2018-08-01

Perceptions of School Uniforms in Relation to Socioeconomic Statuses

Aaron B. Jones
Brigham Young University

Follow this and additional works at: https://scholarsarchive.byu.edu/etd

Part of the Teacher Education and Professional Development Commons

BYU ScholarsArchive Citation
Jones, Aaron B., "Perceptions of School Uniforms in Relation to Socioeconomic Statuses" (2018). All Theses and Dissertations. 6974.
https://scholarsarchive.byu.edu/etd/6974

This Thesis is brought to you for free and open access by BYU ScholarsArchive. It has been accepted for inclusion in All Theses and Dissertations by an authorized administrator of BYU ScholarsArchive. For more information, please contact scholarsarchive@byu.edu, ellen_amatangelo@byu.edu.
Perceptions of School Uniforms in Relation to Socioeconomic Statuses

Aaron B. Jones

A thesis submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of
Master of Arts

Michael John Richardson, Chair
Bryant Troy Jensen
Erin Feinauer Whiting

Department of Teacher Education
Brigham Young University

Copyright © 2018 Aaron B. Jones
All Rights Reserved
ABSTRACT

Perceptions of School Uniforms in Relation to Socioeconomic Statuses

Aaron B. Jones
Department of Teacher Education, BYU
Master of Arts

Schools that implement a school uniform policy are on the rise (Musu-Gillette, Zhang, Wang, Zhang & Oudekerk, 2017). About 74% of these schools have a high population of low socioeconomic status students (Musu-Gillette et al., 2017) with about 75% or more qualifying for free or reduced lunch. The purpose of this study was to examine any relationships between students’ perceptions of the effects of school uniforms and student socioeconomic status. In a charter school, a survey was completed by students to gather perception information and a separate survey by parents to gather socioeconomic status information. Hypotheses were tested using descriptive statistics and multiple regression models. Data were gathered from 184 students in grades 3 through 8. Examining individual survey items revealed older students were more likely to report that school uniforms help to reduce bullying and teasing. Another statistically significant difference was that some students of high socioeconomic status reported that uniforms help reduce arguments with parents about clothing ($t(182) = 2.66$, p<.01). Student responses on 10 survey items were grouped into one factor called School Climate, reflecting student perceptions on how uniforms affect the school’s climate. Analyses revealed no significant relationships between the School Climate factor and socioeconomic status. However, Hispanic students reported a significantly more positive response overall than non-Hispanic students. These findings suggest students of various socioeconomic status perceive school uniforms similarly, but older students could be more likely to associate uniforms with a reduction in bullying. More research needs to be done in charter schools as little research has been done on school uniforms in charter schools, and among Hispanic students because the participation of Hispanic students was relatively low.

Keywords: school uniforms, dress codes, school policy, socioeconomic status, educational environment
ACKNOWLEDGMENTS

I wish to express gratitude to my chair, Dr. Mike Richardson. His guidance helped keep me grounded and on track through every step of this process. I also wish to thank Dr. Bryant Jensen who assisted with much of my analyses and Dr. Erin Whiting whose positive evaluations and excitement helped me realize how important this research could be. A special thanks goes to my family, particularly my wife, who sat next to me but could not talk to me the past two years while I worked to finish this degree. Her support and encouragement were integral to my studies.
TABLE OF CONTENTS

ABSTRACT ............................................................................................................................... ii

ACKNOWLEDGMENTS ........................................................................................................ iii

TABLE OF CONTENTS ........................................................................................................ iv

LIST OF TABLES .................................................................................................................. vi

LIST OF FIGURES ................................................................................................................. vii

CHAPTER 1: Introduction ..................................................................................................... 1

   Problem ............................................................................................................................... 4

   Purpose ............................................................................................................................... 4

   Hypotheses .......................................................................................................................... 5

      H1 ................................................................................................................................... 5

      H2 ................................................................................................................................... 5

      H3 ................................................................................................................................... 5

      H4 ................................................................................................................................... 6

   Limitations .......................................................................................................................... 6

CHAPTER 2: Review of Literature ....................................................................................... 8

   Safety and Student Behavior ............................................................................................. 8

   Academic Well-Being ........................................................................................................ 11

   School Climate .................................................................................................................. 13

   Family Effects ................................................................................................................... 15

   Clothing and Socioeconomic Status ................................................................................. 16

CHAPTER 3: Method .............................................................................................................. 19

   Instruments ......................................................................................................................... 19
### Procedures

Data Analysis .................................................................................................................. 21

- Descriptive analysis. ....................................................................................................... 22
- Factor analysis. ................................................................................................................ 23
- Regression models. ......................................................................................................... 23

### Descriptive Analysis

Descriptive analysis. ....................................................................................................... 22

### Factor Analysis

Factor analysis. ................................................................................................................ 23

### Regression Models

Regression models. .......................................................................................................... 23

### CHAPTER 4: Findings

Item-Level Descriptives .................................................................................................. 25

### CHAPTER 5: Discussion

- Hypotheses ..................................................................................................................... 37
- Correlation to SES ......................................................................................................... 40
- Other Observations ....................................................................................................... 42
- Implications ..................................................................................................................... 45
- Future Research ............................................................................................................. 45

### References

........................................................................................................................................ 48

### APPENDIX A: Student Survey

........................................................................................................................................ 52

### APPENDIX B: Parent Survey of Child’s Demographics

........................................................................................................................................ 54

### APPENDIX C: Script for Survey Administration

........................................................................................................................................ 55

### APPENDIX D: Consent to be a Research Subject

........................................................................................................................................ 57

### APPENDIX E: Parental Permission for a Minor

........................................................................................................................................ 59

### APPENDIX F: Child Assent

........................................................................................................................................ 61
LIST OF TABLES

Table 1  *Descriptive Statistics for School Uniform Items* ..................................................27

Table 2  *Means for Q1* ........................................................................................................28

Table 3  *Correlation Matrix* ................................................................................................30

Table 4  *Demographics Statistics of School Climate Across Demographic Subgroups* ..........33

Table 5  *Regression Model* ..................................................................................................35
LIST OF FIGURES

Figure 1  Scree plot with dropped questions……………………………………………………………31
CHAPTER 1

Introduction

Across the nation, school uniforms are becoming increasingly more popular. Between the years 2000 and 2014 the number of schools that had a school uniform policy has increased from 12 percent in 2000 to 20 percent in 2014 (Musu-Gillette, Zhang, Wang, Zhang, & Oudekerk, 2017). There are many claims to the benefits of school uniforms including an increase in attendance, academics, safety and sense of community, also a decrease in clothing expenses, family stress, school violence and bullying. “Educators and politicians across the country have considered school uniforms as a vehicle to achieving school safety, student discipline, and student achievement” (Sowell, 2012, p. 1). School uniforms became so popular that President Clinton issued a statement and called for the creation of a pamphlet that offers guidelines for schools that want to implement uniforms in 1996 (U.S. Department of Education, 1996).

Opponents to school uniforms retort that uniforms have no effect on attendance, academic achievement, safety or sense of community. They also claim uniforms add to clothing expenses and that uniforms remove students’ personal freedoms including the freedom of expression (Anderson, 2002).

Despite the increased use, implementation, and claims regarding school uniforms, researchers do not agree on positive or negative effects of uniforms (Anderson, 2002; Reynolds, 2006; Sowell, 2012). Regarding academics and behavior, Brunsma (2004) claims there is no research that has given any compelling reason to implement a uniform policy. Sowell (2012) said there is limited empirical data to support the positive effects claimed by advocates including academic performance, attendance rates, and discipline referral rates. Even with limited research to support uniform policies, many schools and districts still implement a uniform policy for reasons that may include political pressure or community values (Reynolds, 2006). Other
researchers suggest that research should look for benefits in non-cognitive areas such as self-esteem and self-discipline (Gentile & Imberman, 2012). Jacob (2002) defines non-cognitive skills as the skills a student uses to be successful in school and employment such as the ability to work with others in a group, pay attention in class, keep themselves organized, and seek help when needed. This suggests that researchers might look beyond academic benefits or reduced behavior problems for additional benefits of school uniforms.

Perceptions of school uniforms are important to research as perceptions have the potential to cause more change than the actual effects of uniforms (Robbins, 1991). Some of the changes could be how students act in the school which affects the school environment, parents could pull their children from the school which affects the school’s enrollment, and administrators may need to change policies to fit the needs or wants of the population. Though research has been done on perceptions of school uniforms, fewer studies have focused on students' perceptions of uniforms (Bodine, 2003a; Wade & Stafford, 2003; Woods & Ogletree, 1992). Student perceptions are particularly important because of the students’ placement within the school system. Because students are the ones who must wear the uniforms, their perceptions of the school environment might be more affected than those of the school’s administration or the students’ parents. A students’ view of the school as conducive to learning is greatly affected by their perception of the school environment (Marzano, 1992), which can include their perceptions of the clothing worn by the student body. Students need to feel safe and comfortable in the school in order to take on challenges which will stretch and strengthen them as learners. Students who are not comfortable may not take simple risks such as raising their hand to ask a question or socialize with other students. The clothing a student wears can have great effects on their
perception of the school climate and their view of themselves as learners (Francis, 1992; Murray, 1997).

In the research on school uniforms, an interesting statistic emerges. According to recent research, 74% of schools with a uniform policy also have a student population where 76% or more qualify for free or reduced lunch (Musu-Gillette et al., 2017). In this research, socioeconomic status (SES) is determined by whether or not a student qualifies for free or reduced lunch. This brings up some interesting questions that require more research. Why do fewer schools with a higher SES implement uniform policies? Do families of higher SES perceive the effects of uniforms different than those of lower SES? Do schools with a higher SES not feel the need to implement a uniform policy? Woods and Ogletree (1992) suggest that the majority of parents are supportive of school uniforms, but again, most of these parents represent lower SES families. The same researchers also report a small percentage of parents not supportive of a uniform policy. Could family SES relate to whether the student supports a uniform policy or not?

Though there is research on actual effects of uniforms and some perceived effects, none of this research looks at students’ perceptions in light of their SES. One study made an attempt to learn about uniforms and perceptions according to SES but none of the participants were involved in a school that currently required the use of school uniforms (West, Tidwell, Bomba, & Elmore, 1999). The present study aims to add to the literature with an examination of the perceptions of students in a relatively high SES school on the effects of school uniforms, and correlate these perceptions to students’ SES.
Problem

One problem with the current literature on school uniforms is that most research that includes SES demographics indicates a very high percentage of students that qualify for free or reduced lunch, suggesting that most schools where research has been done are low SES (Musu-Gillette et al., 2017). Most research indicating an SES level have no specific analysis relating to SES. One study made an attempt to learn about uniforms and perceptions according to SES but none of the participants were involved in a school that currently required the use of school uniforms (West et al., 1999). The present study aimed to explore students’ perceptions of the effects of uniforms and compare these perceptions to various SES variables such as whether a student qualifies for free or reduced lunch and academic attainment of students’ parents.

