“It’s Just a Disability” or Is It?: Stigma, Psychological Needs, and Educational Outcomes in African American Adolescents with Learning-Related Disabilities

by

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Dedication

To Mom and Dad

Acknowledgements

Over the years, I have received support from many people who have shaped my development as a person and a scholar. First, I would like to say that it was my belief in God and my faith in Him that got me through the most difficult times these past 5 years. Without my unwavering faith in Him, I would have given up. There were plenty of rough times, times when I was uncertain of my future, times when I wanted to quit. In all those times, it made me glad to know that if I just held on to God and believed in His word, He would bring me through.

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Table of Contents

Dedication ii

Acknowledgements iii

List of Tables ix

List of Figures x

List of Appendices xi

Abstract xii

Chapter I Introduction 1

Significance of this study: Why Study African American Students with Learning Disabilities? 2

An explanation of the problem: Stigma, psychological needs, and special education 4

Specific study aims 7

Chapter II Literature Review 9

Experiences of African American students in special education 10

Research framework: Person-environment fit and self-determination theories as they pertain to African American students in special education 12

Race differences in psychological need satisfaction 18

Stigma associated with special education 23

Effects of general versus special education 25

Varying conceptualizations of self-determination: Psychological and special education 26

Dissertation Objectives 27

Significance of current study 28

Research Question 1: Are there racial differences in psychological needs in African American students with learning-related disabilities? 29

Research Question 2: To what extent do psychological needs moderate the relationship between negative school experiences (e.g. being teased) and placement in special education and academic engagement and achievement in African American students with learning-related disabilities? 30

Research Question 3a: How does the learning disability label become incorporated into the self-concept of African American students with learning disabilities? 30

Research Question 3b: Are the psychological needs of African American students with learning disabilities being satisfied in the school environment? What are the implications of psychological need satisfaction on student persistence and engagement in school? 30

Chapter III Study 1: Method, Results, and Discussion 32

Method 32

Participants 32

Measures 38

Procedure 40

Analytical strategy 41

Results 42

Correlations between study variables 42

Descriptive statistics 44

Hierarchical Linear Regressions 46

Summary of results 54

Discussion 54

Chapter IV Study 2: Method, Results, and Discussion 60

Method 60

The setting: Riverside Middle School 60

Study participants 62
Data Collection Recruitment 63
Measures 63
Procedure 64
Analytic Approach 65
Results 67
Psychological needs and thematic exploration 70
Summary of results 83
Discussion 84
Chapter V Conclusion 90
Appendix A 93
Appendix B 102
Appendix C 105
Appendix D 107
References 109

List of Tables

Table

1. t-Test and Chi-Square Differences in African American Students with and Without Missing Data 34

2. Correlations between Study Variables 43

3. Significant Differences on Study Variables between African American Students with Learning-Related Disabilities and White and Latino/a Students 45

4. Summary of Weighted Estimates of Hierarchical Regression Analysis Predicting Motivation and Academic Achievement for African American Students with Learning-Related Disabilities 47

5. Ethnic and Gender Breakdown of Students Attending Riverside Middle School 61

6. Study Participant Attributes 82

7. Results from the ADDI-Learning Disability Scale 83

List of Figures

Figure

1. Plot of the Significant Interaction between Teasing and Relatedness on Grades 48

2. Plot of the Marginally Significant Interaction between Teasing and Autonomy on Grades 49

3. Plot of the Marginally Significant Interaction between Teasing and Relatedness on Motivation 51

4. Plot of Marginally Significant Interaction between Teasing and Competence on Math Achievement 53

List of Appendices

Appendix

A. Youth Achievement and Resilient Study 93

B. Interview Protocol 102

C. Thematic Content Analysis for Disability Experience Conceptualizations 105

D. Missing Data Code 107

Abstract

"It's Just a Disability" or Is It?: Stigma, Psychological Needs, and Educational Outcomes in African American Adolescents with Learning-Related Disabilities

by

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Chair: Stephanie J. Rowley

The purpose of this dissertation project was to examine the extent to which the special education context, riddled with labeling and teasing, affected the motivation, academic self-concept, grades, and academic achievement of African American adolescents with learning-related disabilities. This dissertation research is situated within two theoretical frameworks, person-environment fit and self-determination theories, suggesting that optimal outcomes are associated with the satisfaction of certain psychological needs; namely, competence, relatedness, and autonomy. Data for Study 1 came from the Special Education Elementary Longitudinal Study (SEELS), a national educational policy study sponsored by the U. S. Department of Education. For this dissertation, I used data for 180 African American adolescents with learning-related disabilities who participated in SEELS. Results from Study 1 showed that there were racial differences in the satisfaction of only two of the three psychological needs. African American students with learning-related disabilities had higher ratings of competence and autonomy than White and Latino students, but there were no significant differences in

ratings of relatedness to the school environment. Although African American students had higher ratings of psychological needs fulfillment, they still earned the lowest grades of all the racial groups. Results from Study 1 also revealed that relatedness and autonomy served as moderators in the relationship between negative school experiences and educational outcomes such that when students were being teased and their psychological needs were high, they had higher educational outcomes. Though, for every moderating effect, the highest educational outcome was attained when students were not being teased and not feeling related to their environment or autonomous. The second study used data collected from semi-structured interviews conducted with 10 African American middle school students with learning-related disabilities. Results from Study 2 demonstrated the varying affects of the 'learning disability' label on the academic self-concept and motivation of African American students. Thematic content analysis was used to identity themes in the data. Several themes such as mistrust of the special education curriculum, disability shame and embarrassment, engagement and motivation in school, support from parents and teachers, and pride and acceptance of the disability were evident in the data. Some students internalized the stereotypes associated with the label into their academic self-concept which affected their engagement and motivation in school. Other students maintained a positive academic self-concept. Overall, results show that the students in the two studies were well adjusted and not as harmed by the special education environment as might be expected. This dissertation project has overarching implications for teachers and administrators; namely, educating teachers on the negative effects of stigma and

offering more opportunities for students with learning disabilities to interact with their peers in the general education curriculum.

Chapter I

Introduction

This dissertation research is rooted in the theoretical frameworks of person-environment fit and self-determination theory. Both theories suggest that context such as classroom environments, home environments, teachers, etc., plays a role in the satisfaction of psychological needs. The theories assume that individuals will be motivated or engaged if the psychological needs of competence, relatedness, and autonomy are satisfied. To some extent, the special education environment, which includes the classroom environment as well as factors such as labeling of students and teasing, can have an adverse affect on the satisfaction of psychological needs in African American students diagnosed with learning-related disabilities. The theories of person-environment fit and self-determination offer good support for how relationships in the environment play a role in the development of competence, engagement, and motivation in African American students with learning-related disabilities.

Although a great deal of research has chronicled the academic experiences of African American adolescents and another body of literature details the stigma associated with having a learning disability very little research has studied African American adolescents with learning-related disabilities. As a group, African Americans have had to overcome certain racial barriers such as institutional racism and stigma associated with

being a person of color to be successful in society (Winston, Rice, Lloyd, Bradshaw, Harris, Burford, et al., 2004). Given this racial and socio-cultural history of African Americans, African American adolescents have distinctive school experiences from other groups. African American students have faced many obstacles in the learning environment, such as experiences with discrimination, detrimental relationships with teachers and peers, and cultural orientations that are different from those of the school culture which can hinder academic success (Boykin, 1983; Jackson, Smith, & Hill, 2003; Russell & Atwater, 2005; Sellers and Shelton, 2003).

Students with learning disabilities face similar obstacles in school, such as being rejected and ignored more often than their peers without a learning disability (Turkapsa, 2002). Students with learning disabilities are also perceived less favorably by their teachers (Turkapsa, 2002) and receive less positive ratings from their peers because of perceived lower intellectual or academic abilities. Stigma related to the label is associated with negative peer interactions and causes students to have a lower sense of self-worth (Donahue & Wong, 2002), affecting academic self-concept, motivation, and achievement. Thus, this dissertation will examine the academic and social experiences of African American middle school students with learning-related disabilities.

Significance of this study: Why Study African American Students with Learning Disabilities?

This study is important for two reasons. First, it will address the dearth of research that focuses on the moderating effect of competence, relatedness, and autonomy on the relationship of being teased and motivation, and achievement in African American

students with learning-related disabilities. Second, there is a lot of research that focuses on the connection between neurological and biological foundations of learning-related disabilities and student experience (Cosden, Brown, & Elliot, 2002); however, the social or lived experiences these adolescents face in school and the internal mechanisms they employ to cope with their disability is lacking. Research on learning disabilities began by examining the neurological basis of learning disabilities, but then grew to consider the social experiences of students with learning disabilities (Cosden et al., 2002).

African American adolescents are overly represented in special education classes, yet little is known about the association of race-related experiences and the educational and psychological well-being of African American adolescents with learning-related disabilities (Skiba, Poloni-Staudinger, Gallini, Simmons, & Feggins-Azziz, 2006). Moreover, the literature does little to examine the extent to which the special education environment plays a role in the academic engagement, motivation, and self-concept in students with learning disabilities. Research on the effects of the special education environment is mixed and more research is warranted.

In fact, when social considerations are made, studies tend to focus on the school-to-work transition for high school students, leaving little information about the experiences of younger adolescents with learning disabilities (Reiff & deFur, 1992). Therefore, my dissertation will provide research that is necessary on the academic and social experiences of African American adolescents with learning-related disabilities.

Below, I explain the effect of stigma-related experiences and the educational and psychological well-being of African American students.

An explanation of the problem: Stigma, psychological needs, and special education

As aforementioned, the context of special education carries with it stigma associated with being labeled with a disability as well as teasing. With this stigma-intense context, the psychological needs of competence, relatedness, and autonomy may not be satisfied for reasons explained in the next couple of sentences. A stigmatized individual is deemed as "devalued, spoiled, or flawed in the eyes of others" because of their social identity or membership in a social category that is seen as inferior in some way (Crocker, 1999, p. 89). The effects of stigma on self-esteem and self-concept have been widely studied in college students from various ethnic groups, with little information provided on these phenomena in younger adolescents (Crocker & Major, 2003). Together, Brenda Major and Jennifer Crocker have studied, through several experimental studies, the effect of stigma and prejudice on self-esteem. They have found that there are few if any differences between stigmatized and non-stigmatized groups on self-esteem. In her work, Crocker argues against past social psychology research that suggests that stigmatized individuals internalize negative messages about their group and that self-esteem is stable across situations. She posits that self-worth is situational rather than stable. Because research on internalization of stigma and factors such as negative stereotypes not necessarily agreed upon by other researchers, it was important to explore this in African American middle school students with learning-related disabilities.

The little amount of research on the effects of stigma and psychological needs makes it difficult to understand the experiences of African American students with learning-related disabilities. As part of a larger self-concept, an academic self-concept is defined as the way in which a student *perceives* himself/herself in an academic context (Byrne, 1984; Harter, 1999; Marsh & O'Neil, 1984). Just like perceptions of competence, or academic self-concept, have been linked to educational outcomes in adolescent students, so have the psychological needs of relatedness and autonomy. Many factors can affect the psychological need fulfillment of these students, one of which is teasing.

If a child is being teased, especially about their intellectual ability then they may disengage from the school environment. Conversely, if a child is being teased but has a supportive environment, high academic self-concept, or a high sense of agency then teasing and the potential negative effects of special education may not affect them as much.

Many studies have shown that academic self-concept is related to the academic performance of students. These factors have been researched in a variety of ways including student academic self-perceptions in math and science and their relation to academic performance (Bouchey & Harter, 2005); students' perceptions of their academic identities and how these relate to their college aspirations (Howard, 2003); how identity matters in the literacy choices of students (McCarthey & Moje, 2002; Williams, 2004); and, the effect of self-efficacy and self-concept on term grades (Choi, 2005) and

on motivation, particularly, engagement and learning in the classroom (Linnenbrink & Pintrich, 2003).

The field of motivation, particularly, the theory of self-determination, focuses on how psychological need fulfillment affects behavior and action (Ryan & Deci, 2000). Examining the relationship between negative experiences and psychological needs helps to explain engagement and motivation in African American adolescents with learning disabilities. The notion of academic disengagement in African American students has been widely studied. The works of Osborne 1997 and Cokley (2002) are prevalent in the discussion of reasons why African American students disengage and disidentify from the school environment. The assumption that African American students, who are members of a stigmatized group that often encounters stereotypical beliefs, discrimination, and bias, use academic disengagement as a mechanism to protect their academic self-concept and self-esteem is accepted as truth.

Some research suggests that stigmatized individuals internalize the devalued perceptions of their group. This would suggest that non-stigmatized groups have higher self-esteem than stigmatized groups which is not always founded in the literature, especially in studies that compare African American students and White students. Adolescents who are labeled as having a learning disability are treated negatively by peers and teachers (Wilczenski, 1992). McDonald, Keys, and Balcazar (2007) conducted a qualitative study and found that African American and Latino community college students with learning disabilities perceived that their teachers and peers thought of them

as having an illegitimate impairment and having an intellectual ability lower than that of their peers.

In the McDonald et al. study, African American males reported being negatively targeted more than any other racial group or female students. Though not addressed in the McDonald et al. study, a low sense of self-worth and academic self-concept could result from the negative perceptions of teachers and peers. This low academic self-concept could cause adolescents to see themselves as being academically inferior, prompting them to become emotionally detached from the educational process and in some cases, drop out (McDonald et al., 2007; McInstosh, 2002). The experimental, laboratory studies as well as some qualitative research shed light on the phenomenon of the relationship between stigma and self-esteem and self-concept, but work with younger adolescents, particularly middle school students, is sparse.

Specific study aims

The purpose of this two-study dissertation is to understand how a behavioral manifestation of stigma associated with group membership, teasing, is associated with academic self-concept, motivation, achievement. First, I examine racial differences in academic self-concept, relatedness to the environment, and autonomy by using descriptive data. I also examine racial differences in students being teased. Second, I investigate the extent to which academic self-concept and relatedness moderate the relationship between negative experiences and engagement, motivation, and achievement outcomes for African American adolescents with learning-related disabilities. Third, I describe the educational and social experiences of African American adolescents with

learning disabilities as they pertain to stigma, academic self-concept, engagement, and motivation. Study 1 uses data from the Special Education Longitudinal Study to describe the population of students with special needs in the United States. Study 2 is a mixed-method study using data from surveys and semi-structured interviews with African American middle school students with learning disabilities.

This dissertation is unique in that it will consider both general and race-related issues that face adolescents with learning disabilities. In addition, rather than focus only on the deficits and problems experienced by this group, this study will examine the extent to which academic self-concept and relatedness serve as buffers from potential negative experiences.

Chapter II

Literature Review

The argument that a sense of competence, or positive academic self-concept, is affected by relationships with teachers and peers is one of the basic tenets of person-environment fit theory. Person-environment fit has been mostly studied in vocational and organizational psychology where the focus is on career- and work-related outcomes. It has also been a theme of several studies in work and family related literature. Though the context of work is different from that of school, two main assumptions of person-environment fit theory are that 1) people seek out environments that are compatible with their perceptions of self and 2) fit between the person and their environment is associated with outcomes such as performance, achievement, and engagement (Swanson & Fouad, 1999). These assumptions are not only important for occupational and vocational psychology; they are important for understanding how relationships with peers and teachers in the school environment increase or decrease student engagement and academic self-concept. Yet, there is little research conducted on factors that influence the satisfaction of psychological needs for African American students with learning-related disabilities. In the section below, I describe the experiences of African American students in special education.

