet when you left them alone for a few minutes, this
    would more likely happen
a. because you knew how to keep them quiet when you are out of the room, or
b. because the students were more controllable than usual.
Appendix F

IRB PROPOSAL

Recruitment

Teacher Recruitment Flyer/Email
Hello!
Thank you for inquiring about this research study. This experiment is designed to examine how student-teacher relationships affect student academic achievement and student subjective well-being. It will take about 1 hour to complete the two questionnaires.

To be eligible for this study, you must be all of the following:
- A Certified Teacher
- American citizen over the age of 18
- Fluent in English
- Have never received a clinical diagnosis for depression.

Participation in this research study will earn your entry into a raffle for a Bard College Sweatshirt.
This IRB-approved research study is being run as part of a senior project under the supervision of Dr. Stuart Levine.
If you are still interested in participating in this study and are eligible based on the above criteria, please respond “Yes,” along with your name and subject that you teach, to Leah Bracey at lb8037@bard.edu.

Once test dates are available, you will be emailed a list of available time slots to choose from.

Thank you for your interest!
Leah Bracey,
Bard College Psychology Program

Parent/Guardian-Student Recruitment Flyer/Email
Hello!
Thank you for inquiring about this research study. This experiment is designed to examine how student-teacher relationships affect student academic achievement and student subjective well-being. It will take about 1 hour to complete. The experiment consists of three self-report questionnaires.

To be eligible for this study, the student must be all of the following:
- A current high school student
- An American citizen
- Fluent in English
- Have never received a clinical diagnosis for any mood or attention deficit disorders.

Participation in this research study will earn your entry into a raffle for a Bard College Sweatshirt.
This IRB-approved research study is being run as part of a senior project under the supervision of Dr. Stuart Levine.
If you are still interested in participating in this study and are eligible based on the above criteria, please respond “Yes,” along with your name, your school city and your graduating year, to Leah Bracey at lb8037@bard.edu. Once test dates are available, you will be emailed a list of available time slots to choose from.

Thank you for your interest!
Leah Bracey,
Bard College Psychology Program
Consent Forms

Principal Consent Form

Study Title:
IRB Case Number: 2016DEC06-BRA

This research study is designed to investigate the effects of teacher-student relationships on student academic achievement and student subjective well-being. The research is being conducted as a part of Leah Bracey’s Senior Project, under the supervision of Dean Emeritus and Professor Stuart Levine, PhD., in the Department of Psychology, at Bard College. This study calls for the participation of consenting parents, students and teachers at your academic institution. The teachers will be taking a total of three self-report questionnaires for this study. The questionnaires will be regarding how they feel about themselves as teachers and to what extent they feel responsible for the academic achievement of their students. The students, who have parental consent and who also give individual consent, will be taking a total of three self-report questionnaires. The questionnaires will be regarding how they feel they are doing in school socially, emotionally and academically, as well as to what extent they feel they are in control of their own lives. The total duration of the study will be 3 weeks long with about three campus visits by the researcher.

Why has my academic institution been selected for participation?
Your academic institution has been selected to participate in this study because it is a high school that is affiliated with Bard College.

Why is this study being done?
This study is being conducted in order to evaluate the effects of student-teacher relationships on student academic achievement and student subjective well-being.

How many people will take part in this study?
About 40 teachers and students will take part in this study.

What will happen if my academic institution takes part in this research study?
If you agree to allow your academic institution participate in this study, your teachers and students will complete a total of nine questionnaires; five for students and four for teachers.

How long will this study take?
Participation in this experiment is expected to take a total of about 1 hour per participant over the course of three weeks of intake.

Can I withdraw my academic institution from the study?
Yes. Participation in any research is voluntary and you can withdraw your academic institution at any time. There will be no consequence to your withdrawal from the study. Your students and teachers will still be fully compensated for their participation in the research.

What side effects or risks can I expect my students and faculty to experience from being in the study?
Although no side effects have been reported and it is unlikely, there is a possibility that the Teacher Locus of Control Questionnaire, the Teacher Evaluation Form, The Student Subjective Well-Being Questionnaire or the Internal Locus of Control Questionnaire may cause depressive symptoms, anxiety or fatigue.

Are there benefits to taking part in the study?
A benefit to taking part in this study is finding out what students at your academic institution anonymously believe your teachers do very well in regards to your teaching practices. Additionally, you can hypothesize, based on the results of the study, which types of teacher personalities influence higher student academic achievement. There are no other direct benefits to you. However, the participation of your academic institution may help benefit future research and possibly educational policy.

What other choices do I have if I do not allow my academic institution to take part in this study?
You are free to choose not to allow your academic institution to participate in the study. If you decide not to allow your academic institution to take part in this study, there will be no penalty to you, your students or teachers.