Purpose

This study aimed to answer the following question: How do students’ perceptions of the effects of school uniforms vary by SES? To answer this question, I administered a survey to look at students’ perceptions of the effects of school uniforms and separate parts of SES like qualifying for free or reduced lunch and parent’s education level. In this study, students’ qualification for free or reduced lunch will be used because that will be similar to SES variables used in previous studies. It is important to understand that qualifying for free or reduced lunch is not completely representative of a person’s income because of the numerous qualifications a family can meet to receive free or reduced lunch. For additional information on a families’ SES, the parents’ education level will also be gathered to add another variable for a deeper understanding of SES. Other variables that could affect students’ perceptions are gender, grade level, ethnicity and race.
Some questions that guided the study were; (a) How do students’ perceptions of the effectiveness of uniforms on school safety vary by SES? (b) How do students’ perceptions of the effectiveness of uniforms on academic wellness vary by SES? (c) How do students’ perceptions of the effectiveness of uniforms on school belonging vary by SES? (d) How do students’ perceptions of the effectiveness of uniforms on family stress vary by SES?

**Hypotheses**

**H1.** There is no difference in how students of different SES groups perceive the effect uniforms have on the safety of the school. Previous studies have not provided adequate reasons for assuming any difference in perceptions according to SES.

**H2.** Students with lower SES perceive uniforms to have a greater impact on their academic well-being. Anderson (2002) suggested school uniforms can help hide distinguishing markers of low SES. Because students have less visible signs of economic distinction, low SES students may not perceive their SES as classifying them within low academic value (Wiederkehr, Darnon, Chazal, Guimond, & Martinot, 2015). Thus, students with low SES might not distinguish themselves from their higher SES peers and might feel more academic value. This motivation may encourage the student to put more effort in school and see themselves as able to succeed more so than in a school without a uniform policy.

**H3.** Students with lower SES perceive that uniforms help improve school climate. Because students’ SES is less visible (Anderson, 2002), the fear of looking different or poor may diminish, allowing students to socialize with peer groups of varying SES. Battistich, Solomon, Kim, Marilyn, and Schaps, (1994) said students look for peer groups with similar SES. Without distinctive clothing to distinguish a students’ SES, class distinctions may become less apparent which may help students feel an increased sense of belonging with an improved school climate.
Also, Bodine’s (2003b) research showed students felt less teased and bullied because of their clothing. The lack of teasing and bullying will help students feel more welcome in the school and they will be more comfortable socializing with more students and participating in more school activities.

**H4.** There is no difference in how students of different SES groups perceive the effect uniforms have on family stress. Low SES and high SES student groups will see a reduction in clothing caused stress. Walker (2007) and Bodine (2003a) suggest that families will have a reduction in stress factors from contention brought on by arguing which clothes to wear to arguing which clothes to buy at the store. This will apply to students with high and low SES.

**Limitations**

An important limitation of this research is related to the potential of selection bias as the survey is done in one charter school. A charter school is a public school, but is also a school of choice, meaning families choose to register their kids to the school. Parents choose a charter school based on varying features of attractiveness such as class size, a different curriculum, or services offered. Because when parents choose to join the school they are fully aware of the uniform policy, they must have some level of acceptance if they are willing to be a part of the school. This does not necessarily reflect students’ perceptions of uniforms, which this study focuses on, because it is generally the parents that choose the school, not the student, though children can be influenced by their parents’ perceptions. Also, because it is a school of choice, the school draws people from a larger demographic area which means the results from this study might not generalize to many district schools (public schools belonging to a district) which generally draw their population from proximate neighborhoods.
Another limitation is related to the variable of a family’s qualification for free or reduced lunch being used to assess a family’s SES. The free or reduced lunch variable may not account for much SES variation because families can qualify for free or reduced lunch with a wide range of incomes, education attainment, and employment depending on the size of their family. It is used in this study because it allows comparison with previous studies that tend to use this variable exclusively, even though they generally make no connections between the variable and the results of their research. I also added the variable of parent educational attainment to provide additional information. Future studies might include family size, regional cost of living or occupation.

The use of a survey itself creates limitations as it has restrictions on questions and possible responses by participants. It also limits the ability to explore perceptions in depth as opposed to more qualitative methods such as interviews and focus groups. This method is appropriate for an initial study on the issue, as it offers a broad view on the perceptions of participants. It is also more conducive to research conducted with large numbers of students at school because it takes less time away from learning and can prompt future studies which might explore these questions in more depth, in other contexts, and with other scales.
CHAPTER 2

Review of Literature

The research that has been done on school uniforms creates a fractured conversation with results varying from uniforms having positive to negative effects in various areas of education, and disagreement among researchers of whether the research has correctly represented the issue of school uniforms. Though many studies have been done, not enough research has been done that is consistent with results of other research for anyone to draw conclusions that can be generalized to all student populations. Some of the inconsistencies range from different purposes and methods used by researchers to different sample sizes and contexts of schools involved. However, when it comes to perceptions of school uniforms, there is more consistency in the research, though researchers have not examined perceptions of school uniforms as thoroughly as the actual effects of school uniforms. In my review of the literature, I will attempt to demonstrate how the literature creates a fractured conversation by displaying the variety of results that have come from the research. For the purpose of this study, I have grouped common research topics into four categories that stem from focuses of other researchers who have studied the use of school uniforms. The categories are safety and student behavior, academic well-being, school climate, and family stress. Within each category, I will first discuss research showing any direct connection of effects related to the use of school uniforms, followed by the perceived effects of school uniforms. After which, I will discuss the connection of SES and student clothing choice and the importance it has for students.

Safety and Student Behavior

One of the major claims is that school uniforms help improve behavior and safety in a school. Many studies have been done to examine whether uniforms affect bullying, gang violence, and other disciplinary issues (Brunsma, 2004; Chime, 2010; Gentile & Imberman,
conclusions from this research vary with some reporting positive effects, some reporting negative effects and others providing no clear evidence of any positive or negative effects of school uniforms.

Pate’s (1999) research reported on schools that changed to uniforms but had no change in truancy or in-school infractions in some elementary and middle schools. However, Pate also reported a significant decrease in out-of-school suspensions. Pate suggests that the effects of school uniforms may vary by grade and school. Brunsma and Rockquemore’s (1998), research used data collected from the National Education Longitudinal Study of 1988 (NELS:88) in private schools, and public schools to claim that uniforms had no effect on student behavior. Sowell (2012) studied two high schools, one without a uniform policy and one with a uniform policy. He found that in the school with a uniform policy, students had better attendance rates than the students in the school without a uniform policy, but reported more in-school infractions in the school with a uniform policy than the school without a uniform policy. Brunsma (2004) also claims that uniforms have no effect on attendance and self-esteem, and that SES has more of an effect than school uniforms. However, Bodine (2003a) noted in a critique of Brunsma and Rockquemore’s (1998) study that the behavior data used was self-reported by students, which depended on student memory and may not be entirely accurate or reliable.

Despite the different conclusions about the relationship between uniforms and student behavior, most teachers and administrators have positive perceptions of school uniforms, feeling that uniforms increase positive behaviors and decrease safety issues including fighting, gang violence, and bullying (Bodine, 2003b; Chime, 2010; Hawkins, 2013; Woods & Ogletree, 1992). Likewise, parents report perceptions that uniforms matter as evidenced in Woods and Ogletree’s
(1992) research, which suggested that parents of elementary aged students whose children go to a school in an area with high gang activity feel their children are safer in a school that requires uniforms. Similarly, Bodine’s (2003b) research indicated that 88% of parents and 86% of teachers feel uniforms increase the safety of the school. However, in this same study, fewer students reported positive perceptions of the effects of uniforms on school safety with only 43% of elementary and middle school students feeling that uniforms increase safety in the school (Bodine, 2003b). Wade and Stafford (2003) reported that teachers and administrators may have felt gang violence had decreased with the implementation of school uniforms, but students disagreed. They theorize that teachers judge gang presence more so by their clothing while students notice other signs of gang affiliation and know individuals in gangs (Wade & Stafford, 2003). However, Murray’s (1997) research indicates that middle school students still report feeling safer in schools that require uniforms compared to students in similar schools that did not require uniforms. Since schools want a safe atmosphere for the benefit of their students, students’ perceptions of the safety of the school is very important. If a student is to feel safe, they must perceive the school as being safe. More research is needed on how students perceive safety in schools.

Research is unclear on the actual benefits school uniforms have on safety and behavior concerns within schools. The lack of clarity may be due to the variety of data sets (international, national, and local) and methodology (self-report vs other, between school comparisons vs. within). Perceptions are clearer, as most parents, teachers, and administrators agree that uniforms increase safety and behavior in schools. However, students agree less, even though it appears that over all they feel that uniforms help increase the safety of a school.
Academic Well-Being

Research on the effect school uniforms have on academics is unclear with many studies reporting positive effects, no effects, or negative effects. Reynolds (2006) said Brunsma was one of the leading advocates for more research on the effects of school uniforms, and Brunsma’s (2004) research led him to the conclusion that school uniforms do not have any academic benefit for students. Brunsma said, “There is insufficient empirical research to support a cause-effect relationship between the school uniform and increased student behavior and academic achievement” (2004, p. 189). This conclusion was partly based on research he conducted previously (Brunsma & Rockquemore, 1998). However, other researchers disagree with these conclusions. For example, in Bodine’s (2003a) critique of Brunsma and Rockquemore, she strongly disagreed and claimed their research was misleading. She argued that they emphasized a negative correlation between school uniforms and academics at Catholic schools over a positive correlation found at other schools and the total sample (Bodine, 2003a). Bodine said, "Brunsma and Rockquemore's (1998) empirical finding that uniforms are correlated significantly with higher test scores for the total sample and despite their claim of the opposite correlation, school uniforms have not been demonstrated to affect academic achievement" (p. 70). Bodine (2003a) continues to explain her surprise at any positive or negative claim from Brunsma and Rockquemore (1998) regarding effects on academics from school uniforms because uniform policies are often only a part of a larger group of policies and practices implemented in schools.

Another researcher (Pate, 1999) reported gains in reading scores for elementary boys but not for girls.

One problem with much of the research looking at benefits to academic achievement is that most of it includes only a simple comparison of academic achievement within a single
school before and after implementing a school uniform policy (Brunsma, 2004; Gentile & Imberman, 2012; Reynolds, 2006). Each researcher noted that other factors could have contributed to any positive effects, so a direct connection to uniforms is still unclear.