This dissertation will apply these tenets of person-environment fit to the situation of African American students with learning disabilities. A key assumption is that African American students with learning-related disabilities are negatively affected both by environmental factors associated with their race and those associated with their disability status. In terms of race, issues of discrimination may be central struggles faced by these students. Prior research has shown that experiences with discrimination and racism present challenges and barriers that are thought to hinder academic success (Boykin, 1983; Gay, 2002), development of a positive academic self-concept, and relatedness to the school environment. A school environment where teachers respect and support students while demonstrating warmth leads to higher levels of competence, which in turn predict, academic engagement, motivation and achievement especially for African American students (Obiakor, 2002). Stigma around disability may be central to the experiences of students with disabilities. In the sections below, I describe the experiences of African American students with learning-related disabilities.

Experiences of African American students in special education

Nationwide, African American students in general and African American boys in particular are over-represented in special education classes (Harry & Klinger, 2006; Moore, Henfield, & Owens, 2008). In addition to asking whether this over-representation reflects biases against African American boys, a number of scholars have questioned whether special education classrooms provide African American students with the support and motivation they need to develop toward positive social and academic outcomes (Hilliard, 1994). Specifically, research has found that special education

programs place African American students at risk for school dropout and lowers student self-worth (Harry & Anderson, 1994). Moreover, the tendency for African American students to be diagnosed with mental retardation and serious emotional disturbances (Harry & Klinger, 2006) makes them more likely to be placed in the most restrictive classrooms (Fierros & Conroy, 2002). While overrepresentation in the mental retardation category is on a national level, in their book on minority overrepresentation in special education, Harry and Klinger (2006) report that in some states (e.g. Georgia) African Americans are overrepresented in the learning disability category as well.

The prudence of placing students of any background in special education has been problematized by many because some suggest that special education classrooms to some extent are not conducive to meeting the needs of students with special needs (Hilliard, 1994). Research regarding the effects of student placement in special education classrooms on student engagement and achievement is mixed. There are some researchers who suggest that special education negatively impacts students' self-concepts, thus having an effect on student engagement. The stigma associated with being labeled 'learning disabled' has been found to affect student perceptions of competence (Major& O'Brien, 2005). Labels are meant to isolate one from another (Hudak, 2001), to recognize where a need may exist, and to justify our assumptions about others (Dillon, 2001); they maximize weaknesses and minimize strengths and abilities in other areas. As part of the process of stigmatization, a disability label can limit how children see themselves, because they may internalize how others see them which is in relation to their disability

(Dillon, 2001; Kelly & Norwich, 2004). Educational outcomes are affected when an individual from a stigmatized group internalizes messages and beliefs associated with their group stigma (Cohen & Garcia, 2005; Cohen & Garcia, 2008; Steele, 1997; Walton & Cohen, 2007).

The stigma associated with being in special education and having a disability might impede student sense of relatedness to school, positive academic self-concept, and sense of control or agency that are instrumental for engagement and success within the school context. This may lead to a lack of healthy social connections at school, low feelings of academic competence, and little sense of personal agency or autonomy. Moreover, it is likely that these psychological factors, if satisfied, buffer youths' self-concepts and achievement from the effects of the range of negative experiences associated with being an African American student in special education.

Given this, the aim of this dissertation is to illustrate the extent to which competence, relatedness, and autonomy are related to achievement outcomes and buffers students from negative school experiences such as teasing. In the first section of this literature review, I discuss the relationship between sense of competence, sense of belongingness, and sense of agency and educational outcomes in African American youth with special needs. Then, I explore the implications of findings from past research for a specific population of African American students with special needs, those with learning disabilities.

Research framework: Person-environment fit and self-determination theories as they pertain to African American students in special education

I position my research through a melding of two theoretical frameworks: person-environment fit and self-determination to demonstrate how relationships with peers and teachers in school are instrumental in the development of academic self-concept and engagement in African American students with mild, less severe disabilities. Person-environment fit occurs when there is a match between the characteristics of an individual and the characteristics of their environment (Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan, & MacIver, 1993). There is potential for students with special needs to not fit their environment, for reasons such as being teased and labeled with a disability and placed in an environment aforementioned, which may lead to lower levels of academic achievement and disengagement. Self-determination theory posits that people have intrinsic propensities to engage in active, curiosity-based exploration (Hadre & Reeve, 2003; Ryan & Deci, 2002; Skinner & Edge, 2002). This perspective is an amalgamation of viewpoints from humanistic, developmental, behaviorism, and cognitive psychological theories. The theory of self-determination refers to a sense of belongingness, sense of competence, and sense of agency and autonomy as psychological needs that must be met in order for humans to be intrinsically motivated and engaged. In the section below, I demonstrate how research has examined the ways in which negative school experiences have affected the psychological needs of African American students in special education.

Several research studies have shown that African American students, in general, have different experiences in school than their White counterparts (Boykin, 1983;

Jackson, Smith, & Hill, 2003; Russell & Atwater, 2005). African American students tend to be over-represented in school suspensions and expulsions (Monroe, 2006) and special education classification. Particularly vulnerable to negative societal stereotypes and low teacher expectations, African American students are placed in a context that perpetuates the stigma associated with being labeled with a disability. Those who study the over-representation of African American students in special education have examined many reasons why African American students tend to be referred for special services more than other students and ultimately placed in special education (Harry & Klinger, 2006). In what they term the "Theory of Compromised Human Development"(O'Connor and Fernandez, 2006), in which they situate findings from the National Research Council's report on disproportionality that suggest that more students of color are poor and being poor is associated with risk factors which impede academic and social development. The Theory of Compromised Human Development suggests that poverty is the primary reason that minority students are placed in special education. In their review of the NRC's report, O'Connor and Fernandez (2006) postulate that social class *as well as* race is a significant predictor of student classification as disabled. They analyzed how poverty impacted minority student overrepresentation in special education by aligning findings from the NRC report to the extant literature.

In another study of disproportionality, Hosp and Reschly (2004) performed a series of 12 least squares regression analyses to determine what accounts for the variance in special education representation in the mild mental retardation, emotional disturbance,

and learning disability category. They used racial, social class, and academic achievement data from the Elementary and Secondary Schools Civil Rights Compliance Report from the U. S. Department of Education Office of Civil Rights (results from Fall 1998); Common Core of Data (1997-1998) which was designed to gather demographic data from every public school and district in the United States; and district-level achievement data from 16 states. Consistent with previous research, Hosp and Reschly found that economic variables were the strongest predictor of disproportionate representation. Hosp et al. also found that there were differences regarding predictors of disproportionality according to disability category—academic variables, racial variables, and economic variables predicted disproportionality patterns for African American students in the mental retardation and emotional disturbance categories. Economic variables did not predict disproportionality for African American students with learning disabilities. The strongest predictor for the LD category disproportionality was the academic variables. Therefore, there are different reasons for disproportionality and for African American students with learning-related disabilities being placed in special education could be detrimental to their sense of self and motivation in school.

Primarily caused by a lack of cultural sensitivity and understanding, teachers and peers of African American students in special education, have lower expectations for their success (Kunjufu, 2005). These lower expectations and negative assumptions about the intellectual ability and capability of African American students create a hostile school environment. According to Deci and Ryan (2002), and person-environment fit theory,

warmth, support, and nurturance are necessary for a student to feel related, competent, and autonomous which leads to academic engagement and achievement. With a hostile context formed by labels, separation, and stigma, a positive sense of competence, positive relationships with peers and teachers, and a feeling of agency is not easily attained.

Relatedness refers to caring for and being cared for by others, feeling connected to others and having a sense of belongingness to individuals and one's community; competence refers to feeling capable of doing something in a specific context or environment; and autonomy refers to the capacity to make decisions, "acting from interests and values" (Deci & Ryan, 2002, p. 8). Positive feelings towards school, belongingness to the classroom environment, and structured and autonomy-supportive environments have all been associated with higher levels of academic competence, or academic self-concept, and academic engagement.

Several researchers have postulated that positive teacher-student relationships and a sense of belonging to the school environment are critical in fostering intrinsic motivation and enhancing achievement outcomes for African American students (Cooper & Jordan, 2003; Ferguson, 1998; Kaplan & Maehr, 1999). For instance, O'Connor and McCartney (2007) found that high-quality teacher-student relationships promoted achievement outcomes in 880 3rd grade students from the NICHD Study of Early Child Care and Youth Development. The quality of teacher-student relationships was measured by a 15-item Student Teacher Relationship Scale administered to teachers (see Pianta, 1992) that contained two subscales: Closeness and Conflict. Higher scores on the scale

indicated more positive relationships. For African American students in special education, relationships with teachers and peers and the stigma associated with being placed in special education and labeled with a disability are two important influences on feelings of competence (McIntosh, 2002). In fact, in a qualitative study of ten Latino/a and African American college students diagnosed with learning disabilities, McDonald, Keys, and Balcazar (2007), found that it was African American males who felt that people had little sympathy for them because of their disability. In open-ended interviews, they reported that they were perceived by teachers and peers as having an illegitimate impairment and an intellectual ability lower than that of their peers. In some instances, male participants from the McDonald et al. (2007) study reported seeing themselves as academically inferior. This prompted one participant, as self-reported, to become emotionally detached from the educational environment and drop out. In a book chapter on the impact of categorization on African American learners with special needs, McIntosh (2002) explains that this is all too common an outcome of being negatively treated and stereotyped by others.

Students benefit when teachers support their autonomy rather than control behavior. According to self-determination theory, the more autonomy and agency a person has over their decisions, the higher their self-esteem; in contrast, motivation that is controlled by external forces (i.e. teachers, parents, work deadlines) lead to poorer mental health. Reeve (2002), who researches self-determination in educational settings, found that there were several teacher practices that supported and thwarted autonomy in

students. Over the course of several studies, he and his colleagues used experimental designs with a control and treatment group as well as some studies where they administered questionnaires to teachers to test the extent to which they engage in autonomous versus controlled support. Reeve found that most students were more autonomous when teachers spent significantly more time listening, gave students more time for independent work, praised the quality of student performance, responded to student-generated questions, made empathic perspective-taking statements, and supported intrinsic motivation. These instructional practices as well as making good grades also made students feel more competent (Hamm & Reeve, 2002). On the contrary controlling behaviors such as keeping instructional materials, giving answers to problems, and using directives and commands led to less positive educational outcomes.

In summary, competence, relatedness, and autonomy can be related to achievement outcomes in African American middle school students with learning-related disabilities. However, quantitative and qualitative research is sparse in this area. My dissertation project takes both a quantitative and qualitative aim in investigating how these psychological needs relate to academic self-concept and motivation in African American students with learning-related disabilities.

Race differences in psychological need satisfaction

Everyone has the basic need to be valued and when students are excluded and stereotyped, low levels of relatedness impact perceptions of competence and academic performance (Inzlicht & Good, 2006; Walton & Cohen, 2007). Most studies examining psychological needs report using a Caucasian sample or do not mention race differences

at all when a racially mixed sample was used. However, some studies do report race differences in academic self-concept, relatedness, and sense of agency or autonomy. African American students report less relatedness with teachers, peers, and the school environment than their Caucasian counterparts (Walton & Cohen, 2007). In two experimental studies, Walton & Cohen (2007) examined student perception of belongingness in 26 African American and Latin American students and 51 Caucasian American and Asian American students majoring in computer science. Belongingness was measured as "sense of academic fit" in computer science. Items assessed social fit in the department, social fit compared to other students, self-efficacy, identification with the department, and how much students enjoyed using computers. Also, it has been found that there are racial differences in student perception of competence; Research has suggested that African American students have high levels of competence beliefs and self-esteem, but seldom does this positive attitude translate into higher grades for them in comparison to other groups (Cokley, 2002).

The psychological need of relatedness is related to outcomes for students of color. Several researchers have postulated that relatedness to the school environment, conceptualized as positive teacher-student relationships and a sense of belonging to the school environment, are important in fostering intrinsic motivation and enhancing achievement outcomes for African American students (Cooper & Jordan, 2003; Ferguson, 1998; Kaplan & Maehr, 1999). However, African American adolescents report having teachers with low expectations for their academic performance, perceiving

discrimination in school, and feeling uncomfortable in the school climate (Boykin, 1983; Sellers & Shelton, 2003).

Some theorize and have found that African American students have more barriers to face in the school environment because there are more Caucasian teachers than African American teachers in K-12 education thus, causing African American students to be treated less favorably (Hughes & Kwok, 2007). Kelly (2007) found that African American and Caucasian students had about the same level of engagement in classrooms, but that children in classrooms that are predominantly African American spend more time dealing with disciplinary actions, interruptions, reading aloud, and seat work. This represents the different schooling experiences that African American students have from other groups. Kelly used observation and student-questionnaire data collected by the National Research Center on English Learning and Achievement to examine the relationship between instructional style and student engagement. In addition to the finding previously mentioned, Kelly found that African American students have fewer verbal exchanges with their teachers than their Caucasian counterparts. This type of classroom environment reflects a lack of classroom relatedness for African American students.

Most of the research on relatedness and belongingness to the school environment focuses on students who are “at-risk” for academic failure. Just as positive teacher-student relationships are important for African American students, they have also been found to be critical for students who perform poorly in school (Murray & Malmgren,

2005). Moreover, in studies where the sample is racially mixed, having protective factors such as positive relationships with teachers and external support outside of the home has been more significant for students of color and especially African American students (Gutman & Midgley, 2000; Stolz, Barber, Olsen, Erickson, Bradford, Maughan, & Ward, 2004). More research is warranted on the investigation of the differential impact of relatedness on varying racial groups.

Vulnerability status can also affect relatedness, competence, and autonomy. Margaret Beale Spencer (2005) conducted a study on the link between vulnerability status and achievement and identity outcomes. In her study, she refers to vulnerability status as the combination of risk and protective factors a student has. Risk factors for this study were darker skin tone; extreme poverty; and living in a single-parent household. Protective factors were a positive school climate; high parental monitoring; and skin color consonance. She found that high vulnerability (i.e. high risk and low protective factors) was associated with less positive psychosocial outcomes and academic indicators for a racially heterogeneous sample of approximately 700 children.

According to Spencer, there were a disproportionate number of African American students, and specifically African American males, in the high vulnerability group. Results suggest that students in the high-vulnerability group were more likely to infer negative teacher attitudes than students in other vulnerability groups. Students of color in the high-vulnerability group and the masked-vulnerability group (i.e., low risk and low protective factors) had lower scores on ego-resiliency and ego-esteem measures. For

Asian and White students, the masked-vulnerability group had lower ego-resiliency than any other group, while for Black, Hispanic, and multiracial students in the high vulnerability group had lower ego-resiliency (i.e. resiliency regarding attitudes and behaviors when dealing with friends) than any other group. Overall, students of color had higher negative teacher attitude perceptions than Asian and White students across vulnerability groups. This study on risk and protective factors, or vulnerability status, shows that African American students, and more importantly African American males are less likely to have their needs for competence and relatedness satisfied in the context of school.

Though the relationship between relatedness and competence has been established in the extant literature, an explicit examination of ethnic differences in the satisfaction of psychological needs has not been conducted. Research has found that, as a group, African American students have high educational expectations, high aspirations, and high self-concepts (Graham, 1994). However, low expectations from teachers often become self-fulfilling for the child and hinder their performance in school (Madon, Smith, Jussim, Russell, Eccles, et al., 2001; McIntosh, 2002). This negatively impacts a child's self-concept and even more so, causes feelings of inadequacy and internalization of such biased, stereotypical beliefs (Kea, Cartledge, & Bowman, 2002, p. 80; Murray & Mandara, 2002), as outlined earlier. This connection with relatedness and competence, though not established as such in the extant literature, could explain the experiences of African American students with special needs.