**Will my information be kept private?**

All of the personal information that is collected from the experimenter will be kept confidential. The data will be only identifiable by the experimenter with a numeric code. The information associating participant name to its numeric code will be kept in a separate and secure location. This study will be viewable in the Bard College Stevenson Library. However, your teachers’ and students’ personal and identifiable information will not be used in the publishing of this study.

For the raffle drawing, the names of the participants will be kept separate from the data collected. Participation in the raffle is completely unconnected to participation in the study and no one other than the researcher will be able to associate your students or teachers with this raffle or the study. After the drawing, any identifiable information linking your students and teachers with the raffle will be properly discarded.

**What are the costs of taking part in this study?**

There is no cost to you or your academic institution for taking part in this study.

**Will I or my institution be paid for taking part in this study?**

To compensate your academic institution’s teachers and students for their participation in this research study, their name will be entered into a raffle drawing to win a Bard College Sweatshirt.

**What are my rights if I take part in this study?**

Having your academic institution take part in research experiments is your choice. You may choose whether or not you let your academic institution participate in this study. If you decide to allow your academic institution take part in this study, you may withdraw your institution from the study at any time. If you choose to do so, there will be no penalty whatsoever. Your teachers and students will not be subject to physical harm or pain during the study.

**Who can answer my questions about the study?**

If you have any questions, comments or concerns about the research experiment, you may contact Leah Bracey at lb8037@bard.edu or Professor Stuart Levine at levine@bard.edu. Bard College’s Institutional Review Board can also answer any questions regarding ethics and can be contacted via email at irb@bard.edu.

If you feel that you, your teachers or students need help or support with any emotional or psychological distress as a result of this study, please contact your school counselor, local distress counselor or the 24-Hour Crisis Hotline - The Samaritans (212) 673-3000.

By placing a check on the line (left) and signing on the bottom line (below), I consent to have my institution participate in this study. I understand that I have the right to withdraw my academic institution from this study at any time and/or to decline participation in this study without consequence. I acknowledge the information presented in this consent form and have a complete understanding.

Academic Institution Name: __________________________________________________

Principal Printed Name: ____________________________________________________

Principal Signature: _________________________________________________________

Date of Participation: _______________________________________________________

Experimenter Printed Name: ________________________________________________

Experimenter Signature: ____________________________________________________

Date of Study conducted: ___________________________________________________
**Teacher Consent Form**

**Study Title:**
**IRB Case Number: 2016DEC06-BRA**

This research study is designed to investigate the effects of teacher-student relationships on student academic achievement and student subjective well-being. The research is being conducted as a part of Leah Bracey’s Senior Project, under the supervision of Dean Emeritus and Professor Stuart Levine, PhD., in the Department of Psychology, at Bard College. This study includes two self-report questionnaires. First, you will be asked to complete a self-report evaluation. You will then be asked to complete an Attribution Questionnaire.

**Why have I been selected for participation?**
You have been selected to participate in this study because you are a high school teacher who teaches 10th grade students.

**Why is this study being done?**
This study is being conducted in order to evaluate the effects of student-teacher relationships on student academic achievement and student subjective well-being.

**How many people will take part in this study?**
About 40 teachers and students will take part in this study.

**What will happen if I take part in this research study?**
If you agree to participate in this study, you will complete a total of three questionnaires. After the second questionnaire, you will receive feedback regarding your teaching experience and practices.

**How long will this study take?**
Participation in this experiment is expected to take a total of about 1 hour.

**Can I withdraw from the study?**
Yes. Participation in any research is voluntary and you can withdraw at any time. There will be no consequence to your withdrawal from the study. You will still be fully compensated for your participation in the research.

**What side effects or risks can I expect from being in the study?**
Although no side effects have been reported and it is unlikely, there is a possibility that the Teacher Locus of Control Questionnaire or the Teacher Evaluation Form may cause depressive symptoms, anxiety or fatigue.

**What are the consequences to participating in this study?**
Participation and stopping participation will not affect your relationship to the institution and its administrators. Your results will be kept anonymous.

**Are there benefits to taking part in the study?**
A benefit to taking part in this study is finding out what your students anonymously believe you do very well in regards to your teaching practices. There are no other direct benefits to you. However, your participation may help benefit future research and possibly educational policy.

**What other choices do I have if I do not take part in this study?**
You are free to choose not to participate in the study. If you decide not to take part in this study, there will be no penalty to you.

**Will my information be kept private?**
All of the personal information that is collected from the experimenter will be kept confidential. Your data will be only identifiable by the experimenter with a numeric code. The information associating your name to its numeric code will be kept in a separate and secure location. This study will be viewable in the Bard College Stevenson Library. However, your personal and identifiable information will not be used in the publishing of this study.

For the raffle drawing, your name will be kept separate from the data collected. Your participation in the raffle is completely unconnected to your participation in the study and no one other than the researcher will
be able to associate you with this raffle or the study. After the drawing, any identifiable information linking you with the raffle will be properly discarded.