However, there is some research that varied from the simple before and after assessment. Baumann and Krskova’s (2016) research showed a connection between school uniforms and improved academics. For his research, he looked at the Program for International Student Assessment (PISA), which had academic and behavior data from numerous countries and correlated the data to schools in the respective countries that reported requiring uniforms (Baumann & Krskova, 2016). Another example is Gentile and Imberman (2012), who gathered data from multiple districts that switched to school uniforms. Test data from math and reading was collected from three years before implementation of a uniform policy and 6 years after. The data showed decreasing test scores until the implementation of school uniforms, when linear trends tended to show an increase in test scores. Test scores rose more significantly in the elementary schools where high schools were slower to show any increase, but over time they also showed a steady increase in academics. The researchers did suggest the rise in test scores was not wholly attributed to school uniforms, but the school’s uniform policy was a part of a number of school policy changes that resulted in the improved academics (Gentile & Imberman, 2012). Still, other research comparing two rural high schools with and without uniforms shows no evidence of increased academic achievement (Sowell, 2012). However, this author acknowledged potential systematic differences in the schools were not controlled for (including SES and attitudes of students, teachers, and administrators) although race and disabilities were accounted for.
Few researchers have looked at perceptions of academic success, probably because of the ease of measuring academic success using concrete evidence such as test scores. There is some research suggesting that teachers, parents, administrators, and students, feel school uniforms contribute to improved academic success (Hawkins, 2013; Murray, 1997). Murray’s (1997) research indicated that middle school students feel they are more successful when wearing a uniform, even though assessment scores showed no evidence of academic improvement. Other researchers suggest uniforms could eliminate competition over designer and name brand clothing, which would encourage the student to focus more on learning instead of their clothes. In addition, uniforms might promote good behavior as students tend to act how they dress, meaning school uniforms send a message that it is time to learn, and play clothes suggest it is time to play (Woods & Ogletree, 1992).

School Climate

School climate is an area where the results of research have been a little more consistent with conclusions. This is an area that is important to research because whether a student feels they are a part of the school community is related to the school’s climate. A “positive school climate fosters youth development and learning necessary for a productive, contributive, and satisfying life” (Cohen, McCabe, & Michelli, 2009, p. 182). Chime’s (2010) research showed 70 percent of teachers who worked at disciplinary alternative schools claim that uniforms have a positive effect on a school’s climate, with more experienced teachers being more favorable. Some administrators feel uniforms help increase student pride and the image of the school within the community (Hawkins, 2013).

Baumann and Krskova (2016) studied schools internationally using data self-reported by students and reported by administration. They reported that schools with uniform policies have
students that listen better, classes that start more on time and have less noise level, which might mean teachers have more instruction time.

More research needs to be done on student perceptions of the school environment when uniforms are used in order to affirm that students experience these improvements to the school environment. A study done by Murray (1997) among middle school students showed that students in a school with a uniform policy viewed their school climate better when compared to a neighboring school that does not use uniforms. These students felt safer, more supported by the staff, and reported better interpersonal relationships with peers and teachers as compared to students in the other school. Other studies show students overwhelmingly agree that uniforms reduce bullying and teasing based on clothing (Bodine, 2003b). Many students feel pressured to dress according to peer’s opinions (Woods & Ogletree, 1992) and uniforms may reduce this peer pressure. Despite the recognition that uniforms help reduce the amount of bullying and teasing, most high school students do not support wearing a uniform according to DeCosta (2014). This research compared two high schools in a rural community with one school having a uniform policy and the other without a uniform policy.

An interesting note about student perceptions comes from a study done by Wade and Stafford (2003). These researchers found that middle school students who wear uniforms had few differences in self-perception when compared to students who did not wear uniforms. These researchers measured self-perception using six subscales and five subscales yielded no significant results. However, one of the six subscales measuring global self-esteem indicated a lowered self-esteem for students wearing uniforms. These researchers suggested that finding few differences in self-perceptions between these groups might be due in part to the high poverty levels of the schools included in the study. They suggest that many other variables might
influence self-perception in this context, leaving little room for uniforms to impact self-perception.

One of the primary justifications by parents who favor school uniforms was they help create a protected space where students are free from “markers of economic disparity” (Bodine, 2003b, p. 55) which eliminates social exclusion. However, many students and parents feel this equalization through controlling students’ clothing restricts students’ freedom of expression and denies students the opportunity to learn to work with people who are different (Walker, 2007).

**Family Effects**

A major reason for families to justify school uniforms was the reduction in family stress. The main reason for this is reflected in the morning routine when students get ready for school. With school uniforms, children have less choice of clothing in the morning, which shortens preparation time and reduces arguments when getting ready for school (Bodine, 2003b). School shopping for clothes is much easier and causes less contention between the parent and child when purchasing school uniforms (Bodine, 2003b).

Another element about school clothing that contributes to family stress is the financial burden to purchase school clothes (Anderson, 2002; Bodine, 2003b; Brunsma, 2004; Chime, 2010; Walker, 2007). The majority of parents claimed school uniforms reduced the financial burden of families while fewer complained about the added expense of uniforms (Walker, 2007). The concern of how the purchase of a school uniform effects families’ budgets appears frequently in the literature. One research study claims parents with more education and more income feel uniforms would be more burdensome (West et al., 1999), though this research was done with schools that do not require school uniforms.
Bodine referenced parents who saw their children being overly concerned with clothing and opted into a uniform program in an effort to reduce their children’s concern with clothing (Bodine, 2003b). Parents opting to join a charter school with an existing uniform policy might have the same mindset as the parents in Bodine’s study, that is, they do not want their children to become preoccupied with clothing and the status it can represent, but to focus more on academics instead.

**Clothing and Socioeconomic Status**

Students are affected by their perception of their social acceptance and autonomy, and these in turn are affected by a student’s SES in which clothing plays a part. A family’s SES might influence students’ perceptions of their “academic value” (Weirkehr et al., 2015, p. 771), which is the students’ perceptions of their ability to succeed within an academic field. Weirkehr and associates (2015) found students perceive their SES, whether consciously or unconsciously, which affects their perceived ability to succeed. Additionally, students from high and low SES (assessed by parent occupation) think students belonging to a higher SES will achieve more in academic pursuits. Weirkehr et al. (2015) also found that social class differences in academic achievement can be internalized so lower-class students believe they have a lower academic value and lower self-efficacy. These authors refer to Bandura’s (1994) definition that self-efficacy is a person’s belief in their ability to perform the required action in order to exercise influence over events in their lives. Low-SES students participating in the research by Weirkehr et al. had a lower “sense of fit” within an academic field and “experienced more ego depletion than high SES students” (p. 771). Results from this research suggested that students with lower self-efficacy also had lower scores in math and second language acquisition (Weirkehr et al., 2015).
Caldas and Bankston (1997) found that students are drawn to social groups of similar social status. This process of socializing with peers according to SES showed students in peer groups with students of higher SES achieving more academically while peer groups of lower SES students achieved less in their academic pursuits (Caldas & Bankston, 1997). Other researchers found that students choose their social group when “their need for belonging, autonomy and competence are met” (Battistich et al., 1994, p. 629). Francis (1992) added that students generally feel these needs are met within a peer group of similar SES. When searching for a group to socialize with, students may begin their search by observing how other students dress and make judgement calls about SES according to clothing (Francis, 1992). Anderson (2002) said, school uniforms may conceal “the income of a child’s family, thus eliminating another mark of distinction of shame” (p. 6). Students attending a school with a uniform policy may need to rely more on other clues besides clothing to judge who to socialize with.

A study done by Pilcher (2011) shows that parents care about how their children dress, though their concerns may vary. He explains that some parents are more concerned about fashion and worry how their child will “fit in” with peers while other parents are more concerned with the function of the clothes. Additionally, children’s concerns with clothes tend to reflect their parents’ ideals in the younger ages while peer groups and media have more influence on older children. These preferences for fashion “continue to mark out particular kinds of bodies, drawing distinctions in terms of class and status, gender, age, sub-cultural affiliations that would otherwise not be so visible or significant” (Pilcher, 2011, p. 129). Those more concerned with name brand clothing and fashion were generally families in higher SES groups while those who favored function over fashion tended to be in lower SES groups (Bodine, 2003b; Pilcher, 2011).
The social group a student is accepted into, which can be marked by clothing, affects their feelings of belonging and autonomy, which in turn can have possible effects on their perceived academic ability. If clothing can be a precursor to social acceptance into a peer group which in turn may determine a students’ self-efficacy and academic perception, maybe that is why proponents of school uniforms claim that uniforms can be the “great equalizer” (Anderson, 2002, p. 6) among students of varying SES. Having school uniforms may help negate the distinctions of SES from appearance, and make it more likely for students of different economic backgrounds to associate in the same peer group and school community.

As it is, the issue of students only socializing with peer groups of similar SES is common in schools which might be why Wiederkehr et al. (2015) said, a "school is a system that contributes to justifying social inequalities by transforming social class differences into personal differences” (p. 779). Do schools without uniform policies contribute to students’ internalized values by allowing students to dress according to their socioeconomic class? Do schools with uniform policies have fewer differences in students’ self-efficacy between social classes? Is this one of the justifications people use to support uniforms, so that students will not be classified and risk lowering their self-perceived academic value? Though this study will not address these questions directly, they could prove of value for future research. Although previous researchers have suggested that SES might influence perceptions of school uniforms, the perceptions of students who are actually required to wear uniforms have not been directly examined in relation to their SES. The present study addresses the question of whether the SES of students who are required to wear school uniforms might be related to their perceptions of the effects of those uniforms on school climate.
CHAPTER 3
Method

The participants of this study are students from one charter school in Utah. The charter school consists of students from kindergarten through eighth grade. This school was chosen because it has been using a uniform policy since it was started in 2007 and was convenient to me as the researcher. Charter schools might be an ideal setting for a study of this sort because it draws students from a larger area than a local district school which is subject to the demographics of its surrounding population. Not being restricted to an immediate surrounding population may draw families with a larger variety of SES. Although, some researchers argue charter schools still contribute to the problem of segregation by social class, Race, and ethnicity (Lacireno-Paquet, Holyoke, Moser, & Henig, 2002). In addition, in my surrounding area, charter schools are the only public schools that require the use of uniforms. At this school, the student body consists of 671 students with a fairly equal ratio of male to female students. Of the students, about 92% have registered at the school as White with about 8% who registered as a race other than White (Black, Pacific Islander, Native America, Asian, and any race other than White). The total percentage of students who registered a Hispanic ethnicity at the school is 14%, with all but one registering as White Hispanic. Also, 33% qualify for free or reduced lunch. Only students from third grade and up were invited to take the survey because students needed to be able to read and make conscious choices as independently as possible in order to answer the survey questions.

Instruments

Data were collected through a survey adapted from one designed by Chime (2010). Chime designed the survey to assess perceptions held by teachers and administrators of the effect school uniforms have on school climate. His survey questions were computed as one score which
was analyzed along with varying characteristics of the teachers and administrators who participated. I initially grouped survey questions into four categories in an effort to find more specific information about students’ perceptions (though, as will be explained, the questions ended up being grouped into one score similar to Chime’s). The categories were chosen based from topics focused on in previous studies. Most of the questions met the needs of this study but some questions needed to be deleted and new questions needed to be added to have a sufficient number of questions to address each of the four categories focused on in this study. Questions that were not deleted were simplified to increase comprehensibility by students as young as third graders. Teachers of students in grades three and four were consulted on the wording of the survey and procedures for administration to make sure their students would be able to understand every step of the process.