Stigma associated with special education

Though previous studies have suggested racial differences in competence, relatedness, and autonomy, a clear, direct link has yet to be established between the stigma associated with being in special education and the satisfaction of psychological needs. It is possible that the competence and relatedness of stigmatized groups would be compromised because of their being negatively stereotyped.

Stigma has been defined not as an attribute but as interactions between the person and the other who evaluates him or her in negative terms (Green, Davis, Karshmer, Marsh, & Straight, 2005). According to Link and Phelan (2001) there are four interrelated components of stigma which are labeling, stereotyping, separation, and status loss and discrimination. Stereotyping is the process whereby labeled differences are connected to judgments or undesirable attributes about others. This causes the separation of social identities and groups into “us” and “them”. This loss in status for the stigmatized individual leads to unequal treatment (Major & O’Brien, 2005) and negative perceptions of self.

Major and O’Brien (2005) describe ways that stigma affects the stigmatized. These mechanisms are negative treatment and discrimination; expectancy confirmation process; automatic stereotype activation; and stigma as identity threat. Using these various processes and mechanisms, Major and O’Brien describe how stigmatized individuals may confirm or deny the negative attributes associated with their group. However, confirming or denying negative attributes has direct consequence for academic self-concept and achievement outcomes. The effect that stigma has on outcomes is based

on the extent to which stigmatized individuals are sensitive to stigma; the extent to which individuals identify with their stigmatized group; and the extent to which individuals identify with the domains that their group is stigmatized on.

The academic self-concept of African Americans has been negatively affected by stereotypes and stigma attributed to their community (Sellers & Shelton, 2003). This can also be applied to the institution of formal education in America. Research has shown that when students of color encounter discrimination and are stereotyped their mental health and academic self-concept is negatively affected which has an effect on their academic performance (Cohen & Garcia, 2005; Cohen & Garcia, 2008; Steele, 1997). A clear link between discrimination and psychological needs has not been established in research. Ultimately, that is the goal of this dissertation. These negative experiences may impede a sense of belongingness to school, a positive academic self-concept, and a sense of agency or autonomy of students, therefore thwarting intrinsic motivation and academic engagement in school. Research shows that students who are intrinsically motivated to do well in school, have high levels of academic engagement because they find school valuable (Ryan & Deci, 2000). Self-determination theory posits that there is a process by which people become intrinsically motivated which begins with their needs being met in order for the values and beliefs of teachers to be integrated into the self-system. Once this regulation and integration occurs and the values and beliefs of others are adopted, they become a part of a student's identity. Someone is more likely to be intrinsically motivated when they engage in behaviors that they value. However, research has shown

that some African American students become disengaged from the school environment and the academic process altogether (Cokley, 2002; Osborne, 1997). I posit that it is due to the stigma associated with being an African American student with a disability that the development of competence and academic self-concept, relatedness to teachers and peers, and a sense of agency or autonomy is hindered causing academic disengagement.

Effects of general versus special education

The extant literature is mixed on the difference in outcomes from students in general education settings and special education settings. Research has shown that general education classrooms provide students with more opportunities to interact with their peers without disabilities and giving and receiving social support suggesting that inclusive classrooms are better for students with disabilities (Kennedy, Shukla, & Fryxell, 1997).

Ong-Dean (2006) explains that the LD diagnosis was a diagnosis given to students from privileged backgrounds as a means to explain away their low academic performance and achievement. Middle and upper-class parents were embarrassed by the low academic performance of their otherwise capable children. Instead of saying a student was lazy, stupid, or dumb, now these privileged parents could say their child has a learning disability. Moreover, privileged parents would then be more involved in making decisions about the types of services their child received whereas parents from disadvantaged backgrounds would not. This type of structural or institutional discrimination would then be related to student psychological outcomes.

This has prompted some researchers to suggest that the label ‘learning disability’ is a socially constructed term. Somehow the power of the label was taken from parents and children and given to schools. Once laws were enacted by the United States Congress, the path to being diagnosed with a learning disability became institutionalized and schools took control of who would be referred and recommended for services. When parents stopped having as much voice as they did in the past, empowerment was shattered. Power is a critical aspect in research on stigma because it determines how individuals are perceived by others and how they perceive others and their experiences (Major & O’Brien, 2005).

Varying conceptualizations of self-determination: Psychological and special education

The psychological conceptualization of self-determination including the types of motivation and the importance of psychological needs is concerned with the “energization” of behavior rather than the goals and outcomes associated with being self-determined (Deci et al., 1991). Researchers in the field of special education, on the other hand, have tended to examine the goals and outcomes associated with being self-determined as it relates to children with mild and severe disabilities (Carter, Lane, Pierson, & Glaeser, 2006; Field, Sarver, & Shaw, 2003; Konrad, Fowler, Walker, Test, & Wood, 2007; Lee, Wehmeyer, Palmer, Soukup, & Little, 2008) extending Deci and Ryan’s framework. In the field of special education, self-determination is a thing, a behavioral manifestation that can be taught. Furthermore, these researchers in the field of special education have found that higher levels of self-determination, defined as a set of

certain behaviors or skills such as self-awareness, decision-making, goal setting, and self-advocacy (Konrad & Test, 2007), lead to more positive outcomes.

Wehmeyer (2005) suggests that self-determined behaviors refer to volitional actions that enable individuals to act as the primary causal agent in their own life and to maintain or improve their quality of life. Currently, researchers in the field of special education have not examined how stigma associated with being in special education impacts students' sense of competence, relatedness, and agency. I posit that while being intrinsically motivated leads to academic engagement for students with special needs, more research is warranted on how 1) the special education context satisfies psychological needs and 2) how psychological needs buffer the relationship between special education and negative experiences and academic engagement and achievement. This link between the psychological and behavioral aspect of self-determination could help researchers and educators better serve this particular group of students. My dissertation attempts to bridge these two perspectives.

Dissertation Objectives

In some ways, the aforementioned difficulties faced by adolescents with learning disabilities are similar to those of African American adolescents. African American adolescents with and without learning disabilities encounter people (teachers, peers, parents) with negative assumptions about their ability mostly due to their group membership (McDonald et al., 2007). Although a great deal of research has chronicled the underachievement of African American adolescents and another body of literature details the negative effects of having a learning disability, very little research, to date, has

studied African American adolescents with learning disabilities. In sum, children require an environment of "tolerance and respect in order to fully develop autonomy and identity" (Deci & Ryan, 2002, p. 439).

As stated in the above section on special education, research is warranted in the areas of the effect of stigma on adolescents' perceptions of their experiences and schooling outcomes. The complex interaction between race and disability has not been examined in such a way in the research literature. Thirdly, there is a need for more research on the psychological underpinnings of academic engagement in students with learning disabilities. Though self-determination, or a sense of agency is seen as a set of behaviors that can be taught in special education research, this conceptualization does not provide us with an understanding of what affects and sustains student motivation and engagement in school.

Significance of current study

The present paper has four aims which are addressed through two studies, one quantitative and one qualitative. First, I compared the level of negative school experiences of students from different racial groups. These negative experiences such as being teased and joked on because of a disability, I deem, are due to the stigma associated with being in special education. Second, to determine whether special education placement undermines student sense of competence and academic self-concept, relatedness to teachers and peers, and student sense of autonomy, I compared the autonomy, relatedness, and competence of African American students with learning-related disabilities in general education classes with those in special education classes.

Third, I examined the role relatedness, competence, and autonomy in buffering African American students, in special education placement, from the effects of negative school experiences.

In the second study, I used thematic content analysis to explore interviews from African American adolescents with learning-related disabilities. To fully capture the essence of how psychological needs impact outcomes for African American students in special education, I used excerpts from semi-structured interviews to illustrate the realities of these students' experiences as they relate to the satisfaction of psychological needs. Based on my findings from this literature review, I expected that negative experiences in school would adversely be related to psychological need satisfaction, intrinsic motivation, and academic motivation.

Finally, I discussed policy and practical implications as to how schools could better serve African American students with special needs to facilitate the development of academic engagement. The research questions and hypotheses for this study are included below.

Research Question 1: Are there racial differences in psychological needs in African American students with learning-related disabilities?

Hypothesis 1: I hypothesize that there will be significant race differences in the psychological need satisfaction of students with learning-related disabilities. Even though research suggests that African American students have higher competence beliefs than other racial groups, I hypothesize that competence, relatedness, and autonomy in African American students with learning-related disabilities is lower due to the double stigma

associated with race and disability status. With this, I also hypothesize that African American students will feel less related to their environment and will be less agentic because of the special education placement than students from other racial groups with learning-related disabilities.

Research Question 2: To what extent do psychological needs moderate the relationship between negative school experiences (e.g. being teased) and placement in special education and academic engagement and achievement in African American students with learning-related disabilities?

Hypothesis 2: I hypothesize that there is a negative relationship between negative school experiences and educational outcomes such that the more negative experiences a student has, the lower their academic engagement and academic performance and achievement in school.

Hypothesis 3: I hypothesize that competence, relatedness and autonomy will moderate the effects of these negative factors on educational outcomes.

Research Question 3a: How does the learning disability label become incorporated into the self-concept of African American students with learning disabilities?

Research Question 3b: Are the psychological needs of African American students with learning disabilities being satisfied in the school environment? What are the implications of psychological need satisfaction on student persistence and engagement in school?

Hypothesis 4: I hypothesize that due to group membership associated with being African American and labeled with a disability that the psychological needs of competence, relatedness, and autonomy are not satisfied.

Hypothesis 5: I also hypothesize that this lack of satisfaction leads to lower levels of persistence and engagement in African American girls and boys with learning disabilities.

Chapter III

Study 1: Method, Results, and Discussion

Method

Participants

Data for Study 1 came from the Special Education Elementary Longitudinal Study (SEELS), collected by SRI International. SEELS is a large-scale national policy study designed to assess children and families served by special education programs; the administration of special education programs in various types of schools; and child and family outcomes in multiple domains. Additionally, the SEELS study was conducted to assess the effectiveness of the Individuals with Disabilities Education Act (IDEA) of 1997. The data include all disability categories as outlined by IDEA with 1000 students per category (excluding traumatic brain injury and sensory impairments). Data were collected over a period of six years (2000-2006) from students, teachers, parents, school administrators, and other school personnel across three waves of data collection. Data were collected for Wave 1 between 1999 and 2001, Wave 2 between 2001 and 2002, and Wave 3 between 2003 and 2004.

Because my interest is on African American middle school students with learning-related disabilities, I chose to use African American students in Wave 3 where the age range is 11-15. There were a total of 180 African American students with learning-related disabilities in the student sample that had data from parents and teachers.

Thirty percent of the students were diagnosed with a learning disability as their primary disability. Twenty-nine percent were diagnosed with speech impairment and forty-one percent were diagnosed with emotional/behavioral disturbances.

The SEELS study used a complex stratified sampling design to represent the diversity of contexts in which students are educated. A two-stage sampling procedure was used in which 245 local education agencies, LEAs, and 30 schools who served only students with disabilities were sampled. From these LEAs, elementary school students who were 6-12 years of age in 1999 and at least in 1st grade or above were sampled. LEAs provided rosters of students who were then sampled to be representative of students with disabilities in elementary and middle school. A total of 13,176 students, 6,337 parents/guardians, and 6,349 teachers participated in the SEELS study during Wave 3.

Missing data analysis. I only used cases with complete data for my analyses. In the end, cases that were missing data on any study variable were dropped from all later analyses. Missing data analyses were only conducted for African American students with learning-related disabilities since that was my sample of interest. For continuous variables, an independent-samples t-test was conducted and for categorical variables, a chi-square analysis was conducted, using the KKSELECT dummy variable, to compare study outcomes in African American students with and without missing data (see Table 1) to test for bias. There was a significant difference in students with missing and students without missing data on household income, χ^2=7.20, p<.03. There were more students

with missing data whose parents/guardians earned less than $25, 000. These results suggest that students without missing data are more likely to have a higher household income. The results of the t-test and chi-square analyses show that there are no significant differences between groups on other study variables.

Table 1

t-Test and Chi-Square Differences in African American Students With and Without Missing Data

Variable	**Without Missing (n=180)**	**With Missing (n=91)**	**t(df) or χ^2(df)**
	M(SD) or N(%)	M(SD) or N(%)	
Income	257(94.8%)	14(5.2%)	7.20(2)*
Special Education	264(97.4%)	7(2.6%)	.59(1)
Setting (LA)			
Being teased	229(84.5%)	42(15.5%)	2.56(1)
Competence	**13.28(1.84)**	**13.10(1.70)**	**-.78(269)**
Relatedness	**2.69(.58)**	**2.72(.56)**	**.49(269)**
Autonomy	**2.13(1.16)**	**2.20(1.05)**	**.46(268)**
Motivation	2.87(.59)	2.74(.56)	-1.69(269)
Grades	213(78.6%)	58(21.4%)	2.30(3)
Reading achievement	82.16(15.33)	80.42(14.57)	-.90(269)
Math achievement	87.11(14.76)	85.07(14.13)	-1.09(269)

Missing data occurred because data across different data files were combined and because some survey items did not apply to certain students. For each case and item that this was true for, I used data from Wave 1 and Wave 2 to eradicate the missing data problem in Wave 3. The administrators of the SEELS study warned researchers about issues with missing data.

Sample Characteristics. African American students with learning-related disabilities had an average household income around $25, 000 (*M*=1.56). In addition, the mean grade of African American students with learning-related disabilities was 7th grade and the average age was 13 years. I discuss the disability breakdown for learning-related disabilities in the section below.

Rationale for excluding severe, pervasive developmental disabilities. Originally, the SEELS dataset included the twelve federal disability categories used nationally. These disability categories are learning disability; speech impairment; mental retardation; emotional disturbances; hearing impairment; visual impairment; orthopedic impairment; autism; deafness/blindness; traumatic brain injury; other health impairment; and multiple disabilities. Given my research questions regarding how negative school experiences hinder student perceptions of competence, relatedness, and autonomy as well as motivation and classroom engagement, I chose to exclude the severe, pervasive developmental disorders from the dataset. I do want to make a note that the other health impairment category includes attention deficit hyperactivity disorder as well as other health disorders (Wagner & Blackorby, 2002).

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR, 2000), mental retardation, autism, deafness/blindness, and traumatic brain injury are pervasive disorders and I excluded African American students with these disorders from the dataset. I also excluded African American students with orthopedic impairments, from the dataset as this type of impairment is typically due to disorders of the skeleton, muscles, and joints or could result from traumatic brain injury. So the final dataset for my dissertation includes African American students with learning disorders, emotional disturbances, and speech impairments as these are less severe relative to the pervasive disorders mentioned above.

With the exception of orthopedic impairment, emotional disturbances and speech impairments are often associated with learning disorders/disabilities (DSM-IV-TR, 2000). To clarify, these less severe disorders are not necessarily deemed as mild because each has a range of severity. However, I have no way of knowing how severe a disability is for students who participated in SEELS. Throughout this dissertation I refer to this group of disorders as "learning-related disorders". In the section below, I outline some facts regarding each disability category included in the study.

Characteristics of learning disorders. The Individuals with Disabilities Education Act (2004) states that a learning disability is "a disorder in 1 or more of the basic psychological processes involved in 1) understanding or in using language, spoken or written; and 2) may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations" (Sattler & Hoge, 2006, p. 391). About 5%

of public school students in the United States are diagnosed with a learning disorder and about 60% to 80% of students diagnosed with Reading Disorders are male. The website for the Learning Disabilities Association of America lists certain symptoms of learning disabilities that can affect student performance in school (www.ldaamerica.org, 2006). These symptoms include poor memory, poor reading and writing ability, short attention span, poor coordination, difficulty with sequencing, and difficulty following directions to name a few. Dyslexia and other reading disabilities make up about 80% of all cases (Sattler, 2006) of adolescents with learning disabilities. Mathematics disorder and disorder of written expression are rarely diagnosed without a child being diagnosed with a reading disorder. The criterion for diagnosing a learning disorder is when scores on a standardized assessment of reading, mathematics, or written expression is *substantially below* or more than 2 standard deviations, between the expectations for a child's age group or level of intelligence and achievement. School drop-out rate higher than the national average, low self-esteem, and deficit in social skills are all associated with children with learning disorders.