**What are the costs of taking part in this study?**
There is not a cost to you for taking part in this study.

**Will I be paid for taking part in this study?**
To compensate you for your participation in this research study, your name will be entered into a raffle drawing to win a Bard College Sweatshirt.

**What are my rights if I take part in this study?**
Taking part in research experiments is your choice. You may choose whether or not you participate in this study. If you decide to take part in this study, you may leave the study at any time. If you choose to do so, there will be no penalty whatsoever. You will not be subject to physical harm or pain during the study.

**Who can answer my questions about the study?**
If you have any questions, comments or concerns about the research experiment, you may contact Leah Bracey at lb8037@bard.edu or Professor Stuart Levine at levine@bard.edu. Bard College’s Institutional Review Board can also answer any questions regarding ethics and can be contacted via email at irb@bard.edu.

If you feel that you need help or support with any emotional or psychological distress as a result of this study, please contact your local distress counselor or the 24-Hour Crisis Hotline - The Samaritans (212) 673-3000.

By placing a check on the line (left) and signing on the bottom line (below), I consent to participate in this study. I understand that I have the right to withdraw from this study at any time and/or to decline participation in this study without consequence. I acknowledge the information presented in this consent form and have a complete understanding.

____________ Printed Version ___________ Online Version

Participant Printed Name: ____________________________________________

Participant Signature: _____________________________________________

Dates of Participation: ____________________________________________

Experimenter Printed Name: _________________________________________

Experimenter Signature: ___________________________________________

Date of Study conducted: ___________________________________________
This research study is designed to investigate the effects of teacher-student relationships on student academic achievement and student subjective well-being. The research is being conducted as a part of Leah Bracey’s Senior Project, under the supervision of Dean Emeritus and Professor Stuart Levine, PhD., in the Department of Psychology, at Bard College. This study includes three self-report questionnaires, two of which will be repeated. In the first part of this study, your student will be asked to complete two self-report evaluations. Your student will then be asked to complete an Attribution Questionnaire.

Why has your student been selected for participation?
Your student has been selected to participate in this study because they are a high school student.

Why is this study being done?
This study is being conducted in order to evaluate the effects of student-teacher relationships on student academic achievement and student subjective well-being.

How many people will take part in this study?
About 40 teachers and students will take part in this study.

What will happen if my student takes part in this research study?
If you and your student agree to have your student participate in this study, your student will complete a total of three questionnaires.

How long will this study take?
Participation in this experiment is expected to take a total of about 1 hour.

Can I withdraw my student/ can my student withdraw from the study?
Yes. Participation in any research is voluntary and you can withdraw your student at any time and your student can withdraw themselves at any time. There will be no consequence to withdrawal from the study. Your student will still be fully compensated for their participation in the research.

What side effects or risks can I expect from my student being in the study?
Although no side effects have been reported and it is unlikely, there is a possibility that the Internal/External Locus of Control Questionnaire, Student Evaluation Form or the Student Subjective Well-Being Form may cause depressive symptoms, anxiety or fatigue.

What are the consequences of participating or not participating in this study?
Participation and stopping participation will not affect grades, letters of recommendation or relationships with teachers and school administrators.

Are there benefits to taking part in the study?
There are no other direct benefits to you or your student. However, your participation may help benefit future research and possibly educational policy.

What other choices do I have if I do not take part in this study?
You are free to choose not to have your student participate in the study. If you decide not to allow your student to take part in this study, there will be no penalty to you or your student.

Will my student’s information be kept private?
All of the personal information that is collected from the experimenter will be kept confidential. Your student’s data will be only identifiable by the experimenter with a numeric code. The information associating your student’s name to its numeric code will be kept in a separate and secure location. This study will be viewable in the Bard College Stevenson Library. However, your student’s personal and identifiable information will not be used in the publishing of this study. For the raffle drawing, your student’s name will be kept separate from the data collected. Your student’s participation in the raffle is completely unconnected to their participation in the study and no one other than
the researcher will be able to associate your student with this raffle or the study. After the drawing, any identifiable information linking your student with the raffle will be properly discarded.

**What are the costs of taking part in this study?**
There is not a cost to you or your student for taking part in this study.

**Will I or my student be paid for taking part in this study?**
You will not be paid for allowing your student to participate in this study. To compensate your student for their participation in this research study, their name will be entered into a raffle drawing to win a Bard College Sweatshirt.

**What are my rights if I allow my student to take part in this study? What are the rights of my student?**
Allowing your student to take part in research experiments is your choice. Taking part in research with your permission is your student’s choice. You may choose whether or not you allow your student to participate in this study. If you decide to allow your student to take part in this study, your student may leave the study at any time and/or you may withdraw your student at any time. If you choose to do so, there will be no penalty whatsoever. Your student will not be subject to physical harm or pain during the study.