There are two sections of the data collection; a demographic survey to gather SES data, which was to be filled out by parents and collected along with the parental consent form, and the survey with questions about students’ perceptions of the effects of school uniforms. The adapted survey (Appendix A) divided items into four categories: (a) behavior and safety, (b) perceived academic wellbeing, (c) school climate, (d) family stress. These categories will be referred to as the four perception factors. In the survey, there are 16 questions total with each category having four questions each. Questions were written in a random order but aligned on the paper and digital versions. Each question is a statement such as “A school uniform helps reduce being bullied or teased” or “A school uniform helps students focus in class.” Questions were to be answered using a 4-point Likert scale where students could select either disagree, somewhat disagree, somewhat agree, and agree. The demographic form (Appendix B) collected information regarding students’ ethnicity and the parents’ education attainment level. Other demographics,
including the students’ grade and qualification for free or reduced lunch were given to me by the school’s administration.

Procedures

Before proceeding with the survey, school administrators looked over the questions and methods and gave their approval. A cover letter and parent consent form were sent home with students in grades three through eight to inform parents of the purpose of the survey. In addition, the parents received a survey about the demographics of their child who was participating in the study. Teachers were also informed during a faculty meeting where I explained to teachers the purpose of the research and procedures. I asked teachers to take 15-20 minutes of their computer time with their class and allow students to fill out an online survey using Google Forms. Teachers were informed of the requirements for students to have a parental consent form to participate. Teachers were also not required to administer the survey with their classes. Teachers who chose to administer the survey were asked to follow a set of instructions, including a script for the administration of the survey.

Before administering the survey, teachers obtained the parental consent forms and demographic surveys from the students. Teachers of students in grades five through eight administered the survey using Google Forms. The teachers instructed students using the provided script to use the provided link which took them to the online survey. Teachers of students in grades three and four administered a paper survey to increase the accuracy of students’ selections in the survey. The younger students have less experience on computers and I thought a paper version of the survey would eliminate possible confusion in procedures that come from using unfamiliar computer programs.
All data from Google Forms were transferred to a data analysis program and paper surveys from parents were inputted into the same data analysis program. Entries were double checked to make sure participants completed the parental consent form. Any names given by students were converted to a code to protect the students’ identity.

**Data Analysis**

The four perception factors, safety and behavior, academic well-being, school climate, and family stress, were considered continuous. The demographic and SES variables were the predictor variables. The two SES variables, free or reduced lunch and education attainment, were considered as categorical variables. Within the demographic variables, grade level was treated as a continuous variable, while gender, race and ethnicity were considered categorical variables. Student demographic variables, grade, ethnicity, and gender, were used as controls in the regression models described below to determine the variance in the four perception factors accounted for by the SES variables.

**Descriptive analysis.** To begin analyzing the data, basic descriptive analyses were conducted to explore relationships between variables and explore problems of variability such as skewness or kurtosis. Variability of categorical variables were analyzed using frequencies and histograms. Continuous variables, including the four perception factors and grade were analyzed with means and standard deviations. The four perception factors were also analyzed for other central tendencies, including the median and mode.

After exploring variability and central tendencies, relationships between variables were examined for additional implications between variables within the models. Bivariate correlations were used to explore relationships between two continuous variables such as grade and student academic well-being. Cross tabulations were used to explore relationships between categorical
variables, such as the relationship between some demographic variables like student gender or ethnicity and one of the four perception factors.

**Factor analysis.** I conducted one confirmatory factor analysis (CFA) model to examine construct validity of the four perception factors that I identified conceptually (see above), or to confirm whether the four perception factors were empirically supported by the survey items. I reported standardized factor loadings and goodness-of-model-fit indices. Fit indices I included were the Comparative Fit Index (CFI), chi-square and associated probability values, the Tucker-Lewis Index (TLI), and the Root Mean Square Error of Approximation (RMSEA). Afterword, I conducted an exploratory factor analysis (EFA) because of poor model fit (as described below). Eigenvalues values and scree plots were examined to explore alternative grouping of survey items into categories that had a better fit and that would account for 50% (Guttman, 1954) or more of the variance.

**Regression models.** To test my hypothesis, I planned to conduct a series of eight predictive models, two for each of the four perception factors. Each model would then follow the stepwise method where a different predictor variable would be added with each step. However, the factor analysis revealed a poor model fit for the four perception factors, as will be explained, so the survey items on student perceptions of school uniforms were subsequently considered as one variable. The regression model then used three steps to analyze how the demographic and SES variables explained the variation in this predicted variable. The first step was to examine the extent to which the control variables--gender, age, race and grade level--accounted for the variation in the predicted variable. The relationships between predictor and predicted variables were examined using standardized beta coefficients which indicated the strength and directions of the relationship between the predictor variable to the predicted variable. The next step was to
examine the extent to which the SES variables of parent education and free or reduced lunch accounted for the variance in the predicted variables above and beyond that accounted for by the control variables.

The third step examined interactions between grade level and parent education, because previous analyses indicated possible grade level difference in perceptions. Other variables (e.g. ethnicity, race, and free or reduced lunch) were not included in this analysis because they did not have sufficient number of participants in each category or they yielded no significant main effects. Each variable had categories converted to dummy coded variables for analysis.

Each of the three steps reported an $R^2$ which explained the variance of the data as it fit to the regression line. The $R^2$ from the first step was subtracted from the $R^2$ of the second step to find the $R^2$ change in variance accounted for by the SES variables. The $R^2$ from the second step was subtracted from the $R^2$ of the third step to find the $R^2$ change in variance accounted for by the interaction terms. This estimated the variance accounted for by the additional variables after removing that accounted for by the previous variables. I also looked at the size, direction and significance of the relationship between the predictor variables and the predicted variable to test my hypotheses.
CHAPTER 4

Findings

Of the 440 third through eighth grade students who were asked to participate, 184 students completed and returned all the forms and surveys (approximately 42% response rate). Not all demographic groups are representative of the school populations as reported above. More female students participated (56%) than males (44%). An average of about 30 students participated in each grade, with fifth grade having the largest number of participants \(n=43\) and eighth grade having the lowest number of participants \(n=17\). Ethnicity was reported as Hispanic or not, and race was reported as White, Black, Asian, Pacific Islander, Native American, or other. Most participants indicated their race as White and ethnicity as non-Hispanic (about 85%). White Hispanic students represented about 5%, 5% were non-White and Hispanic, and another 5% indicated a race other than White and ethnicity as non-Hispanic. The percentage of students who indicated non-White and Hispanic as gathered from this survey does not agree with the percentage of non-White Hispanic students reported from the administration as having registered with the school (only one student). As parents filled out the demographic survey for this study and registered their children for the school, I am not sure why the disparity. It may be related to parents not reading registration or survey forms correctly or thoroughly before submitting. Participants indicating a race other than White were over-represented (about 10%) of the schoolwide percentage (about 8%). The number of participants indicating Hispanic ethnicity was about 11% which was less than the school wide percentage of 14%. Of the students who participated, about 21% qualified for free or reduced lunch, which is a smaller percentage than schoolwide (33%).

I began with descriptive analyses of all the questions on the student perceptions survey (means, variance, and correlations among the items). Because there was poor model fit for the
confirmatory factor analysis, six questions were not included in the regression analyses (they were removed for conceptual dissimilarity or lack of clarity), and the remaining ten questions were considered as a single factor called School Climate. Descriptive statistics were then obtained for each predictor variable (means, standard deviations, and mean differences across groups) in relation to the School Climate factor. Finally, a stepwise regression was conducted using grade, gender, ethnicity, and SES variables as predictors of the School Climate factor.

**Item-Level Descriptives**

Initial descriptive analysis (before the factor analysis) showed that most students viewed uniforms somewhat positively. That is, most students responded with “agree” or “somewhat agree” to these items. All 16 questions combined showed a mean score of 2.73 (SD = .63). Questions with means above 2.50 indicate a positive response. Students responded positively to most questions (see Table 1), suggesting support for positive student perceptions of school uniforms. Question 3, Q6, Q7, and Q8 showed a more negative response (mean response was less than 2.50). There were two questions with a mean above 3.00, Q2 and Q16. It is also interesting to note that Q2 and Q16 also had the smallest standard deviations. This means the majority of the responses were more similar with less variation in students’ responses.

Of the four perception factors, academic well-being had the lowest mean responses with means for the questions being mostly negative, except for Q5. This suggests that most students did not perceive uniforms as positively influencing academic well-being. The questions in the family stress category show the highest means, with every question having a positive mean response, suggesting that students perceived uniforms as reducing family stress. The school belonging category also reported high mean scores. Questions in the category of safety and
<table>
<thead>
<tr>
<th>Category</th>
<th>Question label</th>
<th>Question</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety and behavior</td>
<td>Q1</td>
<td>School uniforms help the school feel safer.</td>
<td>181</td>
<td>1</td>
<td>4</td>
<td>2.85</td>
<td>1.01</td>
</tr>
<tr>
<td></td>
<td>Q2</td>
<td>School uniforms help identify strangers on our campus</td>
<td>183</td>
<td>1</td>
<td>4</td>
<td>3.37</td>
<td>.93</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
<td>School uniforms help stop students from getting in fights</td>
<td>184</td>
<td>1</td>
<td>4</td>
<td>2.31</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>Q4</td>
<td>School uniforms help improve respect for school staff</td>
<td>184</td>
<td>1</td>
<td>4</td>
<td>2.84</td>
<td>1.03</td>
</tr>
<tr>
<td>Academic well-being</td>
<td>Q5</td>
<td>School uniforms help focus during class</td>
<td>184</td>
<td>1</td>
<td>4</td>
<td>2.75</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>Q6</td>
<td>School uniforms help participate more in school activities</td>
<td>183</td>
<td>1</td>
<td>4</td>
<td>2.25</td>
<td>1.06</td>
</tr>
<tr>
<td></td>
<td>Q7</td>
<td>School uniforms help students do better on assignments</td>
<td>183</td>
<td>1</td>
<td>4</td>
<td>2.25</td>
<td>1.15</td>
</tr>
<tr>
<td></td>
<td>Q8</td>
<td>School uniforms help students feel more comfortable to ask questions in class</td>
<td>184</td>
<td>1</td>
<td>4</td>
<td>2.15</td>
<td>1.08</td>
</tr>
<tr>
<td>School climate</td>
<td>Q9</td>
<td>School uniforms help the school feel more inviting and supportive</td>
<td>184</td>
<td>1</td>
<td>4</td>
<td>2.75</td>
<td>1.04</td>
</tr>
<tr>
<td></td>
<td>Q10</td>
<td>School uniforms help students feel happy to be a part of the school.</td>
<td>184</td>
<td>1</td>
<td>4</td>
<td>2.69</td>
<td>1.03</td>
</tr>
<tr>
<td></td>
<td>Q11</td>
<td>School uniforms help reduce being teased or bullied.</td>
<td>182</td>
<td>1</td>
<td>4</td>
<td>2.90</td>
<td>1.14</td>
</tr>
<tr>
<td></td>
<td>Q12</td>
<td>School uniforms take away students’ right to express themselves</td>
<td>184</td>
<td>1</td>
<td>4</td>
<td>2.63</td>
<td>1.17</td>
</tr>
<tr>
<td>Family stress</td>
<td>Q13</td>
<td>School uniforms help make getting ready in the morning less stressful</td>
<td>183</td>
<td>1</td>
<td>4</td>
<td>2.95</td>
<td>1.13</td>
</tr>
<tr>
<td></td>
<td>Q14</td>
<td>School uniforms help save time getting ready for school</td>
<td>184</td>
<td>1</td>
<td>4</td>
<td>2.98</td>
<td>1.16</td>
</tr>
<tr>
<td></td>
<td>Q15</td>
<td>School uniforms help reduce how much money parents spend on children's clothing</td>
<td>180</td>
<td>1</td>
<td>4</td>
<td>2.73</td>
<td>1.12</td>
</tr>
<tr>
<td></td>
<td>Q16</td>
<td>School uniforms help reduce conflicts between parent and child when choosing appropriate clothing</td>
<td>184</td>
<td>1</td>
<td>4</td>
<td>3.21</td>
<td>.97</td>
</tr>
</tbody>
</table>
behavior had the largest range in mean scores (low = 2.31, high 3.37). This could be because of a larger variation of student interpretations of each question.