Characteristics of speech impairment. Speech impairments, such as Phonological Disorder or Stuttering, are characterized by the failure to use developmentally appropriate speech sounds. Phonological Disorder can be diagnosed if there is an omission of sounds or if there is substitution of one sound for another. Phonological disorders are often associated with hearing impairments. Stuttering is a separate classification from Phonological Disorders but can be characterized by the disturbance in normal speech

fluency such as frequent repetitions, pauses within a word, or prolongations of sounds (American Psychiatric Association, DSM-IV, 2000). Speech impairments are prevalent in about 2% of pre-pubertal children and range slightly in prevalence in adolescence (from 0.5% to 0.8%). Speech impairments are more prevalent among males.

Characteristics of emotional disturbances. An emotional disturbance is typically characterized by a condition that adversely affects a child's educational performance such as "an inability to learn that cannot be explained by intellectual, sensory, or health impairments; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school problems" (Individual with Disabilities Education Act, P.L.94-142). The emotional disturbances category does include schizophrenia but students who are socially maladjusted are not diagnosed with emotional disturbances.

Measures

Child negative school experiences. Negative school experiences were measured from the perspective of the parent. I used the item "child was teased and called names" from the parent interview to measure teasing. The response range was 0= no to 1=yes.

Psychological needs. The psychological needs of competence, relatedness, and autonomy were used as moderators in the study. To assess the extent to which these

needs were satisfied, I used items from the Student Attitudes Scale (Wick, 1990), administered by SEELS during Wave 3 data collection.

Competence. The Academic Self-Concept subscale of the Student Self-Concept Scale (Gresham & Elliott, 1990b) was used to assess student perceptions of their abilities in an academic domain. This subscale includes 18 items. The SSCS measures student self-concept and efficacy across three content domains: academic, social, and self-image. Participants in the SEELS study rated how confident they felt performing tasks and how important the tasks were to them. Self-confidence was rated on a 3-point Likert scale (1=not at all, 2=not sure, 3=confident). Importance was also rated on a 3-point Likert scale (1=not important, 2=important, 3=critical). Full-scale internal consistency ranged from .89 to .92 while the internal consistency of the Academic Self-Concept subscale ranged from .64 to .88 (Gresham, 1995).

Relatedness. I used an item from the student assessment, "I feel lonely at school", to measure relatedness which ranged from 1=yes, 2=no, and 3=sometimes. Items were recoded to positively measure relatedness as 1=yes, 2=sometimes, and 3=no.

Autonomy. To assess autonomy, I used one item from the student direct assessment: "I have no control over things I do in school" which ranged from 1= never agree to 4=always agree. This item was re-coded to be a positive measure of student autonomy. The recoded variable values were 1=always agree to 4=never agree.

Motivation. Seven items were used to assess student motivation for school. These items were chosen because they best represent student attitudes measured in the direct

assessment. The items are “I look forward to each new school year”; “School will help me have a better life”; “I don’t like to stay home from school”; “I look forward to more years of school”; “I like Mondays because I come back to school”; “School is the best place to learn”; and “I am happy at school”. The scale ranged from 1=never agree to 4= always agree. The Cronbach’s alpha reliability was α=.71.

Student achievement. Standardized assessments and grades were used as measures of student academic performance.

Math and reading achievement (Woodcock, McGrew, & Mather, 2001). I used standard scores from subscales of the Woodcock-Johnson III (Research Edition) as an assessment of student math and reading achievement. The Woodcock-Johnson was administered during the direct assessment of students. To assess math achievement, I used the standard score from the Calculation and Applied Problems section of the assessment. To assess reading achievement, I used the standard score of the Passage Comprehension and the Letter-Word Identification section of the assessment. Standard scores were centered on a mean of 100 and ranged from 0 to 200.

Academic Performance. To account for missing data, Ie used an item which combined parent interview data and teacher questionnaire data to assess student academic performance in terms of grades received. The scale was re-coded so that values ranged from 1=Mostly Ds and Fs, 2= Mostly Cs and Ds, 3= Mostly Bs and Cs, and 4=Mostly As and Bs.

Procedure

Parent interviews were conducted using computer assisted telephone interviewing (CATI) which is a programmed system that used skip logic where the next question asked to a respondent is conditioned on previous responses. Students completed direct assessments of their reading and math achievement and in-person interviews assessing their self-concept, attitudes about school, and relationships with peers every two years. Teachers and school representatives were mailed surveys that assessed curriculum, school performance, descriptions of the overall school program, and school policies and school characteristics. Sample weights were created for each data instrument to make results representative of the national population of students with disabilities.

Analytical strategy

Descriptive statistics and correlations were conducted to explore averages and relationships among competence, relatedness, autonomy, negative school experiences and the dependent variables. Because of the sampling procedure, the Complex Samples module in SPSS was used to account for the sampling design and appropriate standard errors when we ran a series of hierarchical linear regressions in order to assess the moderating effect of psychological needs on the relationship between main effects and study outcomes. In the Complex Samples module, cluster and strata variables must be defined and implemented into the design. For this study, districts represented the strata and schools represented the clusters. Three nested models were considered for each dependent variable (i.e., grades, motivation, math achievement, and reading achievement). In the first model, parent income level, special education placement, and teasing were entered simultaneously. In the second model, competence, relatedness, and

autonomy were added. The third model duplicated the second and added the interactions between negative school experiences and the three psychological needs. The weight from the student survey was included in all analyses.

Results

Correlations between study variables

Bivariate correlations were run in order to examine the extent to which study variables were related to each other. Only significant correlations are mentioned in this section (see Table 2). Income was positively correlated with reading (r=.21, p<.01) and math achievement (r=.21, p<.01). Higher income was associated with higher reading and math achievement. Special education setting was negatively correlated with competence (r=-.19, p<.05), reading achievement (r=-.34, p<.01), and math achievement (r=-.34, p<.01); however, it was positively correlated with autonomy (r=.22, p<.01). Receiving Language Arts in a special education setting was associated with lower competence and lower academic achievement. Being teased was negatively correlated with math achievement (r=-.22, p<.01) and no other study variables. Teasing was associated with lower math achievement. In addition to being significantly correlated to special education setting, competence was negatively associated with autonomy (r=-.17, p<.05) and positively correlated with motivation (r=.16, p<.05). Reading achievement and math achievement were positively correlated with each other (r=.62, p<.001).

Table 2

Correlations between Study Variables

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1. Income	1.00									
2. Special Education	-0.13	1.00								
3. Being Teased	-0.11	0.04	1.00							
4. Competence	0.11	-0.19*	0.01	1.00						
5. Relatedness	-0.07	-0.04	-0.12	-0.04	1.00					
6. Autonomy	0	.22**	0.05	-0.17*	0.02	1.00				
7. Motivation	-0.13	0.09	0.06	.16*	-0.1	-0.12	1.00			
8. Grades	0.13	0.05	-0.05	0	-0.11	0	0.03	1.00		
9. Reading Achievement	.21**	-0.34**	-0.11	0.11	-0.02	-0.17	-0.08	-0.01	1.00	
10. Math Achievement	.21**	-.34**	-.22**	0.01	0.09	-0.12	-0.01	0.06	.62***	1.00

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

Research Question 1: How does psychological need satisfaction differ by race in students with learning-related disabilities?

Descriptive statistics

As the Complex Samples module does not include analysis of variance, significant mean differences between groups were assessed using General Linear Models. First, dummy variables were created for African Americans, Whites, and Latinos, respectively. African American students were the reference group. Table 3, below, displays all means and standard deviations. Means were considered statistically significant when the alpha was less than .05.

Table 3

Significant Differences on Study Variables Between African American Students with Learning-Related Disabilities and White and Latino/a Students

Variable	**African American Students (n=180)**	**White students (n=819)**	**Latino Students (n=107)**
	M(SD)	*M(SD)*	*M(SD)*
Income	1.52(.75)	2.20(.81)***	1.71(.79)*
Special Education Setting (LA)	.59(.49)	.34(.47)***	.44(.50)**
Being teased	.61(.49)	.48(.50)***	.41(.49)***
Competence	**13.28(1.84)**	**12.86(1.97)****	**12.54(2.23)*****
Relatedness	**2.69(.58)**	**2.69(.55)**	**2.79(.45)**
Autonomy	**2.13(1.16)**	**1.91(1.02)****	**1.95(1.00)**
Motivation	2.87(.59)	2.51(.64)***	2.66(.62)**
Grades	2.66(.97)	2.91(.95)***	2.95(.81)**
Reading achievement	82.16(15.33)	89.34(14.15)***	82.44(15.38)
Math achievement	87.11(14.76)	94.77(15.01)***	88.02(15.71)

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. LA=Language Arts

African American students and White students differed significantly on all study variables except for relatedness. Latino students significantly differed from African American students on all study variables except for relatedness, autonomy, reading achievement, and math achievement. Descriptively, African American students had higher competence beliefs, similar relatedness to the school environment, and a higher

sense of autonomy in comparison with White and Latino students. African American students also had higher motivation, higher instances of being teased, and were more likely to be taking Language Arts in a special education setting.

Even though African American students were more motivated and had high higher beliefs regarding their academic competence compared to White and Latino students, their grades and their math achievement scores were lower than those of both racial groups. In addition, African American students had lower reading achievement scores than White students.

Research Question 2: To what extent do psychological needs moderate the relationship between being teased and dependent variables (academic motivation and achievement)?

Hierarchical Linear Regressions

I conducted hierarchical linear regressions using General Linear Models in the SPSS Complex Samples Procedure. For each dependent variable, three models were tested. Household income, taking language arts in a special education setting, and being teased were entered in Model 1. In Model 2, competence, relatedness, and autonomy were added. The interactions between teasing and competence, teasing and relatedness, and teasing and autonomy were entered in Model 3 to examine the extent to which psychological needs serve as moderators. I plotted significant and marginally significant interactions ($p<.08$) in the manner suggested by Aiken and West (1991). Variables were plotted at points representing one standard deviation above and one standard deviation below the means. Table 4 displays the results from the regression model.

Table 4
Summary of Weighted Estimates of Hierarchical Regression Analysis Predicting Motivation and Academic Achievement

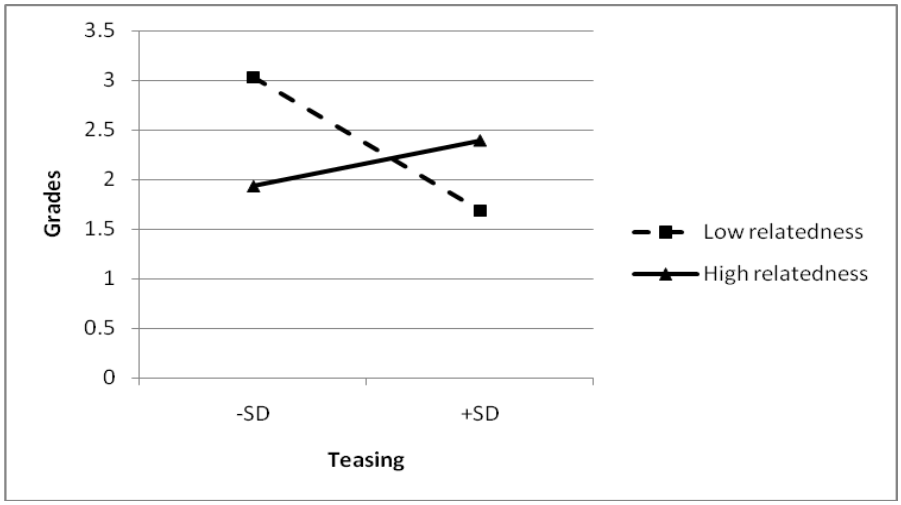
Variable	Grades	Motivation	Math	Reading
Model 1				
Income	.13(.10)	-.17(.05)***	1.26(1.79)	.90(1.93)
Special Ed Setting	.10(.21)	.09(.09)	-10.73(2.63)***	-13.26(2.74)***
Teasing	-.18(.15)	.03(.08)	-6.98(2.60)**	-1.00(2.35)
R^2	.025	.061***	.187***	.188***
Model 2				
Income	.12(.10)	-.18(.04)***	1.52(1.78)	1.10(1.86)
Special Ed Setting	.19(.21)	.14(.09)	-12.30(2.34)***	-14.69(2.86)***
Teasing	-.22(.14)	-.01(.09)	-6.29(2.41)**	-.51(2.32)
Competence	.06(.05)	.06(.02)**	-1.45(.47)***	-1.63(.83)*
Relatedness	-.13(.14)	-.15(.07)*	-.03(1.90)	-2.50(1.70)
Autonomy	-.05(.07)	-.01(.04)	.25(.96)	-.36(1.05)
R^2	.052	.123***	.221***	.230***
Model 3				
Income	.14(.09)	-.17(.04)***	1.49(1.68)	1.19(1.87)
Special Ed Setting	.20(.19)	.16(.09)^	-12.28(2.24)***	-14.60(2.84)***
Teasing	-.22(.14)	-.02(.08)	-6.46(2.41)**	-.60(2.33)
Competence	.02(.05)	.07(.02)***	-1.09(.53)*	-1.54(.70)*
Relatedness	-.10(.13)	-.17(.08)*	-.43(2.11)	-2.65(1.90)
Autonomy	-.03(.07)	.00(.04)	.13(.92)	-.33(1.11)
TeasingXCompetence	-.04(.09)	.05(.05)	1.68(.96)^	.79(1.58)
TeasingXRelatedness	.45(.23)*	.31(.19)^	1.28(4.26)	2.76(3.39)
TeasingXAutonomy	.31(.18)^	.01(.09)	-.53(2.33)	.71(2.73)
R^2	.111**	.148**	.233***	.234***

Note. ^ marginally significant, * $p < .05$, ** $p < .01$, *** $p < .001$. TeasingXCompetence= interaction between teasing and competence; TeasingXRelatedness= interaction between teasing and relatedness; TeasingXAutonomy= interaction between teasing and autonomy.

Grades. Model 1, $F(3,161)=1.42$, $p=.24$, and Model 2, $F(6,158)=1.51$, $p<.18$, were not significant in predicting grades in African American students with learning-related disabilities. However, Model 3 was significant, $F(9,155)=2.62$, $p<.01$. The interaction between teasing and relatedness ($B=.45$, $p=.05$) was a significant predictor of grades. When the student is teased more, high amounts of relatedness are associated with better grades (see Figure 1). However, students earn better grades in an environment where they are not teased and relatedness is lower. That is, students had the lowest academic letter grades when relatedness and teasing were both higher. Though these results are such, the direction of the interaction affect suggests that high relatedness is associated with positive outcomes for students (see Figure 1). Grades decline when relatedness is low and students are being teased.

Figure 1.

