

THE EFFECT OF SCHOOL UNIFORMS ON ACADEMIC
PERFORMANCE AND BEHAVIORAL OFFENSES

A Thesis

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ABSTRACT

The objective of this study is to determine if academic performance and behavioral offenses are affected by wearing school uniforms in public elementary schools. To determine if the wearing of uniforms affects academic performance and behavioral offenses, permission from two elementary schools, in a large Midwestern city, was obtained to examine students' records. The records examined included fourth grade proficiency tests, and behavioral offenses. Behavioral records consisted of a number of offenses including absenteeism and tardiness. One elementary school required uniforms. The other elementary school did not. The records from years 1993-1994 through 1996-1997 for each school were compared. In the study, the presence or absence of uniforms was the independent variable and academic performance, as measured by, proficiency tests, and behavioral offenses were dependent variables.

Data were obtained from the city school board data management center. Means and standard deviations were computed. Analysis of variance was used to determine if means differed significantly for scores between the two schools. Chi square test of independence was used to determine if the difference in frequency of behavioral offenses in the two schools was a chance occurrence. A Point Biserial Correlation Coefficient was computed to determine if there was a relationship between wearing uniforms and academic performance. A final ANOVA was computed to determine if the increase in

test scores over time, from the school with uniforms, was significant. Throughout the study, significance levels of less than or equal to .05 were used. There was no contact with the students themselves.

Results of the analysis of variance revealed that in the year prior to either school adopting uniforms, 1993-1994, there were no significant differences in test scores; neither was there a significant difference in test scores in 1996-1997. However, there was a significant difference in Reading, Mathematics, and Citizenship tests between the school with the uniforms and the school without the uniforms for the school years 1994-1995 and 1995-1996.

Results of the Chi Square test of independence, to determine the pattern of behavior between the two schools, revealed that from 1993-1994 through 1996-1997, the school without the uniforms had more occurrences of disruptions of class, repeated violations of school rules, and gross insubordination than the school with the uniforms. However, the school with the uniforms had more occurrences of fighting than the school without the uniforms. For three out of the four years, the school without uniforms had a higher frequency of absenteeism and tardiness than the school with uniforms.

A Point Biserial Correlation Coefficient was calculated to determine if there was a relationship between the wearing of uniforms and academic performance. Results indicated that there was a significant, but low negative correlation between wearing uniforms and test scores for the Reading, Mathematics and Citizenship tests. From the years 1994-1995 through 1996-1997, the mean scores on two of the five tests increased in the school with uniforms, while the mean scores for students in the school without

uniforms decreased consistently on all tests from 1994-1995 through 1996-1997.

Because there was an increase in scores for some tests in the school with uniforms, an ANOVA was calculated to determine if the increase in proficiency scores over time was significant. Results of the test indicate that the increase in proficiency scores for the Citizenship and Science tests were significant.

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TABLE OF CONTENTS

	<u>Page</u>
Abstract.....	ii
Acknowledgments	v
Vita	vi
List of Tables.....	ix
Chapters:	
1. INTRODUCTION.....	1
1.1 Problem Statement.....	3
1.2 Need/Justification.....	4
1.3 Definition of Terms.....	4
2. REVIEW OF LITERATURE.....	6
2.1 Advantages of School Uniforms.....	7
2.2 Disadvantages of School Uniforms.....	9
2.3 Legal Ramifications.....	9
2.4 Academic Performance and Person Perception	10
2.5 Violence in the Schools.....	16
2.6 Nonverbal Communication	23
2.6.1 Communication of Clothing.....	24
2.6.2 Physical Attractiveness.....	25
2.6.3 Clothing Perceptions and Impression Formation	30
2.6.4 Clothing and Behavioral Response.....	36
2.7 Summary.....	40
2.8 Theoretical Framework.....	42

	<u>Page</u>
2.9 Research Questions.....	47
3. METHOD.....	49
3.1 Procedure.....	51
3.2 Data Analysis.....	53
4. RESULTS.....	55
4.1 Results of Research Question. 1.....	58
4.2 Results of Research Question. 2.....	66
4.3 Results of Research Question. 3.....	74
5. SUMMARY AND CONCLUSIONS.....	79
5.1 Results of Question. 1.....	80
5.2 Results of Question. 2.....	82
5.3 Results of Question. 3.....	84
5.4 Conclusions and Recommendations.....	85
6. LIST OF REFERENCES.....	90

LIST OF TABLES

<u>Table</u>	<u>Page</u>
3.1 Enrollment.....	50
4.1 Demographic Information (1993-1994).....	56
4.2 Demographic Information (1994-1995).....	56
4.3 Demographic Information (1995-1996).....	57
4.4 Demographic Information (1996-1997).....	57
4.5 Analysis of Variance for Proficiency Tests by School (1993-1994).....	59
4.6 Analysis of Variance for Proficiency Tests by School (1994-1995).....	61
4.7 Analysis of Variance for Proficiency Tests by School (1995-1996).....	63
4.8 Analysis of Variance for Proficiency Tests by School (1996-1997).....	65
4.9 Chi Square of Offensive Behavior.....	68
4.10 Other Behavior Offenses by School.....	69
4.11 Means and Standard Deviations for Absenteeism and Tardiness by School (1993-1994).....	71
4.12 Means and Standard Deviations for Absenteeism and Tardiness by School (1994-1995).....	71
4.13 Means and Standard Deviations for Absenteeism and	

<u>Table</u>	<u>Page</u>
Tardiness by School (1995-1996).....	72
4.14 Means and Standard Deviations for Absenteeism and Tardiness by School (1996-1997).....	72
4.15 Total Means and Standard Deviations for Absenteeism and Tardiness by School.....	73
4.16 Point Biserial Correlation Coefficient for Proficiency Tests.....	76
4.17 Mean Scores for School with Uniforms.....	77
4.18 Mean Scores for School without Uniforms.....	77
4.19 Analysis of Variance of Proficiency Tests from 1994-1995 through 1996-1997 for the School with Uniforms.....	78

CHAPTER 1

INTRODUCTION

“What we look like and how we choose to present ourselves is a salient form of communication” (Hethorn, 1994, p.44). We present ourselves through the type of clothing we decide to wear. Through this clothing we communicate nonverbally. Nonverbal communication of clothing can influence person perception (Creekmore, 1980; Morganosky & Creekmore, 1981) and impression formation (Parr & Halperin, 1978) and the behavior of persons (Bickman, 1971; Chaikin, Derlega, Yoder & Phillips, 1974; Hensley, 1981). Person perception and impression formation and references pertaining to the behavior of persons dressed in certain styles of clothing are important because elementary teachers, principals, as well as, school board officials suspect that certain styles of clothing have a negative influence on the behavior of students while school uniforms have a positive influence (Cohn & Siegel, 1996; U S Department of Education, 1996).

Parents, teachers, and school board officials want to implement the wearing of uniforms by students because of their supposed advantages. Some of these advantages include decreases in fights, sex offenses, weapon offenses, assault and battery, vandalism, and student suspensions (“Educators say school dress...”, 1992; Gorman, 1996; Gursky,

1996; Hatfield, 1992). It has also been suggested that the wearing of uniforms will help increase the safety of the student by decreasing violence and theft (“Educators say school dress...”, 1992; Gorman, 1996; Gursky, 1996; Hatfield, 1992). By implementing the wearing of uniforms, students would no longer be permitted to wear clothing that school officials find offensive, and designer clothes that gangs adopt as symbols of group membership (“Regulating Student Appearance”, 1994). Many public school officials have already implemented the wearing of uniforms and are citing positive effects (Cohn & Siegel, 1996; Edwards, 1997; Gursky, 1996; Hatfield, 1992; Sternberg, 1997; U. S. Department of Education, 1996).

The importance of the issue of implementing school uniforms is exemplified by the mention of such in President Clinton’s 1996 State of the Union Address (Gowen, 1996). President Clinton recommended requiring the wearing of uniforms in order to instill discipline and order in schools. To accomplish this recommendation, he signed a directive for the Department of Education to distribute a manual as a guide for schools in adopting uniforms. In connecting dress with violence and other disciplinary behavioral offenses, he stated “school uniforms are one step that may be able to help break this cycle of violence, truancy, and disorder...in schools ” (“Clinton suggests uniforms to improve schools,” 1996, no page).

Not everyone is confident that the implementation of school uniforms is the correct procedure for changing the behavior of students. Kealey, executive director of the Department of Elementary Schools for National Catholic Educational Association, contended that uniforms are worn only for appearance. Zimmerman (1996) stated that by

themselves, the wearing of uniforms will not improve a student's behavior. According to Joe Williams (1993), a writer for the Los Angeles Sentinel, the government should concentrate on how to change the poor conditions of the schools and prepare students for better jobs instead of concerning themselves with what students wear to school. Another non-supporter of uniform policies, John Maag, associate professor in the Special Education Department at the University of Nebraska-Lincoln, was quoted as stating "anyone who tries to link changes in schools directly to uniforms is speaking prematurely... little research on the subject exists" (Nygren, 1996, p. B1).

Problem Statement

It is not known if the wearing of school uniforms has an effect on a student's academic performance and behavioral offenses. Thus, the purpose of the study was to determine if the wearing of school uniforms has an effect on a student's academic performance and behavioral offenses. Even though the problem of gang violence is found mostly in high schools, elementary schools were chosen because the focus of the study is not on gang dress, but on whether wearing school uniforms would make a difference in academic performance and behavioral offenses. Second, there was no empirical research found concerning the effect of uniforms on student's academic performance or behavioral offenses in elementary schools. Therefore, the objectives for this study were to:

1. Determine if the academic performance, as measured by proficiency tests, of students who wear uniforms differ significantly from those who do not wear uniforms.

2. Determine if the number and types of behavioral offenses of those who wear uniforms differ significantly from those who do not wear uniforms.

3. Determine if there is a correlation between wearing school uniforms and academic performance.

Need/Justification

It is important for elementary and secondary educators to know if the wearing of uniforms affect a student's academic performance and behavioral offenses. There is a need for this information because of the increase in violent behavior in schools which is attributed in part to dress (Futrell, 1996; Kopka, 1997). In addition, no empirical research was found concerning the effect of uniforms on academic performance and behavioral offenses. For the most part, it is the opinion of the principals and teachers, often sensationalized in the press, that serves as the basis for the move to require the wearing of uniforms in schools. These opinions pose a problem because there is no empirical research to support them.

Definition of Terms

1. Behavioral Offenses - Any violation of school rules by students, including absenteeism and tardiness.

2. Academic performance - A measurement of achievement by utilizing scores on proficiency tests given by the schools.

3. Uniforms - Clothing that an individual school requires and considers as a uniform; may vary by school. The school with uniforms for this study required the typical parochial school uniform. Girls wear a dark blue plaid or solid skirt or jumper. The girls may also wear dark blue pants with a white shirt. The boys wear dark blue trousers. They were permitted to wear different colors of shirts, such as white, yellow or light blue, with their trousers.

CHAPTER 2

REVIEW OF LITERATURE

Uniforms are a newsworthy topic on the agenda of school boards across the country (Stover, 1990). Parents, teachers, and school board members believe that the student's academic performance and behavioral offenses will improve when the student is wearing a uniform (Cohn & Siegel, 1996). Landwehr (1987) stated that there is no evidence that determines that the wearing of uniforms increases children's scores on standardized tests, or makes them adjust socially. No empirical research was found to support this claim. However, several articles written in the popular press sensationalize the wearing of uniforms (Cohn & Siegel, 1996; Gursky, 1996; Hatfield, 1992; Linke, 1994; Rowell, 1997; Sternberg, 1997). Because no empirical data were found regarding the wearing of uniforms, academic performance, and behavioral offenses, other bodies of literature dealing with academic performance and clothing and behavioral response were reviewed. Most of the references concerning school uniforms and policies were found in popular press. Therefore, these references, under the heading of advantages and disadvantages of school uniforms, will be discussed. Second, references pertaining to violence in schools will be discussed. Next, nonverbal communication will be discussed including references dealing with clothing and communication, physical attractiveness,

perceptions and impression formation, and behavioral responses. Because persons in the military have orders to behave in strict ways, and behavior is dictated by the commanding officers, references concerning military uniforms will not be included.

Advantages of School Uniforms

According to Cohn and Siegel (1996), the implementation of uniforms in elementary schools has influenced the improvement of student's behavior in schools. Parents, teachers, and school board members all agree that uniforms possess several advantages including helping to increase academic performance and decrease behavioral offenses (U. S. Department of Education, 1996). Also, the popular press has printed numerous articles about the advantages of uniforms (Hatfield, 1992; Linke, 1994; Rowell, 1997; Sternberg, 1997). However, all of the articles are based on opinions of parents, teachers, and school board members. They believe that if students wear uniforms, their interest in school will increase. Writers ("Educators say school dress. . ."; 1992 Cohn & Siegel, 1996; Hatfield, 1992; Nygren, 1996), have cited several instances in which school districts have implemented a mandatory or voluntary wearing of uniforms in order to improve students' education. The school systems claimed the implementation of uniforms to be advantageous (Cohn & Siegel, 1996; Gursky, 1996; Hatfield, 1992; U. S. Department of Education, 1996). Some of these advantages included decreases in fights, sex offenses, weapon offenses, assault and battery, theft, vandalism, and student suspensions ("Educators say school dress...", 1992; Gorman, 1996; Gursky, 1996; Hatfield, 1992).