**Who can answer my questions about the study?**
If you have any questions, comments or concerns about the research experiment, you may contact Leah Bracey at lb8037@bard.edu or Professor Stuart Levine at levine@bard.edu. Bard College’s Institutional Review Board can also answer any questions regarding ethics and can be contacted via email at irb@bard.edu.

If you feel that you need help or support with any emotional or psychological distress as a result of this study, please contact your local distress counselor or the 24-Hour Crisis Hotline - The Samaritans (212) 673-3000.

By placing a check on the line (left) and signing on the bottom line (below), I consent to participate/for my student to participate in this study. I understand that I have the right to withdraw my student from this study at any time and/or to decline participation in this study without consequence. I acknowledge the information presented in this consent form and have a complete understanding.

____________  Printed Version               ____________  Online Version

Parent/Guardian of Student Printed Name: _____________________________________________

Parent/Guardian of Student Signature: ________________________________________________

Student Participant Printed Name: ____________________________________________________

Student Participant Signature: _________________________________________________________

Dates of Participation: ______________________________________________________________

Experimenter Printed Name: _________________________________________________________

Experimenter Signature: _____________________________________________________________

Date of Study conducted: _____________________________________________________________
Scripts

In-person Protocol Script for Teachers

Pre-Script/ Pre-Experiment Material Checklist:
- Consent Form
- Necessary Questionnaire(s)
- Manila Folder

[Outside Office Room/ Questionnaire Room]
“Hi! Good (Morning | Afternoon)! Are you participating in the study?”
“Great! What is your name?”
“Is that your preferred name for the duration of your participation in the study?”
“Sounds good! Please come in and have a seat here.” *Direct participant to seat at desk*
“Thank you so much for taking the time out to participate today in the study. You can stop participation at any time during the study without any consequence. In today’s experiment you will complete two questionnaires. There are no right or wrong answers for any questions in the questionnaires, they both simply require your opinion. The first questionnaire that you will complete will be a Teacher Locus of Control Questionnaire. You will have 35 minutes to complete the questionnaire once you have read the instructions and asked any questions regarding the instructions. After you have completed the first questionnaire, you will hand the completed questionnaire to me and I will then place it in a manila folder and the folder into a secure location. Next you will complete a Teacher Evaluation Form and you will have 25 minutes to complete it. Once you have completed the evaluation form you will give it to me and I will place it in the same manila folder as your first questionnaire. I have essentially just summarized the consent form for you. It is important that you have a complete understanding of what the study is asking of you and how it affects you. Please take time to review the consent form and once you feel comfortable please check the line, print your name, and sign both consent forms. Two identical consent forms are presented for your consideration so that you may have one and that I may have one copy for my confidential records.”
*Hand participant the two consent forms and give them time to review it.*
*Once they have signed the consent forms, place the research study copy in a manila folder.*
“We will now begin with the first questionnaire. After you have read the instructions, you will have 35 minutes to complete it. You can alert me by saying my name that you have finished or wish to stop.”
*Sit in another part of the room sort of out of sight but still in peripheral view so that the participant is not distracted by presence but also close enough that they feel comfortable enough to ask a question or stop the study.*
*Once the participant has completed the first questionnaire place it in the same manila folder as the consent form.*
“Thank you for completing the questionnaire!”
“Are you doing okay?”
“Are you okay with completing the second questionnaire?”
*Depending on their answer, give them the second questionnaire or recommend that they stop.*
*If they are continuing with the experiment, give them the Teacher Evaluation Form Questionnaire.*
“We will now begin with the second questionnaire. After you have read the instructions, you will have 25 minutes to complete it. You can alert me by saying my name that you have finished or wish to stop.”
*Sit in the same part of the room that is sort of out of sight but still in peripheral view so that the participant is not distracted by presence but also close enough that they feel comfortable enough to ask a question or stop the study.*
*Once the participant has completed the second questionnaire, place it in the same manila folder as the consent form and the first questionnaire.*
“Thank you so much for completing the second questionnaire. That is all for today. If you have any questions, comments or concerns you may ask me now or contact me via email. All of the contact information that you will need is located on your copy of the consent form. Shall you choose to continue with the experiment, in approximately a few days you will be contacted to set up another meeting time for the upcoming week. Are there any questions that I can answer for you now?”

“Thank you again for your participation in the study! I will be in contact with you soon.”