Plot of the significant interaction between teasing and relatedness on grades

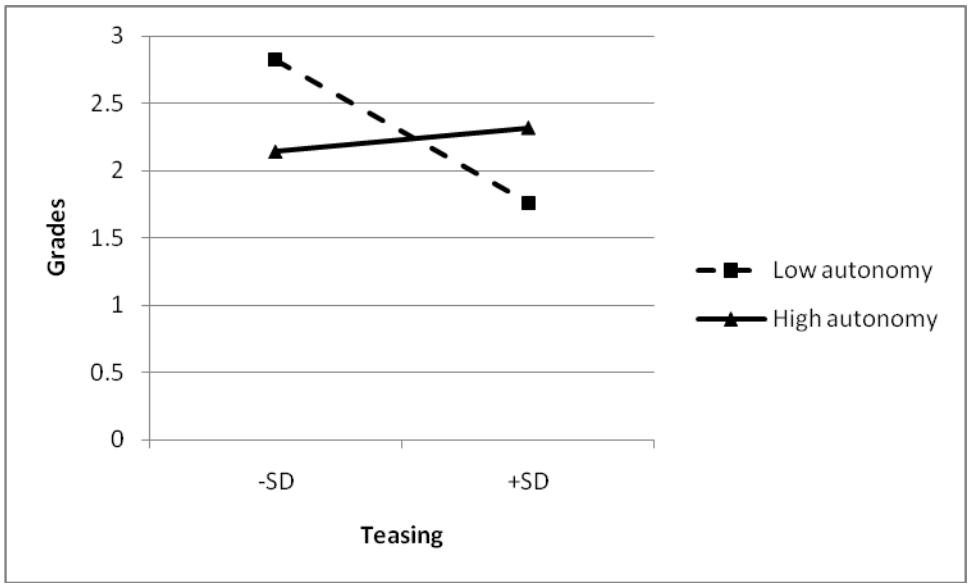


The interaction between teasing and autonomy ($B=.31$, $p<.09$) was marginally significant in predicting grades (see Figure 2). Students who were less autonomous and

who were not teased made better grades than students who have high autonomy and are being teased. Students with high autonomy in contexts with teasing earned slightly better grades than students in school contexts with less teasing. As with the interaction between teasing and relatedness on grades, the direction of the slope of the line suggests that autonomy does in fact moderate the relationship between teasing and grades. There is a slight increase in grades when autonomy is high and students are being teased. The worst outcome is when students have low autonomy and are being teased.

Figure 2

Plot of the marginally significant interaction between teasing and autonomy on grades

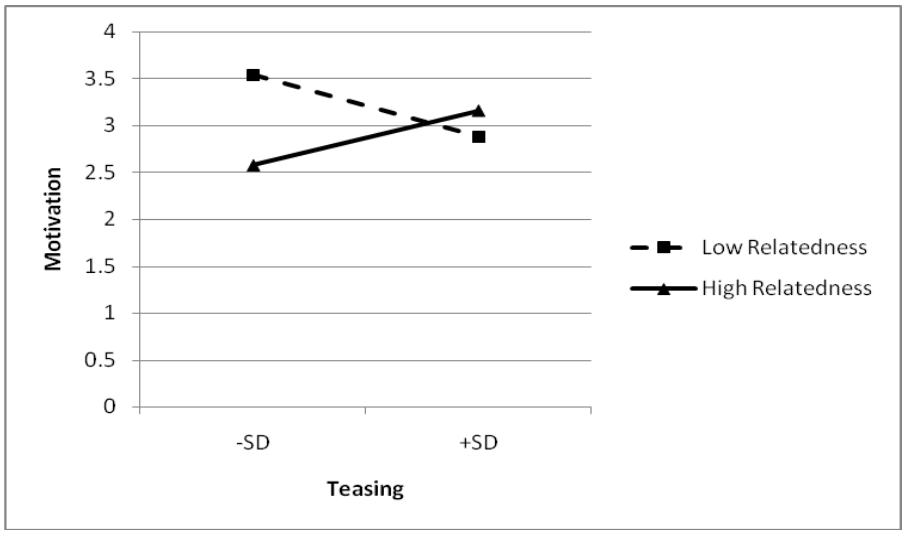


Motivation. Income (*B*=-.17, *p*<.001) was the only significant predictor of motivation in Model 1, *F*(3,161)=4.81, *p*<.003, R^2=.061 (see Table 4). Model 2 was significant, *F*(6,158)=6.10, *p*<.001, as well as Model 3, *F*(9, 155)=5.57, *p*<.001. Model 2 explained an additional 6 percent of the variance (R^2=.12) and Model 3 (R^2=.15)

explained an additional small but significant portion of the variance in motivation. Income (*B*=-.18, *p*<.001; *B*=-.17, *p*<.001), competence (*B*=.06, *p*<.01; *B*=.07, *p*<.001), and relatedness (*B*=-.15, *p*<.05; *B*=-.17, *p*<.05) were the only significant predictors of motivation in models 2 and 3. Higher household income and feeling related to the school environment predicted low levels of motivation in African American students with learning-related disabilities. Higher academic competence beliefs were associated with higher levels of motivation. The interaction between teasing and relatedness was marginally significant in predicting motivation (B=.31, p<.08). Though the slope of the line suggests moderation, when students were being teased, relatedness does not seem to have much of an affect motivation (see Figure 3). In environments where there is no teasing, higher relatedness is associated with less motivation. When there is no teasing and relatedness is low, motivation is higher in African American students with learning-related disabilities. No other effects or interactions were significant predictors of motivation (see Table 4).

Figure 3

Plot of the marginally significant interaction between teasing and relatedness on motivation



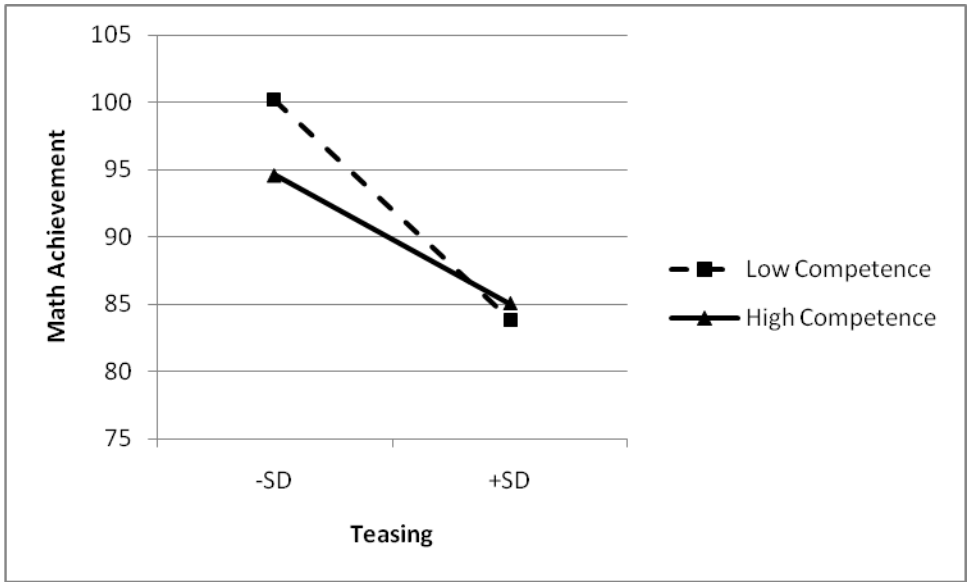
Math achievement. The first model that explored household income, special education setting, and negative experiences was significant, $F(3,161)=6.74$, $p<.001$, $R^2=.19$. Special education setting and teasing were significant predictors of math achievement. Students who had language arts in a special education setting scored approximately ten points lower on the math Woodcock-Johnson than students in general education setting ($B=-10.73$, $p<.001$). Being teased was associated with lower scores on the math Woodcock-Johnson assessment ($B=-6.98$, $p<.01$). Model 2 was significant, $F(6,158)=8.44$, $p<.001$, and explained an additional 3 percent of the variance, $R^2=.22$ (see Table 4). Special education setting ($B=-12.30$, $p<.001$), being teased ($B=-6.30$, $p<.01$), and competence ($B=-1.45$, $p<.05$) were significantly related to math achievement. Neither household income, relatedness, nor autonomy were significant predictors of math

achievement in model 2. African American students with learning-related disabilities who were in special education, who were teased, and who felt competent had lower levels of math achievement.

Model 3 was also significant, $F(9,155)=10.39$, $p<.001$ and explained an additional 1 percent of the variance in math achievement, $R^2=.23$. In Model 3, special education setting ($B=-12.28$, $p<.001$), teasing ($B=-6.46$, $p<.01$), and competence ($B=-1.09$, $p<.05$) were significant predictors of math achievement. These results were similar to those found in Model 2. The interaction between teasing and competence was marginally significant ($B=1.67$, $p=.08$). When students were being teased, math achievement decreased for students with lower and higher levels of competence (see Figure 4). However, when there was no teasing, lower competence affected math achievement. The slope of the interaction suggests that competence does not serve as a moderator for the relationship between teasing and math achievement.

Figure 4.

Plot of marginally significant interaction between teasing and competence on math achievement



Reading achievement. Model 1 was significant $F(3,161)=11.55$, $p<.001$, $R^2=.19$. Special education setting ($B=-14.26$, $p<.001$) was the only predictor of reading achievement in model 1. Students in language arts special education settings scored 13 points lower on the reading achievement assessment than students who had language arts in a general education classroom (see Table 4). Model 2 was significant and explained an additional 4 percent of the variance $F(6,158)=5.78$, $p<.001$, $R^2=.23$. Again, special education setting ($B=-14.69$, $p<.001$) was a significant predictor of reading achievement and a similar pattern of effect as in model 1. Competence ($B=-1.63$, $p<.05$) was also a significant predictor of reading achievement in terms of the psychological needs variables. The more competent a student felt, the lower their reading achievement scores. Model 3 was also significant and explained an additional small, but significant, amount

of variance $F(9,155)=3.98$, $p<.001$, $R^2=.23$. Special education setting ($B=-14.60$, $p<.001$) and competence ($B=-1.54$, $p<.05$) were significant predictors of reading achievement. Special education setting and positive feelings of competence were associated with lower reading achievement in African American students with learning-related disabilities. No interactions or other main effects were significant.

Summary of results

Results show that there were significant racial differences in competence, relatedness, and autonomy. Though, African American students with learning-related disabilities had significantly higher ratings of competence and autonomy than White and Latino students, there were no significant racial differences in how students felt they related to school. In terms of the regression models, the psychological needs of relatedness and autonomy served as moderators in the relationship between being teased and educational outcomes. Competence, however, was not a significant moderator. Findings are discussed below.

Discussion

The primary goal of Study 1 was to investigate racial differences in psychological needs and to examine the extent to which academic competence, relatedness, and autonomy served as buffers on the relationship between being teased and special education placement and educational outcomes for African American students with learning-related disabilities. I hypothesized that competence, relatedness, and autonomy in African American students with learning-related disabilities is lower due to the double stigma associated with race and disability status. In addition, I hypothesized that there was a negative relationship between negative school experiences and educational

outcomes such that the more negative experiences a student had, the lower their academic engagement and academic performance and achievement in school. Lastly, I hypothesized that the psychological needs variables (competence, relatedness and autonomy) would moderate the effects of these negative factors on educational outcomes. Below, I discuss findings as they relate to each research question and the extant literature.

Racial group differences and implications for achievement outcomes

According to the theoretical frameworks of person-environment fit and Deci and Ryan's conceptualization of self-determination (Deci & Ryan, 2000), individuals will be engaged and intrinsically motivated to complete school tasks if their psychological needs are met. To begin to understand how racial group membership affected the satisfaction of psychological needs, it was important to first investigate the experiences of different racial groups with learning-related disabilities. Results from Study 1 suggest that African American students with learning-related disabilities had their psychological needs, except relatedness, met to a greater degree than White and Latino students.

As with existing research on non-disabled African American students, my dissertation showed that African American students with learning-related disabilities have higher academic self-concepts than students in other racial/ethnic groups, yet achieve at lower levels than other students. In this study, I found that the psychological need of competence, operationalized as academic self-concept, was related to motivation. Yet, relatedness and autonomy were not significantly correlated with motivation or achievement in school. This is quite different from other studies that have found that relatedness is important to motivation and achievement in school (Martin & Dowson,

2009). This suggests that researchers who utilize the theoretical frameworks of person-environment fit and self-determination should consider factors related to group membership, such as race and disability status, that may be a hindrance in the satisfaction of psychological needs. Perhaps a sense of relatedness to the classroom environment does not facilitate positive outcomes for African American middle school students with learning-related disabilities.

Further, African American students may not feel related to the environment because they may feel that they do not belong in special education setting. For example, relatedness did moderate the relationship between teasing and grades. However, grades were higher for students who were not being teased and who had low relatedness. African American students with learning-related disabilities may feel as if they do not belong in special education and earning higher grades may be one way they try to prove this.

The attitude-achievement paradox, coined by Mickelson, provides one explanation for the relationship between competence and outcomes. Mickelson (1990) posited that negative stereotypes somehow repress psychological and achievement outcomes in African American students. Another explanation for this paradoxical finding is that research is sparse on the concept of academic identity. An academic identity (Kizzie, 2006), defined as who one is in the context of school, is quite different from the concept of academic disidentification. There is research to suggest that African American students disidentify with school in order to protect their sense of worth (Cokley, 2002; Osborne, 1997). Disidentification is when students' self-esteem and identity are no longer tied to their achievement in school. Future research is needed on

the processes involved in the academic identification of African American students with learning-related disabilities.

In the literature review, I made a strong case for the importance of positive relationships with teachers and peers in the academic success of African American students with learning-related disabilities. Existing research has shown that positive teacher-student relationships and fit with the environment are instrumental in facilitating motivation and achievement outcomes (Eccles et al., 1993; Ryan & Deci, 2002; Swanson & Fouad, 1999) for all students and more especially for African American students. Existing research suggests that African American students, regardless of disability status, feel less related to their school environment than other students. Hughes and Kwok (2007) found that African American students had less supportive relationships in school than other students. As stated earlier, students with learning-related disabilities, in particular, may feel as if they do not belong in special education classrooms.

Overall, results show that psychological needs do not serve as buffers for the relationship between being teased and educational outcomes. There was no significant interaction found between being teased and the psychological needs variables. This is an important finding because it lends an opportunity for researchers to consider factors other than psychological needs that may buffer students from the effects of teasing associated with disability. Being teased does have a negative effect on academic outcomes, but psychological need satisfaction does not buffer students from being teased. External factors such as support from parents, or internal factors, such as educational utility have been shown to affect student motivation and achievement in school (Rowley, 2000).

Some of the students who were interviewed said it was the support of their families or the idea that going to college would lead to good things later in life that helped them cope with their negative school experiences and that made them persist. In sum, they had goals that they were striving for.

According to Deci and Ryan (2002), the theory of person-environment fit, and others who study the concept of relatedness, being connected to the school environment on personal and emotional levels leads to higher academic achievement. Students are more likely to adopt the beliefs, orientations, and values associated with doing well in school if they have positive relationships with (Martin & Dowson, 2009). There were some conflicting findings with Study 1 and Study 2 in regards to the affect of relatedness. In Study 1, I found that relatedness was not related to any study main effect or outcome. But in Study 2, I found that relatedness to the school environment, mostly support from teachers and interactions with peers, was instrumental in students' achievement and motivation in school. Below, I discuss this concept further in relation to Study 2.

Limitations

There was an extreme amount of missing data in the SEELS data which decreased my final sample size of African American students. Findings were marginally significant for many of the interactions; a larger sample would increase my power to detect significant relationships. Third, relatedness may not have been significantly related to other variables in the study because of how it was operationalized. The item for relatedness "are you lonely at school?" does not reveal much about the nature of the relationships that students have with their peers and teachers. However, research has

been studied on the concept of loneliness in students with learning disabilities (see Margalit & Al-Yagon, 2002).