Further analyses examined relationships between demographics and survey items. A post-hoc $t$-test revealed a statistically significant difference $t(49) = -2.90, p < .01$ between eighth graders and fourth graders on Q1, but not for the other grades, which suggests that the statistical significance is not interpretable. There was another statistically significant relationship between grade levels and responses to Q11, $t(184) = .39, p < .01$ (see Table 2). Responses to this question reveal a pattern of increasing scores which can be interpreted to mean that as students get older, they agree more that school uniforms reduce the amount of teasing or bullying that occurs. In addition, the standard deviation got smaller in higher grade levels, indicating that as students get older, their perceptions are more similar with less variation in responses.

Table 2

<table>
<thead>
<tr>
<th>Grade</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2.06</td>
<td>1.24</td>
</tr>
<tr>
<td>4</td>
<td>2.59</td>
<td>1.18</td>
</tr>
<tr>
<td>5</td>
<td>3.07</td>
<td>1.06</td>
</tr>
<tr>
<td>6</td>
<td>3.18</td>
<td>1.04</td>
</tr>
<tr>
<td>7</td>
<td>3.30</td>
<td>.77</td>
</tr>
<tr>
<td>8</td>
<td>3.53</td>
<td>.72</td>
</tr>
</tbody>
</table>

Question 16 and free or reduced lunch participation also showed a significant difference between students, $t(182) = 2.66, p < .01$. Those who did not qualify for free or reduced lunch had a higher mean score ($M = 3.30, SD = .92$) than students who did qualify for free or reduced lunch ($M = 2.85, SD = 1.07$). This may suggest that students who do not qualify for free or reduced
lunch are more likely to experience fewer arguments about clothing when students wear a school uniform.

**Factor Analysis**

In order to examine the construct validity of the four perception factors driving my original research questions, a confirmatory factor analysis was conducted. Bi-variate correlations among all perception items are included in Table 3. This is especially helpful to preview factor analytic model findings. Correlations above .40 indicate a moderate relationship. Of the four perception factors, only one, academic wellbeing, had correlation values among all corresponding items that were at or above the moderate range. The other three perception variables had some correlation values above the moderate range, but others that were not. Moreover, items between the categories show a range of values, with some above and some below the moderate range. This suggests that my purported item-factor structure may not be supported by the data.

To investigate the item-factor structure further, I conducted a series of factor analyses, first a confirmatory model, and second an exploratory model. Fit indices for the confirmatory factor analysis suggested poor model fit for the purported factors. For example, the Tucker Lewis Index indicated a value of .81 which does not meet the minimum value of .95 or above (Schreiber et al., 2006). Also, the Root Mean Square Error of Approximation (RMSEA) was .11 where a RMSEA value above .06 is typically considered suggestive of poor model fit (Schreiber et al., 2006). This suggests the four-factor model previously discussed was not supported by the data.
**Table 3**

*Correlation Matrix*

<table>
<thead>
<tr>
<th></th>
<th>Q1</th>
<th>Q2</th>
<th>Q3</th>
<th>Q4</th>
<th>Q5</th>
<th>Q6</th>
<th>Q7</th>
<th>Q8</th>
<th>Q9</th>
<th>Q10</th>
<th>Q11</th>
<th>Q12</th>
<th>Q13</th>
<th>Q14</th>
<th>Q15</th>
<th>Q16</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Safety</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q2</td>
<td>.336*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q3</td>
<td>.422**</td>
<td>.264**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q4</td>
<td>.444**</td>
<td>.261**</td>
<td>.379**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q5</td>
<td>.358**</td>
<td>.216**</td>
<td>.487**</td>
<td>.353**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Academics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q6</td>
<td>.551**</td>
<td>.356**</td>
<td>.377**</td>
<td>.486**</td>
<td>.439**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q7</td>
<td>.367**</td>
<td>.244**</td>
<td>.500**</td>
<td>.372**</td>
<td>.635**</td>
<td>.454**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q8</td>
<td>.519**</td>
<td>.263**</td>
<td>.628**</td>
<td>.430**</td>
<td>.482**</td>
<td>.669**</td>
<td>.526**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q9</td>
<td>.592**</td>
<td>.354**</td>
<td>.428**</td>
<td>.514**</td>
<td>.395**</td>
<td>.511**</td>
<td>.378**</td>
<td>.517**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Belonging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q10</td>
<td>.571**</td>
<td>.279**</td>
<td>.361**</td>
<td>.410**</td>
<td>.376**</td>
<td>.484**</td>
<td>.303**</td>
<td>.481**</td>
<td>.501**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q11</td>
<td>.323**</td>
<td>.297**</td>
<td>.542**</td>
<td>.228**</td>
<td>.436**</td>
<td>.349**</td>
<td>.366**</td>
<td>.419**</td>
<td>.328**</td>
<td>.344**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q12</td>
<td>-.342**</td>
<td>-.180*</td>
<td>.228**</td>
<td>-.395**</td>
<td>-.269**</td>
<td>-.251**</td>
<td>-.218**</td>
<td>-.291**</td>
<td>-.395**</td>
<td>-.418**</td>
<td>-.143</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Family</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q13</td>
<td>.501**</td>
<td>.194**</td>
<td>.401**</td>
<td>.375**</td>
<td>.365**</td>
<td>.387**</td>
<td>.248**</td>
<td>.512**</td>
<td>.445**</td>
<td>.523**</td>
<td>.305**</td>
<td>-.231**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q14</td>
<td>.380**</td>
<td>.250**</td>
<td>.404**</td>
<td>.279**</td>
<td>.316**</td>
<td>.304**</td>
<td>.174*</td>
<td>.456**</td>
<td>.387**</td>
<td>.363**</td>
<td>.362**</td>
<td>-.182*</td>
<td>.696**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Q15</td>
<td>.425**</td>
<td>.341**</td>
<td>.288**</td>
<td>.389**</td>
<td>.299**</td>
<td>.355**</td>
<td>.299**</td>
<td>.429**</td>
<td>.395**</td>
<td>.441**</td>
<td>.262**</td>
<td>-.341**</td>
<td>.403**</td>
<td>.323**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Q16</td>
<td>.324**</td>
<td>.292**</td>
<td>.273**</td>
<td>.312**</td>
<td>.396**</td>
<td>.380**</td>
<td>.355**</td>
<td>.454**</td>
<td>.375**</td>
<td>.309**</td>
<td>.194*</td>
<td>-.178*</td>
<td>.454**</td>
<td>.301**</td>
<td>.309**</td>
<td>1</td>
</tr>
</tbody>
</table>

** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).
An exploratory factor analysis was then conducted, which suggested a three-factor solution, with only three components reaching Eigenvalues above 1.00 (Figure 1). However, with three components, all items loaded most highly on the first component, and the clearest distinction in Eigenvalues was between components one (6.34) and two (1.25). However, a one factor solution only accounted for about 42% of the variance where 50% is preferred (Guttman, 1954).

Figure 1. Scree plot with dropped questions.

In order to determine a factor structure that is interpretable and supported by the data, I decided to drop items 13 to 16 which addressed family stress. They did not load cleanly with other items in the exploratory model reported above and were less related conceptually with the other items which focus more on school issues. Q2 and Q12 were dropped because of low factor loadings. The first was perhaps more likely to be interpreted differently by students in different grades, and the second might have been confusing as the only reverse coded item, resulting in possible confusion about the meaning of the questions especially in the younger grades. The
remaining ten questions still did not correlate well into multiple variables and fit better as one factor (now accounting for more than 50% of the variance). This factor, which I refer to as the School Climate factor, was retained for subsequent analyses. The label was chosen because it seemed the most inclusive of the remaining ten questions, as perceptions of academic well-being and student safety and behavior also contribute to the climate of the school.

**Factor Level Descriptive Statistics**

With the new School Climate factor, descriptive statistics were re-analyzed to explore relationships with demographic variables (see Table 4). The mean student response of the overall factor was 2.57 (SD = .76) which is lower than the previous overall mean with all 16 items. This might be explained because four of the six survey items that were deleted during the process of the factor analysis, had mean scores of 2.95 or higher (Q2, Q13, Q14, and Q16). Table 4 includes descriptive statistics of the School Climate factor across all demographic categories used in this analysis—grade level, gender, race, ethnicity, and SES variables. One interesting value is the mean difference in the variable of ethnicity. The variable of ethnicity indicates whether a student is Hispanic or not. This variable has the largest mean difference (-.41), with Hispanic students showing a more positive response (M = 2.61, SD = .77) than non-Hispanic students (M = 2.20, SD = .61). Also, the non-Hispanic students showed a lower standard deviation which indicates that most of these students reported similar scores with less variance. However, participation among Hispanic students was lower than preferred for statistical analyses.