“Have a great rest of your day!”
In-Person Protocol Script for Students

Pre-Script/ Pre-Experiment Material Checklist:
- Consent Form
- Necessary Questionnaire(s)
- Manila Folder

[Outside Office Room/ Questionnaire Room]
“Hi! Good (Morning | Afternoon)! Are you participating in the study?”
“Great! What is your name?”
“Is that your preferred name for the duration of your participation in the study?”
“Sounds good! Please come in and have a seat here.” *Direct participant to seat at desk*
“Thank you so much for taking the time out to participate today in the study. You can stop participation at any time during the study without any consequence. In today’s experiment you will complete two questionnaires. There are no right or wrong answers for any questions in the questionnaires, they both simply require your opinion. The first questionnaire that you will complete will be an Internal/External Locus of Control Questionnaire. You will have a class period which is around 50 minutes to complete all of the questionnaire once you have read the instructions and asked any questions regarding the instructions. After you have completed the first questionnaire, you will be asked to continue the study. Provided that you say yes, next you will complete a Student Evaluation Form. Once you have completed the evaluation form you will be asked to complete the final questionnaire of the session. Thirdly, you will complete a Student Subjective Well-being Questionnaire and you will have the remainder of the period to finish it. Your packet of questionnaires will be collected at your point of designated termination of the study and placed into a secure manila envelope. I have essentially just summarized the consent form for you. It is important that you have a complete understanding of what the study is asking of you and how it affects you. Please take time to review your signed and parent/guardian signed consent form once more.”
*Hand participant the two signed consent forms and give them time to review it.*
*Once they have reviewed the consent forms, place the research study copy in a manila folder.*
*Place the Questionnaire Packet in front of the student*
“We will now begin with the first questionnaire. After you have read the instructions, you will have the duration of the class period to complete the three of them. You can alert me by saying my name that you have finished or wish to stop.”
*Sit in another part of the room sort of out of sight but still in peripheral view so that the participant isn’t distracted by presence but also close enough that they feel comfortable enough to ask a question or stop the study.*
*Once the participant has completed the Crandall Intellectual Achievement Responsibility questionnaire remind them of their rights and ask their continuation of the study.*
“Thank you for completing the questionnaire!”
“Are you doing okay?”
“Are you okay with completing the second questionnaire?”
*Depending on their answer, give them the second questionnaire or recommend that they stop.*
*If they are continuing with the experiment, give them the Student Evaluation Form Questionnaire.*
“We will now begin with the second questionnaire. After you have read the instructions, you will be asked to complete the final questionnaire. You can alert me by saying my name that you have finished or wish to stop.”
*Sit in the same part of the room that is sort of out of sight but still in peripheral view so that the participant is not distracted by presence but also close enough that they feel comfortable enough to ask a question or stop the study.*
*Once the participant has completed the second questionnaire remind them of their rights and ask their continuation of the study.*

“Thank you for completing the questionnaire!”

“Are you doing okay?”

“Are you okay with completing the third questionnaire?”

*Depending on their answer, give them the third questionnaire or recommend that they stop.*

*If they are continuing with the experiment, give them the Student Subjective Well-being Questionnaire.*

“We will now begin with the third questionnaire. After you have read the instructions, you will have the remaining duration of the class to complete it. You can alert me by saying my name that you have finished or wish to stop.”

*Sit in the same part of the room that is sort of out of sight but still in peripheral view so that the participant is not distracted by presence but also close enough that they feel comfortable enough to ask a question or stop the study.*

“Thank you so much for completing the third questionnaire.”

“The study is now complete. Thank you for your full participation, it is greatly appreciated! Do you have any questions, comments or concerns?”

“Now we will begin the debriefing portion of the study where I tell you what this study was aiming to find and the purpose behind the questionnaires.”
Debriefing

Teacher Debrief Script

“So, in this study, we are interested in whether or not there is an ideal matching between teacher and student that ultimately yields high student academic achievement and subjective well-being. Specifically, we wanted to examine the influence of attribution theories; who claims responsibility for student academic achievement-- teacher or student. Based on the Teacher Locus of Control Questionnaire that you took and the Teacher Evaluation Forms, I hope to examine the degree to which you feel personally responsible for the academic achievement of your students. Based on your score on the Teacher Locus of Control Scale and the extent to which your students felt that you tailored your teaching to their learning style, I can use this information to infer the influence of teacher-student relationships on academic achievement and student well-being, propose future research and changes in educational policy.”

“I hypothesize that teachers who believe that they have a large influence on student academic achievement paired with students who believe they are in control of their own lives will yield students who have higher letter grades in their classes and feel happier in the school environment. Contrastsingly, I hypothesize that teachers who believe that they do not have a large influence on student academic achievement paired with students who believe they are not in control of their own lives will yield students who have lower letter grades in their classes. If there is a teacher who believes that they have a large influence on student academic achievement paired with students who believe they are not in control of their own lives it is hypothesized that the student will have mid-range to high letter grades in their classes. If there is a teacher who believes that they do not have a large influence on student academic achievement paired with students who believe they are in control of their own lives it is hypothesized that the student will have mid-range to low letter grades in their classes.”

“If these hypotheses prove to be true based on the gathered data, the results would demonstrate that teachers and students who accept responsibility for student academic achievement and act to ensure it will produce high student academic achievement and student subjective well-being in the classroom and overall school environment. From this we can imply correlations between teacher and student relationships and academic achievement and student subjective well-being. This three way relationship has the potential to be used to change the educational environment and educational policy.”