Chapter IV

Study 2: Method, Results, and Discussion

Method

The setting: Riverside Middle School

I will refer to the school where data was collected as Riverside Middle School throughout the paper. Riverside is a large middle school serving students in 7th and 8th grade. At the time of data collection, there were a total of 669 students enrolled. Table 5 shows the ethnic and gender breakdown of the student body. Riverside is approximately 63% African American, 29% White, and 1% Latino. Seventy-three students of the entire student body were identified as receiving special education services. Of the 73 students receiving special education services in the school, 40 have been diagnosed with a learning disability. Thirty-one (78%) adolescents who are identified as having a learning disability and are receiving special education services are African American; eighteen percent are Caucasian and a little less than 4% are identified as bi-racial. One hundred and twenty students were on the honor roll.

Table 5.
Ethnic and gender breakdown of students attending Riverside Middle School

	African American		**White American**		**Latino**		**Middle Eastern**		**Native American**		**Multi-Ethnic**		**Total**
Grade	**7th**	**8th**	**7th**	**8th**	**7th**	**8th**	**7th**	**8th**	**7th**	**8th**	**7th**	**8th**	
Male	107	101	53	51	1	3	1	0	1	0	11	5	334
Female	106	107	49	42	3	2	0	3	1	2	8	12	335
Percentage	62.9%		29.1%		1.3%		.6%		.6%		5.4%		669
Total	421		195		9		4		4		36		

Note: Data from the 2007-2008 academic year. The name of the school is a pseudonym.

To learn more about the special education program at Riverside Middle School, I met with the Special Education Teacher Consultant. Her duties were to coordinate standardized assessments; assign special education teachers to a case load of students; create the special education curriculum and schedule; and ensure students receive the services they are entitled to as outlined in the Individuals with Disabilities Education Act (IDEA). As she described, the goal of the special education program at Riverside is to give the students the skills they need to be capable learners. Several programs exist for teaching students with special needs including a resource room, categorical services, co-teaching, teacher consultant services, social work services, speech/language services, occupational/physical therapy services, and hearing consultant services. The content areas offered are Essential Language Arts, Essential Math, Co-Taught Math, Essential Science, and Essential Social Studies. The special education program at Riverside also offers several elective courses such as Essential Study Skills, Essential Career Computers, and Essential Life Skills. Eighth grade students also participate in an annual

transition program, Reality Store, which is a simulation of daily adult life and responsibilities. Students with special needs can also take advantage of after-school tutoring where they can get help with any subject.

Study participants

Through recruitment efforts with the help of the Special Education Coordinator and the school principal, I was able to recruit ten students in special education at Riverside Middle School. At the time of data collection, they were eligible for and receiving special education services. Table 6 outlines characteristics of each participant as it pertains to their background and other attributes related to their experiences in school. All participants were in the 7th grade except for two who were in the 8th grade. The students that were in the 8th grade when data were collected are now in the 9th grade. Participants had a mean age of approximately 13 years. In total, there were 5 boys and 5 girls diagnosed with a learning disability and receiving special education services. One student, self-identified as being bi-racial; the remaining students self-identified as being African American. All ten students had at least one parent or guardian with some college experience. One student had a mother with a Bachelor's degree; a second reported having a mother with a junior college degree. All students, with the exception of one student, had dyslexia as one of their disabilities. One student was diagnosed with Attention Deficit Hyperactivity Disorder. Two students also reported a second disability: bipolar disorder and test anxiety, respectively. In terms of academic grades, four students reported earning a mix of Bs and Cs; 2 students reported earning a mix of As and Bs; 2 students reported earning a mostly Bs; and one student reported earning a mix of Cs and Ds.

Data Collection Recruitment

The Special Education Coordinator at the school mailed home information regarding the study, a parent demographic questionnaire, and consent forms to the parents of potential participants. Once consent forms were returned to the school, they were collected and parents were called in order to schedule an interview time and day for the child. From this first effort of recruitment, I was able to recruit four students for the study. To increase my sample size, I attended parent orientations and "Back to School" night as second and third attempts of recruitment. At both of these events, the school allowed me set up a table outside of the auditorium with information regarding the study. Interested parents were able to learn more about the study, sign up, and schedule an interview directly following these events. Phone calls were made to follow-up and confirm interview times. From these two waves of participant recruitment, I was able to successfully recruit 6 more students.

Measures

Background information.

Participants completed a demographic questionnaire about their grade level, age, race, academic performance, gender, whether most of their classes represented general or special education, and the educational background of their male and female guardians.

Perceptions of Discrimination because of a Learning Disability

To examine participants' perception of discrimination of a learning disability, I modified the Adolescent Discrimination Distress Index (Fisher, Wallace, & Fenton, 2000). This 15-item questionnaire measures adolescents' responses to perceived instances of racially motivated discrimination in institutional, educational, and peer contexts. This

measure asks students to indicate whether they have experienced discrimination because of their race or ethnicity and if so, they have to rate how much it upset them using a 5-point Likert scale. Internal consistency for institutional (α=.72), educational (α=.60), and peer (α=.60) subscales was good. For the purpose of this dissertation, I adapted the ADDI to measure adolescents' responses to perceived instances of discrimination based on their learning disability. This adapted version had 8 items. A sample item is "You were given a lower grade than you deserve". Students were instructed to answer "yes" or "no" for each item if they had experienced this because of a learning disability. If they did experience it, then they were to report how much it upset them on a scale from 0=not at all to 4=extremely.

Academic Self-Esteem.

This 10-item measure (Hare, 1977) was utilized to measure students' sense of self-importance in their classes (e.g. "I am an important person in my classes", pride in school performance (e.g. "I am usually proud of my grades."), and self-concept of ability (e.g. "I am as good as other people in my classes.").

Procedure

Data collection took place after-school hours in the school guidance office or at the public library depending on parent preference and student schedule. Interviews were audio-recorded using a digital recorder and included a questionnaire which took approximately 25 minutes to complete and a semi-structured interview which took approximately 30 minutes to complete. Each interview session began with the survey which I read to aloud to each student and recorded their answers. The semi-structured interview followed the survey. During the interview, the purpose of the study was

explained and students were asked if they had any questions. Participants were asked three questions regarding their experiences in middle school and their perceptions of having a learning disability. Follow-up questions, or probes, were also asked after each question because it was necessary for some students to go into more detail regarding their experiences. The interview questions are included in Appendix B, but they were as follows: 1) Pretend that you have a pen pal that lives in another country. They are not familiar with middle schools in the United States. What would you say to them about your experiences in middle school?; 2) If I asked you to describe your experiences as a student with a learning-related disability, would that change what you said?; and 3) Describe for me a time in school where you had to cope with having a learning-related disability? Each student was given a $15 gift card to Target as compensation for their participation in the study.

Once data collection was completed, audio files from each interview were transcribed by two undergraduate research assistants and me. After the audio files were transcribed, I reviewed them for accuracy by checking them against the audio tape. The undergraduate research assistants also assisted with the initial coding of interview data. The extent of their assistance is described below. The use of "we" refers to the undergraduate research assistants and me.

Analytic Approach

The objective of this mixed-method study was to understand the meaning that participants gave to their lived school experiences (Patton, 2002). In essence, I provide a focused viewpoint on how stigma is represented in the narratives and academic self-

concepts of African American adolescents with learning-related disorders. This has implications for student success and resilience in school while understanding the barriers they face.

Similar to the analysis process of Fredricks, Alfred-Liro, Hruda, Eccles, Patrick, and Ryan (2002), combination of induction and deduction techniques was used to analyze the interviews. Data analysis and data collection overlapped so that analyses would inform later data collection (Strauss & Corbin, 1990). We used thematic content analysis as our method to identify, categorize, classify, and label codes and patterns in the data (Patton, 2002). The research team went through several steps of data analysis. First, each member of the research team read the transcripts for each case and after reading wrote a summary of the main issues that each student faced as it pertained to how they represented their academic self-concept in their narratives. Second, we used our summaries to create matrices of student experiences to help in the coding process. Once these matrices were completed, we discussed themes that emerged from the data and once agreed upon, each theme was added to a list of codes. The codes are based on the theoretical underpinnings of research the psychological effects of stigma and labeling; factors associated with student academic self-concept; and factors associated with engagement and achievement in school as well as the data itself. We found several patterns and themes in the data as we read, coded, and read again the transcripts (LeCompte, 2000). The initial coding list is in Appendix C.

Once this step was completed, I used the NVivo 8 software in order to organize the data and to ensure consistency between data. I used “AND” matrix coding queries to

identify patterns in the data for different subgroups of students that were interviewed (Bazeley, 2007). 'AND' matrix coding is used for comparing cases on their attributes, which are defined in Table 6. Attributes, as well as certain codes, were used to organize cases into subgroups. This method of organization and analysis was chosen because matrices "provide both numeric summary information and also access to the underlying text…" (Bazeley, 2007, pg. 204). Using NVivo, I ran the following matrix queries:1) the association between the Academic Self-Esteem scale and codes for motivation and relationships; 2) the association between the Adolescent Discrimination Distress Index-Learning Disability scale and motivation and academic self-concept (the codes of motivation and academic self-concept are positive codes); and 3) the association between codes for relatedness and academic performance, academic self-concept, disengagement, motivation, and negative self-concept.

Results

The objectives for Study 2 were to describe the educational and social experiences of African American adolescents with learning disabilities as they pertain to stigma, academic self-concept, engagement, and motivation. The first aim was to explore how the learning disability label became incorporated into the self-concept of study participants. The second aim was to determine, using students' voices, if the psychological needs of competence, relatedness, and autonomy were being fulfilled and the extent to which these needs were involved in student motivation and engagement in school. Overall, there were differences in how psychological needs were fulfilled in students. The theories of person-environment fit and self-determination were supported

by results from Study 2. Students, whose psychological needs were met, engaged and persisted more in school. Nevertheless, there were some instances where engagement and motivation did not occur because psychological needs were not being fulfilled as a result of the special education context. There was evidence of students being teased and negatively affected by their disability label, though it was not widespread. Findings suggest that the special education environment is not as stigma-intense as I originally hypothesized. Students were both aware of and negatively affected by the stigma or they ignored this stigma. Student perceptions of relationships with teachers and peers varied. The ways in which the needs of competence, relatedness and autonomy were fulfilled are outlined below after a discussion of themes.

Several themes were identified through my analysis. These themes were related to the representation of stigma in the educational and social experiences of African American middle school students with learning-related disabilities. My findings, as presented below, suggest that some students experience discrimination while they continue to have a positive academic self-concept. These students are able to stay motivated and engaged in school despite having negative experiences associated with being labeled. However, for some students, instances of teasing and discrimination weigh heavily on how they perceive their academic abilities and their motivation and engagement in school. Four of the nine students in this study reported not being upset about their experiences with discrimination. Three of the nine students reported being extremely upset by their experiences with discrimination while two students had no reports of discrimination due to their learning-related disability.

Several factors were barriers to youth feeling competent and related to their environment such as perceptions of discrimination, negative relationships with teachers, and stigma-relevant experiences. Yet, there were some instances of students who reported being discriminated against, while maintaining a high sense of academic self-concept and were motivated to do well in school. Disability shame and embarrassment was a common theme amongst the students as was relationships with teachers, including support from teachers and mistrust. Another theme I identified during my analysis was persistence and engagement. Interview excerpts from four boys and three girls are used to illustrate how stigma is represented in the academic self-concepts of these students. I present a narrative summary from each case, using their own words to argue why they engaged and persisted in school.

Some students verbalized feelings of shame and embarrassment when discussing their negative experiences in school associated with perceptions of discrimination. This is not surprising given that previous research has found that students with learning disabilities may be targeted and treated unfairly by their peers and teachers (McDonald et al., 2007; Tenenbaum & Ruck, 2007). The ADDI-LD scale and the Academic Self-Esteem scale were used in combination with data from student interviews in order to understand how perceptions of discrimination were related to student narratives. Results from the ADDI-LD scale are in Table 7.

In the following section, I use the narratives of African American adolescents with learning-related disabilities to explore stigma and academic self-concept as well as the importance of competence, relatedness, and autonomy in the motivation and

engagement of these 7 adolescents. I arrange this section in terms of psychological needs of competence, relatedness, and autonomy.

Psychological needs and thematic exploration

As stated above in Chapter II, the fulfillment of the needs for competence, relatedness, and autonomy have been identified as critical predictors of academic engagement, motivation, and achievement in school. I found that the satisfaction of these needs was affected by many factors in the school environment and home environment. Stigma-relevant experiences, perceptions of discrimination, feeling shame because of the disability, mistrusting the special education curriculum, and not receiving the help that is necessary from teachers were all factors that negatively affected a student's sense of competence. I discuss the psychological needs in tandem with the themes that were identified in my analyses.

Stigma-relevant experiences. Students did report being discriminated against because of their disability. Walter was extremely bothered by two discriminatory practices on the ADDI-LD scale that he reported happened to him (see Table 6). Experiences with stigma and the disability label mostly affected students' behavior and in some instances how they felt about themselves. This suggests that students may be externalizing, and to a degree internalizing, the effects of stigma and the disability label. One example is Jack who, throughout all of his negative experiences, stayed encouraged and persistent saying, "I just have to keep working hard." Another example is Walter, an 8th grader diagnosed with bi-polar disorder and dyslexia. He incorporated the disability

label into his academic self-concept. The following excerpt from Walter's interview shows how he thinks of himself as a student:

> "I: Um, how do you, um think you do in school?
> Walter: Good…Kind of bad, but kind of good because if I don't , like if I don't, um, like if I don't understand the work, that's when I get mad, and then I don't like the person. And then that's when I start moving a lot and that's how you get in trouble."

Allison, a 7th grader, who was diagnosed with a dyslexia and test anxiety in elementary school, says that she keeps her diagnosis private. I asked her to explain what she meant by that:

> Allison: …Sometimes I do hide it because I know the outcomes. But, um…
> I: What do you mean you know the outcomes?
> Allison: Like teasing, making fun of. But, um if somebody's being made fun of I would um, like say one of my friends was making fun of somebody else that has a learning disability I will tell them, 'did you ever know that I have a learning disability cause you never made fun of me because you never even noticed I had one? So yes there are certain points and times I would tell somebody I had a learning disability, but there are sometimes I won't. So."

Allison only shared her disability status with others if it was necessary. She only had one report of being discriminated against out of the 8 on the survey. She reported that people expected less of her than they expected of others her age. Even though this experience was true for her, she said it only upset her somewhat. Allison had a fairly high academic self-esteem in relation to the other participants, according to her academic self-esteem scale. Her responses to the survey were contrasting in some ways. Allison felt strongly that she is at least as good as other people in her classes indicating a high sense of self. However, she agreed that school was much harder for her than it was for other students, but that she was proud of her grades and felt important in her classes. Overall,

she felt indifferent towards her teachers with one exception; she felt fortunate to have the kinds of teachers she's had since she started school.

I asked Allison what she thought were the primary challenges that students with learning disabilities face in middle school. She responded, "Um, probably the teasing. They probably get teased a lot. And also, the challenges are like trying to get on the level that other kids have, a higher level." This quote illustrates how Allison does not identify with being "learning disabled".

When I asked her if being "labeled" has affected her in any way, she responded, "No, actually I still feel the same and stuff. Um, it hasn't affected me um except for when people like take it on a different level and like start calling me names or I'm *stupid* or something like that. I'm fine if they say I have a learning disability cause I'm not ashamed of it. All I gotta do is work harder than other people do. So."

Jack said that he was discouraged from joining an advanced level class; he was given a lower grade than he felt he deserved; he was discouraged from joining a club; his peers did not include him in their activities; and that people acted as if they thought he was not smart. When students are separated into general education classes and special education classes, that separation is visible and experienced. Throughout all of his negative experiences, Jack stays encouraged and persistent saying, "I just have to keep working hard." One source of motivation for Jack is his competition with other students and proving himself as smart. For example he says, "Yeah. Because like if they make fun of me, I can show them, um, I can do better than they can when they make fun of me." He also seems to be externally motivated by rewards. For instance, Jack says that "he is

thinking about having a good grade because my ma said she would give me what I want when I get good grades".