Students in sixth grade indicate the largest standard deviation (.88) which means those students had more variation in their responses, while students in fifth grade had the smallest (.68) highest mean score (M = 2.78, SD = .79) meaning their responses were the most positive, indicating that fifth grade students’ responses were more similar. Eighth grade students had the highest mean score (M = 2.78, SD = .79) meaning their responses were the most positive,
Table 4

Demographics Statistics of School Climate Across Demographic Subgroups

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean</th>
<th>SD</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>33</td>
<td>2.43</td>
<td>.73</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>35</td>
<td>2.39</td>
<td>.76</td>
<td>-</td>
</tr>
<tr>
<td>5</td>
<td>43</td>
<td>2.70</td>
<td>.68</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>33</td>
<td>2.58</td>
<td>.88</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>23</td>
<td>2.65</td>
<td>.71</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>17</td>
<td>2.78</td>
<td>.79</td>
<td>-</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>81</td>
<td>2.62</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>103</td>
<td>2.54</td>
<td>.76</td>
<td>.08</td>
</tr>
<tr>
<td>Race*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>162</td>
<td>2.58</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Non-white</td>
<td>20</td>
<td>2.53</td>
<td>.72</td>
<td>.05</td>
</tr>
<tr>
<td>Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Hispanic</td>
<td>161</td>
<td>2.20</td>
<td>.61</td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>20</td>
<td>2.61</td>
<td>.77</td>
<td>-.41</td>
</tr>
<tr>
<td>Qualifies for free or reduced lunch</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>39</td>
<td>2.47</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>145</td>
<td>2.60</td>
<td>.76</td>
<td>-.13</td>
</tr>
<tr>
<td>Mother's education attainment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than a bachelor's degree</td>
<td>82</td>
<td>2.55</td>
<td>.70</td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree or more</td>
<td>101</td>
<td>2.61</td>
<td>.80</td>
<td>-.06</td>
</tr>
<tr>
<td>Fathers education attainment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than a bachelor's degree</td>
<td>62</td>
<td>2.54</td>
<td>.71</td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree or more</td>
<td>115</td>
<td>2.60</td>
<td>.78</td>
<td>-.06</td>
</tr>
</tbody>
</table>

*Note – Non-White includes Black, Pacific Islander, Native America, Asian, and any other race other than White. These races were combined because of low participation.
however the number of participants was low, so it might not be a good representation of all students in eighth grade. Generally, among the grade factor, perceptions increase with grade, meaning as students get older, their perceptions of school uniforms increase. However, fifth grade was an exception to this trend with a higher mean score than all grades except eighth.

**Regression Models**

A series of multiple regression models (see Table 5) were conducted to examine the effects of parent education and free or reduced lunch on the dependent variable above and beyond grade, gender, race, and ethnicity. The first multiple regression model included only these other demographic variables as control variables, and School Climate as the dependent variable (control model). I found that this regression model had an $R^2$ of .062, meaning that over six percent of the overall variation in student perceptions of school uniforms was explained by the demographic variables included. Grade and ethnicity were statistically significant predictors in the model. Higher grades were associated with more positive views of school uniforms, and Hispanic students perceived uniforms more positively than non-Hispanic students.

The second model was conducted to predict whether the SES variables, parents’ education and free or reduced lunch, predicted variation in the dependent variable, School Climate, above and beyond the effects of the demographic variables. In this model, an $R^2 = .062$ with an $R^2$ change < .001 was reported which means that a parents’ education attainment level and whether a student qualifies for free or reduced lunch did not have an effect on the students’ perceptions of the effects of school uniforms above and beyond the effects of the other demographic variables. Grade and ethnicity were statistically significant in the second model also. Higher grades were associated with more positive views of school uniforms, though slightly less than model one, and Hispanic students perceived uniforms more positively than non-Hispanic students.
Table 5

**Regression Model**

<table>
<thead>
<tr>
<th></th>
<th>Model 1 (control)</th>
<th>Model 2 (social class)</th>
<th>Model 3 (interaction)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( B )</td>
<td>( p )</td>
<td>( B )</td>
</tr>
<tr>
<td><strong>demographics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>intercept</td>
<td>.179</td>
<td>.018</td>
<td>.178</td>
</tr>
<tr>
<td>grade</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gender</td>
<td>.072</td>
<td>.338</td>
<td>.072</td>
</tr>
<tr>
<td>ethnicity</td>
<td>.186</td>
<td>.024</td>
<td>.188</td>
</tr>
<tr>
<td>race</td>
<td>.032</td>
<td>.696</td>
<td>.032</td>
</tr>
<tr>
<td><strong>SES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother's edu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father's edu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FRL*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Interaction Terms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade*MomNoColl</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade*MomCollGrad</td>
<td>-.103</td>
<td>.748</td>
<td>.000</td>
</tr>
<tr>
<td>Grade*DadNoColl</td>
<td>.160</td>
<td>.572</td>
<td></td>
</tr>
<tr>
<td>Grade*DadCollGrad</td>
<td>.143</td>
<td>.706</td>
<td></td>
</tr>
<tr>
<td><strong>R squared</strong></td>
<td>.062</td>
<td>.062</td>
<td>.074</td>
</tr>
<tr>
<td><strong>R squared change</strong></td>
<td>.000</td>
<td>.012</td>
<td></td>
</tr>
</tbody>
</table>

* FRL (free or reduced lunch), MomNoColl (Mother with less than a Bachelor's degree), MomCollGrad (Mothers with a Bachelor's degree or more), DadNoColl (Father with less than a Bachelor's degree), DadCollGrad (Father with a Bachelor's degree or more).

The third model explores interactions between grade and parent education, with School Climate as the dependent variable. This was done to find the extent to which student perceptions at different grade levels might be impacted by different levels of parent education. The only variables of interest and with enough participants to divide into dichotomous variables for analysis were grade level and parents’ education level. A dichotomous variable was created within the grade category where grades three and four are one group and grades 5-8 the other. This grouping was chosen because of the possible effect the physical placement of grades within the school have on the students. In the school, kindergarten through fourth grade are on one side
of the school and fifth grade through eighth grade are together on the other. This grouping could have effects on students’ perceptions as students interact with students in their surrounding grade levels, but interactions between the lower grades and upper grades are limited.

New variables were created using the parent education variable to create four interaction terms. The four terms are grade and mothers without a college degree, grade and mothers with a college degree, grade and fathers without a degree, and grade and fathers with a college degree. Before calculating the interaction, dummy codes were created for the interaction with mothers’ education and grade, with mothers without a college degree being omitted and replaced with the mean of that dependent variable. This allowed me to examine just the interaction with grade and mothers without a college degree. The interaction with fathers’ education and grade also used dummy codes with fathers without education being omitted and replaced with the mean of that dependent variable. This third model reported an $R^2 = .074$ with an $R^2$ change of $.012$, meaning that 1.2 percent of the variation in School Climate is explained by the interaction terms as explained above beyond the other demographic and SES variables. However, neither of the interaction terms were statistically significant. Students in higher grades with mothers without a college degree showed lower scores while students in higher grades with fathers without a college degree showed higher scores. Though there were no statistically significant interactions, this may be worth further study. The effect of ethnicity in the third model was still statistically significant, in the same direction as before, though the effect of grade in the third model was no longer significant.
CHAPTER 5

Discussion

This is the only study to my knowledge that addresses student perceptions of school uniforms in a charter school. Studies have examined regular public schools (which I will refer to as district schools to separate and clarify that charter schools are also public but not part of a district), private schools, international schools and even special behavior schools, but no charter schools. This study offers a unique view on the issue of school uniforms as charter schools involve a different context than most district schools. District schools take in students from the population immediately surrounding the school, so their demographics are constrained by the population within the school’s boundaries (whether the surrounding population has high or low SES or has a majority of one race over another). Private schools take in a population from a larger area and are open to all people. However, private schools are limited to only those who can afford the tuition of attending the school, which means the SES of private schools is almost always high. Charter schools are a school of choice, like private schools, but being a public school, they are open to all who are willing to agree with the aims and methods of the school. Because a charter school might include students from throughout the city and neighboring cities, the demographics can vary and fluctuate depending on who registers for that year. Parents join the charter school for many reasons. Some parents want the experience of a private school but cannot afford the tuition. Other parents join the school because they feel their student’s needs are not being met by the assigned district school.

The demographics of charter schools can create positive or negative results for research. The negative side is the results found in charter schools cannot be generalized to the surrounding district schools because the demographics might not be comparable. Also, the methods and policies used in charter schools vary by charter school and are rarely consistent with district
schools, so it would be hard to determine how much of an effect school uniforms have on a school’s climate separate from the other unique characteristics of the charter school. On the positive side, the charter school involved in the present study offers a different perspective because it has a smaller percentage of low SES students, which is atypical of schools involved in most research about school uniforms. In the state where this study took place, only a few district schools require uniforms and they are within a single district. These schools also have high percentages of low SES students. Other than those few district schools, the only schools that use a uniform policy are charter schools and private schools.

The demographics of a charter school may also be affected by the idea that the school is a school of choice, as in the families must make a choice to leave their current school to register for the charter school. This idea of school choice means the school will most likely have a higher percentage of involved parents. A parent’s ability or choice to be involved in their child’s education can be determined by many things including, education, income, culture, perceptions of education, or personal values. The level or type of a parent’s involvement may cause them to think differently about policies within a school and how these policies might affect their child. Contrasting with the involved parent, a parent who is less involved may not make the effort to change their child to a different school which means their child will simply go to whichever school is assigned to them. However, according to Lacireno-Paquet et al. (2002), this is an example of how charter schools contribute to segregation in education. Parents who do not have means to research school options or transport their child to the school, though they want to be involved in their child’s education, are left with fewer options for education.

In addition to being the first study examining the differences of perceptions of the effects of school uniforms by SES in a charter school, this study also includes the additional SES
variable of a parents’ education level. SES is determined by many things so having more than one variable assessing a student’s SES only enhances the results of the study.

**Hypotheses**

My original hypotheses were based on the question: How do students’ perceptions of the effectiveness of school uniforms vary by SES? Since the factor analysis indicated poor model fit for the original four perception factors, I could not test each hypothesis using the predesignated categories in the survey. The survey was created from a survey created by Chime (2010). Chime describes a process wherein he sought expert input on content validity in his study which led him to one overall scale. Although he appears to be driven conceptually and he does not explain this empirically, it is interesting that my empirical work also shows that these items are best represented as one overall scale. Using the one factor model for analysis (with reduced number of questions), I can say that there were no statistically significant findings relating perceptions of the effects of school uniforms to SES.

The failure of model fit according to the factor analysis could be attributed to a couple reasons. First, most of the questions highly correlated, but there were no clear patterns associated with the designated categories the questions were designed to measure, meaning that the questions all related to one another strongly enough that the questions could not be separated into categories. For an example of how the questions relate conceptually, the question about uniforms saving time getting ready in the morning and the question about uniforms helping students focus during class are conceptually related though they may not initially seem to be. If a student is late for school because he or she could not decide on what clothes to wear, the student may come to school frustrated and anxious, which in turn will affect whether he or she can focus on the lesson or activity in class. Additional relationships could be made between every question on the survey.
Another reason for the model fit failure might be because of the various possible interpretations of the questions by students in different grades, or in other words, the factor structure may look different for different grades. Students in third grade might interpret the question, “uniforms help identify strangers on campus,” differently than eight graders. For example, the younger students may see threats to the school coming from adults and recognize that adults do not wear a school uniform. In addition, they still do not know all the teachers in the school to know if an adult is a stranger or a faculty member. The older students may be viewing the questions as strangers being unwelcome students from other schools. At the time the survey was taken, there was a school shooting in Florida where the shooter was a student, and it had been on the news which may have influenced students’ interpretation of the question. They may have interpreted the word “stranger” to mean a student shooter. Students at the school all wear school uniforms, so a student from another school would be easy to recognize.