Uniforms are seen as a popular solution to decreasing the phenomenon of “killing for clothes,” (Hethorn, 1994) in which a student is mugged or killed for the clothing worn. If uniforms are worn, it is believed, there would be a decrease in this dangerous activity. The implementation of uniforms can be an attempt to “eliminate the wearing of gang style clothing, as well as, an attempt to prohibit the wearing of expensive clothing which can create jealousy and cause the wearer to become a target for victimization” (“Regulating Student Appearance”, 1994, p. 6).

The wearing of uniforms may also decrease peer pressure (Schadler, 1989; U. S. Department of Education, 1996). Students would not feel the need to wear expensive clothing and dress like everyone else if they were wearing uniforms. Writers (“A Taste for Uniformity”, 1991; Cohn & Siegel, 1996; Edwards, 1997; Gursky, 1996; Nygren, 1996; U. S. Department of Education, 1996) have cited that students are concentrating more on their school work and achievements, rather than on who is wearing what. They have also cited an increase in self respect, school spirit and loyalty.

Another supposed advantage of uniforms is economic relief for the parents and students who can not keep up financially with the well-dressed student (Cohn & Siegel, 1996; Gursky, 1996; Nygren, 1996; Schadler, 1989). If wearing uniforms, students would not have to obtain a part-time job, which may negatively affect their academic performance, in order to purchase expensive clothing (Ostroff, 1996). Finally, Cohn (1996), the superintendent of the Long Beach Unified School District, stated that uniforms generate support for schools from the parents and community (Cohn & Siegel, 1996).

Disadvantages of School Uniforms

One disadvantage is that uniforms suppress the student's individuality because students can no longer express their creativity through dress (Hethorn, 1994). This is a disadvantage because students need to distinguish themselves and their personality from others through clothing (Joseph, 1986; Joseph & Alex, 1972). Secondly, The American Civil Liberties Union (ACLU) contends that uniforms impose conformity. Students would be forced to dress alike if they had to wear uniforms. The implementation of uniforms, which leads to looking like cookie cutter kids, limits the student's right of freedom of expression (Cohn & Siegel, 1996; Gursky, 1996). The students are being told how to dress, which is resulting in court cases (Linke, 1994).

Legal Ramifications

No legal court cases were found regarding students and uniforms. Therefore, legal cases concerning dress codes were reviewed. For example, in 1969, the Des Moines Board of Education suspended several students for wearing black arm bands to school to protest the Vietnam War. When the students filed a suit, the courts decided in favor of the students, citing their First Amendment rights (Linke, 1994). In another case, Jeglan v. San Jacinto Unified School District in California, the court ruled that the public school district could determine what the students could not wear to class (Linke, 1994). In another case, Pyle v. South Hadley School Community (1995) the students tried to challenge the dress code policy by wearing t-shirts with quotes printed on them. The courts ruled that the students could not wear their t-shirts to school. The t-shirts were found offensive by other students. In a recent case, Stephenson v. Davenport

Community School District (1997), in which school officials ruled that Stephenson could not wear the tiny cross that she had tattooed between her thumb and first finger because it was a symbol of gang affiliation, the school suspended Stephenson and made her remove the tattoo before coming back. The case went to trial, and the ruling was in favor of the school.

There are both pros and cons for implementing the wearing of uniforms. Several writers (Cohn & Siegel 1996; "Educators say school dress...", 1992; Edwards, 1997; Gorman, 1996; Gursky, 1996; Hatfield, 1992; US Department of Education, 1996) have suggested that there are far more advantages, than disadvantages including decreases in fights, sexual assaults and other behavioral offenses. There have been no court cases found in which school uniforms were decided to have legal ramifications. However, court cases dealing with dress codes were found to have legal consequences.

Academic Performance and Person Perception

Types of clothing have been found to influence perceptions of a person's ability to succeed academically. Behling and Williams (1991) and Behling (1995) studied four looks to determine if students and teacher's perceptions of intelligence, and academic achievement were affected by choice of clothing. They studied the hood, artsy, dressy, and casual looks. The hood look consisted of faded jeans, t-shirts, and tennis shoes. The artsy look consisted of a man's suit coat, plain shirt with a tie, trousers and low heeled shoes for the girls. For the boys, the artsy look consisted of a loose-fitting jacket, colored knit shirt, baggy trousers and boat shoes. The dressy look for girls consisted of a plaid suit, tube top, dark hose and heels, while for the boys it was a dark suit, white shirt, dark

tie, and dress shoes. Finally, the casual look for both boys and girls consisted of jeans.

The girls wore a solid colored sweater with a blouse underneath and moccasins.

The boys finished their casual look with a long sleeve shirt with roll up sleeves and tennis shoes.

The subjects studied photographs of a male, and a female model, with faces blocked out, dressed in all of the looks. The subjects also received a questionnaire to complete. Subjects indicated perceptions of intelligence by assigning an intelligence level to the models and by filling out a ten item bi-polar five-point adjective scale. Subjects indicated their perceptions of academic achievement of the models by assigning a grade point average, along with the level of education they believed the models would attain.

Behling and Williams found that the male model was rated higher in perceptions of intelligence in the dressy, casual and hood look than the artsy look. They also found that sex had a significant impact in ratings of intelligence and academic achievement. Both the male and female model were perceived to be more intelligent and have more academic potential when they wore suits; and were perceived to be least intelligent and have lower academic potential when they wore jeans and a t-shirt. However, Behling and Williams indicated that the subjects perceived the male as more intelligent than the female, no matter how the models were dressed. They concluded that students' dress was associated with estimates of their intelligence and potential academic achievement in school (Behling and Williams, 1991; Behling, 1995).

Similarly, Kenealy, Frude and Shaw (1990) studied a teacher's perceptions of a child's attractiveness and academic achievement. They conducted a longitudinal study involving the same children at ages 11-12, 14-15, and 19-20 to determine if a teacher's ratings of attractiveness of a child were correlated with later academic achievement involving test scores. After the third phase of the study, the researchers concluded that the teacher's attractiveness rating and academic perceptions of a child of 11 years were positively correlated with the number of exams passed when that same child was 18 years of age. In other words, the child at age 11 that had higher ratings of perceptions of attractiveness and academic achievement made of them by the teachers, performed better academically at age 18, than those students who were not rated high in perceptions of attractiveness and academic achievement by their teacher (Kenealy, Frude & Shaw, 1990).

Two earlier researchers, Rosenthal and Jacobson (1968) also studied teachers' perceptions of students and academic achievement. In the Oak School Experiment, Rosenthal and Jacobson wanted to determine the expectancy advantage of students. This experiment was conducted at a public elementary school in which the community was divided into three sections. One part of the community had attractive middle class homes and few children. Another section of the community was the industrial section of town, also with few children. The third section of town had the majority of children. It was comprised of streets and alleys full of deteriorated houses. Most of the children were from the third section of town. The school's population consisted of 650 pupils, one sixth of whom were Mexican, the only minority group. Because of families constantly

transferring to look for better jobs, the school's mobility rate was 30% per year. The children were put into three separate tracks in school, dependent upon their academic ability (Rosenthal & Jacobson, 1968).

To determine a child's academic gain in intelligence according to teacher's expectations, or perceptions, several tests were administered to the students. The first test, the "Harvard Test of Inflected Acquisition" or the Tests of General Ability (TOGA), was administered to all the students who would return in the fall. The test was to be a predictor of potential academic achievement. TOGA was designed to predict the basic learning abilities of the students. At all levels of the test, TOGA was composed of two subtests. One of the subtest measured verbal ability, while the other measured reasoning. Verbal ability measured levels of information, vocabulary and concepts. Reasoning subtests measured the ability to understand and form concepts. After two more pretests and one posttest, it was determined that 20% of the children were designated as academic spurters, or children within the top 20% of their class academically (Rosenthal & Jacobson, 1968).

The experiment was conducted by the distribution of sheets of paper to the teachers of each class and grade, with names of the students who were allegedly in the top 20% of the school's children. These children became the experimental group. Rosenthal and Jacobson wanted to know if the teachers would focus more on these spurters than the non spurters. After one year, the results of the experiment indicated that the experimental group had an IQ gain of twelve points, while the control group only had an eight point IQ gain. There were also different gains between different grades. The researchers believed

that this was because of the different expectancy levels between the grades. The first and second graders seemed to gain the most IQ points. The younger children also benefited most from gains in verbal and reasoning IQ. They found the teachers favored the academic spurters more than the non spurters, which resulted in higher reasoning gain of the academic spurters. However, in overall total IQ, girls showed slightly greater advantage than boys. Boys, though, had more of the expectancy advantage than girls by the teachers, which resulted in verbal IQ gain, while girls had more of the expectancy advantage than boys in reasoning IQ gain (Rosenthal & Jacobson, 1968).

In conclusion, the overall results of this study suggest that when teachers expected the spurters to show greater intellectual development, than the non spurters, those students did. Some of the reasons Rosenthal and Jacobson attributed to this were (a) younger children were regarded as more malleable and more capable of change than the older children, (b) the younger children had a less established reputation with the teachers, and (c) younger children exhibited greater gains associated with teacher expectancy. Rosenthal and Jacobson also found that "when the entire school benefited as in total IQ and reasoning IQ, all three tracks benefited; and when the school as a whole did not benefit much, as in verbal IQ, none of the tracks showed much benefit" (Rosenthal & Jacobson, 1968, p 78). In total IQ, girls gained as many as three times in IQ points as boys, as a function of favorable expectations by the teachers. However, overall, girls achieved more in the reasoning sphere of intellectual functioning and boys achieved more in the sphere of verbal functioning (Rosenthal & Jacobson, 1968).

Not only can teachers' expectations of children affect academic performance, children's perceptions about their own intelligence can also affect academic performance. Stipek and Gralinski (1996) were interested in the associations among children's own beliefs about their intelligence and academic performance. Students, third through sixth grade, were surveyed at the beginning of a school year and at the end of that same school year about their feelings of their own intelligence and schooling. The researchers worked mainly with two scales; The Ability Performance Belief Scale and The Effort-Related Belief scale. The former scale describes the belief that some students will never be smart, even if they try hard. The latter scale describes the belief that if students put forth an effort, they will improve in school. The researchers found a difference in the belief scales between third and fourth grades. Only in the third grade were the Ability Performance and Effort Related scales positively correlated. The researchers hypothesized that this was because students in third grade may not be able to differentiate between performance and intelligence. The researchers found that beliefs about intelligence and performance played an important role in the outcome of a student's achievement. The ability performance beliefs at the beginning of the year were directly associated with academic performance at the end of the year (Stipek & Gralinski, 1996).

Behling and Williams (1991) and Behling (1995) concluded that a student's dress influences the teacher's perceptions of that student's ability to perform academically. Similarly, Kenealy, Frude and Shaw (1990) found that a student's physical attractiveness can influence the teacher's perceptions about ability to perform academically. Rosenthal and Jacobson (1968) found that when teachers expected the spurters to show greater

intellectual development than the non spurters, those children did. It was also determined that the younger children gained more in IQ points because they were more malleable than older children, they had a less established reputation with the teacher and they received more of the expectancy advantage. However, student's belief about their own intelligence and how they could perform academically at the beginning of a school year, was directly associated with the actual academic performance at the end of the year (Stipek & Gralinski, 1996). Therefore, it can be inferred from this research that when a student is perceived to perform better academically, because of clothing, or uniforms, physical attractiveness, teacher expectations or their own expectations, that the student will perform better academically.

Violence in the Schools

Because there was no empirical research or statistical data found concerning violence in schools which was specific to elementary schools, references concerning violence in schools in general were included. It is difficult to estimate the scope of the problem of violence in elementary schools because reliable data on elementary school violence have not been included in most national surveys (Astor, 1994; Kopka, 1997). "Violence is recognized as a major public health problem that must be addressed by administrators, educators, family and community members, lawmakers and health care professionals" (Kopka, 1997, p 1). According to Kopka (1997) and Futrell (1996) a violent act is any verbal, visual or physical act that is intended to demean, harm or infringe upon another's civil rights.

Violence increased in the nation's schools 82% between 1990 and 1995 (Maginnis, 1995). Levin, Northeastern University criminologist, stated that violence is not something that occurs only in the middle and high schools. It occurs in the elementary schools also (Daley, 1997). A survey of 64 school principals in five cities indicated that 64% of the elementary principals suspended or expelled a student for behavior ranging from fist fights to carrying knives (Daley, 1997). All types of schools have experienced an increase in violence, with nonsectarian schools up 6%, private schools up 7%, and public schools up 9%. Most violence in schools will take place in the hallways or stairways. However, lunchrooms, classrooms and bathrooms are also not a safe place for students (Futrell, 1996; Maginnis, 1995). Futrell stated that the goal for the year 2000, is for every school in America to be free of drugs and violence and to offer a disciplined environment conducive to learning (1996).

Kopka (1997) stated that the rate of juvenile arrests from 1988-1991 increased 38%. In 1992, juveniles were responsible for one in eight violent crimes and accounted for more than one in six persons entering the justice system charged with a violent offense. He estimated that crime is projected to skyrocket between 1992-2010. Murder, forcible rape, robbery, and aggravated assault will all increase at least 20%. Assuming the population rate continues to increase, as well as the juvenile arrest rate, the number of juvenile crimes are expected to double by 2010 (Kopka, 1997).

In the U.S., nearly 135,000 guns are brought to school each day and about three million crimes occur on or near school campuses each year (Maginnis, 1995). In 1995, a fifth grade elementary school boy brought a loaded .44 caliber handgun to school to show

other students. Another student put the gun in his backpack. While rummaging through the backpack, he accidentally triggered the gun. When the backpack was dropped on the floor, the gun fired. No one was injured. However, the bullet could not be found. Eventually a parent of another child found the bullet in their child's backpack. The gun belonged to the student's parents (Neff, 1995).

Other people have not been so lucky. In 1995-1996, 105 people died at schools or at school related activities. Eighty percent of these deaths were homicides, while 20% were suicides. Guns were used in 77% of the deaths (Kopka, 1997). Because of violent crimes and the increase of guns, in some school districts, students are not attending school regularly or when they do, they are not concentrating on their work (Maginnis, 1995).

Evidence of violence in elementary schools can be recognized through several shootings. In 1992, while walking to school with his mother, a seven year old was killed by sniper fire (Sweeney, 1997). In addition, in the same Chicago community, students are limited to entering and leaving school through back entrances, where it is safer. There is also a buddy system for students walking to and from school. Satinover, principal of the elementary school stated that the "library has bullet holes and children sometimes have to move desks away from windows to be safe" (Sweeney, 1997, p. 6).

Recently, in Jonesboro, Arkansas, (March, 1998) two students, an eleven year old and a thirteen year old, killed a teacher and four young girls, along with wounding ten other students in an ambush at a middle school. The boys used stolen weapons to fire bullets at teachers and students who had been lured into the school parking lot by a false

fire alarm. The boys were charged with five counts of murder and ten counts of first degree battery. The incident was so tragic that President Clinton addressed and consoled the residents of the town (Cart, 1998). The thirteen year old reportedly vowed to kill all the girls that had broken up with him. Apparently, the thirteen year old claimed earlier that he was going to kill a lot of people. No one believed him. This attack was the fourth killing in a school by a youth under the age of sixteen in a period of six months. The other three incidents took place in high school settings (Bragg, 1998).

As reported, students are not the only people being threatened. Approximately 15% of teachers in city schools were threatened in 1993 (Burbach, 1997). Women and the younger, less experienced, teachers are targets. Teachers who are also strict and considered to give rigorous academic work are targets. The result of this is that teachers are less likely to intervene in situations especially if they fear that parents, the community, or other students will not back them. Therefore, one in five teachers leave the profession because of the hassles (Futrell, 1996).

Garrity, Jens, Porter, Sager, and Short-Camilli (1997) stated that the most common types of crime that students encounter are pushing, shoving, grabbing and slapping, which are mild examples of physical aggression. Behavior can range from mild to severe and from physical aggression to intimidation, including social alienation and verbal aggression. Examples of intimidating behavior include threatening to reveal personal information, and graffiti, to coercion or threatening a person with a weapon (Garrity et al., 1997). According to Garrity et al., typical conflicts for students in the first grade include fighting over toys, or arguing about going first in line. Conflicts for second

graders include selfishness, threatening to tattle and the student wanting his own way. Teasing, gossiping, "putting down" a classmate and accusing the classmate of something not true are typical conflicts found in third grade through fifth grade. Finally, in sixth grade, the student might tend to show off, be bossy or tattle on another classmate. Astor (1994) believed that some factors responsible for violence in elementary schools include cut-backs in after school programs, an increase in single working parents, low family income and a lack of knowledge regarding the supervision of children.

There are many characteristics of a serious offender of violent behavior. The offender may have a delinquency case before the age of thirteen, low family income, lack of parental supervision or family involvement. Also, the offender usually exhibits poor school performance by age ten, exposure to violence in the mass media, membership in gangs, and involvement in drugs and alcohol. Teachers and parents usually describe the child as being troublesome (Futrell, 1996; Burbach, 1997).

School violence and the intervention for students can affect the community. Violence by an offender can cost taxpayers approximately \$39,000 per year to keep a student, who has been expelled from school, and placed in a correctional center. Astor (1994) stated that politicians and the general public commonly perceive school violence as a disciplinary or law enforcement problem. Interventions for students that reflect this view include expulsions, suspensions, prison sentences, probations, lowering the age at which the student can be tried as an adult by the courts, and increases in security (Astor, 1994).

Despite the offenders in schools who cause violence, students still see their schools as safe havens (ACLU, 1998). Researchers surveyed 1,802 students from eleven different high schools and several continuation schools of the Los Angeles Unified School District on a range of issues about violence. The sample of students consisted of 68.1% Latin Americans, 6.9% Asian Americans, 14.6% African-Americans and 9.4% European Americans. The students were enrolled in grades nine through twelve (ACLU, 1998). Multiracial teams of research workers administered the questionnaire over a period of one year. Students were encouraged to answer questions in their own words. The results of the survey indicated that 49.1% of the students had seen a weapon at school, while 44.1% had seen a weapon on their way to and from school. The most common weapons were cutting weapons and firearms. Almost 14% of the students reported that they had taken a weapon to school themselves. An alarming 48.2% of students said that it would be no problem for them to get a gun, while 43.5% of the students said they could get one in less than a week. Several students, 38.2% said that they had seen a shooting en route to or from school, while 13.5% said they witnessed a shooting at school. Many of the students, 58.6% said that wearing certain types of clothing put them at risk of becoming a victim of a violent act, while 57.1% of students said they disapprove of wearing uniforms. Only 33% of the students reported favoring wearing uniforms (ACLU, 1998).

When the researchers analyzed the survey by ethnicity, 57% European Americans, 52% Asian Americans, 51% Latin Americans and 49% African Americans reported seeing a weapon at school. These students agreed that the most common weapons were

cutting weapons and firearms. However, approximately 51% of Latin Americans and African Americans reported seeing weapons on their way to and from school while only about 32% of Asian Americans and European Americans reported seeing weapons en route to and from school. Twenty two percent of African Americans, 13.2% of Latin Americans, 12.5% of Asian Americans and 9.1% of European Americans reported having taken a weapon to school. Approximately 13% of all the races reported seeing a shooting while in school. Latin Americans, Asian Americans, European Americans and African Americans all reported that wearing certain types of clothing put them at risk of an attack. However, 66.3% of African Americans, 63.2% of European Americans, 54.3% of Latin Americans and 50.8% of Asian Americans were against the idea of wearing uniforms (ACLU, 1998).

In conclusion, violence in schools is increasing (Futrell, 1996). Juvenile crime is expected to double by the year 2010 (Kopka, 1997). Students, as well as, teachers are being threatened during the school day. Because of this, teachers are leaving the profession (Futrell, 1996).

The most common forms of violence occurring in schools are pushing, shoving, grabbing and slapping (Garrity et al., 1997). However violent behavior can range from mild physical aggression to severe intimidation. According to Garrity et al., there are different conflict levels for different grades. Similar to different forms of behavior, are different characteristics of offenders of violent behavior (Burbach, 1997; Futrell, 1996).

The ACLU (1998) determined that there were large percentages of students who saw weapons or took weapons to school. Also, many of the teens saw shootings and

knew where to purchase weapons at an affordable price. The teens also knew that wearing certain types of clothing was dangerous because they could get hurt. However, they were not willing to lower the risks by implementing uniforms. In spite of weapons in schools, and the feeling of contending with an extreme amount of violence in their communities, the teens felt that their schools were a safe place (ACLU, 1998).

It can be inferred from this research that violence is increasing in all levels of schools, high, middle and elementary. It is suggested that violence in elementary schools will continue to increase because elementary school students may mimic the behaviors of middle school students and then high school students. Thus, as crime increases at the secondary level, such behaviors will be mimicked at lower educational levels. Students may be put at risk of being a victim of crime because of certain types of clothing. Even students attending elementary schools can become targets of violent behavior. Therefore, it can be assumed that the frequency of violent offenses will decrease at school when students are wearing uniforms because they will no longer be victimized for their clothing.

Nonverbal Communication

Davis (1984) stated “we know that through clothing people communicate something about their persons” (p.16). Clothing can communicate the attitudes or cues in a social interaction. The attractiveness of a person's clothing can be used to communicate perceptions of intelligence (Clifford & Walster, 1973; Clifford, 1975; Dare, 1992), social behavior (Dion & Berscheid, 1974) and popularity about a person (Leinbach

& Fagot, 1991). Perceptions and first impressions of persons can also be formed by the type of clothing worn (Creekmore, 1980; Morganosky and Creekmore, 1981). In addition, opinions are formed based on clothing styles worn (Bickman, 1974). Persons may also act based on the opinions that are formed of them, which suggests that nonverbal communication occurs through clothing.

The following discussion of nonverbal communication includes references dealing with the communication of clothing and physical attractiveness, clothing perceptions/impression formation, and clothing and behavioral responses. Perceptions and impression formation have the same meanings and therefore will be used interchangeably. Articles dealing with students in general were used because no empirical data were found dealing with elementary school students and (a) communication of clothing, (b) clothing and physical attractiveness, (c) clothing perceptions and impression formation, and (d) clothing and behavioral responses.

Communication of clothing. The following references were used as examples of how clothing can communicate attitudes, personalities, or cues in social interaction about people. These references are related to elementary school students, because clothing is a form of nonverbal communication. Thus, uniforms can communicate something about students which can be noticed by the teacher.

Buckley and Roach (1974) determined that people who believe in the established culture tend to wear more conservative-looking clothes than people who believe in the counter culture. People who believe in the counter culture, were more likely to wear liberal-looking clothes than people who believe in the established culture . Also, the

perceptions of attitudes communicated by clothing influence whether the clothing would be liked or worn. Students who believe in the counter culture tended to like and wear clothing that communicated their attitudes more than the students who believe in the established culture.

- Clothing may be used to communicate cues in social interactions as well.

Damhorst (1984-1985) found that people who wore business suits for interviews were viewed as stronger candidates for management roles than people who wore casual clothing for interviews. She also found that women seen in casual attire next to a man in a business suit were perceived to be in a nonmanagement role. However, women in suits were more often perceived to have a higher management rank, or better job, than women not in suits, while the men in casual clothing were viewed as being more active than the women in casual clothing. Casual clothing was not as precise for predicting job roles as was the formal suit. Similarly, Johnson, Crutsinger, and Workman (1994) found that females who wore a necktie, were perceived to possess more managerial competencies and to be more determined than females who wore a scarf or an open-collared shirt.

Physical Attractiveness. Attractiveness can be an important form of nonverbal communication. Attractiveness is one personal characteristic that is noticeable by teachers (Clifford & Walster, 1973; Dare, 1992). Clifford and Walster (1973) asked elementary school teachers to complete a questionnaire with a grade card and photograph of a child attached. Fifth grade teachers were the subjects (Clifford & Walster, 1973). Some of the issues in the questionnaire dealt with (a) the student's IQ, (b) the student's social status with peers, (c) parental attitudes toward school, and (d) the student's future

educational accomplishments. Clifford and Walster found that teachers perceived the attractive students to have a higher IQ, to have better social relations with their peers, to have parents more interested in their academic achievement and to get more future education than unattractive students (Clifford & Walster, 1973).

Like Clifford and Walster (1973), Dare (1992) asked teachers from eight primary schools, where a dress code existed, to complete a questionnaire. The dress code of the schools consisted of wearing uniforms, standard brown shoes and simple hair styles. The questions on the questionnaire dealt with the teacher's perception of the child's behavior, appearance and personality. Results of the questionnaire indicated that there was a significant relationship between the perceived attractiveness of the student and how the teacher evaluated the student academically and behaviorally. The teachers expected perceived attractive students to be more interested in their school work, to have more success in life, and to be more popular. The teachers also expected the parents of an attractive child to be more interested in their child's school work (Dare, 1992). Clifford and Walster (1973) and Dare (1992) found that there is a relationship between the perceived appearance of a child and how the teacher evaluates the child academically and behaviorally. The researchers stated that a child's appearance could influence a teacher's expectations about performance, behavior and personality (Clifford & Walster, 1973; Dare, 1992).

Clifford (1975) studied the relationship between physical attractiveness of students, using photographs of students which were rated by teachers, and their recorded academic performance, such as grades and IQ scores. Unlike Clifford and Walster (1973)

and Dare's (1992) results, Clifford (1975) found that physical attractiveness was not a reliable indicator of academic performance of the students as represented by their recorded scores. The researcher only found minimal agreement between teacher's rating of a child's attractiveness and actual academic performance. Clifford stated that attractiveness may only be a first impression of the child. This impression can be altered after other personality characteristics of the child become available (Clifford, 1975).

Dion and Berscheid (1974) studied the effects of physical attractiveness and peer perception among children. The subjects were preschool children who were asked individually to look at black and white photographs of other children posted on a board. The child was asked to point to his classmate, point to his peer choices, and then was requested to find three classmates whom he liked and three classmates whom he disliked. The child was then read statements describing various social behaviors, and was asked to point to a person which he felt exemplified a certain behavior. Dion and Berscheid found that the physical attractiveness of a young child was positively related to popularity and perception of social behavior within a peer play group. They concluded that physical attractiveness as a social cue is not limited to young adults, it can begin very early in an individual's life (1974).

Leinbach and Fagot (1991), studied the effects of attractiveness in young children when dealing with sex-differentiated reactions of adults. Children between the ages of one to three years old were rated by play group care givers on likability, tractability and peer relations of the child. Additionally, a group of undergraduates rated each child on a good look scale and cuteness scale. Finally, the parent of each child filled out a

questionnaire dealing with the pleasures of childrearing. Leinbach and Fagot found no evidence that the adults' judgement toward the children was in any way related to the child's attractiveness. The play group care givers did not see attractive children as easier to get along with, more likable, or as getting along better with other children in the play group. Additionally, parents did not report greater pleasure in caring for an attractive child than an unattractive child. Contrary to the predictions of the researchers, it was not found that the more attractive children received more positive and fewer negative responses from adults. The researchers believe these findings resulted because when judging an unfamiliar child, attractiveness effects are strong. However, when judging familiar children, with whom one has an affectionate bond, other characteristics of the child and the relationship may be dominant, while appearance traits become less noticeable (Leinbach & Fagot, 1991).

Clothing accessories can contribute to judgements of the physical attractiveness of a child. The accessories worn by a child can have an impact on how that child is judged. Terry and Stockton (1992) used color slides of children who were photographed with and without glasses. The participants were students in the first grade. They rated the children in the slides on attractiveness, school performance, conduct, sociability and sociometric choice. Results indicated that the participants rated the stimulus person with glasses lower on attractiveness, school performance and conduct than the stimulus person without glasses. In terms of sociability, both boys and girls rated the stimulus person with glasses as being less friendly than the stimulus person without glasses. The researchers found no significant difference for glasses on the measure of sociometric choice. However,

researchers did find that boys tended to give the male stimulus person higher ratings, while the girls tended to give the female stimulus person higher ratings (Terry & Stockton, 1992). Terry and Stockton (1992) stated that of all the dependent variables, the first grade participants were more likely to discriminate in terms of physical attractiveness than any other variable.

Clothing may be a source of communicating one's attitudes about a culture (Buckley & Roach, 1974), as well as, how one is perceived in a social interaction, such as an interview or working in the office (Damhorst, 1984-1985; Johnson, Crutsinger, & Workman, 1994). Researchers agree that the physical attractiveness of a child can influence the teacher's expectations about that child, but not the child's actual academic performance. Dare (1992) and Clifford and Walster (1973) found that a child's appearance could influence a teacher's expectations about performance, behavior and personality. However, Clifford (1975) found that physical attractiveness of a child was not a reliable indicator of actual academic performance, as represented by the child's academic scores. In addition, there are conflicting results concerning young children and their attractiveness. Dion and Berscheid (1974) and Terry and Stockton (1992) found that young children tend to pick friends, and perceive other young children on the basis of physical attractiveness. However, researchers Leinbach and Fagot (1991) found no evidence that an adult's judgement toward a child, with whom they were familiar, was related to the child's attractiveness. Even the wearing of accessories can affect the perceived attractiveness of a child. A child wearing glasses was rated as less attractive, having a lower school performance and having worse conduct than the child not wearing

glasses (Terry & Stockton, 1992). Thus, it can be determined from the research, that physical attractiveness is important in first impression situations. However, physical attractiveness may not make a difference once persons are familiar with each other.

From the previous literature, it can be inferred that the wearing of uniforms will communicate something about the wearer (e.g. attitudes, how the student will be perceived in a social interaction). The physical attractiveness of a student can be related to how the student is perceived by the teacher, how the student selects his/her friends and the perceptions of personality of the student. However, physical and clothing attractiveness are not reliable indicators of the student's academic performance as represented by the student's scores.

- Clothing Perceptions/Impression Formation. Perceptions and impressions of a person are made based on the type of clothing worn (Creekmore, 1980; Morganosky & Creekmore, 1981). The perception of a person's clothes may influence how others react to that person (Creekmore, 1980; Morganosky & Creekmore, 1981). Similarly, it could be inferred that when a student is wearing a uniform, others will make impressions of the student and react according.

The attractive clothing that students wear in high schools and colleges can influence how students perceive one another. Creekmore (1980) videotaped subjects at a school assembly. She then had students rate the videos on a Likert type scale. She determined that both girls and boys who wore attractive clothing were aware of what other students were wearing and conformed to the accepted high school dress. It was the students who wore attractive clothing that were perceived to be more popular, more

cooperative, and more representative of the student body, than the students who wore unattractive clothing. Additionally, the researchers found that students who wore attractive clothing were perceived to have better dates, participated more in school activities, and were accepted more by their peers than students who wore unattractive clothing (Creekmore, 1980).

Researchers (Morganosky & Creekmore, 1981) found that clothing was an indicator of leadership abilities in a high school setting. Composite leadership was measured by the variables found to influence a student's status within the high school. Representational leadership was measured by the number of times a student was mentioned by his peers. Organizational leadership was measured by the extent to which students participated in school, both academically and athletically. The researchers stated that attractive clothing, as judged by the aesthetic quality of the image of the clothing, may make a person more appealing and attractive to others than a person wearing unattractive clothing (Morganosky & Creekmore, 1981). They also found that clothing attractiveness was related to the different qualities of leadership and conformity. Clothing attractiveness was a strong indicator of composite, representational and organizational leadership for boys, but only composite leadership for girls. Thus, when boys were wearing attractive clothing, they had a high status, were popular and were active in school compared to boys wearing unattractive clothing. When girls were wearing attractive clothing, they had a high status in school compared to girls wearing unattractive clothing.

Lennon (1990) found that clothing attractiveness can influence how a person is perceived or judged. She studied the effects of clothing attractiveness on perceptions of competence, work comfort and sociability by using a slide and tape presentation that contained models who were attractively dressed and unattractively dressed. Lennon used stimulus sampling which guarantees that the appearance manipulation, not a personal trait of the model, is producing the variance in the responses of the subjects. As expected, Lennon found that models dressed in attractive clothing were perceived to be more competent, more comfortable to work with and more sociable than the models dressed in unattractive clothing.

• Lapitsky and Smith (1981), investigated clothing attractiveness and writing ability. The researchers used photos of models in different outfits, along with two written essays. One essay contained examples and visuals. The second essay had few examples, no visuals, but more details. The researchers found that the attractively dressed person consistently received higher marks on the essay than the unattractively dressed person. Also the less interesting essay was ranked considerably lower than the more interesting essay written by the attractively dressed person (Lapitsky & Smith, 1981). The researchers also found that the attractively dressed person scored higher on personal characteristics such as intelligence, talent, sincerity, imagination and overall ability than the unattractively dressed person. Also, the quality of the attractively dressed person's essay was rated higher on creativity, ideas, style, organization and general quality than the unattractively dressed person.

This study indicated that the type of clothing worn does influence the perception of a person's scholastic ability to write (Lapitsky & Smith, 1981).

Behling (1994) studied the effect of wearing uniforms on the perception of behavior, academic performance and academic potential in both a private school, where uniforms are worn, and a public high school. Photographs of two models dressed in four different clothing styles were used. The clothing styles consisted of two styles of uniforms, one dressy, one casual, and two styles of clothing from the models' own wardrobe, including jeans and a jean jacket. Behling used 270 sophomore students and 20 teachers as her subjects. The subjects answered a questionnaire about the "good" attributes of students. Items included in the questionnaire that related to classroom behavior included: being prepared for class, punctual, participates in class, honesty, being polite and being attentive. She found that the students who attended the private school viewed the model wearing jeans and a jean jacket less favorably than the students who attended the public school. Also, subjects perceived the male model more favorably on the behavioral scale when he was wearing jeans and a jean jacket than the female model wearing jeans and a jean jacket. Subjects perceived the models, when wearing the uniform with a blazer, as having more academic achievements than when the models were wearing the other three styles of clothing. In addition, the subjects perceived the male and female model dressed in jeans and a jean jacket as having lower academic potential than when the models were dressed in the uniform and blazer. The male model, in all types of clothing, was almost always perceived to have more academic potential than the female model. Behling stated that "It is apparent that school uniforms, or a

uniform style of dress, positively influence the perception of school-related behavior by both peers and teachers” (Behling, 1994, p 728). Behling also noted that a casual uniform can influence peers', as well as, teachers' perceptions of a student's academic abilities (Behling, 1994).

Persons use clothing to send messages about themselves, as well as, to make social inferences about others (Douty, 1963). Impression formation begins at a very early age. Parr and Halperin (1978) determined that 75% of second grade students believed that clothing communicated something about the wearer. By eighth grade, 75% of the students realized others formed impressions of them depending on the type of clothing they wore.

Lennon and Miller (1984-1985) studied the effects of clothing on people's impressions of sociability and intelligence. They used warmth and likableness of a person to measure the impression of sociability. Furthermore, intelligence, respectability and responsibility of a person were used to measure the impression of intellectuality. Subjects who wore a blazer and glasses were found to have higher ratings of intelligence than subjects who did not wear a blazer and glasses, while subjects who wore long skirts were found to be less sociable than subject who did not wear long skirts. They discovered that dress and physical appearance affects the first impression people have of one another (Lennon & Miller, 1984-1985). Other researchers (Johnson, Nagasawa, & Peters, 1977) found that the style of clothing can affect students' impressions of sociability. In-fashion clothing styles were found to communicate stronger sociability than out-of-fashion clothing styles (Johnson, Nagasawa, & Peters, 1977).

The attractiveness of a person's clothing was found to influence others' perceptions. Persons wearing attractive clothing were perceived to be more popular and accepted more by their peers and to be more appealing physically than persons wearing unattractive clothing (Creekmore, 1980). In addition, attractive clothing was a indicator of a student's perceived status, popularity and activeness in school (Morganosky & Creekmore, 1981). Lennon (1990) found that people who wore attractive clothing were judged to be more competent, more comfortable to work with and more sociable than people who wore unattractive clothing. Similarly, Lapitsky and Smith (1981) found that attractively dressed people were perceived to have better writing ability and to be more intelligent than people who wore unattractive clothing. Finally, clothing was found to influence perceptions of one's academic abilities (Behling, 1994).

The type of clothing worn was also found to influence impression formation. Parr and Halperin (1978) determined that impression formation through clothing can begin at a very early age. Lennon (1984-1985) found that subjects who wore blazers and glasses received higher ratings of intelligence than subjects who did not wear blazers and glasses. Conner, Peters, and Nagasawa (1975) determined that the style of clothing can influence first impressions of sociability.

It can be suggested from this section of literature that the attractiveness of a person's clothing will communicate characteristics (e.g. more status, more popular, more competent, better writing abilities) and impressions (e.g. intelligence, sociability) about a person. Therefore, one might conclude that the attractiveness of a school uniform may also impact impressions of the student.

Clothing and Behavioral Response. The style of clothing is often used to influence a person's perception or first impression, but may also influence the response of a person when asked to comply with a request. Several researchers have executed compliance studies to determine if the clothing people wear will affect the behavior of others when requesting money or task compliance. Researchers (Bickman, 1971; Chaikin, Derlega, Yoder & Phillips, 1974; Hensley, 1981) discovered that persons dressed attractively or conservatively received money more often than persons dressed unattractively or in hippie style clothing. Bickman (1971) found that attractively dressed people received their forgotten dime, after using the pay phone 77% of the time as compared to 38% for the unattractively dressed people. Chaikin, Derlega, Yoder and Phillips (1974) found that fewer people contributed to charity when the solicitor was dressed in hippie style clothing, than when the person was dressed more conservatively. Similarly, Hensley (1981) found that attractively dressed women received more money for a phone call in an airport than unattractively dressed women. However, it was also found that unattractively dressed women received more money than attractively dressed women for a phone call when in a bus station. Hensley believes people analyze the clothing of others and give favors to those they perceive as similar to themselves (Hensley, 1981).

Bickman (1974) conducted another study using people in different types of uniforms. The purpose of the study was to determine if pedestrians were more likely to obey a uniformed guard than a milkman or civilian. When asked, the pedestrians on the

street were more likely to give a stranger change for his parking meter when dressed as a uniformed guard, than when dressed as a civilian or milkman.

The type of dress of a requestor of task compliance can have several outcomes. Schaivo, Sherlock, and Wickland (1974) found that a middle-aged woman, when approached by a conservatively dressed female was more likely to offer helpful suggestions, as well as, the requested directions than when approached by a person dressed as a hippie. Similarly, Bickman (1974) indicated that subjects who were dressed conservatively, as compared to people dressed in hippie style clothing, had more people stop to sign their petitions. Gray, Russell and Blockley (1991) determined the effects upon helping behavior of wearing pro-gay identification. The researchers found that attitudes of homophobia exist and that subjects were less likely to give change for a pound to a person who was dressed in a tee shirt with a pro-gay slogan, than to a person dressed in a plain tee shirt and jeans. Walker, Harriman and Costello (1980) found that people took part in a street survey more often if the request was made by a well-dressed man than by a poorly dressed man. The researchers also found that women complied more to requests from a well-dressed man than did men. All the researchers found that the ability to obtain directions, help from others, and signed petitions, was influenced by the type of dress of the requester.

The type of uniforms worn in the occupational world can influence another person's behavior. The wearing of the white uniforms by nurses, aids, and orderlies has been traditional in hospitals. Several researchers (Leff, Nydegger & Buck, 1970; Rinn, 1976) studied the effects of nurse's attire on patient behavior. The results were

contradictory. Rinn (1976) had nurses observe psychiatric patients and record daily, on a data summary form, any noticeable change in their behavior. He found that when a nurse wore her white uniform, destruction of property occurred more, patients left against medical advice more often, patients showed more aggressive behavior, including self-inflicting pain and patients refused their medication more often. On the other hand, patients responded more positively to the nurses dressed in street clothes. Conversely, Leff, Nedegger and Buck (1970) measured the interaction between nurses and patients. They found that nurses wearing white uniforms were more dominant and more loving than when wearing their street clothes. This study suggests that a nurse wearing the traditional nurse uniform is perceived more favorably by the patients than nurses wearing street clothing.

Religious uniforms have also been found to influence the behavior of people. Long and Long (1976) used two subjects to determine if the influence of religious status and religious attire had an effect on interviewees. One subject was a nun, while the other subject was not a nun. The nun was seen both with and without a habit by the interviewees. The non nun was not dressed in religious attire. They found that male interviewees talked more, reported more nonchurch attitudes and talked about a greater number of personal experiences when interviewed by the nun without a habit than to the same nun wearing a habit. However, male and female interviewees reported a similar number of church related attitudes and personal experiences when the interviewer was not a nun. They also found that there were gender differences. Females disclosed more about themselves when they were talking to the non nun, while men discussed more when

interviewing with the nun. The researchers found that religious attire does affect how a person responded to the wearer of the religious attire.

The wearing of uniforms not only influences behavior in the occupational world, but in the sports world as well. Several researchers (Rehm, Steinleitner, & Lilli, 1987; Frank & Gilvoich, 1988) determined that the wearing of uniforms by teams, either nonprofessional or professional, was correlated with aggressive acts committed by that team. Rehm et. al., (1987), surveyed several middle school gym classes in which one team wore uniforms and the other team did not wear uniforms. They found that the team wearing uniforms committed more aggressive acts than the team not wearing uniforms.

Frank and Gilovich (1988) completed a series of studies with black uniforms being the center of focus using football and hockey teams. The teams were considered to have a black uniform if at least 50% of its "colored" uniform was black. To determine the amount of aggression, they looked at penalty yards received by football teams and total number of penalty minute, in the penalty box, received by hockey teams. They found that those teams with black uniforms were penalized more in yardage or minutes than teams with nonblack uniforms. They also found that teams that switched colors midseason to black uniforms had more penalties at the end of the season. When one team wore blue uniforms, they averaged eight penalty minutes per game. However, when the team switched to black uniforms, the average increased to twelve penalty minutes per game. The data indicated that the color of the uniform was related to how aggressively the team played, as measure by how frequency they were penalized. The researchers found that wearing black uniforms could increase a person's inclination to behave

aggressively in situations of competition, confrontation, and physical aggression. The researchers concluded that the penalties acquired by teams wearing black uniforms were the results of the player's own aggressiveness and harsher treatment by the referees. According to the researchers, the teams that wore black uniforms received harsher treatment from the referees because they associated the color black with meanness and aggressiveness, which was seen as more malevolent. The implication is that the color of the uniform influenced the observer.

Mechling (1987) stated that the wearing of club uniforms has been found to influence the behavior of the club as a whole. The Boy Scout uniform represents a scout's commitment to the group of which he is a member. It joins him in brotherhood with the other scouts. While in uniform, the boys are expected to behave in an appropriate manner. Mechling compared the Boy Scout uniform to a school uniform stating, in his opinion, that the uniform erases class. The uniform puts the rich and poor on the same level. Mechling stated that the "parents believe in the magic [of the uniform]. The uniform transforms the boy" (p. 328).

Summary

The wearing of certain styles of clothing can affect person perception/impression formation and a behavioral response towards another person. In the first part of this chapter, attractive clothing was found to influence person perception and impression formations. Students wearing attractive clothing were perceived as being more popular, more cooperative, more representative of the student body, were more accepted by their peers, and tended to conform to what others were wearing, than students wearing

unattractive clothing. In addition, persons wearing certain types of clothing were perceived as having status, being more popular and more active in school, having a informed political attitude, as well as, being a strong candidate for managerial roles. While these studies do not relate directly to elementary school children, they are important in defining that perceptions of a person are based on the type of clothing worn. The wearing of school uniforms may have an effect on the perceptions formed of the students by other students, as well as, the teacher. Thus, perceptions formed of the student could determine how that student is treated by others.

Impression formation is the result of nonverbal communication. People form impressions of others based on the clothing that is worn. Thus, clothing can be seen to communicate nonverbal information about a person's perceived intelligence, sociability, respectability and responsibility.

The wearing of certain styles of clothing can influence another person's compliant behavior. Researchers found that people who were dressed in attractive clothing affected the behavior of others more positively than when dressed in unattractive clothing. Therefore, it can be inferred that when elementary students wear uniforms, the behavior of others will be affected. The teacher's behavior toward the student may be affected ,as well as, other student's behavior toward the uniformed student.

Uniforms may be used to influence behavior. It was found that occupational, religious and sports uniforms influence a person's behavior. Contradictory results indicate that when nurses wore white uniforms, patients reacted more aggressively than when they wore street clothing. In another study, the patients responded more favorably

to the nurses in white uniforms, than the nurses in street clothing. Religious attire can also affect how a person responds to the wearer of the uniform.

- In sports uniforms, teams wearing the color black were more likely to play more aggressively than teams not wearing the color black. Research has demonstrated that the wearing of certain styles of clothing, including uniforms affect a person's behavioral response. If the wearing of occupational, religious, and sport uniforms affect a person's behavior, then it can be suggested that the wearing of elementary school uniforms will affect a person's behavior.

Theoretical Framework

While research relative to attractiveness, person perception/impression formation, and nonverbal communication have been reviewed because of their relevance to the study, role theory is used as the framework for the study. The theory states that within a society, individuals have many different positions or statuses, each with a set of expectations. Expectations may enhance how a person should behave. While attractiveness, person perception/impression formation, and clothing and behavioral responses are all deemed important issues related to the wearing of uniforms in elementary schools, role theory is seen as the most pertinent theory for studying the effects of school uniforms on academic performance and disciplinary behavior. Role expectations are a set of cognitions of a social position in relation to others who are in the same social structure. Individuals appear and behave in the presence of others. In essence, they take on a role. People act within this role the behavior that has come to be

expected of them. They “acquire masks to adopt certain roles for performances, and perceptions of self which are shaped by these masks” (Kaiser, 1990, p 193). For instance, Bickman (1974) stated that persons are perceived and opinions are formed based on clothing styles worn. Persons may also act accordingly to these perceptions and opinions. Davis (1984) stated that people communicate to others through the clothing they wear. For example, clothing is an excellent source of communication in the theater. Clothing is used to support the role played by the actor. The context within which the clothing is perceived, as well as, what the actor does and says, also communicates the actor's role. The audience can perceive the actor to be a mother, father, teacher, student, shy, outgoing, a leader or a follower. The possibilities are endless. The audience is forming impressions of that actor. The audience is also forming impressions about any anticipated actor that has been mentioned but not yet introduced. However, the audience's impression may be completely different when they are introduced to the person for the first time.

Role analysts are concerned with describing and understanding human behaviors, much like dramatists, novelists, journalists and historians (Thomas & Biddle, 1966). Role theory owes a great deal to the theater. It is very similar to acting on stage, with all of the scenes, masks and airs. Its metaphorical concepts are inspired mainly by a dramaturgical model of human behavior (Thomas & Biddle, 1966). The viewpoint of role theory is that like the theater, role perspective assumes that individuals will perform according to social expectancies and behaviors of others. Stated differently, the audience assumes that a character will perform according to their expectations. Any variation of

the individual's performance will result from changes within the social expectancies and behaviors of others (Thomas & Biddle, 1966). In a similar way, when students wear uniforms, principals, teachers and parents may expect that they will behave in accordance to the school rules.

Role theory is an interdisciplinary theory in which its variables are drawn from studies of culture, society and personality (Sarbin, 1954). “Contemporary role theory regards human conduct as the product of the interaction of self and role” (Sarbin, 1954, p. 223). There are several early contributors to role theory. These writers discovered the concepts of role and self, and interaction (Sarbin, 1954). They mainly contributed to role perspective before the emergence of role theory. However, at the turn of the century, James M. Baldwin, G. Stanley Hall, William James, John Dewey, Charles H. Cooley, and George J. Mead furthered the concept of role (Thomas & Biddle, 1966). Role theory did not begin to be recognized until the 1930s when three major sociologists (Mead, Moreno, and Linton) began working to make role theory popular (Thomas & Biddle, 1966). The first of these theorist was George H. Mead. Role theory receives much of its beginning concepts from Mead. Mead's influence was great at the time when he was at the University of Chicago. He employed the concept of role taking, as well as “self”, “I”, “me”, and “audience”. Mead examined problems of interaction, the self, and socialization. From his examination, role theory developed and grew out of the school of symbolic interactionism within sociology (Mead, 1934; Turner, 1986). About this same time, Jacob Moreno began working with the notion of role playing in the theater of spontaneity in Vienna. He is known for pioneering role playing (the changing of

behavior) in psychodrama and sociodrama (Moreno, 1960). Within role playing, Moreno established three categories. The first one is psychosomatic roles. These roles are non-speaking roles found within a child's world. The child knows that someone is taking the role of walker or sleeper, but can not yet communicate that knowledge. The second role is psychodramatic roles, in which an individual acts out various roles which are manifested in a specific social context. Examples of this role include someone acting out the role of a student or a teacher while they are in the social context of school. The last category is social roles. Within social roles, the individual conforms to general expectations of social categories. It is expected that when a child is taking the role of uniformed student while in school, that the child will conform to the expectations of student by the teachers, parents, and community (Moreno, 1960; Turner, 1986).

All of these roles go through two stages, role perception and role enactment (Moreno, 1960). Role perception is a sequence of behaviors in which a person's response is part of a social act. Role perception is a type of behavior. Therefore, role perception and the adaptation to the social world are highly related (Sarbin, 1954). Role enactment refers to a link between a role or performance and an identity, where the role may become integrated into one's self concept.

Role enactment validates the expectations of others in a social situation and can include the wearing of certain forms of dress or costume (Sarbin, 1954).

In 1936, Ralph Linton (1947), an anthropologist, proposed the distinction between status position and role. Status refers to a place in a particular system which an individual occupies at a particular time. Status has long been used to describe a person's

position within his society. Role designates the total sum of the cultural patterns associated with a particular status. Included in role are attitudes, values, and behaviors of a society (Linton, 1947).

Workman and Johnson (1994) used role theory in their research on gender role expectations associated with dress of students as viewed by teachers and other fellow students. They used role theory to predict that a student's conformity to gender-role expectations for dress will result in favorable teacher evaluations and expectations (Workman & Johnson, 1994). In other words, teachers would like their students to dress appropriately, and if they do, the students will receive favorable evaluations from the teachers. The subjects looked at photos of a male, one with an earring, one without an earring. Personal traits, as well as, educational performance of the male were measured. Workman and Johnson found that students perceived the male with the earring as more obedient, respectful, hardworking, intelligent and independent than the male without the earring. However, the same students perceived the male to be less attractive, popular and masculine when not wearing the earring. The male received more favorable responses from his peers while wearing the earring. Workman and Johnson concluded that this was because he was conforming to his peers' social expectations for a masculine appearance. The teachers did not rate the male wearing an earring high in any category because the male was not conforming to the teachers expectations of a "good" student.

Role theory states that individuals have expectations about how others should behave. People tend to act within this role the behavior that has come to be expected of them. Clothing is a form of communication that people use to assign meaning to the

wearer. The meaning of the clothing can be perceived in several different ways.

According to role theory, individuals often behave in accordance with the expectations of others. Therefore, role theory is the framework for this research because school board members, teachers and parents have suggested that when a student is attired in a uniform, his grades and behavior will improve. It is expected then, that the student will do well academically and not cause problems in the classroom (e.g., the students assume the role of academic achievers who do not cause problems in the classroom). Therefore, this study will contribute to the basic understanding of role theory.

Research Questions

The purpose of this research is to determine if the wearing of uniforms will affect a student's academic performance and behavioral offenses. No empirical data were found which considered the effect of wearing uniforms on academic performance and behavioral offenses. The review of literature included studies in which clothing had an influence on person perception/impression formation and behavior. The implication from role theory is that wearing uniforms should affect the number of disruptions of class, and other behavioral offenses in that students who wear uniforms might conform to the image of the ideal student and therefore perform better academically and behave better than students who do not wear uniforms. Thus, students assume the role of academic achievers; when wearing uniforms, they do not cause problems in the classroom and perform better academically. The research questions guiding the study were:

Q1: Will the academic performance of students in the school requiring uniforms differ significantly from that of students in the school not requiring uniforms?

Q2: Will the number and types of behavioral offenses of students who wear uniforms differ significantly from students who do not wear uniforms?

Q3: Is there a relationship between wearing uniforms and academic performance?

CHAPTER 3

METHOD

Permission was obtained to study the effects of uniforms on academic performance and behavioral offenses in two public elementary schools, kindergarten through fifth grade, in a large Midwest city. Fourth grade students were chosen as the subjects for the study because the fourth grade is the only grade in which state-mandated proficiency tests are given in grades kindergarten through fifth. Data were obtained for the school years 1993-1994 through 1996-1997. Neither school had a uniform policy in the year 1993-1994. The school year 1993-1994 serves as a baseline for comparison between the two schools. Uniforms were adopted in one school in the school year 1994-1995. An Educational Management Information Systems (EMIS) report was used to obtain demographic information, as well as, other characteristics about the students to ensure similarity between schools. From the report, two similar schools were chosen. Both elementary schools had approximately the same number of students enrolled. Table 3.1 shows the daily enrollment of the students within each school. The school with uniforms had an average daily enrollment of 689 students, with an attendance rate of 93.2%. The school without uniforms had an average daily enrollment of 507 students, with an attendance rate of 91.4%. The students came from different ethnic backgrounds,

however, both schools were comparable in terms of ethnicity. Table 1 shows the percentage of each ethnic group from each school. The school with uniforms had 544 (78.5%) students receiving subsidized lunches, while the school without uniforms had 424 (80.9%) students receiving subsidized lunches. The mobility rate for the school with uniforms was 40.9%, while the mobility rate for the school without uniforms was 75.8%.

Table 3.1

Enrollment

1997							
	Daily Enrollment	Attendance Rate	European Americans	African Americans	Hispanic Americans	Asian Americans	Other
School with Uniforms	689	93.2%	4.9%	84.3%	2.5%	7.8%	0.6%
School without Uniforms	507	91.4%	5.3%	93.8%	0.6%	0.0%	0.2%

Both elementary schools provide double dutch (a type of jump rope) cheerleading, basketball, homework clubs and a latch key program. Both schools also offer programs which support the student, as well as, the family. The school with uniforms offers a

program called Care Connection, a family focus group in which psychologists and sociologists are available to work with both students and families. The school without uniforms offers Peace School, a prevention program that teaches anger management. The students involved in Peace School serve as role models to other students. This school also provides a family center, offering parent education during the school year. Both schools have a Parent Teacher Association (PTA). According to the principal of the school without uniforms, parent involvement is very high. However, the acting principal of the school with uniforms indicated that parent involvement is very low. Both schools offer free and reduced meals. Both schools have very similar teacher to student ratios. The school with uniforms has a teacher to student ratio of 1:28, while the school without uniforms has a teacher to student ratio of 1:25. Both schools have computers in the classrooms. The school with uniforms has four computers per classroom, one in a technology lab and one in the library learning center. The school without uniforms has several computers throughout the school building. With permission from parents, both schools allow the students to access the Internet. Another similarity is that 40% of the students in the school with uniforms, compared to 50% of the students in the school without uniforms walk to school. The remaining students are bussed.

Procedure

Permission was obtained from the principals of the two elementary schools. Fourth grade student's proficiency and behavioral offenses records for the years 1993-1994 through 1996-1997 were obtained from the city school board data management center. All the data were on a diskette.

The MAT7 proficiency test, administered during the 1993-1994 school year, was a different test than the tests administered from 1994-1995 through 1996-1997. The subjects tested during 1993-1994 were Reading Vocabulary, Reading Comprehension, Total Reading, Mathematics Computation, Mathematics Concepts & Applications, Total Mathematics, Language Mechanics, Language Expression, and Total Language. For 1994-1995 through 1996-1997, students were administered The Ohio Fourth Grade Proficiency Test (FGPT). The subjects tested were Writing, Reading, Mathematics, Citizenship, and Science. There was one exception. Students were not tested in Science during the 1994-1995 school year. Because of the high mobility rate for each school, only the records for students who had been enrolled in school for at least 90 days, which is one half the school year, were included in the study. There was no contact with the students.

Students are given a booklet describing the different types of disciplinary behavioral offenses. It is unclear how the teacher determines the offense, committed by the student. After the offense has been committed, teachers follow a code of conduct for discipline, which is published in the school district. If this effort fails, other actions are put into place to help the offender. Some of these actions include letters mailed home, phone calls to parents from the teachers, the buddy system, in which the offender is paired with another student who can supervise the offender, and the peak room, or time out room. The offense of the student is entered into a computer program at the school that has a direct link to the city school board data management center.

Data Analysis

This study was an ex post facto study. The presence or absence of a uniform was the independent variable and academic performance, as measured by proficiency tests, and behavioral offenses, including absenteeism and tardiness, were the dependent variables. Data from school years 1993-1994 through 1996-1997 for each school were compared. To determine if wearing a uniform affects students' academic performance, proficiency scores were compared from each school. Means and standard deviations were computed. Analysis of variance (ANOVA) were used to determine if the means differed significantly. Significance levels of less than or equal to .05 were used for the study. A second ANOVA was computed to determine if there was a significant difference in improvement in academic performance for the school with uniforms over a three year period from 1994-1995 through 1996-1997. A Point Biserial Correlation Coefficient was used to determine if a relationship exists between wearing uniforms and academic performance.

There were twenty different types of behavioral offenses found in the two schools. The number of occurrences of different offenses varied within each school. Behavioral offenses, not including absenteeism and tardiness, that were common to both schools and occurred at least ten times over four years were subjected to Chi Square test of independence to determine if the pattern of behavior was different in the school with uniforms than the school without uniforms. Offenses meeting the criteria of ten in both schools were disruptions of class, repeated violations of school rules, gross insubordination, and fighting. A list of other offenses are found in Table 4.10. The

absenteeism and tardiness records of students from each school from the years 1993-1994 through 1996-1997 were examined. Descriptive statistics were used to describe the number of days absent, and number of days tardy for each year, for each school.

CHAPTER 4

RESULTS

The sample for the study consisted of students enrolled in the fourth grade in two similar public elementary schools from the years 1993-1994 through 1996-1997 for at least 90 days. One of the elementary schools had implemented the wearing of uniforms in 1994-1995, while the other had not. The ethnicity of the students consisted of European Americans, African Americans, and other, in which Asian Americans and Hispanic Americans were combined for purposes of analysis. As shown in Tables 4.1-4.4, demographic information was analyzed for each school, by year. African Americans composed the majority enrollment in each school. The number of students qualifying for free or reduced meals ranged from 68% to 98% over the four year period. Each elementary school had approximately the same percentage of males and females. The number of students ranged from a low of 35 students in 1993-1994, in the school without uniforms, to 97 students in 1996-1997, in the school with uniforms. The school with uniforms always had more students than the school without uniforms over the four year period.

Table 4.1

Demographic Information

1993-1994								
	Total Students	Total Females	Total Males	European Amer.	African Amer.	Other	Pay for Meals	Free & Reduced Meals
School with Uniforms	54	50.0% (n=27)	50.0% (n=27)	16.7% (n=9)	63.0% (n=32)	20.4% (n=11)	1.9% (n=1)	98.2% (n=53)
School without Uniforms	35	57.0% (n=20)	43.0% (n=15)	31.4% (n=11)	65.7% (n=23)	2.9% (n=1)	5.7% (n=2)	94.3% (n=33)

Table 4.2

Demographic Information

1994-1995								
	Total Students	Total Females	Total Males	European Amer.	African Amer.	Other	Pay for Meals	Free & Reduced Meals
School with Uniforms	69	46.0% (n=32)	54.0% (n=37)	15.9% (n=11)	69.6% (n=48)	14.5% (n=10)	2.9% (n=2)	97.1% (n=67)
School without Uniforms	56	50.0% (n=28)	50.0% (n=28)	32.1% (n=18)	66.1% (n=37)	1.8% (n=1)	14.3% (n=8)	85.7% (n=48)

Table 4.3

Demographic Information

1995-1996								
	Total Students	Total Females	Total Males	European Amer.	African Amer.	Other	Pay for Meals	Free & Reduced Meals
School with Uniforms	75	49.0% (n=37)	51.0% (n=38)	12.0% (n=9)	72.0% (n=54)	16.0% (n=12)	32.0% (n=24)	68.0% (n=51)
School without Uniforms	34	62.0% (n=21)	38.0% (n=13)	32.4% (n=11)	67.6% (n=23)	0.0% (n=0)	8.8% (n=3)	91.2% (n=31)

Table 4.4

Demographic Information

1996-1997								
	Total Students	Total Females	Total Males	European Amer.	African Amer.	Other	Pay for Meals	Free & Reduced Meals
School with Uniforms	97	49.0% (n=48)	51.0% (n=49)	1.0% (n=1)	86.6% (n=84)	12.4% (n=12)	8.2% (n=8)	91.8% (n=89)
School without Uniforms	45	51.0% (n=23)	49.0% (n=22)	6.7% (n=3)	93.3% (n=42)	0.0% (n=0)	4.4% (n=2)	95.5% (n=43)

Question 1: Will the academic performance of students in the school requiring uniforms differ significantly from that of students in the school not requiring uniforms? Means and standard deviations were computed. Analysis of variance was used to determine if scores of students from the two schools differed significantly. For the school year 1993-1994, students in the school which later adopted uniforms scored as follows: Reading Vocabulary, $M = 664.5$ ($SD = 46.6$); Reading Comprehension, $M = 673.8$ ($SD = 43.1$); Mathematics Concepts and Applications, $M = 691.4$ ($SD = 43.2$); Language Expression, $M = 680.2$ ($SD = 40.0$); Total Reading, $M = 669.5$ ($SD = 42.5$); Mathematics Computation, $M = 720.1$ ($SD = 36.0$); Total Mathematics, $M = 706.4$ ($SD = 36.0$); Language Mechanics, $M = 668.0$ ($SD = 34.9$); Total Language, $M = 674.1$ ($SD = 32.9$). The school without uniforms scored as follows: Reading Vocabulary, $M = 678.3$ ($SD = 57.0$); Reading Comprehension, $M = 670.4$ ($SD = 50.1$); Mathematics Concepts and Applications, $M = 693.2$ ($SD = 31.8$); Language Expression, $M = 676.2$ ($SD = 47.6$); Total Reading, $M = 674.5$ ($SD = 51.5$); Mathematics Computation, $M = 728.0$ ($SD = 31.3$); Total Mathematics, $M = 711.2$ ($SD = 27.5$); Language Mechanics, $M = 668.0$ ($SD = 34.9$); Total Language, $M = 672.3$ ($SD = 44.9$). ANOVA results (Table 4.5) for the year 1993-1994, indicate that there were no significant differences between the two schools with respect to scores for any of the tests.

Table 4.5

Analysis of Variance for Proficiency Tests by School

1993-1994			
	df	Mean Square	F
Reading Voc.	1	3964.59	1.52
Total	86		
Reading Comp.	1	237.55	0.11
Total	86		
Math Con. & App.	1	70.41	0.05
Total	86		
Lang. Exp.	1	336.65	0.18
Total	86		
Total Read.	1	525.78	0.24
Total	85		
Math. Comp.	1	1502.66	1.28
Total	86		
Total Math	1	483.70	0.45
Total	85		
Lang. Mech.	1	0.02	0.00
Total	84		
Total Lang.	1	62.13	0.04
Total	84		

School uniforms were implemented in one school in 1994-1995. Proficiency tests were different in 1994-1995 through 1996-1997 from 1993-1994. Students were tested in Writing, Reading, Mathematics, Citizenship and Science. Means and standard deviations were computed. Analysis of variance was used to determine if the scores differed significantly from the school with uniforms to the school without uniforms. The mean for the Writing test for both schools was the same, 4.5 ([SD = 1.1] for the school with uniforms and [SD = 1.3] for the school without uniforms). The mean for the Reading test for the school with uniforms was 197.1 (SD = 25.7), while the mean for the school without uniforms was 211.0 (SD = 22.4). The mean for the Mathematics test for the school with uniforms was 183.1 (SD = 23.1) and 203.3 (SD = 26.1) for the school without uniforms. The mean for the Citizenship test was 188.2 (SD = 25.4) for the school with uniforms and 211.8 (SD = 22.4) for the school without uniforms. Table 4.6 shows the analysis of variance of the proficiency scores by school for the 1994-1995 school year. ANOVA test results indicate that there was a significant difference between the school with uniforms and the school without uniforms with respect to scores for Reading, $F(1, 97) = 7.89, p < 0.0060$; Mathematics, $F(1, 97) = 16.45, p < 0.0001$; and Citizenship, $F(1, 97) = 23.03, p < 0.0001$. The school without uniforms scored higher on these three proficiency tests than the school with uniforms. This indicates, that fourth graders in the school without uniforms performed significantly better academically than fourth graders in the school with uniforms for the 1994-1995 school year.

Table 4.6

Analysis of Variance of Proficiency Tests by School

1994-1995			
	df	Mean Square	F
Writing	1	0.07	0.05
Total	96		
Reading	1	4653.17	7.89**
Total	97		
Mathematics	1	9822.78	16.45***
Total	97		
Citizenship	1	13445.26	23.03***
Total	97		

Note. **= $p < 0.01$; ***= $p < 0.001$

For the 1995-1996 school year, the means for the Writing test were 4.4 for both schools, (SD = 1.2) for the school with uniforms and (SD = 1.4) for the school without uniforms. The mean for the Reading test was 196.0 (SD = 18.5) for the school with uniforms, whereas the mean for the school without uniforms was 206.5 (SD = 16.1). The school with uniforms had a mean of 189.0 (SD = 20.5) on the Mathematics test, and the school without uniforms had a mean of 199.6 (SD = 18.9). The mean for the Citizenship test for the school with uniforms was 190.9 (SD = 21.5), and the mean for the school without uniforms was 207.4 (SD = 21.8). The school with uniforms had a mean of 164.0 (SD = 31.9) for the Science test, and the school without uniforms had a mean of 172.3 (SD = 33.1). Table 4.7 shows the analysis of variance of the proficiency scores by school for the school year 1995-1996. Results indicate that there was a significant difference between the school with uniforms and the school without uniforms with respect to scores for Reading, $F(1, 86) = 6.91, p < 0.0101$; Mathematics, $F(1, 86) = 5.66, p < 0.0196$; and Citizenship $F(1, 86) = 11.65, p < 0.0010$. The school without uniforms scored higher on these tests. The difference was not significant between schools with regard to the Writing and Science tests. For the second year in a row, the school without uniforms performed significantly better academically on the Reading, Mathematics, and Citizenship tests than the school with uniforms.

Table 4.7

Analysis of Variance for Proficiency Tests by School

1995-1996			
	df	Mean Square	F
Writing	1	0.00	0.00
Total	86		
Reading	1	2164.83	6.91**
Total	86		
Mathematics	1	2253.60	5.66*
Total	86		
Citizenship	1	5426.42	11.65***
Total	86		
Science	1	1353.57	1.29
Total	86		

Note. *= p<0.05; **= p<0.01; ***= p<0.0001.

For the 1996-1997 school year, the mean for the Writing test for the school with uniforms was 3.9 (SD = 1.4), and 4.0 (SD = 1.4) for the school without uniforms. The mean for the Reading test for the school with uniforms was 198.4 (SD = 16.3), while the mean for the school without uniforms was 198.5 (SD = 20.3). The mean for the Mathematics test was 186.5 (SD = 20.2) and 183.7 (SD = 19.9) for the school with uniforms and for the school without uniforms, respectively. The Citizenship test mean scores for the school with uniforms was 199.5 (SD = 17.3) and 196.8 (SD = 20.6) for the school without uniforms. The mean score for the Science test was 177.6 (SD = 26.7) for the school with uniforms and 170.6 (SD = 33.1) for the school without uniforms. Table 4.8 shows the analysis of variance for the proficiency tests for the school year 1996-1997 between schools. Results indicate that for the 1996-1997 school year, there was not a significant difference between the school with uniforms and the school without uniforms for Writing, $F(1, 104) = 0.17, p > 0.68$; Reading, $F(1, 116) = 0.00, p > 0.99$; Mathematics, $F(1, 117) = 0.50, p > 0.48$; Citizenship, $F(1, 118) = 0.55, p > 0.46$; and Science, $F(1, 117) = 1.47, p > 0.23$. This year the school with uniforms scored higher on three out of five tests than the school without uniforms, however the difference was not significant. These tests were Mathematics, Citizenship and Science.

Table 4.8

Analysis of Variance of Proficiency Tests by School

1996-1997			
	df	Mean Square	F
Writing	1	0.34	0.17
Total	104		
Reading	1	0.07	0.00
Total	116		
Mathematics	1	203.20	0.50
Total	117		
Citizenship	1	184.11	0.55
Total	118		
Science	1	1208.69	1.47
Total	117		

Question 2: Will the behavioral offenses of students who wear uniforms differ significantly from students who do not wear uniforms? To answer this question, a Chi Square test of independence was calculated to determine if the pattern of occurrences of behavioral offenses differed between schools. For this test, behavioral offenses that were common to both schools and occurred at least ten times over four years were included. The offenses that occurred at least ten times in both schools were disruptions of class, repeated violations of school rules, gross insubordination, and fighting. Results are shown in Table 4.9. The test revealed that disruptions of class, repeated violations of rules, gross insubordination, and fighting and the wearing of uniforms were not independent $X^2(3, N=722) = 80.28, p < 0.0001$. The school without uniforms had more occurrences of disruptions of class (n=274), repeated violations of school rules (n=16), and gross insubordination (n=237) than the school with uniforms. However, the school with uniforms had more occurrences of fighting (n=47) than the school without uniforms. The occurrences of fighting between schools were fewer overall in comparison to the occurrences of disruption of class and gross insubordination between schools.

There were 23 different types of behavioral offenses, four described above plus nineteen other types, that occurred between the two schools. The school with uniforms had fifteen different types, while the school without uniforms had nineteen different types reported in the database. Table 4.10 shows the other types of behavioral offenses and the frequencies that occurred in the two schools. In 1994-1995, the same student committed two of the three assault/battery incidents on a staff member, in the school with uniforms,

while the other was committed in 1996-1997. It appears that behavioral offenses involving weapons and illegal inappropriate behavior are found in the school without uniforms more than the school with uniforms. In 1996-1997, the school with uniforms experienced several behavioral offenses (which probably occurred outside the classroom) that had not occurred to that extent before (e.g., profanity directed toward adults). Also, seven of the ten assault/battery on a student offenses occurred (in the school with uniforms) in 1996-1997. It appears that violence is increasing in the school with uniforms, 35 or almost two-thirds of the disruptions of class in the school with uniforms occurred in 1996-1997. While violence is increasing in both schools, the violence in the school without uniforms seems to be increasing at a faster rate than the school with uniforms. Overall, the school without uniforms had more frequent occurrences of behavioral offenses than the school with uniforms.

Table 4.9

Chi Square of Behavioral Offenses

	School without Uniforms	School with Uniforms	TOTAL
Disruption of Class	274 ^{a***} 261.8 ^b	56 ^a 68.2 ^b	330
Repeated Violation of School Rules	16 ^{a***} 23.48 ^b	14 ^a 6.52 ^b	30
Gross Insubordin- ation	237 ^{a***} 219.8 ^b	40 ^a 57.2 ^b	277
Fighting	38 ^a 67.4 ^b	47 ^{a***} 17.6 ^b	85
TOTAL	565	157	722

Note. *** = $p < 0.0001$; a = Actual Frequency; b = Expected Frequency

Table 4.10

Other Behavioral Offenses by School

1993-1994 through 1996-1997		
Types	Without Uniforms	With Uniforms
Assault/Battery on Staff Member	0	3
Assault /Battery on a Student	9	10
Threat to a Student	2	1
Threat to a Visitor	1	0
Disruption of School	4	1
Possession of a Weapon	2	0
Possession of a Dangerous Instrument	2	0
Use of a Dangerous Instrument	1	0
Profanity	7	2
Profanity/Verbal Abuse-Adult Directed	0	9
Theft	1	0
Other Illegal Inappropriate Behavior	2	0
Cheating	2	0
Forgery	1	0
Verbal Abuse-Student Directed	1	1
Sexual Misconduct	2	2
Trespassing	0	1
Failure to Abide by Bus Rules	9	12
Failure to Obey Local School Rules	0	1
Total	46	43

See Tables 4.11-4.14 for the means and standard deviations for absenteeism and tardiness for the two schools. The school without uniforms had a greater frequency of absenteeism and tardiness than the school that later adopted uniforms in 1993-1994. The school with uniforms had a greater frequency of absenteeism and tardiness than the school without uniforms in the 1994-1995 school year. Finally, the school without uniforms had a greater frequency of absenteeism and tardiness than the school with uniforms in the 1995-1996 and 1996-1997 school years. Results indicate that for three out of the four years, the school without uniforms had a higher absenteeism and tardiness rate than the school with uniforms. Throughout the four years combined from both school, results, shown on Table 4.16, indicate that absenteeism was highest in the 1995-1996 school year, while tardiness was highest during the 1996-1997 school year.

Table 4.11

Means and Standard Deviations for Absenteeism and Tardiness by School

1993-1994				
	Mean for School pre Uniforms	SD for School pre Uniforms	Mean for School without Uniforms	SD for School without Uniforms
Days Absent	5.8	7.5	6.4	5.8
Days Tardy	1.5	3.1	2.4	5.2

Table 4.12

Means and Standard Deviations for Absenteeism and Tardiness By School

1994-1995				
	Mean for School with Uniforms	SD for School with Uniforms	Mean for School without Uniforms	SD for School without Uniforms
Days Absent	12.3	11.3	11.3	10.4
Days Tardy	4.4	8.4	4.1	7.9

Table 4.13

Means and Standard Deviations for Absenteeism and Tardiness By School

1995-1996				
	Mean for School with Uniforms	SD for School with Uniforms	Mean for School without Uniforms	SD for School without Uniforms
Days Absent	11.7	9.9	12.3	10.0
Days Tardy	3.0	4.3	4.3	5.8

Table 4.14

Means and Standard Deviations for Absenteeism and Tardiness By School

1996-1997				
	Mean for School with Uniforms	SD for School with Uniforms	Mean for School without Uniforms	SD for School without Uniforms
Days Absent	10.0	8.4	12.7	10.2
Days Tardy	4.1	6.5	5.9	8.0

Table 4.15

Total Means and Standard Deviations for Absenteeism and Tardiness

1993-1994 through 1996-1997				
	1993-1994	1994-1995	1995-1996	1996-1997
Days Absent	12.2 (13.3)	23.6 (21.7)	24 (19.9)	22.7 (18.6)
Days Tardy	3.9 (8.3)	8.5 (16.3)	7.3 (10.1)	10 (14.5)

Note. Standard deviations are in parenthesis.

Question 3: Is there a relationship between wearing uniforms and academic performance? This question was answered by calculating a Point Biserial Correlation Coefficient using the years 1994-1995 through 1996-1997. Results of the test revealed a significant, but low negative correlation between wearing uniforms and test scores for Reading ($r_{pb} = -0.196$, $p = 0.00$), Mathematics ($r_{pb} = -0.206$, $p = 0.00$), and Citizenship ($r_{pb} = -0.253$, $p = 0.00$). (Table 4.16) This could be explained by the fact that the school with uniforms, in many instances, scored lower on tests than the school without uniforms. However, from the years 1994-1995 through 1996-1997, the mean scores on two of the five tests increased in the school with uniforms. Table 4.17 shows that Citizenship increased from average scores of 188.2 to 199.5. Science also increased from average scores of 164.0 to 177.6. The mean scores for Writing, Reading and Mathematics were inconsistent. Scores for Writing decreased on average from 4.5 to 3.9. Scores for Reading decreased on average from 197.1 in 1994-1995 to 196.0 in 1995-1996 and then increased again on average to 198.4 in 1996-1997. Scores for Mathematics increased on average from 183.1 to 189.0 in 1995-1996 and then decreased on average to 186.5 in 1996-1997. Table 4.18 shows that the mean scores for students in the school without uniforms decreased consistently on all tests from 1994-1995 through 1996-1997, the same period in which increases were found in scores in the school with uniforms.

Because there was an increase in the school with uniforms over the three year period from 1994-1995 through 1996-1997, an ANOVA was calculated to determine if the increase in proficiency scores over time was significant. Table 4.19 shows the analysis of variance for the proficiency tests from 1994-1995 through 1996-1997.

Results of the test indicate that the increase in proficiency scores was significant for Citizenship, $F(2, 193) = 5.48, p < 0.0048$; and Science, $F(1, 136) = 7.26, p < 0.0080$. The decrease of the Writing scores was also significant $F(2, 193) = 3.96, p < 0.0209$. The scores for the Reading and Mathematics proficiency tests were inconsistent and therefore not significant. This indicates that the wearing of uniforms probably made a difference in the students' academic performance such that for students who wore uniforms, scores increased in Citizenship and Science.

Table 4.16

Point Biserial Correlation Coefficient for Proficiency Tests

	df	r_{pb}	p
Writing	2	-0.047	0.44
Reading	2	-0.196	0.00
Mathematics	2	-0.206	0.00
Citizenship	2	-0.253	0.00
Science	1	0.013	0.85

Table 4.17

Mean Scores for School with Uniforms

	Write	Read	Math	Citizen	Science
1994-1995	4.5	197.1	183.1	188.2	-----
1995-1996	4.4	196.0	189.0	190.9	164.0
1996-1997	3.9	198.4	186.5	199.5	177.6

Table 4.18

Mean Scores for School without Uniforms

	Write	Read	Math	Citizen	Science
1994-1995	4.5	211.0	203.3	211.8	-----
1995-1996	4.4	206.5	199.6	207.4	172.3
1996-1997	4.0	198.5	183.7	196.8	170.6

Table 4.19

Analysis of Variance of Proficiency Tests from 1994-1995 through 1996-1997 for the
School with Uniforms

1994-1995 through 1996-1997			
	df	Mean Square	F
Writing	2	6.54	3.96*
Total	193		
Reading	2	100.02	0.25
Total	193		
Mathematics	2	485.82	1.09
Total	193		
Citizenship	2	2432.95	5.48**
Total	193		
Science	1	6031.74	7.26**
Total	136		

Note. *= p<0.05; **= p<0.01.

CHAPTER 5

SUMMARY AND CONCLUSIONS

The purpose of the study was to determine if academic performance and behavioral offenses are affected by wearing uniforms in public elementary schools. Prior to the study, no empirical research was found concerning elementary school uniforms and academic performance and behavioral offenses. There is a need for this research because it is important to know when students are wearing uniforms, if their academic performance and behavioral offenses are affected. The articles, concerning the wearing of uniforms and academic performance and behavioral offenses, that appear in the popular press are based on the opinions of principals, teachers and parents. Because no empirical research was found, these opinions are based on a lack of facts.

Role theory was the theoretical framework on which the study was based. School board members, teachers and parents have suggested that when students are attired in uniforms, their grades and behavior will improve. It is expected that the uniformed student will do well academically and not cause problems in the classroom. Thus, when wearing uniforms, students are expected to assume the role of academic achievers, who do not cause problems in the classroom. } Role theory states that within a society, individuals have many different positions or statuses, each with a set of expectations.

Expectations may enhance how a person should behave. It is expected that when students wear uniforms, they will not disrupt the class, have repeated violations, or fight.

Academic performance and disciplinary behavior records of fourth grade students were used from two separate elementary schools. Data were obtained for the years 1993-1994 through 1996-1997. To investigate the research questions, several analyses of variance were run, along with a Chi Square test of independence, and a Point Biserial Correlation Coefficient.

Question 1: Will the academic performance of students in the school requiring uniforms differ significantly from that of students in the school not requiring uniforms? For the 1993-1994 school year, in which neither school had uniforms, the MAT7 Proficiency test was administered. The subjects tested were Reading Vocabulary, Reading Comprehension, Mathematics Concepts and Applications, Language Expression, Total Reading, Mathematics Comprehension, Total Mathematics, Language Mechanics and Total Language. Results of the ANOVA revealed that none of the proficiency scores differed significantly between the two schools.

For the school year 1994-1995 through 1996-1997, The Ohio Fourth Grade Proficiency Test was administrated. The subjects tested were Writing, Reading, Mathematics, Citizenship and Science. The Science test was only administered during the 1995-1996 through 1996-1997 school years. For the 1994-1995 school year, an ANOVA revealed that there was a significant difference between the two schools. The school without uniforms scored significantly higher in Reading, Mathematics and Citizenship than the school with uniforms. For the 1995-1996 school year, an ANOVA

revealed that the school without uniforms scored significantly higher again in Reading, Mathematics and Citizenship than the school with uniforms. For the 1996-1997 school year, results of the data analysis indicate there was no significant difference in scores between the two schools.

A limitation of this study is that it is not possible to determine why the school without uniforms scored significantly higher on the Reading, Mathematics and Citizenship tests than the school with uniforms. Consequently, it is possible that the difference can be attributed to more parent involvement and more academic support provided by the school without uniforms than the school with uniforms. However, the average scores on Citizenship and Science tests for the school with uniforms increased consistently from 1994-1995 through 1996-1997. The average score for Reading also increased from 1995-1996 to 1996-1997.

The implication, according to role theory is that when uniformed students assume the role of academic achievers, they are expected, by the teachers to perform better academically. It is suggested these children may perform as expected. Even though the school with uniforms in many instances scored lower on tests than the school without uniforms, the wearing of uniforms was concurrent with increased learning in the school with the uniforms. Although there was not a continuous increase in Reading and Mathematics from 1994-1995 through 1996-1997, the 1996-1997 scores are higher than 1995-1996 scores in all cases except Writing. This suggest that learning did take place in the school with uniforms. Since scores improved concurrently for students from the school with uniforms, it can be suggested that the wearing of uniforms does help students

to concentrate more on their school work, not on what other students are wearing, and therefore receive higher scores on the proficiency tests.

Question 2: Will the number and types of behavioral offenses of students who wear uniforms differ significantly from students who do not wear uniforms? Many school administrators have suggested that the wearing of uniforms decreases violence and theft, as well as, increases the student's safety ("Educators say school dress...", 1992; Gorman, 1996; Gursky, 1996; Hatfield, 1992). Question 2 was investigated by a Chi square test of independence. Offenses that occurred for the years 1993-1994 through 1996-1997 at least ten times in both schools were examined. The offenses meeting the criteria of ten were disruptions of class, repeated violations of school rules, gross insubordination and fighting. Results indicate that there were more occurrences of disruptions of class, repeated violations of rules, and gross insubordination in the school without uniforms than the school with uniforms. However, the school with uniforms had more occurrences of fighting than the school without uniforms. [According to Futrell (1996), it is likely that fighting took place outside the classroom in locations such as hallways or playgrounds. In these places, it is possible that the students were not in the role of academic achiever. Therefore, they did not act appropriately, as expected by the teacher.] A limitation of this study is that it is unclear how teachers defined behavioral offenses.

Means and frequencies were used to describe the number of days absent and tardy. Results indicate that for three out of the four years, the school without uniforms had a greater frequency of absenteeism and tardiness than the school with uniforms.

Only for the 1994-1995 school year was there a greater frequency of absenteeism and tardiness for the school with uniforms than the school without uniforms. Throughout the four years combined for both schools, absenteeism was highest in the 1995-1996 school year, while tardiness was highest during the 1996-1997 school year.

The implication, according to role theory is that individuals will perform according to social expectancies and behaviors of others, or the audience assumes that a character will perform according to their expectations. Any variation of the individual's performance will result from changes within the social expectancies and behaviors of others (Thomas & Biddle, 1966). In a similar way, when students wear uniforms, principals, teachers and parents may expect that they will behave in accordance to the school rules. The school without uniforms had more occurrences of disruptions in class, repeated violations of rules, and insubordination than the school with uniforms. However, even though there is insufficient evidence to offer an explanation of why the school with uniforms had more occurrences of fighting, it is suggested that the fighting took place outside of the classroom when students were not in the role of academic achiever. The school without uniforms also had a higher frequency of days absent than the school with uniforms. The fewer occurrences of certain behavioral offenses and the lower frequency of absenteeism and tardiness could be attributed to role theory and that the wearing of uniforms enhance the role of an academic achiever, not only to perform academically, but to behave appropriately as well. Therefore, it can be inferred that the wearing of uniforms did decrease the type and frequency of behavioral offenses.

Question 3: Is there a relationship between wearing uniforms and academic performance? A Point Biserial Correlation Coefficient was calculated to determine if there was a relationship between wearing uniforms and academic performance. Results revealed a significant but low negative correlation between wearing uniforms and test scores for Reading, Mathematics, and Citizenship. One explanation for this may be that the school with uniforms in many instances scored lower on tests than the school without uniforms. However, from the years 1994-1995 through 1996-1997, the mean scores on the Citizenship and Science tests increased in the school with uniforms. The mean scores for Writing, Reading and Mathematics were inconsistent. The mean scores for the Writing test declined from years 1994-1995 to 1996-1997. The mean scores for the Reading test decreased in year 1995-1996, but increased in the year 1996-1997. The mean scores for the Mathematics test increased in the year 1995-1996, however, scores then decreased in the year 1996-1997. Meanwhile, the school without uniforms, scores decreased on all tests from 1994-1995 through 1996-1997, which was the same period in which increases were found in scores, on the same tests, in the school with uniforms. An analysis of variance was calculated to determine if there was an increase in test scores over the years 1994-1995 through 1996-1997. Results revealed that the increase in scores for Citizenship and Science were significant. Also significant was the decrease in scores for Writing. The scores for the Reading and Mathematics proficiency tests were inconsistent and therefore not significant.

[The implication, according to role theory is that clothing enhances the role of the student as academic achiever. When wearing uniforms, the students performed better academically, as expected. Meanwhile, the students in the school without uniforms scores decreased consistently on the proficiency tests. Thus, it can be inferred that the wearing of uniforms were related to a student's academic performance.]

Conclusions and Recommendations

There are a number of conclusions that can be drawn from the study, particularly regarding (a) the effect of uniforms and academic performance, (b) the effect of uniforms and behavioral offenses, and (c) the correlation of uniforms and academic performance.

[First, writers (“A Taste for Uniformity”, 1991; Cohn & Siegel, 1996; Edwards, 1997; Gursky, 1996; Nygren, 1996; U. S. Department of Education, 1996) have cited in the popular press, and government publications, a general increase in students concentrating on their school work and achievements, rather than on who is wearing what, as well as, an increase in self respect, school spirit and loyalty when they were wearing uniforms.]

This may be true; however, for two of the four years, there was no significant difference on proficiency tests between the school with uniforms and the school without uniforms. For the other two years, there was a significant difference only in Reading, Mathematics and Citizenship between the two schools. The school without uniforms scored higher on the tests than the school with uniforms. However, from the years 1994-1995 through 1996-1997, the mean scores on the Citizenship and Science tests increased in the school with uniforms. The mean scores for Writing, Reading and Mathematics were

inconsistent. Meanwhile, the school without uniforms consistently scored lower on all tests from 1994-1995 through 1996-1997, which was the same period in which increases were found in scores on the same tests, in the school with uniforms. An explanation, consistent with role theory, is that the scores in the school with uniforms increase because the students had taken the role of academic achiever. The teachers may have expected them to perform better academically and the students did by increasing the scores on some proficiency tests during a three year period. However, the implication is that even though in the school with uniforms scores increased over a period of time, a precise conclusion can not be drawn from this study. Therefore, additional studies need to be completed, to determine if the wearing of uniforms will affect a student's academic performance.

Second, President Clinton stated “school uniforms are one step that may be able to help break this cycle of violence, truancy, and disorder...in schools” (“Clinton suggests uniforms to improve schools,” 1996, no page). This is evident by the fact that the school without uniforms had more occurrences of disruptions of class, repeated violations of rules, and insubordination than the school with uniforms. When wearing uniforms the students had fewer behavioral problems. Therefore, the wearing of uniforms does make a difference in the number and types of behavioral offenses committed by students. This can be attributed to role theory. When the students were in uniforms, they took the role of academic achiever and behaved, while in class, as expected by the teachers.

Third, it was concluded that uniforms had a significant, but negative correlation with academic performance. This is because the school without uniforms, in many instances, scores higher on the tests than the school with uniforms, even though the school with uniforms scores increased, in some tests, over the three year period. A Point Biserial Correlation Coefficient revealed that academic performance was related to the wearing of uniforms. Therefore, the implication is that the wearing of uniforms is related to a student's academic performance. An explanation for this relationship, consistent with role theory, is that the students in the school with uniforms took on the role of academic achiever and performed better academically, which may have been expected by the teachers.

The results of this study are significant for elementary school students because it is in elementary school that a student begins to recognize perceptions and form impressions of others. If it is determined that wearing uniforms will help the child learn, increase their academic performance, and decrease their behavioral offenses, then the wearing of uniforms should be introduced very early in the formal learning process. If elementary schools are successful by enforcing the wearing of uniforms, then middle and high schools may also want to implement the wearing of uniforms in order to increase the student's academic performance or decrease the occurrences of disciplinary behavioral offenses.

Additional work needs to examine relationships between elementary school uniforms and academic performance and disciplinary behavior. A replication of the study needs to be completed, in several. The same criteria should be used as this study.

Several public elementary schools with and without uniforms need to be compared to confirm the results of this study. Different types of comparable schools could also be examined, for example, schools in different regions, or schools of different economic levels. An additional study could also be completed at the middle or high school levels in order to determine if the same results of this study would be achieved. If an additional study produces the same results, it can be concluded that the wearing of uniforms can affect students' academic performance and disciplinary behavior. In addition, a study including grade point averages, as well as, proficiency test scores should be conducted. This would allow for more data, which may influence the results of the study.

Qualitative data could also be collected by the researchers observing behavior in the classroom of a school with uniforms and a school without uniforms. The behavior observed in the classroom could be videotaped within each school and then compared. This comparison would allow the researcher to see if behavioral offenses occur differently in one school than the other school. Also, a videotape would allow the researcher to observe the teacher's discipline of students, as well as, other interactions with the students. This would determine if the teaching affects the behavior of the student or if wearing uniforms affect the behavior of the student.

Another reason that additional research needs to be done on this subject is that there was no research available concerning the wearing of uniforms and academic performance and behavioral offenses. The following questions need to be answered: Are the students performing better academically, and having decreased behavioral offenses because the expectations of the teachers and their teaching methods have become more

positive, therefore affecting the students? This could be measured by surveying the teachers concerning their teaching methods. Are the students performing better academically, and having decreased behavioral offenses because the students are wearing uniforms? (By furthering this research, children will continue to receive the best education possible.)

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