There were also instances of students who did not report any negative experiences in school due to their learning-related disability. Paul, a 7th grader diagnosed with ADHD, stated that he had not been treated poorly by his peers, he was not teased, and he said that he did not have any negative school experiences. However, on his Adolescent Distress Discrimination Scale-LD questionnaire, he reported having four discriminatory practices that happened to him and none of them bothered him to a point where he felt negatively affected.

Disability shame and embarrassment. Three males verbalized feelings of shame and embarrassment when discussing their negative experiences in school. This is not surprising given that previous research has found that students with learning disabilities may be targeted and treated unfairly by their peers and teachers. An example of this is when Walter says "…I just don't want people to know. Well, it's fine if people know. I just don't like to get laughed at." Walter is in the 8th grade and is new to the Riverside school district. His quote above is evidence of his being embarrassed to tell people for fear of the response that his disclosure could illicit from people at school. This was his response after I asked him if he was teased by others because of his learning disability. When asked why he thinks people laugh at him he responded very angrily, "Because they call me retarded. They think I'm retarded just because I'm dyslexic." Walter also reports having negative experiences with some of his peers. An example of this is when Walter says "…I just don't want people to know. Well, it's fine if people know. I just don't like

to get laughed at." His quote above is evidence of his being embarrassed to tell people about his learning-related disability for fear that his disclosure would elicit negative responses from people at school. This was his response after I asked him if he is teased by others because of his learning-related disability. When asked why he thinks people laugh at him he responded very angrily, "Because they call me *retarded*. They think I'm *retarded* just because I'm dyslexic." Though not a primary focus of this dissertation, I do consider how participants defined what a learning disability is or what it is not. I return to this issue of the use of the words "*retarded*", "*stupid*", and *"dumb"* in the discussion section.

Walter feels that school would be quite different if he did not have a learning disability: "Hmm. If I didn't have whoa, I don't know, I'd think of myself as a good student because I wouldn't be bipolar and I wouldn't get mad at, about the school work I couldn't do". Duke is also in the 8th grade and says he does not share his disability status with others because: "It's none of their business."

Jack, a student in 7th grade diagnosed with dyslexia, also had some experiences with feeling shame and embarrassment. According to Jack's mother, he could talk until he was seven years old. Now that he is older, he thinks of this as affecting the kind of student he was. He described not being able to talk as "bad…because I know, I know, I wasn't able to talk, like that good." His classmates teased him saying, "you got a bad voice." When I asked him how that made him feel about himself, he simply responded, "bad." Jack describes his experiences in school in this manner: "Well, I, I act like I'm, don't have a um, a learning disability." This is one defense mechanism students in the

study employed. This separation of groups into “us” and “them” makes for an environment that is unhealthy for students who are designated as less than or inferior to the dominant, “able” group.

Jessica, who is currently in the 9th grade, also feels embarrassed and shame because of the way she is treated by others when they find out she has a learning disability. Jessica was diagnosed with dyslexia in elementary school. During the interview, Jessica was quiet and murmured when she talked. She said that, “I don’t tell people…because I’m embarrassed about it.” She goes on to say that, “(crying) people, like when they found out, found out you got a special-ed class, they be like, ‘you’re retarded’.” This is another example of the negative treatment that students with learning disabilities are having in school. Jessica was more “outwardly” affected by her experiences in school than any other participant. Even though on the ADDI-LD she reported not being upset about the discrimination she experienced due to her learning disability, during her interview she was noticeably “affected” by the stigma associated with the label.

Teacher support of student academic success and mistrust of teachers and special education curriculum. On the whole, the students described the importance of teachers for their academic success and engagement in school. Walter emphasizes the value in having good teachers at the start of the interview. When asked how he would describe his experiences in middle school to a pen pal in another country, Walter says, “Um, if you don’t really, really, if you don’t have the right teachers, it’s kinda hard. But, if you do

have the right teachers, it's kinda easy…And if you really need the help, sometimes they just say try at home, but you can't do it. That's awful."

He goes on to explain that he has a couple of teachers who support him, but it was the teachers who did not offer support that affected his perception of competence and his ability to complete his work. When I asked him to describe the primary challenges that students with learning disabilities face, he simply replied "um, we just need more teachers to help us."

I asked Duke, a now 9th grader diagnosed with dyslexia, if he thought his teachers were helpful and he responded, "there's some not, like I tried to talk to the, to my science teacher, you know. And he just like, I mean he like didn't really ignore me but he didn't help me, help me as much as I needed him to help me." He went on to say, "he'd just say we did this, just look at the page because it's on there. Duke explains that:

> "Teachers, when they explain it, they expect you to get it. Now other, now the special-ed teachers, they break it down for you. The other teachers don't, they don't break it down, they just you know, because they not trying to rush us, but they just trying to hurry everything up. And like the special-ed teachers take it slow and break it down for you to the point where you can make it easy…But then sometimes, they're rushing teachers, they be like oh, just read this. So, I mean, I get, I just get mad and go to my seat, close my book, and just sit down."

Besides agreeing and disagreeing with some of the items on the Academic Self-Esteem scale, Duke was neutral on the items regarding how he felt about his teachers. Clearly, in some instances, teacher support is related to a student's competence and perceptions of academic self-concept. In Duke's case, the lack of teacher support is directly related to his feelings of competence and to his lack of motivation in school. He describes feeling "*dumb*, when you got to go up and ask and the lesson was easy, but you

know you didn't get it." Then he states, "I mean I struggle, but, I mean if people are willing to help me, I can succeed." Duke perceives his ability and success as reliant on the help and support he is able to get from skilled others. According to Duke's academic self-esteem scale results, he has one of the highest academic self-esteems compared to other students the students in the study. Walter and Duke have similar outlooks on the role that teachers play in their engagement and motivation in school. They see their teachers as a "help-source" and when these students do not receive this help, they simply give up and stop trying.

During her interview, Jessica also had many things to say about her teachers and the work that she was doing in school. Jessica was taking a special education Language Arts class and was doing well. She gave an example of the level of work she was doing in her language arts class:

> "Oh, like these, these worksheets. They have a picture on the top, had a little title and like three paragraphs with like four sentences that were…it had like ten questions, had to find corrections in the sentence and stuff. And then you had to , it had to be like so easy. Because it was like a word was like, was misspelled or the word would be like "the" or something like that without the "e"…so easy because sometimes I didn't even do it at home, I would just bring it and do it in class."

Jessica is frustrated by the lack of challenging work she is assigned. She explained that when she goes to 9th grade, she will be in a regular Language Arts class. This worries her because she does not feel that she is getting the academic preparation that she needs in order to be successful. In some respects, teachers and the school environment played an instrumental role in satisfying the psychological needs of the students.

Pride and acceptance of the disability. Jack describes instances when he does have some issues with being joked on, but declares, "If you don't like me the way I am, then you ain't my friend. Ain't my real friend." Towards the end of the interview he declares, "It's not going to change for me." These statements suggest that Jack is validating and accepting his disability. At times he describes how having a learning disability is a hindrance to his academic performance. From his perspective, school would be better if he did not have a learning disability because he would be able to catch up with his classmates.

Tricia, an 8th grader, thought of herself as being unique because of her diagnoses of dyslexia. "Like I'm different from everybody. I'm considered smart. I don't consider myself slow. I don't consider myself retarded. And nobody's retarded, really." She goes on to declare that, "Like I had to believe in myself that I like I know I can do this. It's nothing. It's just something that's making you better, making you unique and different from other people."

When I asked Allison how she thought of herself as a student she stated that, "I think I'm actually pretty good, even though I have some disabilities". She goes on to say, "Like um, I have a harder level with spelling um sometimes even speech and even tests while somebody else may be really good at tests and spelling and stuff like that. So I try to get on a level and try to balance it out". She uses "they" quite a few times throughout her discourse whereas Walter used "us" when I asked him the same question about primary challenges. Regardless of the use of "they", she does reveal that teasing occurs because of the label. This use of "they" signifies hat Allison has not incorporated the

disability label into her self-concept which could be one suggestion for her positive outlook and engagement in school. We see here that Allison feels competent in her abilities. But just like Jack, she has a notion to prove herself to her peers and others.

Paul has somewhat of a different outlook on school and his learning challenges. Several times throughout the interview he spoke of his love for school and saying, "It's fun!" He doesn't hide his label; he says, "As in like I'm ADHD. And that's something I have to live with." When he does not understand something he relies on friends and teachers for help saying, " Whatever I need, it's like right there." Paul has a positive perception of his school environment which makes him feel competent and related. This underscores the connection between person-environment fit. When characteristics of the environment and characteristics of the individual match, optimal outcomes occur. This is evident in the dialogue below:

> Paul: Um, I'm welcomed here. I feel welcome.
> I: You feel welcome? You feel happy? And that's important to you because?
> Paul: It's important to me because this is my motivation.
> I: Mmhmm.
> Paul: And like this is where I'm supposed to start and supposed to make my grades so I can be the radiologist doctor.

By reading Paul's words it is clear that, in his eyes, all of his psychological needs are being satisfied by the school environment. There is an understandable link between the school environment, academic outcomes, and feelings about school.

Having autonomy for some students produces stress and does not necessarily have advantages. Duke describes how he handles a struggle: "I mean, there's, if I end up, I might end up just copying the words from the book and the teacher don't like that, he likes a summary. He wants you to summarize it in your own way…I just read it a little

bit, and if I just can't understand it, I'm going to just close it." Duke is given opportunities to demonstrate control over his work however, he does not feel efficacious in doing so. He places the blame on teachers saying, "I find it's not my fault. It's *they* fault. Because they ain't going to try to teach me." He does not take responsibility for his own learning.

Tricia also stayed persistent through challenges in school. She felt that it was her responsibility to try to work on her own.

> "Well, like if I'm struggling with something, then first I'll go ask the teacher. But, then after you get, after awhile you get tired of keep going back and forth cause other kids they need help too. Then you have to learn how to do it on your own. Figure it out. Like strategies to where to keep you focused."

She is very agentic and accountable for her success in school. For instance, she says this in the interview: "You need a little extra push, you'll have the extra push always there but sometimes you have to learn how to push yourself. Not always have somebody there to push you."

All of this is true despite her reality of being discriminated against in 3 out of 8 times for her learning disability (see Table 6). She was moderately upset by these experiences, but they did not affect her high motivation level or academic self-concept. She sees the disability as a barrier, as something that she has to get past. "Like after you get used to it, it's just a disability you can get past it. Like I'm working to get past it, it doesn't hold me back none." For Tricia, stigma was not a factor. She had very strong family support unlike any other student. When she was first diagnosed with dyslexia, her family was instrumental in supporting her.

> "And I asked my mom. She said you can do it. Don't worry about it. If somebody you know you getting bad grades now but in the long run this will make you

> better and you'll do better. Like she was like my mom, my cousins, my aunts, my whole family was like a big motivation for me. So I gotta make them proud. I can't be messing up in school cause I gotta make my grandpa proud. Grandpa was the one who was always there. That's the one I used to be with all the time. He would take me anywhere I wanted. He found out I had this dyslexia, he was like, he the one who sat me down and tried to talk to me about it. The first one. Him and my older cousin who has it. Dem two was the first two to talk to me. My mother and we sat down and talked about it. My grandpa said, no matter what. I believe in you and I love you and no matter how. You might get worse you might get better. But no matter what I'mma help you through this. And I love you. That's really what helped me."

She acknowledged that the support she was getting from her family and peers was a motivating factor for her to do well in school. Another thing that made a difference for Tricia was the fact that she had an older cousin who was also diagnosed with dyslexia. Tricia looked up to her because she graduated from high school, college, and was attending Ferris State to get her Master's degree.

Table 6. Study Participant Attributes.

	Tricia	Walter	Jessica	Duke	Paul
Disability	dyslexia	bipolar and dyslexia	dyslexia	physical impairment/dyslexia	ADHD
Mom Ed	some college	junior college degree	some college	some college	some college
Dad Ed	some college	GED	some college	don't know	high school graduate
Gender	Female	Male	Female	Male	Male
Grade	7th	7th	8th	8th	7th
Age	13	13	14	13	13
Academic Record	mixed Bs Cs	mixed As/Bs	mixed Bs/Cs	mixed Bs/Cs	mostly Bs
Class category	General	Special	General	General	General
Academic Self-Esteem	38 out of 50	32 out of 50	30 out of 50	29 out of 50	38 out of 50
ADDI-Learning Dis	3 out of 8/ frequently bothered	2 out of 8/ extremely bothered by it	2 out of 8/not bothered by it	1 out of 8/not bothered by it	4 out of 8 exp/ not that bothered

	Jack	Allison
Disability	Dyslexia	Dyslexia/ Test Anxiety
Mom Ed	some college	some college
Dad Ed	some college	some college
Gender	Male	Female
Grade	7th	7th
Age	12	12
Academic Record	Mixed Bs/Cs	mostly Bs
Class category	dk	General
Academic Self-Esteem	40 out of 50	34 out of 50
ADDI-Learning Dis	5 out of 8 exp. extremely upset	1 out of 8/ somewhat upset

Table 7

Results from the Adolescent Discrimination Distress Index-Learning Disability by Student

	Tricia	Walter	Jessica	Duke	Paul	Jack	Allison	Total times
Discouraged from joining an advanced level class				■	■	■		**3**
Wrongly disciplined or given after-school detention								**0**
Given a lower grade than you deserve	■					■		**2**
Discouraged from joining a club			■			■		**2**
Peers not including you in their activities					■	■		**2**
People expected more of you than others your age	■	■						**2**
People expected less of you than others your age	■		■		■		■	**4**
People acted as if they thought you were not smart		■			■	■		**3**
Total for each student	**3**	**2**	**2**	**1**	**4**	**5**	**1**	

Summary of results

Although this is true, some students in Study 2 were affected more than others by the teasing they endured. What separates these resilient and persistent students from the rest is that these students, namely Tricia, Paul, and Jack were socialized into doing well in school and had someone who supports them at home. Most of the students with the

exception of Derek and Walter, felt that it was their responsibility to seek help and not the responsibility of the teacher to ask them if they need help.

Discussion

The purpose of Study 2 was to capture, from student interviews, the essence of how the 'learning disability' label is internalized into the academic self-concept. I hypothesized that students would internalize the negative stereotypes of the label. I also thought that this would be negatively related to their orientation to school and motivation in school. I found that not all students internalized the negative stereotypes associated with the label and that in fact, even if students did, they still had a desire to do well in school. However, this positive attitude towards school was not relating to student report of grades.

Steele and Aronson's work on stereotype threat (1997) could be seen as an extension of Mickelson's work on the attitude-achievement paradox. Stereotypical judgments based on group membership are often used to make attributions about others' behaviors (Fiske, 1992; Martin, Wood, & Little, 1990; Ruble, Cohen, & Ruble, 2001). My dissertation shows that the extent to which a student internalizes these stereotypical beliefs, as manifested in the negative effects of teasing, regarding special education and having a disability as well as receiving differential treatment can affect their academic self-concept and motivation in school.

The aforementioned concept of internalization is a key component of self-determination theory. Internalization refers to adopting values and goals from others into the self-system. There is agreement among researchers that the self is a social

construction (Harter, 1990) especially during the period of childhood and early adolescence when so much of what one believes about oneself is strongly dependent upon the appraisals and judgments of others. This serves as the impetus for the current study: group membership and the satisfaction of psychological needs. The data from Study 2 suggests that relationships with teachers and peers, being labeled with a learning disability, and experiencing discrimination affects African American adolescents' perception of competence and causes psychological needs to go unfulfilled because they begin to internalize messages from those in their environment.