The fact that the questions across the four perception factors tend to correlate and that students interpret questions differently according to age level and comprehension ability, may help explain why the factor analysis indicated that the four perception factors were a poor model fit. My hypotheses were contingent upon the four perception factors being factors, but since the factor analysis failed to confirm the fit of the categories, my hypotheses could not be directly tested.

**Correlation to SES**

The new factor that emerged from the exploratory factor analysis, School Climate, failed to show any significant relationship to SES variables. When controlling for demographic variables, the correlation was even less. This suggests that the two factors of SES, parent education and qualifying for free or reduced lunch, do not affect a students’ perception of school uniforms. One reason there was no statistical significance with SES variables might be because
the study took place at a charter school. When parents decide to have their children go to this charter school instead of their local district school, they are doing so fully aware that the choice means their children will have to wear a uniform. Pilcher (2011) said a child’s values on clothing are influenced by their parents’ clothing values. Parents who choose to have their children attend a school that requires a uniform may have similar values about clothing regardless of their education attainment or qualification for free or reduced lunch level. These values may be passed on to their children, which could explain why there was not much difference in how students of various SES perceived the effects of school uniforms.

However, the lack of difference in perception by SES may be a positive result for students of low SES. Wiederkehr et al. (2015) suggested that uniforms may help hide some signs of low SES, which may encourage students to not classify themselves with low academic value. The fact that the present study showed little variations by SES in the perceptions of the effects uniforms had on academics, might support Wiederkehr’s ideas that students of high and low SES who wear uniforms do not perceive their socioeconomic differences and thus perceive their academic value as equal. Many of these students have been in this school since kindergarten and have not had as much experience searching for peers to socialize with by assessing another’s clothing. Because students’ SES was masked through the school uniform, it helps make students all appear equal in this regard. Anderson (2002) suggested students look for peer groups of similar SES which is first perceived by clothing. Again, the fact that this study had similar results from students of various SES, might suggest students are socializing with peers with a wider variety of SES. This wide range of socialization could increase their sense of belonging at school because there is less fear of unacceptance from social groups of different SES.
**Other Observations**

The three items that showed statistical significance are worth discussing even though they are not all directly related to my research question. These items may point to areas where future research may be more fruitful. The first item that showed a relationship between the question about bullying and the variable of grade was interesting. As students got older, they felt more consistently that uniforms did help reduce being teased and bullied. This result is similar to Bodine’s (2003b) research, where she reported that students felt they were teased less while wearing a school uniform. Bodine said, “When I asked children (including those who oppose common school dress) the best thing they have found about wearing uniforms, virtually all pointed to a reduction in teasing” (p. 55). Maybe as students get older, they begin to notice and value clothing more, and see it as a symbol of wealth (Battistich et al., 1994) or value (Wiederkehr et al., 2015). This new recognition may cause other students to tease those who are different, and older students who have worn school uniforms longer or experienced the younger grades in other schools without uniforms, recognize that teasing and bullying about clothing is mitigated by the use of a school uniform. This observation may be valuable to administrators who are constantly searching for ways to reduce bullying in their school.

The second item with statistical significance was the relationship between students arguing with their parents about clothing choices and free or reduced lunch. This was the only statistically significant relationship with an SES variable. Students who did not qualify for free or reduced lunch agreed more that school uniforms reduce conflicts between parents and child when choosing appropriate clothing. This finding is similar to Bodine’s (2003b) research, where she reported that the majority of students in her study also reported fewer arguments with parents about clothing when getting ready for school. A possible explanation could be that parents of students who do not qualify for free or reduced lunch have enough income that they do not need
assistance to buy lunch, which also means they may have the ability to purchase more stylish clothes for their children. This explanation supports Bodine’s (2003b) and Pilcher’s (2011) claims that students of higher SES are more concerned with name brand clothing and fashion. These stylish clothes may ignite tensions when the children do not get to wear them to school to show their friends their cool clothes because one part of the clothing item may be too revealing or inappropriate for school. Having school uniforms simplifies the choices of clothing for parents and students, thus reducing conflict over clothing. On the other hand, children whose parents qualify for lunch assistance may not have the income to spend on stylish clothes. Recognizing that their parents might not have money for more expensive clothing purchases, these children would have less reason to argue with their parents over clothes. For these students, wearing a school uniform would not reduce conflict as much if the conflict was less to begin with.

The third statistically significant item showed that overall Hispanic students viewed uniforms more positively. There could be numerous possibilities as to why Hispanic students could perceive uniforms as more helpful. It is possible that these students or parents view their personal family situation in that they are somewhat new to the area and feel conformity is more important than popularity or fighting the status quo. Uniforms may also contribute to Hispanic students feeling less different which creates a sense of belonging with the school. This phenomenon has intriguing implications for further research. Why do Hispanic students have different perspectives on school uniforms than non-Hispanic students? With such a small number of participants, would the same results be seen if the same survey was done on a larger scale? In this study, Hispanic students represented a small percentage of the participants. How do Hispanic students view uniforms in schools where they are the majority instead of the minority?

Another interesting item is that 67.6 percent of the students reported a more positive response (selected “agree” or “somewhat agree”) to the question asking if uniforms help the
school feel safer, which could be different from Bodine’s (2003b) research that reported that 47% of students felt uniforms increased the safety in the school. However, the two results may not accurately compare, as Bodine did not report her exact survey/interview questions, or how student responses were measured. Another difference in this study and Bodine’s is related to the fact that this study took place in a charter school and Bodine’s in district schools.

Generally, students’ responses were positive suggesting a positive perception of uniforms by most students. This positive perception may contribute to the school climate, creating a positive atmosphere which as Cohen et al. (2009) explains is what is needed for students to learn what is necessary to have a “productive, contributive, and satisfying life” (p. 182). This conclusion agrees with other researchers who have claimed that school uniforms have a positive effect on a school’s climate (Chime, 2010; Hawkins, 2013; Murray, 1997). However, since the study took place in a charter school, it is hard to determine how much of the difference in positivity can be determined by the different demographics or culture created by the methods, policies, and staff of the charter school.

In conclusion, this study did not reveal any differences in students’ perceptions on the effects of school uniforms by SES. Initially, this conclusion may seem valueless, however it might indicate the opposite. With more research, this conclusion may help support some of the purposes stated by proponents for school uniforms, that uniforms may help equalize the playing field (Anderson, 2002) among students of various SES and help improve a school’s climate. This study also supports the claim that uniforms help to reduce bullying and may reduce conflicts between parents and children regarding choice of clothing. The issue of school climate being affected by school uniforms needs more research as a school’s climate is integral to the growth of the students. This study and the current research seem to support the idea that school uniforms contribute to more positive school climates. Researchers may do well to involve more charter
schools in future research as charter schools can offer different perspectives, opportunities, and student bodies that could provide valuable information. This information may provide more answers to the question of whether school uniforms should or should not be implemented in schools.

**Implications**

The purpose of the present study was to discover any differences between perceptions on school uniforms by students of various SES. My hopes were to add to the current literature by studying a topic not researched before, but also to find information that would be helpful for administrators who are exploring the option to implement a uniform policy in their school. Specifically, I was hoping to find information for why most schools that have participated in research regarding school uniforms have such a high percentage of students qualifying for free or reduced lunch (Musu-Gillette et al., 2017). Having information to predict how students of various SES perceive or react to school uniforms would be helpful for administrators who may be considering a uniform policy.

The fact that the present study took place in a school that had fewer students who qualify for free or reduced lunch and showed most students had positive perceptions towards uniforms, and that there was little difference in how students of various SES perceived the school uniform policy, may also be useful for administrators. Currently, most schools that have uniform policies have a larger low-SES population (Musu-Gillette et al., 2017), but the present study which was done in a school with a lower population of low-SES students suggests that communities with a higher-SES population may also be supportive of a uniform policy.

**Future Research**

There are many possibilities for future research building off the present study. In general, more research investigating school uniforms in multiple charter schools that require uniforms
may prove valuable, as having a larger population to explore various demographic variables might reveal additional relationships between factors. The present study was done in a school where the population of ethnic minority students was relatively small. Also, little research has been done on uniforms in charter schools. Charter schools have a different population than district schools and practice different methods which may yield interesting results when exploring perceptions or actual effects of uniforms.

It may be of value to researchers and administrators to qualitatively explore why Hispanic students may have a more positive perception on school uniforms in future research. Administrators may want to find information to predict how the Hispanic population in their school may react to a new uniform policy. In the current study, the numbers of students who were Hispanic or a race other than White were relatively small, which might mean that even if there is a significant relationship between race and ethnicity and the school climate factor (table 4), the relationship might not be generalizable. To generalize perceptions of Hispanic students, a larger number of Hispanic students selected at random would be necessary.

Other methods of studying school uniforms may include limiting the age range of participants. In this study, the students in different age groups might have interpreted questions differently which might have created inconsistencies in the results. Also, it could be useful to study how students socialize with peer groups of various SES with and without uniforms to see if uniforms really effect whether students will join peer groups of different social classes.

A method to modify the questionnaire so the questions fit better into separate factors could be to begin with a more qualitative approach of interviews or open-ended questions. These questions could include general ideas such as, “What are the best/worst things about wearing a school uniform?” or, “What are your favorite/least favorite things about school uniforms?” These types of questions could then be used to explore patterns that would suggest better survey
questions on which to base a new questionnaire. Having fewer categories of questions may also help narrow down a researcher’s study and gain greater insights into students’ perceptions. This type of approach may be useful in creating a better questionnaire that could be used to explore generalizable information that would be helpful to future researchers or administrators.