“Do you have any questions about this or any of the tasks that you completed today?”

“Great. Again, thank you so much for your participation today. If you think of any questions or concerns, please do not hesitate to email me, Leah, with the information provided in your consent form. The final page of the consent form also contains the contact information for the IRB and my faculty advisor Professor Stuart Levine, should you wish to speak with someone other than myself (Leah). You can also find the number for school counseling and a 24-hour hotline, should you feel any distress or anxiety as a result of this study.”

“Thank you again and have a great day!”
“So, in this study, we are interested in whether or not there is an ideal matching between teacher and student that ultimately yields high student academic achievement and subjective well-being. Academic achievement in this study means the improvement or worsening of the self-predicted letter grade of the student. Specifically, we wanted to examine the influence of attribution theories; who claims responsibility for student academic achievement-- teacher or student. Based on the Internal/External Locus of Control Questionnaire that you took, the Subjective Well-being Questionnaire and the Student Evaluation Forms, I hope to examine the degree to which you feel personally responsible for your academic achievement. Based on your score on the Internal/External Locus of Control Scale and the extent to which you felt that your teacher tailored their teaching to your learning style, I can use this information to infer the influence of teacher-student relationships on academic achievement and student well-being, propose future research and changes in educational policy.”

“I hypothesize that teachers who believe that they have a large influence on student academic achievement paired with students who believe they are in control of their own lives will yield students who have higher letter grades in their classes and feel happier in the school environment. Contrastingly, I hypothesize that teachers who believe that they do not have a large influence on student academic achievement paired with students who believe they are not in control of their own lives will yield students who have lower letter grades in their classes. If there is a teacher who believes that they have a large influence on student academic achievement paired with students who believe they are not in control of their own lives it is hypothesized that the student will have mid-range to high letter grades in their classes. If there is a teacher who believes that they do not have a large influence on student academic achievement paired with students who believe they are in control of their own lives it is hypothesized that the student will have mid-range to low letter grades in their classes.”

“If these hypotheses prove to be true based on the gathered data, the results would demonstrate that teachers and students who accept responsibility for student academic achievement and act to ensure it will produce high student academic achievement. From this we can imply correlation between teacher and student relationships and academic achievement and student subjective well-being. This three way relationship has the potential to be used to change the educational environment and educational policy.”

“Do you have any questions about this or any of the tasks that you completed today?”

“Great. Again, thank you so much for your participation today. If you think of any questions or concerns, please do not hesitate to email me, Leah, with the information provided in your consent form. The final page of the consent form also contains the contact information for the IRB and my faculty advisor Professor Stuart Levine, should you wish to speak with someone other than myself (Leah). You can also find the number for school counseling and a 24-hour hotline, should you feel any distress or anxiety as a result of this study.”

“Thank you again and have a great day!”
Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that Leah Bracey successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 10/09/2016.

Certification Number: 2205331.
Appendix H

20 February 2017

Leah Bracey
lb8037@bard.edu

Re: It Takes Two: Adolescent Students’ Relationships with Their Teachers and the Influence It Has on Student Academic Achievement and Well-Being

DECISION: APPROVED

Dear Leah,

The Bard Institutional Review Board has reviewed your thorough revisions. Your proposal is approved through 3 May 2017.

We recognize the loop you are caught in vis-à-vis gaining the principals’ consent. It will be sufficient to submit to the IRB copies of the signed Principal Consent Forms as you obtain them.

Your case number is 2017FEB20-BRA. Please notify the IRB if your methodology changes or unexpected events arise.

We wish you success with your Senior Project research.

Sincerely,

Simeen Sattar
IRB Chair

cc: Stuart Levine
Principal Consent Form

Study Title:
IRB Case Number: 2016DEC06-BRA

This research study is designed to investigate the effects of teacher-student relationships on student academic achievement and student subjective well-being. The research is being conducted as a part of Leah Bracey’s Senior Project, under the supervision of Dean Emeritus and Professor Stuart Levine, PhD., in the Department of Psychology, at Bard College. This study calls for the participation of consenting parents, students and teachers at your academic institution. The teachers will be taking a total of three self-report questionnaires for this study. The questionnaires will be regarding how they feel about themselves as teachers and to what extent they feel responsible for the academic achievement of their students. The students, who have parental consent and who also give individual consent, will be taking a total of three self-report questionnaires. The questionnaires will be regarding how they feel they are doing in school socially, emotionally and academically, as well as to what extent they feel they are in control of their own lives. The total duration of the study will be 3 weeks long with about three campus visits by the researcher.

Why has my academic institution been selected for participation?
Your academic institution has been selected to participate in this study because it is a high school that is affiliated with Bard College.

Why is this study being done?
This study is being conducted in order to evaluate the effects of student-teacher relationships on student academic achievement and student subjective well-being.

How many people will take part in this study?
About 40 teachers and students will take part in this study.

What will happen if my academic institution takes part in this research study?
If you agree to allow your academic institution to participate in this study, your teachers and students will complete a total of nine questionnaires, five for students and four for teachers.

How long will this study take?
Participation in this experiment is expected to take a total of about 1 hour per participant over the course of three weeks of intake.

Can I withdraw my academic institution from the study?
Yes. Participation in any research is voluntary and you can withdraw your academic institution at any time. There will be no consequence to your withdrawal from the study. Your students and teachers will still be fully compensated for their participation in the research.

What side effects or risks can I expect my students and faculty to experience from being in the study?
Although no side effects have been reported and it is unlikely, there is a possibility that the Teacher Locus of Control Questionnaire, the Teacher Evaluation Form, The Student Subjective Well-Being Questionnaire or the Internal Locus of Control Questionnaire may cause depressive symptoms, anxiety or fatigue.

Are there benefits to taking part in the study?
A benefit to taking part in this study is finding out what students at your academic institution anonymously believe your teachers do very well in regards to your teaching practices. Additionally, you can hypothesize, based on the results of the study, which types of teacher personalities influence higher student academic achievement. There are no other direct benefits to you. However, the participation of your academic institution may help benefit future research and possibly educational policy.

What other choices do I have if I do not allow my academic institution to take part in this study?
EFFECTS OF ATTRIBUTION ON ACADEMIC ACHIEVEMENT AND WELL-BEING

You are free to choose not to allow your academic institution to participate in the study. If you decide not to allow your academic institution to take part in this study, there will be no penalty to you, your students or teachers.

Will my information be kept private?
All of the personal information that is collected from the experimenter will be kept confidential. The data will be only identifiable by the experimenter with a numeric code. The information associating participant name to its numeric code will be kept in a separate and secure location. This study will be viewable in the Bard College Stevenson Library. However, your teachers’ and students’ personal and identifiable information will not be used in the publishing of this study.

For the raffle drawing, the names of the participants will be kept separate from the data collected. Participation in the raffle is completely unconnected to participation in the study and no one other than the researcher will be able to associate your students or teachers with this raffle or the study. After the drawing, any identifiable information linking your students and teachers with the raffle will be properly discarded.

What are the costs of taking part in this study?
There is no cost to you or your academic institution for taking part in this study.

Will I or my institution be paid for taking part in this study?
To compensate your academic institution’s teachers and students for their participation in this research study, their name will be entered into a raffle drawing to win a Bard College Sweatshirt.

What are my rights if I take part in this study?
Having your academic institution take part in research experiments is your choice. You may choose whether or not you let your academic institution participate in this study. If you decide to allow your academic institution take part in this study, you may withdraw your institution from the study at any time. If you choose to do so, there will be no penalty whatsoever. Your teachers and students will not be subject to physical harm or pain during the study.

Who can answer my questions about the study?
If you have any questions, comments or concerns about the research experiment, you may contact Leah Bracey at lbb037@bard.edu or Professor Stuart Levine at levine@bard.edu. Bard College’s Institutional Review Board can also answer any questions regarding ethics and can be contacted via email at irb@bard.edu.

If you feel that you, your teachers or students need help or support with any emotional or psychological distress as a result of this study, please contact your school counselor, local distress counselor or the 24-Hour Crisis Hotline- The Samaritans (212) 673-3000.

By placing a check on the line (left) and signing on the bottom line (below), I consent to have my institution participate in this study. I understand that I have the right to withdraw my academic institution from this study at any time and/or to decline participation in this study without consequence. I acknowledge the information presented in this consent form and have a complete understanding.

Academic Institution Name: 

Principal Printed Name: JOHN
Principal Signature: 
Date of Participation: 3/17/17

Experimenter Printed Name: Leah Bracey
Experimenter Signature: 
Date of Study conducted: 3/17/17
Appendix I

Proposed Intervention Materials

Teacher Classroom Management Tips based on Dave Foley’s Classroom Management Book (2015)

Establish The Rules
On the first day of class, establish the school rules and following, establish the specific classroom rules. Students are not mind-readers and rules that an adult would assume are common knowledge to students, are often not if the student has not been taught before. Henceforth, it is essential that rules are established on day one. Have the rules written clearly on a poster-board so the students and you may reference it in the event of misbehavior. Furthermore, have the consequences on the board next to each rule, so the students know what to expect and there is no uncertainty.

Getting Student Attention
Gather attention before beginning your class lesson. Do not start teaching until you have full attention. Inform the class in a medium tone voice that you expect everyone to be quiet and take their seat. You can also try standing at the front of the classroom and saying “If you can hear me clap once. If you can hear me clap twice. If you can hear me clap three times, take your seat and listen for further instructions.” This technique reminds students of their active listening skills and puts control back into your hands. One final technique to consider before starting a class is to stand outside of the classroom and greet each student as they come in and tell them to go in quietly and get started with the paper on their desks. This method serves two purposes: 1. The students feel individually recognized which leads to respect for authority and 2. The students are aware of the expectation from the moment that they enter into the classroom.

Maintaining Student Attention
Maintaining attention of resistant students is challenging when trying to not take away from the limited time to teach a lesson. A great tactic is to make the students struggling to pay attention a part of the lesson. If this is a class focusing on a text with a main character, ask the student how they relate to the student or if they would act in a similar way. This also allows for you as the teacher to be able to see the level of understanding of the students. If it is a math course, have the students who are having trouble focusing or disrupting the class go up to the board and solve problems on the board or to write a problem on the board and ask a student in the class to help them and the class get through the problem. This allows for students to use each other as resources and encourages a sense of classroom collective achievement. Students may not be paying attention because they do not know or understand the material. In other scenarios students who are having side conversations, make your way over to their desk and make disapproving eye contact while continuing teaching. You being close to them will more than likely discourage their talking.
One-“Mic”rophone
Establishing a one-mic rule is essential for classroom management. For more disruptive and harder to manage classes, having a stress ball or something similar for the students to hold onto indicating that it is their turn to speak is helpful. It establishes respect and students become better active listeners. A consequence to not adhering to the one-mic rule would be writing a paragraph due by the end of the day or the following morning on why it is important to listen and not speak out of turn.

Furniture Arrangement
Rearranging the desks into a circle or a U-shape can be very effective because students are encouraged to monitor one another’s behavior, respectfully look at and pay attention to the speaker, and you as the teacher have a clear view of all students. Students are less likely to be distracted and turn their heads to the person in back of them if there is no one behind them.
Teacher Lesson Planning Tips

Timing/Organization-
Students typically remain focus for about 15 -20 minutes per activity during a lesson. The ideal set up for a 50-minute lesson is to have a 5 minute warm up which goes over what was previously taught in the last class lesson. Then there should be a connecting transition into the new topic. This makes it easier for students to intellectually digest the upcoming new information.

Opening Question-
Starting general on the new topic by posing a question related to the subject to the entire class is helpful for the students and you as a teacher. The students are able to express what they know or are unsure about which gives you the chance to gauge the level of knowledge in the class. Furthermore, students learn well when they learn from each other and an open discussion is helpful.

Mind Map-
Having students write what they know on the board around a mind map is also beneficial for students because it allows for collective thinking and support. After the mind map is complete, have students write down in their own notebooks what was written down. Writing notes down by hand is essential for a deeper level of understanding because the brain is encouraging it into the memory more than students just listening or typing up answers.

Physical Activity-
Going from class to class and seat to seat can be boring for students. Studies show that physical activity in the classroom is another good way of helping students understand new material.

Characteristics of Quality Problems -
➢ Engaging and motivating;
➢ Authentic, from professional/social life;
➢ Sustaining discussion, open to more hypotheses;
➢ A stimulus for collaborative enquiry;
➢ Challenging learners to achieve learning outcomes, understand key concepts and be able to work on common practice problems;
➢ Enhances the development of transferable skills.

Appendix J

Bracey Student Time Management Tips

❖ Utilize a scheduling notebook every day.
   - Hopefully at the beginning of the year you receive a syllabus. If you do, once you receive it, write down the assignments that you have due on the corresponding date in your scheduling notebook. If you do not have a syllabus, meet with the teacher and receive estimations regarding assignments and show them your scheduling notebook. Teachers will appreciate your desire to stay on top of your assignments.

❖ Attend teacher office hours whenever offered.
   - Even if you do not believe that you have misunderstandings or questions from the class lesson, still go to office hours and have your teacher look over your work to be 100% sure that you are on the right track. Just presenting your work demonstrates a great work ethic and will have your professors know that not only are you invested in your work and doing a great job, but also that they are doing a good job teaching you.

❖ Get Ahead.
   - Getting ahead can be as ahead as working on a homework you just received last period during your free period or during lunch. Working on homework assignments as soon as you receive them provides you with more time at home to study and have free time.
   - Assignments may not be due for weeks, but as soon as you are assigned them, start generating ideas and preparing your outline for how you will complete your work. This saves you time in the future so that you do not spend hours coming up with ideas a
couple days before the assignment is due. Also, the sooner you start preparing to complete the assignment, the sooner you can ask your teacher questions and for clarifications. Your questions may also benefit other students.

❖ Pay Attention

- As simple as this piece of advice may seem, it is often one that is hardest to do when surrounded by classmates, especially when they are your friends. Paying attention requires you as the student to not have side-conversations while in class. This is because you may miss out on information in a lesson. Each lesson that you are taught has importance whether it be in real life or for a midterm and you do not want to miss it because of a side conversation that could’ve waited until break or lunch-time. Side conversations not only negatively impact you, but also those around you who are trying to learn.
Appendix K

Teacher Case Summaries

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Appendix L

Student Case Summaries

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