In summary, the stigma associated with being in special education and having a disability did impede some students' sense of relatedness to school, positive academic self-concept, and sense of control or agency that are instrumental for engagement and success within the school context. However, two students, Paul and Tricia, were not as affected by the stigma associated with disabilities. Teachers were instrumental for the motivation and engagement of all students as was support from parents. Secondly, a sense of competence and relatedness were instrumental in the motivation and engagement of students. Thirdly, girls seemed to be less affected than boys of the stigma associated with the label though there were two exceptions, Jessica who was very affected and Paul who was not affected at all.

It is important to remember that for these young adolescents, dealing with a learning disability is difficult and hard. The period of adolescence is marked with students not wanting to stand out for anything. Being separated from their non-disabled peers was a sure sign of psychological needs not being met. According to the literature

stated above, having a learning disability can and does affect students' academic self-concepts and academic engagement. Relationships with teachers affect perceptions of competence.

These negative experiences directly impact a student's need to hide their disability status from others. This separation of groups into "us" and "them" makes for an environment that is unhealthy for students who are designated as less than or inferior to the dominant, "able" group.

After running the query for the attribute of ADDI scale results and the academic self-concept code, the results are that there is no difference in the association between how much students were affected by their experiences with discrimination and academic self-concept. Whether students were bothered extremely or somewhat by instances of discrimination did not affect their positive perceptions of self. For example, Jack stated that "I'm doing good. I'm…one grade behind. I used to be lots of grades behind, but now I'm just one. I'm catching up though."

I hypothesized that due to group membership associated with being African American and labeled with a disability that the psychological needs of competence, relatedness, and autonomy would not be satisfied. In fact, the African American students in this study felt competent. When narratives and ADDI-LD scores are both taken into consideration, the number of discriminatory experiences was not as important as is the impact of having one discriminatory experience on student motivation and academic self-concept. A student could have had one discriminatory experience and been more bothered by it than a student who had many experiences that was not bothered by it (see

Table 6 and 7). These results are similar to findings from Finlay and Lyon (2005) who report that people who are labeled often try to distance themselves from the label as a means of protecting their self-esteem. This occurred several times throughout student interviews. Tricia, Jack, Paul, and Allison all rejected the label by either calling the disability something else or removing the emphasis from it like when Tricia said, "It's just a disability". On the other hand, Jessica, Walter, and Duke incorporated the disability into their self-concepts. This was evident in how they articulated their experiences in school regarding having a learning-related disability. As in a case study conducted by Hutchinson, Freeman, and Steiner-Bell (2002), students in the dissertation project did not feel accepted by their peers for who they were.

How students defined what it meant to be learning disabled was not a primary focus of this study. However, students used several derogatory words when they referred to having a learning disability. During interviews, students used the words "*retarded*", *"dumb"*, and *"stupid"* to describe how they thought how others saw them in some cases, and what others actually called them in other cases. To some extent they even adopted these descriptions as truths regarding their own disability. For example, Walter's discourse showed his feelings of incompetence. Students were very aware of the negative connotations of having a disability. This conveys how students define what it means to be or what it does not mean to be labeled "learning disabled".

Special education setting and teasing were both significant predictors of reading and math achievement, but not psychological needs satisfaction in Study 1. However, being in a special education setting was related to lower academic competence, but a

higher level of autonomy. Extant literature is mixed on this phenomenon regarding the effects of special education, which was addressed in the literature review.

On the whole, the students described the importance of teachers for their academic success and engagement in school. Support from teachers was instrumental in student success. These themes of teacher support are similar to those found in another study of African American students with learning disabilities (Murray & Naranjo, 2008). Getting help from an 'abled' someone is instrumental in engagement and motivation.

Some of the students stopped demonstrating effort as soon as challenges appeared. They did not persistently seek help, and they blamed teachers for not helping them enough. Not having the right kind of help is stifling for these students. Two students, Duke and Walter, lacked persistence due to their frustrations. This lack of persistence has been linked to early signs of school drop-out.

Limitations

There are several limitations with Study 2. The first is that I only included African American students in the sample. Given this, I cannot make the claim that my findings are specific to all African American students with learning-related disabilities. To truly explore if there is a double stigma with race and disability, I would collect data from students from different racial groups and compare them amongst each other.

Second, it would have been helpful to know the amount of time that students actually spend in their special education classes. I did not think to collect this data at the start of the study. When I did think to collect it, the school reported this information for about 3 students because others had moved away. Without this information, it is difficult

to make accurate inferences about the effects of special education on psychological needs. Even though these limitations exist, this study is still necessary and important for special educators in the United States.

Chapter V

Conclusion

The primary goal of this dissertation project was to examine the extent to which the stigma associated with being an African American student with a learning-related disability impacted academic self-concept, student motivation, and academic achievement. Overall, I expected to find that the psychological needs of African American students would be negatively affected by the teasing associated with the "LD" label. I expected this because of the "double" stereotypes associated with being African American and labeled with a learning disability. This hypothesis was partially confirmed in the two studies. This discussion highlights key findings of this dissertation project pertinent to each research question and then considers educational implications for those involved in the lives of students labeled with a learning-related disability, namely, special education teachers and parents. Future directions and limitations are also discussed.

Results also revealed that African American students with learning-related disabilities have a similar sense of belonging and relatedness in comparison to White and Latino students. Students did not confirm a "double" effect of stereotyping (i.e. for race and disability) that I mentioned earlier in the discussion. When prompted about the unique challenges that African American students face in Study 2, the middle school students reported almost none. One boy, Walter, even said that "what is there to laugh at if you don't have a learning disability". It is possible that this relative privileging of

disability status over race might reflect recruitment efforts where students were told that the study was about middle school students with learning-related disabilities.

Limitations

This dissertation study is not without limitations. First, to truly capture the effect of special education on student self-concept and motivation, longitudinal research is necessary. Academic self-concept, motivation, and psychological needs could be examined in students when they are first diagnosed with a disability. In subsequent years, to test the effect of special education, questionnaires and interviews could be conducted to see how the academic self-concept and motivation changed from baseline. Also, for Study 2, observation data would have shed light on student experiences as they went though their school day.

Future research directions

Family support contributed a great deal to the academic self-concept and academic engagement of the students in Study 2. However, support from teachers was deemed as being necessary to complete tasks in school. While the focus of this study was on the relationships between students and teachers, one suggestion for minimizing the negative effects of a disability label is for school teachers and officials to reach out to parents more in an effort to create teacher-parent partnerships. Research should be conducted on parent-school-teacher partner relationships as they relate to students diagnosed with learning-related disabilities. Teachers should see themselves as

facilitators of acceptance and provide a buffer for students from negative treatment (Appl & Spenciner, 2008).

In addition to research on parent-teacher relationships, more research is needed that ask students to think about why they think their motivation, persistence, and engagement in school does not translate into better educational outcomes for them. Also, I plan to do research on the academic identity of African American students with and without learning disabilities. Giving students, the true stakeholders in all of this, a chance to sound their opinions should aid in the development of curriculum and programming that would facilitate their achievement in school.

Appendix A

Youth Achievement and Resilience Study

University of Michigan

Department of Psychology

Welcome! Thanks for your participation in our research study!

This data will be used for my dissertation and I am so happy that you decided to participate. This survey asks questions about your experiences in middle school—how you feel about middle school, your experiences with teachers and peers, your experiences with having a learning difficulty or challenge, and how you cope with difficult situations. We will ask you to think about what you have learned and gained from middle school as you complete this survey packet.

If you feel uncomfortable answering questions at any time, please stop. You may skip any questions that you feel uncomfortable answering. You will not be forced to complete the survey; however, we see you as the expert and your responses are valuable.

The session will take about 30-45 minutes to complete.

Warmly,

Karmen Kizzie

If you agree to participate in this study, please sign below.

Signature _____ Date _____

Demographic Information

1. What is your grade in school?
   - 7th
   - 8th

2. In what grade did you start attending this school?
   - 7th
   - 8th

3. How old are you today?
   - 11
   - 12
   - 13
   - 14
   - 15

4. Are you
   - Male
   - Female

5. What is your racial or ethnic identification?
   (Mark all that apply)
   - Black/African American
   - White
   - Asian American or Pacific Islander
   - Hispanic, Latino, or Spanish origin
   - American Indian or other Native American
   - Other, specify: _____

6. What have your most of your middle school grades been?
   (Mark <u>one</u> response only)
   - Mostly As
   - Mixed As and Bs
   - Mostly Bs
   - Mixed Bs and Cs
   - Mostly Cs
   - Mixed Cs and Ds
   - Mostly Ds
   - Below D
   - Grades are not used
   - Don't know

7. Which category represents most of your classes?
   (Mark one response only)
   - General/Regular
   - Special Education
   - Don't know

8. What is the highest level of education that your parent(s) or guardian(s) completed?

   (Mark one response only)

	Mother	**Father**
Did not finish high school		
High school diploma or GED		
2-year college degree (Associate's)		
4-year college degree (Bachelor's)		
Master's degree		
PhD or other advanced professional degree (law, medicine, etc)		
Don't know		

Academic Self-Esteem

Read the following questions carefully and indicate the extent to whether you disagree or agree by circling your response.

	1 **Strongly Disagree**	**2** **Disagree**	**3** **Neutral**	**4** **Agree**	**5** **Strongly Agree**
1. My teachers expect too much of me.	1	2	3	4	5
2. In the kinds of things we do in school, I am at least as good as other people in my classes.	1	2	3	4	5
3. I am usually proud of my grades.	1	2	3	4	5
4. I often feel worthless in school.	1	2	3	4	5
5. My teachers are usually happy with the kind of work I do.	1	2	3	4	5
6. Most of my teachers do not understand me.	1	2	3	4	5
7. I am an important person in my classes.	1	2	3	4	5
8. No matter how hard I try, I never get the grades I deserve.	1	2	3	4	5
9. School is harder for me than it is for most other people	1	2	3	4	5
10. All in all, I feel I've been very fortunate to have had the kind of teachers I've had since I started school.	1	2	3	4	5

Adolescent Discrimination Distress Index-Learning Disability

Read the following questions carefully and indicate whether you have experienced this type of discrimination *because of learning challenge or learning disability*. If you have, also rate how much it upset you.

		How much did it upset you?				
	Have you experienced this because of a learning challenge or learning disability?	0 Not at all	1 Somewhat	2	3 Frequently	4 Extremely
1. You were discouraged from joining an advanced level class	Yes No	0	1	2	3	4
2. You were wrongly disciplined or given after-school detention	Yes No	0	1	2	3	4
3. You were given a lower grade than you deserve	Yes No	0	1	2	3	4
4. You were discouraged from joining a club	Yes No	0	1	2	3	4
5. Others your age did not include you in their activities	Yes No	0	1	2	3	4
6. People expected more of you than they expected of	Yes No	0	1	2	3	4

	others your age						
7.	People expected less of you than they expected of others your age	Yes No	0	1	2	3	4
8.	People acted as if they thought you were not smart	Yes No	0	1	2	3	4

Thank you!

Appendix B

INTERVIEW PROTOCOL

OPENING REMARKS

First let me begin by thanking you for agreeing to participate in this study. My name is Karmen Kizzie and I am a college student at the University of Michigan. I am majoring in psychology and education. To remind you, briefly, the purpose of this research is to learn about your schooling experiences (as a student with learning challenges). We are interested in learning about your schooling experiences over the past few years, and what factors you think shape who you are as a student. I will ask you to tell me about factors which you think contribute to your success, challenges, engagement, and motivation for learning. Do you have any questions about the purpose or why I am conducting the study? [ADDRESS QUESTIONS AS APPROPRIATE, THEN PROCEED TO THE NEXT PARAGRAPH]

I want to remind you that everything we say is completely confidential. I will not talk to anyone at school or in your family about what you say here. The only exception is that if you tell me that someone is physically hurting you or that you are hurting someone else, I have to tell someone about the situation. This is a semi-structured interview, which means there are some specific questions that I will ask you related to your views and experiences; however, this interview is also dictated by you and what you want to share. As the interviewer, my role will be to listen and guide you with some questions.

Before we start, do you have any questions for me? Remember that I am going to tape record your interview so that I don't have to write while you're talking. However, if you want me to turn off the tape recorder for some reason, just tell me. [TURN ON AUDIO RECORDER]

1. Pretend that you have a pen pal that lives in another country. They are not familiar with middle schools in the United States. What would you say to them about your

experiences in middle school? [Probe: experiences with friends, teachers, and schoolwork?]

2. If I asked you to describe your experiences as a student with learning difficulties, would that change what you said? [Probe:] Why or why not? How would it have been different?

3. Describe for me a time in school where you had to cope with having learning challenges. [Probe:] What happened? How did it make you feel?

CLOSING REMARKS

That is all the questions that I have. Do you feel like I left something out or is there something else you would like to tell me? [PAUSE FOR RESPONSE]

Before we end, do you have any questions for me?

Thank you for answering my questions and participating in my study. I greatly appreciate it.

Appendix C

Stigma and disability research group

Thematic Content Analysis for Disability Experience Conceptualizations

1. Academic Self-Concept
    a. Competence
    b. Self-descriptions
2. Academic Socialization
    a. School rules and policies
    b. Behaviors students engage in to do be successful or because they believe it will bring them success
3. Academic Initiative/Autonomy
4. Academic goals
5. Motivation
    a. Academic engagement/disengagement
    b. Identity detachment
6. Disability Attribution
7. Relationships with others
    a. Support from others
        i. Other school staff
        ii. Parents
            1. parent involvement
        iii. Close friends
    b. Negatively perceived by others
        i. Teachers
        ii. peers
8. Inferiority Complex
9. Disability Shame and Embarrassment
10. Disability Stereotype Exception
11. Validation and Acceptance
12. Intellectual Inferiority Stereotypes
    a. Proving stereotypes wrong
    b. Opportunities given to do prove stereotypes wrong
13. Mistrust
    a. Of others
    b. Of self
14. Identity Intersectionality
15. Solo Status
16. Perceptions of learning disability/stereotypes/stigma

Appendix D

This is information regarding the creation of study datasets. I only used cases with complete data for my analyses. First, a variable, 'CHILDOUT', was created for each case in the dataset that was missing data (i.e., autonomy = CHILDOUT1; teasing = CHILDOUT2; grades = CHILDOUT3, etc.). These variables were set to '0' to represent cases with missing data on the following variables: academic self-concept, autonomy, relatedness, grades, motivation, reading achievement, math achievement, income, special education setting, and teasing.

Once all CHILDOUT variables were created another variable, 'CHILDOUTSUM' was created where the series of CHILDOUT variables were added together. For African American students, only 4 variables had missing data. Therefore, if CHILDOUTSUM equaled 4 then that case was not missing any data. There were 7 variables missing data for White students and 5 variables missing data for Latino students. For White students if WCHILDOUTSUM equaled 7 then that case was not missing any data. For Latino students, if LCHILDOUTSUM equaled 5 then that case was not missing any data. For all of these variables, if they were equal to anything less than 4, 7, or 5, respectively, then they were coded as missing and set to '0'.

Another variable, KKSELECT, was created for each racial group and set to '1', if CHILDOUTSUM, WCHILDOUTSUM, or LCHILDOUTSUM equaled 4, 7, or 5. KKSELECT was set to '0' if CHILDOUTSUM, WCHILDOUTSUM, or LCHILDOUTSUM were missing data. To create the complete dataset for African American, White, and Latino students, all students without missing data were selected using their respective 'CHILDOUTSUM' variable pertaining to their group.

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