A school’s climate can affect students in many areas, including, behavior, academics, and self-perception. Further research comparing how uniforms affect perceptions of the school climate might be the most beneficial as a school’s climate has effects on student risk factors, and teaching and learning in general (Cohen et al., 2009). To do this, studies could be done comparing students perceptions of elements of school climate in schools with and without uniforms similar to Murray’s (1997) research. Also, studies comparing charter schools with public schools, and charter schools with uniforms compared to other district schools with uniforms could be beneficial. Studying how these schools differ in their school climates may prove helpful for teachers and administrators who are looking at ways to improve their own school climate. Teachers and administrators are always looking for ways to improve the school climate, and influencing a student to have a positive perception will affect their behavior, because as Robbins (1991) teaches, “People's behavior is based on their perception of what reality is, not reality itself” (p. 125). If students perceive the school climate to be positive, then their behavior may improve which will in turn create a positive learning atmosphere. It might also be interesting to explore how charter schools and district schools work to create positive school climates differently.
References


APPENDIX A: Student Survey

PERCEPTIONS OF THE EFFECTS OF SCHOOL UNIFORM

All questions were answered using the following scale: D- disagree, SD – somewhat disagree, SA – somewhat agree, A – Agree,

1. A School uniform helps the school feel safer.
   D   SD   SA   A

2. A School uniform helps students feel happy to be a part of the school.
   D   SD   SA   A

3. A School uniform helps students do better on assignments.
   D   SD   SA   A

4. A School uniform helps reduce being teased or bullied.
   D   SD   SA   A

5. A School uniform helps save time getting ready for school.
   D   SD   SA   A

6. A School uniform helps to improve respect for school staff.
   D   SD   SA   A

7. A School uniform helps to stop students from getting in fights.
   D   SD   SA   A

8. A School uniform helps to identify strangers on our campus.
   D   SD   SA   A

9. A School uniform helps students feel more comfortable to ask questions in class.
   D   SD   SA   A

10. A School uniform encourages students to participate more in school activities.
    D   SD   SA   A
11. A School uniform helps students focus during class.
   D    SD    SA    A

12. A School uniform helps make getting ready in the morning less stressful.
   D    SD    SA    A

13. A School uniform reduces school clothing costs for parents.
   D    SD    SA    A

14. A School uniform takes away students’ right to express themselves.
   D    SD    SA    A

15. A School uniform helps make the school feel more inviting and supportive.
   D    SD    SA    A

16. A School uniform reduces conflicts between parent and child when choosing appropriate clothing.
   D    SD    SA    A
APPENDIX B: Parent Survey of Child’s Demographics

Is your child participating in the study Hispanic:  Yes______ No ______

Which racial group does your child identify with? (Mark as many as you need)

   White_____
   Black_____
   Pacific islander _____
   Native American_____
   Asian_____
   Other_____

Highest education level of mother:

   Some High School _____
   High School _____
   Some College _____
   Bachelors degree_____
   Graduate degree _____
   More_____

Highest education level of father:

   Some High School _____
   High School _____
   Some College _____
   Bachelors degree_____
   Graduate degree _____
APPENDIX C: Script for Survey Administration

Teacher says, “Today, you will be taking a survey about school uniforms. This survey is about how you think uniforms effect you. Please answer as many questions as you can but remember that you do not have to answer all the questions. Each question is a statement or saying. For each statement, you select if you agree or disagree with each statement. You can also select if you somewhat agree or somewhat disagree. Please be honest about what you think and remember that the more honest you answer the more you help Mr. Jones with his research.”

Grades 5-8

For students taking the survey online, direct them to Mr. Jones’s class website, which can be found through the reaganacademy.org website. There is a link on the opening page called, “School Uniform Survey”.

Teacher says, “Please click on the link, “School Uniform Survey”. This should take you to Google Forms where the survey is found. If you have questions, please raise your hand. I can help with using the computer and read questions outloud, but I cannot explain any part of a question. When you are finished, submit the survey and exit the website. Begin when ready.”

Grades 3, 4

Make sure every student who has turned in a parental permission form has a copy of the survey.

Teacher says, “Please put your name on the line on top of the survey.” Wait for students to do so. Say, “Please mark the answers as best as you can. If you have questions, please raise your hand. I can read questions outloud to you and define some words and rephrase some questions, but I cannot explain any questions. When you are finished, please raise your hand and
I will collect your survey.” As students finish, collect their survey and place them in the envelope which you will seal and return to Mr. Jones as soon as feasible.

**Definitions of Difficult Words and Alternate Phrasing**

Reduce – To make less or smaller.

Somewhat – Kind of, or not fully.

Conflicts – Lots of arguing

Inviting – You feel happy to be there.

Supportive – You feel like teachers care about you and you get the help you need.

Question 4 – “Students get teased or bullied less when everyones wears uniforms”

Question 14 – “Wearing a school uniform takes away students freedom to show their personality.”

Question 13 – “Buying school uniforms saves parents money.”

Question 16 – “Students and parents argue less in the morning about what clothes to buy or wear.”
APPENDIX D: Consent to be a Research Subject

Introduction
This research study is being conducted by Aaron Jones at Reagan Academy, along with Mike Richardson Ph.D. at Brigham Young University to find out whether students' thoughts about school uniforms might be related to things like grade level, gender, or family background. I am asking your permission to participate in this research because your child attends a school that requires the use of uniforms.

Procedures
If you agree to participate in this research study, the following will occur:
• you will be invited to fill out a demographic survey.
• your student will return the survey to their teacher at school.
• the researcher will compile the answers from surveys into a computer system to analyze the results.
• total time commitment will be between 5-10 minutes.

Risks/Discomforts
We have taken all reasonable measures to protect your identity and responses. Any identifying information, such as names, ages, or ethnicity, will be kept confidential and only viewed by the researcher. Paper surveys will be stored in a locked cabinet where only the researcher will have access, and online survey data will be saved on a password protected data base which is only accessible by the researcher. There is a small risk that another person will see your selections on the survey. To limit this possibility, teachers helping in the study will gather the forms from students as quickly as possible and place them in an envelope which will be collected by the researcher and locked in a filing cabinet. In addition, the name of the school will not be revealed in any reports or publications.

Benefits
There will be no personal benefit for participating in this research. However, through your participation, researchers may be able to add to the knowledge base regarding school uniforms which could aid schools as they design future policies and other researchers who continue to study the subject.

Confidentiality
Data compiled into a data processor will be saved on a password protected account and only the researcher will have access to the data. Any data on paper will be kept in the researcher's locked cabinet. A master list linking data to individuals will be kept in a separate locked cabinet and destroyed after a period of three years. No identifying information will be included in publications or shared with anyone outside the researcher.

Compensation
There will be no compensation for participating in this research.

Participation
Participation in this research study is voluntary. You have the right to withdraw at any time or refuse to participate entirely without affecting your child’s standing or grade in class, or jeopardize your status, or standing with the researcher or university.

Questions about the Research
If you have questions regarding this study, you may contact Aaron Jones at ajones@reaganacademy.org or Michael Richardson Ph.D. at michael_richardson@byu.edu for further information. Questions about your child's rights as a study participant or to submit comments or complaints about the study should be directed to the IRB Administrator, Brigham Young University, A-285 ASB, Provo, UT 84602. Call (801) 422-1461 or send emails to irb@byu.edu.
Statement of Consent
I have read, understood, and received a copy of the above consent and desire of my own free will to participate in this study.

Name (Printed): _______________________________________

Signature: ____________________________________________

Date: ________________________________________________
APPENDIX E: Parental Permission for a Minor

Introduction
This research study is being conducted by Aaron Jones at Reagan Academy, along with Mike Richardson Ph. D. at Brigham Young University to find out whether students' thoughts about school uniforms might be related to things like grade level, gender, or family background. I am asking your permission for your child to participate in this research because s/he attends a school that requires the use of uniforms.

Procedures
If you agree to let your child participate in this research study, the following will occur:

- your child will be invited to fill out a paper survey either at home, or with their homeroom or language arts class. If your child chooses not to participate and their teacher administers the survey with the class, their teacher will have other activities for them to do while the other students fill out the survey
- the researcher will compile the answers from surveys into a computer system to analyze the results.

Total time commitment will be between 5-10 minutes.

Risks
We have taken all reasonable measures to protect your identity and responses. Any identifying information, such as names, ages, or ethnicity, will be kept confidential and only viewed by the researcher. Paper surveys will be stored in a locked cabinet where only the researcher will have access, and online survey data will be saved on a password protected data base which is only accessible by the researcher. One risk is that another student may peek at your child’s answers or forms before they can turn them into their teacher. Teachers participating in the study will limit this possibility by gathering any forms as quickly as possible and keeping them in a locked drawer. Another risk is a loss in instructional time. Students may lose 5-10 minutes of instructional time. Teachers will do their best to minimize lost time and turn the opportunity into an educational moment.

Confidentiality
The research data will be kept in a private, password protected account and only the researcher will have access to the data. Any data on paper will be kept in the researcher's locked cabinet for a period of 3 years. No identifying information will be included in publications or shared with anyone outside the researcher.

Benefits
There will be no personal benefit for participating in this research. However, through your child’s participation, researchers may be able to add to the knowledge base regarding school uniforms which could aid schools as they design future policies and researchers who continue to study the subject.

Compensation
There will be no compensation for participating in this research.

Questions about the Research
If you have questions regarding this study, you may contact Aaron Jones at ajones@reaganacademy.org or Michael Richardson Ph. D. at michael_richardson@byu.edu for further information. Questions about your child’s rights as a study participant or to submit comments or complaints about the study should be directed to the IRB Administrator, Brigham Young University, A-285 ASB, Provo, UT 84602. Call (801) 422-1461 or send emails to irb@byu.edu.

Participation
Participation in this research study is voluntary. Your child has the right to withdraw at any time or refuse to participate entirely without affecting their status, grade/s or standing with the teacher or school. For students who choose not to participate when the class is completing the survey, they will have an alternative activity provided by their teacher.
Statement of Consent
I have read, understood, and received a copy of the above consent and allow my child to participate in this study.

Child's Name: __________________________________________

Parent’s name (Printed): __________________________________

Signature: ______________________________________________

Date: ________________________________
APPENDIX F: Child Assent

**What is this research about?**
My name is Mr. Jones. I want to tell you about a research study I am doing for my education at BYU. I am trying to learn more about how students think uniforms affect their school experience. You are being asked to join the study because you go to Reagan Academy and wear uniforms to school.

If you decide you want to be in this study, all you will do is answer a **16 question survey** and return a permission form to your teacher.

**Can anything bad happen to me?**
Nothing bad can happen to you. You may not want to answer questions, and that is OK. Other students may peak at your answers and learn what you think but I will try my best to protect your answers.

**Can anything good happen to me?**
I do not know if being in this study will help you. But I hope to learn something that will help other schools someday.

**Do I have other choices?**
You do not have to be in this study and you do not have to answer any questions that make you feel uncomfortable. If your teacher gives the survey during class and you choose not to fill it out, your teacher will have other activities for you to do while the other students fill out the survey. If you choose to take part in the survey, you must return the parent permission forms and survey to your teacher or to me for your survey to count in the research.

**Will anyone know I am in the study?**
I will not tell anyone you took part in this study. When I am done with the study, I will write a report about what I learned. Your name will not be used in the report.

**What if I do not want to do this?**
You do not have to be in this study. It is up to you. If you say yes now, but change your mind later, that is okay too. If you feel uncomfortable during the study, you may talk to you teacher or to me.

Before you say yes to be in this study; be sure to ask me to tell you more about anything that you do not understand.

If you want to be in this study, please print your name, and sign your name below:

Name (first and last): __________________________________________________________

Signature : ___________________________________________ Date: