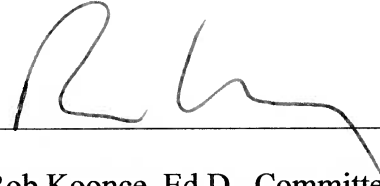




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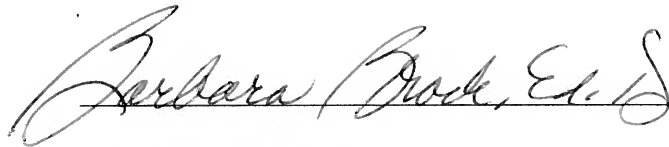
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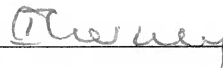
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THE INFLUENCE OF SOCIOECONOMIC STATUS ON ADOLESCENT  
LEADERSHIP IN COLORADO PUBLIC HIGH SCHOOLS

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By

JENNIFER L. BAUBLITS

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A DISSERTATION

Submitted to the faculty of the Graduate School of Creighton University  
in Partial Fulfillment of the Requirements for the degree of  
Doctor of Education in Interdisciplinary Leadership

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Omaha, NE

June 3, 2015

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## Abstract

A number of studies investigate the differential treatment of students in education based on gender, race, or disability. Few examine the indicator of socioeconomic status (SES), particularly in relation to student leadership participation. This study examined the occurrence of low SES adolescents in positions of leadership among Colorado public high schools. Through a correlational explanatory survey design, data analyses confirmed the null hypotheses that there was no relationship between the SES of adolescents and adolescents serving in leadership positions in urban or rural public high schools in Colorado. Post-hoc analyses yielded additional information related to what types of activities are more likely to have low SES adolescent leaders: (1) Low SES students were more involved in leadership while attending low SES schools; (2) low SES students were more likely to serve in positions of leadership in certain types of activities; and, (3) school SES was shown to influence the types of activities where low SES student leaders serve. Public high schools represent ideal environments for influencing leadership development of low SES adolescents. This study proposed incorporating a leadership curriculum that identifies potential leaders, provides ongoing support and training, develops leadership skills through school and community partnerships, and eliminates pay-to-play policies for extracurricular activities. Although this study presented significant findings, additional research on low SES adolescent leadership is warranted to determine whether leadership opportunities are sufficient for low SES adolescent leaders to transfer leadership skills into adulthood and out of a low socioeconomic environment.

*Keywords:* Adolescent leadership, low socioeconomic status, poverty, education

## Dedication

To Joshua, Sarah Grace, Michael, and David - my life's greatest work.

## Acknowledgments

My great-grandmother was a fierce, five-foot tall matriarch, and one of the strongest people I have known. With barely an 8th grade education, she lived nearly a century and survived the Dust Bowl Days, the Great Depression, and raised four children in a tiny adobe house with no indoor plumbing. When I graduated from high school, Grandmother (then age 88) shared a portion of her wisdom by testifying that throughout life people would come and go, experiences would change, and there would be times of great joy and deep sorrow, but one's faith and education could never be taken away. She encouraged me to devote my time and efforts to those two things. Accordingly, with the help of many, I have attempted to expand my knowledge and strengthen my faith, most recently through the Doctorate of Education in Leadership Studies program at Creighton University.

First, I am grateful for God's many blessings and His promise that "the God of all grace, who called you to his eternal glory in Christ, after you have suffered a little while, will himself restore you and make you strong, firm, and steadfast" (I Peter 5:10 New International Version). I also acknowledge the teachings of St. Ignatius who inspired me throughout the doctoral process and beyond to strive for excellence (*magis*) and care for others (*cura personalis*) by showing concern specifically for low socioeconomic adolescents with the purpose of creating change - all for the greater glory of God (*ad majorem Dei gloriam*).

I would like to thank Creighton's Ed.D. faculty and staff who epitomize the Jesuit values. Thanks for encouraging me to strive for *magis*; challenging me to be an advocate for others; developing my heart, mind, and spirit; and upholding the truth that we should strive to do everything for the greater glory of God. I would like to express a sincere

appreciation to Dr. Isabelle Cherney who leads with a servant's heart and a gentle spirit. The success of the program is a testament to her leadership. In addition, I would like to express my appreciation to my Ed.D. colleagues for challenging me beyond what I believed I was capable and for the opportunity to be a part of this unique assembly of diversity in occupations, backgrounds, and knowledge. I wish to thank my dissertation committee for their time, consistent support, and constructive guidance: Dr. Barbara Brock, for her valuable professional background knowledge and for our frequent discussions regarding educational issues; Dr. Leah Georges, for serving as my academic adviser and for her immense quantitative research knowledge; and my dissertation chair, Dr. Rob Koonce, for his patience and editing skills in seeing through to the completion of this document.

I am especially grateful for my most cherished friend, David, who has never wavered in his confidence in me or in his dedication to my family. Our bond is eternal. Additional gratitude is extended to my friend and math whiz, John, who tutored me through the goat study in Financial and Legal Leadership Issues class and assisted with the data analysis in this project.

Finally, I would like to extend my sincerest appreciation to my family. My parents, Bill and Diane, and siblings, Tim and Shari, have always believed that I could do anything I set my mind on doing - often frustrated by my stubbornness and independence, but never limiting my possibilities. I am thankful to have a family who loves and supports one another, enjoys spending time together, and holds one another accountable. I would especially like to thank my father who is my greatest advocate and my mother who patiently taught me how to write and spent years proofreading and making suggestions



for improvement, including my doctoral work. Special recognition is extended to my four children with whom I share this honor. Thanks to Joshua, Sarah Grace, Michael, and David for patiently supporting, encouraging, and loving me throughout this process and for serving as my motivation to exemplify the importance of following through on a commitment. After all, effort spent on faith and education is never lost.

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## CHAPTER ONE: INTRODUCTION

**Background of the Problem**

A number of research studies investigate the differential treatment of students in education based on gender (Espinoza, Areas da Luz Fontes, & Arms-Chavez, 2014), race (Glock, Krolak-Schwerdt, Klapproth, & Bohmer, 2013; Harber, Gorman, Gengaro, Butisingh, Tsang, & Ouellette, 2012), or disability (Hosterman, DuPaul, & Jitendra, 2008); however, few examine the indicator of socioeconomic status (SES) in relation to student leadership participation. Because SES is determined by the combination of family income, parental education level, and parental occupation (Clauss-Ehlers, 2010), family SES can play a vital role in a child's education. Families with an average or an above-average SES generally have parents who are educated and are therefore better equipped to assist their children academically, as well as provide additional exposure to cultural, academic, and leadership opportunities (Crook & Evans, 2013). The North Central Regional Educational Laboratory (2004) suggests that parents from higher SES households have knowledge of the resources available to them, creating a positive learning environment for their child by providing books, educational toys and tools, and cultural experiences to better prepare their children. On the other hand, students with low SES parents are at a disadvantage because low SES families often lack financial, social, and educational support for their children. Low SES can produce parents who have limited knowledge about community resources (Kiernan & Mensah, 2011) or even basic needs like childhood immunizations (Black, Yankey, & Kolasa, 2013) and nutrition (Raphael, 2014). Parents of low SES students often lack the knowledge or experience to appropriately assist their children academically (Zady, Portes, DelCastillo, & Dunham,

1998); this accentuates the potential influence of the public school environment in the lives of its students. This is not to say that children growing up in a poor family will never obtain a good education, or that a wealthier student is destined to be successful. Still, the influence of socioeconomic factors in public education is evident in a number of academic areas including vocabulary and language skills (Aikens & Barbarin, 2008; Richels, Johnson, Walden, & Conture, 2013), math course work (Baird, 2012; Crosnoe & Schneider, 2010), physical fitness (Coe, Peterson, Blair, Schutten, & Peddie, 2013), college attrition (Domina, 2009; Engberg & Wolniak, 2014; Vignoles & Powdthavee, 2009; Walpole, 2003), and in overall cognitive ability (Hackman & Farah, 2009). According to the positive youth development theory, the best and most critical time for leadership development is during the adolescent years when leadership skills are introduced and practiced (Lerner, Phelps, Forman, & Bowers, 2011; Li & Wang, 2009). However, the question remains as to whether these opportunities are sufficient for low SES adolescents serving as leaders to transfer leadership skills into adulthood and out of a low socioeconomic environment.

### **Introduction and Statement of the Problem**

In 1964, President Lyndon B. Johnson declared an unconditional war on poverty by stating, "Our aim is not only to relieve the symptoms of poverty, but to cure it and, above all, to prevent it" (First State of the Union Address, 1964). However, 50 years later, the increase in poverty has been significant (Watson, 2014) and is reaching record levels (Lipman & Davis, 2014). In addition to the increase in the number of people living in poverty, the growing educational consequences of poverty have been detrimental (Duncan & Murnane, 2011). Yet, little research exists regarding the influence of SES and

leadership during the pivotal adolescent years of development. This study attempted to narrow the gap in research by investigating the relationship between adolescent leadership and SES in Colorado public high schools, present recommendations, and open the discussion for further research.

### **Purpose of the Study**

The purpose of this quantitative study was to determine whether there was a difference between the number of adolescent students from low and high SES households who serve in positions of leadership in urban and rural Colorado public high schools. The study included quantitative data gathered from Colorado public high school personnel.

### **Research Questions**

The following research questions were developed from an identifiable research gap in this discipline with the intention of contributing to a greater understanding of adolescent leadership. These questions guided the design of a survey, which was distributed to Colorado public school district administrators.

#### **Research Question #1 (R1)**

What is the relationship between adolescent students' SES and their opportunity to serve in positions of leadership in rural Colorado public high schools?

#### **Alternative Hypothesis #1 (H1)**

High SES students are more likely to serve positions of leadership than low SES students in rural Colorado public high schools.

#### **Null Hypothesis #1 (HO1)**

There is no relationship between low SES and high SES students' positions of leadership in rural Colorado public high schools.

**Research Question #2 (R2)**

What is the relationship between adolescent students' SES and their opportunity to serve in positions of leadership in urban Colorado public high schools?

**Alternative Hypothesis #2 (H2)**

High SES students are more likely to serve positions of leadership than low SES students in urban Colorado public high schools.

**Null Hypothesis #2 (HO2)**

There is no relationship between low SES and high SES students' positions of leadership in urban Colorado public high schools.

**Significance of the Study**

For more than 50 years, a number of governmental and private agencies attempted to provide opportunities to improve the lives of students from low SES backgrounds. The efficacy of these programs has been highly debated, yet the desire to contribute to the overall well-being of this demographic has been uncontested. This project was designed to complement past research by studying the occurrence of leadership among low SES adolescents within Colorado public high schools and help fill the gap in scholarly research and literature in the area of adolescent leadership as it specifically related to student SES. This project contributes to a better understanding of the underrepresented group and encourages change from current attitudes, barriers, and perceptions by improving educational policy and practice. Students, teachers, curriculum specialists, administrators, and future educational researchers may all benefit from various segments of this study.

Low SES adolescents are perhaps the individuals who receive greatest benefit of the outcome of this research. Students who serve in positions of leadership have advantages over those who do not serve as leaders (Pedersen, Yager, & Yager, 2012; Shook & Keup, 2012; Wooten, Hunt, Leduc, & Poskus, 2012). Any improvements to adolescent leadership development or leadership opportunities may help this demographic matriculate as adult leaders and thrive in society. Although this study showed that low SES adolescents serve in certain categories of leadership, other research found that low SES adolescents struggle academically (Huang, 2013; Rotherham, 2010) and attend college at a lower rate (Vignoles & Powdthavee, 2009; Walpole, 2003). Additional research is needed to understand this variance and if serving in a position of leadership shows any correlation to improved academic success.

Teachers, curriculum specialists, and administrators can use this research as a basis for implementing leadership curriculum and policies relating to how and under what circumstances adolescent leaders are chosen and developed. This study showed specific organizational categories where low SES students were more likely to serve as leaders, and may assist education personnel in observing behaviors and talents of students who would benefit from leadership opportunities which otherwise may go unrecognized and lost. This research may create and facilitate opportunities to examine, evaluate, and implement strategies for adolescent leadership development within classroom curricula.

Finally, this study of low SES adolescent leadership established a foundation for research that was previously absent from scholarly literature. Although this study produced significant findings, the analyses raised additional questions that require further research. The implications of this study were numerous with the potential of influencing

low SES adolescent leaders, school personnel, school leadership curriculum and policy, and future research.

### **Aim of the Study**

The aim of this study was to assist schools and community leaders in recognizing the occurrence of adolescent leadership within Colorado public high schools and to encourage inclusive leadership development and opportunities.

### **Methodology Overview**

This project used a correlational explanatory design to survey urban and rural Colorado public school district personnel. A correlational explanatory design was chosen to determine if a relationship exists between variables by forming groups based on quantitative survey results, which could later be used to guide purposeful sampling for future qualitative research (Creswell & Plano Clark, 2011). The design consisted of a 5-question, cross-sectional quantitative survey utilized to collect and analyze urban/rural schools and the assignment of SES to adolescents serving in specific school leadership positions (class/club officers, student council, team captains). As noted by Creswell and Plano Clark (2011), the quantitative data provided a general understanding of the research problem through an advocacy or emancipatory worldview by representing the marginalized low SES adolescent leadership group and encouraging future research to promote change.

### **Definition of Relevant Terms**

For the general purposes of this study, the following terms were defined:

*Adolescent student leadership:* Students between 13 and 19 years of age considered in the transitional stage from childhood to adulthood (All About Adolescence, 2014) serving in positions of authority in Colorado public high schools.

*Socioeconomic status (SES):* The social standing or class of an individual or group measured by education, income, and occupation (Education & Socioeconomic Status, 2014).

*Low SES:* For the purpose of this study, low SES was defined as those students who financially qualify as recipients of free and reduced lunch benefits (Hoffman, 2012).

*High SES:* For the purpose of this study, high SES was defined as those students who do not financially qualify as recipients of free and reduced lunch benefits (Hoffman, 2012).

*Urban:* For the purpose of this study, urban classification included Denver metro, urban-suburban, and outlying cities as categorized by the Colorado Department of Education (Data and accountability, 2013).

*Rural:* For the purpose of this study, rural classification included outlying towns and remote communities as categorized by the Colorado Department of Education (Data and accountability, 2013).

### **Assumptions**

Several assumptions were made about the methodology, participants, instrument, and analysis of this study. It was assumed that the chosen research methodology was based on epistemological norms about what constitutes legitimate knowledge and ways of acquiring that knowledge (Bryant, 2004), and that reality was something that could be studied objectively. Therefore, it was assumed that the researcher remained independent

of research participants and their environment in order to predict, explain, and understand the occurrences of low SES adolescent leadership in Colorado public high schools.

Additionally, it was assumed that the participating high school personnel who answered the survey questions did so in a manner that honestly and accurately reflects their professional opinions (Creswell, 2012). Confidentiality was preserved and participants were volunteers who were able to withdraw from the study at any time and with no ramifications. It was also assumed that the sample used in this study was representative of the population from which inferences within this study were made. Finally, it was assumed that the sample data was suitable for analysis using a Pearson's chi-square test, and that this study could be replicated and generalizability among high school adolescents in positions of leadership was possible (Creswell, 2011).

### **Delimitations and Limitations**

Delimitations of this study involved the unit of analysis, participants, and the geographical placement of the research. The unit of analysis was confined to a survey of Colorado public high school personnel regarding the adolescent leadership during the 2014 fall school semester. The delimitation of participants as observers rather than subjects allowed the research to look at low SES adolescent leadership from an education professional perspective. Finally, the decision to research the particular geographical area of Colorado public high schools permitted the researcher to look at a large diversity of schools and communities within the confines of one state.

The limitations of this study included the lack of prior research studies on the theme, sample, instrumentation, time constraints, and analysis. As noted in the following chapter, a tremendous gap exists in research relating to low SES adolescent leadership,



thereby limiting the foundation for understanding the research problem being investigated within this study. The scope of this study was limited to personnel employed by public schools in Colorado who voluntarily participated in the survey. Additionally, the study was limited by the professional opinions of school personnel through their honest and accurate responses. The electronic survey return rate was a limitation due to potential institutional barriers or technical restrictions (Creswell, 2012). The research time constraints may have limited the extensive internal research approval process required of certain urban school districts.

The results of this study were also limited by the ability of the methodology to address the problem and purpose, as well as the procedure selected to find statistical significance between urban and rural high school population and the occurrence of low SES adolescent leaders (Creswell, 2012). The use of school SES percentage categories as opposed to the actual percentage limited the ability to perform correlational analyses using linear regression or similar techniques. Using the actual school SES percentage, even if rounded to the nearest 5%, would have made it possible to perform a multivariate analysis. In addition, limited data in some of the categories restricted analysis. In retrospect, the survey questions requesting school leadership positions and overall school SES percentages restricted the ability to perform a multi-variable regression analysis. This limitation should be taken into consideration in future research.

### **Leader's Role and Responsibility in Relation to the Problem**

The nationwide increase in class inequality over the past half-century has created a tremendous class-based opportunity gap among adolescents (Putnam, 2015). In spite of numerous programs designed to reduce poverty and increase educational opportunities

for low SES students, national issues related to poverty continue to place demands on individual public school systems. These issues require effective leadership practices from local school administrators, staff, and adolescents.

Adolescent leaders of school activities are frequently peer-nominated by popularity or by the influence of perceived power (Corsaro & Eder, 1990) and are expected to lead without proper training or support. School leaders including administrators and teachers are capable of changing the approach to adolescent leadership by incorporating a leadership curriculum that identifies potential leaders, provides ongoing support and training, develops leadership skills through school and community partnerships, and eliminates pay-to-play policies for extracurricular activities. By implementing the proposed solution using change theory strategies, local leaders can more effectively develop low SES adolescent leaders with the intent of influencing their futures as productive adult members of society.

### **Summary**

Research has shown that students from low SES backgrounds are associated with lower academic achievement and slower rates of academic progress as compared with higher SES communities (Morgan, Farkas, Hillemeier, & Maczuga, 2009). Nonetheless, an absence in research of low SES student leadership is evident, creating the rationale for this study. This study consists of five chapters and four appendices. Chapter 1 presented the background of the problem and provided a statement of purpose, while the research questions and hypotheses considered the occurrence of adolescent leadership as it relates to SES. Also included in Chapter 1 was an overview of the method, definition of terms, assumptions, delimitations, limitations, and the significance of the study.

In Chapter 2, the premise that a link exists between low SES students and academic achievement is further explored and expanded to include additional research indicating that socioeconomic desegregation and family environment may also sabotage low SES student success, despite the numerous educational programs instituted to help this population. Additionally, research will show that leadership transference from adolescence to adulthood is highly involved, especially for those from low SES backgrounds. Nonetheless, the problem remains that a gap connecting SES and adolescent leadership research exists.

Chapter 3 reviews the methodology used to collect and analyze data, including a description of participants, data collection tools, variables, data collection procedures, the data analysis plan, assumptions, and ethical considerations. Chapter 4 presents the summary and presentation of findings by answering the research questions using both the Pearson's chi-square cross-tabulations and Fisher's exact tests. Reliability and validity of the research is discussed. A post-hoc analysis of data for the various leadership activity types is also included in Chapter 4. Supported by the data collected, a solution to the problem is proposed. Existing support, policies, potential obstacles, and financial issues related to the proposed solution are also examined. A change strategy is introduced and includes the socio-ecological model of education along with an explanation of change theory as it relates to the proposed solution.

Chapter 5 concludes the study with an interpretation of the findings and a detailed process, timeline, roles and responsibilities of key players, and an evaluation cycle necessary for effective implementation of the solution. Chapter 5 discusses implications for action and recommendations for future research. Four appendices provide additional

information including the invitation to participate in research, online survey consent form, a copy of the survey, and the detailed activity-type categorization for individual survey responses.

## CHAPTER TWO: LITERATURE REVIEW

### **Introduction**

Participating in leadership as an adolescent improves a student's chances of getting into college and builds a foundation for future leadership development (Murphy & Johnson, 2011). However, fewer low SES adolescents are graduating from college or working in careers that narrow the opportunity gap (Putnam, 2015). In an effort to better understand this problem, this study focused on leadership occurrences among low SES adolescents. The specific purpose of this study was to determine whether there was a difference between the number of adolescent students from low and high SES households who served in positions of leadership in urban and rural Colorado public high schools.

The literature search failed to reveal significant research on the topic of low SES and adolescent leadership, guiding the research in a direction that involved a deeper understanding of low SES classification as it relates to a variety of aspects of education including leadership development. Four themes emerged from the scholarly literature that may influence the advocacy of and encourage additional research on current and future low SES adolescent leaders: socioeconomic desegregation, educational programs, family environment, and post-secondary attrition rates.

### **Purpose of the Study**

The purpose of this quantitative study was to determine whether there was a difference between the number of adolescent students from low and high SES households who serve in positions of leadership in urban and rural Colorado public high schools. The study included quantitative survey data gathered from Colorado public high school personnel.

### **Aim of the Study**

The aim of this study was to assist schools and community leaders in recognizing the occurrence of adolescent leadership within Colorado public high schools and to encourage inclusive leadership development and opportunities.

### **Socioeconomic Desegregation**

The idea of economically integrated schools runs deep in American history, beginning with Horace Mann's 1837 proclamation that public education should be "the great equalizer" (Kahlenberg, 2012). Following the infamous 1954 decision in *Brown v. Board of Education* that initiated racial desegregation in U.S. public schools (Kluger, 2004), numerous attempts have been made to equalize educational opportunities (McDermott & Nygreen, 2013; Rebell, 2012; White House Initiative on Educational Excellence for African Americans, 2014). However, a shift in desegregation from that of race to socioeconomic status is becoming the standard for establishing student composition of schools, as class-based residential segregation has been steadily increasing since 1970 (Bischoff & Reardon, 2014; Caldas & Bankston, 2003; Crosnoe, 2009; Rotherham, 2010). Putnam (2015) acknowledged that studies have consistently found tremendous gaps in the academic outcomes between low and high SES schools. However, research on the effectiveness of socioeconomic desegregation has presented varied results.

### **Academic and Psychosocial Differences in SES Desegregation**

Few deny that the effect of poverty on a child's learning is profound (Rebell & Wolff, 2014). By placing students from low SES backgrounds into higher SES schools, one might expect student outcomes to improve (Caldas & Bankston, 2014; Zwick &

Himelfarb, 2011). However, according to Crosnoe (2009), SES desegregation negatively affects low SES students in a variety of areas. In the instances in which low-income students in higher SES schools demonstrated academic and psychosocial differences from low-income students in lower SES schools, Crosnoe's (2009) research indicated a significant disadvantage for the low-income students in the higher SES schools. Interestingly, no racial/ethnic differences were found in high-SES schools. Crosnoe (2009) proposed three theories of socioeconomic desegregation:

1. Low SES students may experience greater academic competition or may become stigmatized in a middle-class school rather than in a school with a similar SES background.
2. Low SES students may have a double disadvantage of also being additionally classified as a minority.
3. Low SES students' psychosocial adjustment and enrollment in advanced coursework may decrease as the proportion of their public schools' student body with college-educated, middle- or high-income parents increases.

Crosnoe (2009) found that the school SES was measured categorically, which ignores potential variation in school composition. Additionally, there appeared to be an uneven distribution of higher-SES schools, as that demographic was far above the majority of the students studied by Crosnoe (2009).

Contrary to Crosnoe's (2009) article, Kahlenberg (2012) stated that socioeconomic integration is one of the most important tools for improving academic achievement and life chances of students, emphasizing that the major problem with American schools is the combination of poverty and economic segregation. Kahlenberg

(2012) argued that low-income students attending more-affluent schools significantly outperformed low-income students who attended higher-poverty schools, while the achievement of middle-class students in integrated schools did not decline, nor was there evidence that it improved. Kahlenberg (2012) continued by stating that children surrounded by low SES classmates are more likely to be disruptive, to have a limited vocabulary, and to move in the middle of the school year. Additional research found a close relationship between the influences of school peers and academic achievement (Caldas & Bankston, 2014). Often times, a teacher's *stereotype vulnerability*, or an artificially low expectation of an underrepresented group, influences the group perceptions and performance (Steele, 1995). Auwarter and Aruguete (2008) found that teachers often develop expectations of student potential based on student SES or gender, thereby, debilitating student academic opportunities for success. As a result, low SES schools are often unable to recruit and hire highly effective educators, creating a cycle of failure for low SES children.

To cut segregation by half, approximately 25% of low SES students would be required to transfer to more-affluent schools and another 25% of higher SES students would need to transfer to schools in disadvantaged neighborhoods (Kahlenberg, 2012). In spite of the increased cost to school districts, Kahlenberg (2012) argued that the long-term public return of investment would become evident as more low SES students graduate from high school and contribute to society in a positive way. He also stated that although most people agree that racial, ethnic, and income diversity enriches the classroom, federal policy does not currently require socioeconomic desegregation.



Similar to Kahlenberg's (2012) argument, researchers in Australia studied the probability of high school completion using the predictors of student SES and school quality (Lim, Gemici, & Karmel, 2014). Not surprisingly, students in better schools performed better academically. What was notable about this study was that academic school quality had a significant differential impact for students from low SES backgrounds. The gap between low and high-SES student probability of high school completion is vastly narrowed as school quality increases, indicating an advantage for school desegregation. However, the logistics of socioeconomic desegregation may be the greater concern.

Rotherham (2010), co-founder of Bellwether Education, a nonprofit organization working to improve educational outcomes for low SES students, has published hundreds of articles related to educational policy in the United States. Rotherham (2010) agreed with research stating that as the poverty levels increase, academic achievement decreases, noting that the reasoning for this decrease was that low SES students are more difficult to educate, low SES schools have fewer enrichment opportunities and resources, and that the most highly effective teachers typically are not drawn to low SES schools. Yet, Rotherham (2010) declared that income-based school integration does not work, nor is it practical for several reasons:

1. Quality schools are not in close physical proximity of low SES populations.
2. If given the opportunity to attend quality schools, the space is limited, and the competition is fierce.
3. In many districts, poverty is so great that integration cannot work, as there are not enough non-low SES students to balance and truly integrate.

4. Parents and school administrators are resistant.

Finally, Rotherham (2010) stated that although segregated schools are not preferred, socioeconomic desegregation is logistically unrealistic. He proposed that educational reform for low SES students should include improving teacher effectiveness and providing better curriculum, rather than changing housing policy or school district boundaries. In other words, education policy should work towards bringing good schools to low SES students, rather than require socioeconomic desegregation.

Although literature on the effectiveness of socioeconomic desegregation varies, the relevance of these studies indicates that more needs to be done to reverse the effects of low SES on adolescent success. With billions of dollars invested, years of scholarly research, and the implementation of a plethora of government and individual school educational programs, students from low SES backgrounds continue to lag behind educationally. Research indicates that a number of low SES educational programs are successful, while other attempts to improve low SES student outcomes have failed to bridge the gap in academic and leadership success.

### **The Effectiveness of Low SES Educational Programs**

For centuries, the federal government has continually implemented new education curriculum requirements, raised and changed academic standards, and mandated compliance to lessen the socioeconomic gaps among its students. The Common School movement of the mid-1800s created the free public education system (Mann, 1848). At the turn of the twentieth century, secondary education became universal through the High School movement, which Goldin and Katz (2008) described as the key to socioeconomic equality in America. The Land-Grant College movement, including the G. I. Bill,

intended to provide post-secondary education opportunities to many individuals classified as low SES (Thelin, 2011). Within the last half century, special attention has been given to the education of disadvantaged children with the establishment of abundant government and private educational programs to assist those in poverty. Extensive research has been done on the effectiveness of these programs, although the results were as varied as the programs themselves. To narrow the scope, this review of the literature was confined to programs associated with low SES educational programs and not programs related exclusively to disadvantage due to race, disability, or gender.

Fifty years after President Johnson's declaration of the "War on Poverty", the Council of Economic Advisers (CEA, 2014) produced a progress report proclaiming that the programs initiated in 1964 have been successful, even though, in 2012, there were nearly 50 million Americans living below the poverty line, including over 13 million children (CEA, 2014). According to the report, poverty declined more than one-third since 1967. Yet, the report did not indicate whether the decline was a result of hard work, education/skills attainment, or government financial assistance. The report acknowledged concerns that these programs may discourage employment, but indicated that research has found that this was not the case for most programs (CEA, 2014).

The programs instituted by President Johnson intended to provide economic resources to those identified as low SES, as well as provide a means to improve the education, health, skills and jobs of those in need (CEA, 2014). The major initiatives that came out of the War on Poverty included the Social Security Act of 1965 (Medicare and Medicaid), the Food Stamp Act of 1964 (now referred to as the Supplemental Nutrition Assistance Program), The Economic Opportunity Act of 1964 (Community Action

Program, Job Corps, Volunteers in Service to America), and the Elementary and Secondary Education Act of 1965. In the interest of this research project, the focus on education programs was a priority, recognizing that education's role in preventing poverty has increased over the past 50 years. The CEA report (2014) stated that those with college degrees have a greater potential for higher earnings than those with less education. Hence, success of the educational programs for low SES students is of utmost importance. The report did not address any educational program success other than Head Start, which is a federal grant program established to provide early childhood education, nutrition, social, and parental involvement services to low SES children (Improving Head Start for School Readiness Act, 2007). The report suggested that the consensus of Head Start program research showed that the program has been considered a success for much of its duration, as Head Start participants were more likely to graduate from high school and attend college (CEA, 2014).

In response to the current state of poverty, President Obama has continued Johnson's platform by implementing a number of new programs intended to reduce poverty, including the Affordable Care Act, Child Tax Credit, Early Head Start-Child Care Partnerships, American Opportunity Tax Credit, School Improvement Grants, Promise Neighborhood Program (CEA, 2014) and the Obama Administration's American Recovery and Reinvestment Act (Engberg & Wolniak, 2014). Most recently, during the Summits on Educational Excellence for African Americans, President Obama established the White House Initiative on Educational Excellence for African Americans (2014). The CEA report (2014) detailed President Obama's desire to have the United States lead the world in college completion by 2020 by persisting to implement new curriculum

requirements, raise and change academic standards, and mandate compliance; whereas, further research suggested that the nation's leaders are not focusing enough on the rapid rise of poverty (Watson, 2014).

Comparable to the CEA report, additional literature stated that there are nearly 50 million Americans living in poverty. Contrary to the CEA report, literature stated that poverty is declining and food stamp utilization is at an all-time high with 46.7 million participants (Watson, 2014). Additionally, research found that the achievement gap between low SES and affluent children widened over the last decade, specifically in standardized test scores where the gap has grown by 40% (Reardon, 2011). Watson (2014) stated that the achievement gap based on income is now greater than it is for race. With nearly 20% of the nation's population classified as low SES, there is immediacy to finding viable solutions to help poor children succeed academically. Watson (2014), however, indicated that national programs are not the solution, as congressional action is required for national initiatives to take place creating an extensive time delay and political deadlock in most circumstances. He continued by mentioning that although the federal Head Start program began fifty years ago, it has never been fully funded to reach all the children in the target income group. Billions of dollars are spent annually without an effective plan for the program (Watson, 2014). Watson (2014) recommended that the most effective approach to the educational gap and poverty is for states and communities to participate in more localized programs with proven success, rather than wait for the creation of additional federal programs. Rebell and Wolff (2014) agreed by stating that school improvement efforts for low SES students should continue, but not until the real issue of understanding the achievement gap is first solved.

Researchers suggested that the extensive pattern of childhood poverty inhibits educational opportunity and educational achievement, and until the issue of poverty is resolved, raising academic standards and implementing costly programs will not solve the achievement gaps between advantaged and disadvantaged students (Rebell & Wolff, 2014). Stating that the No Child Left Behind initiative has made limited progress overall, Rebell and Wolff (2014) agreed with Watson (2014) that the solution for educational opportunity for low SES students involves the local communities and state agencies, particularly early childhood education, physical and mental health care, expanded learning time opportunities, and family engagement. However, the cost to implement more programming on the state and local level continues to be an obstacle, questioning if there is a viable solution to reducing the education gap of low SES students.

The disparate research on the success and failure of the 50-year war on poverty is well documented. Because SES is based on the combination of family income, parental education level, and parental occupation (Demarest, Reisner, Anderson, Humphrey, Farquhar, & Stein, 1993), the general consensus of the research reviewed is that family SES plays a vital role in a child's education and leadership development.

### **Family Environmental Impact on Education and Leadership Development**

From the mid-1960s to the 1980s, the American family experienced an enormous change. A half-century ago, most households consisted of a breadwinner dad, a homemaker mom, and the kids. Divorce was uncommon and unplanned pregnancies were rare, regardless of SES (Putnam, 2015). Today, the division of class is evident in family structure as higher SES American children are more likely to live with two college-educated parents earning two incomes. In the lower SES households, children more often

live with at most one of their biological parents with one income (Putnam, 2015).

Numerous studies have found that family SES affects the educational achievement and leadership development of children. Families with an average or an above-average SES generally have parents who are educated, and are therefore better equipped to assist their children academically, as well as provide additional exposure to cultural, academic, and leadership opportunities. In addition to obvious financial constraints, research has shown that students from low SES households are further limited by lower parental academic expectations (Davis-Kean, 2005; Froiland & Davison, 2014; Kim, Sherraden & Clancy, 2013; Mello, 2009; Stull, 2013), fewer family/community assets and resources (Huang, 2013; Kim, Sherraden & Clancy, 2013), and limited knowledge of and exposure to leadership development opportunities (Oliver, Gottfried, Guerin, Gottfried, Reichard, & Riggio, 2011; Zhang, Ilies, & Arvey, 2009).

### **Parental Expectations**

Recently, a study looked at parent educational expectations for approximately 22,000 students categorized by SES and achievement (Stull, 2013). Demographic information, achievement records, teaching practices, and school structure and functioning data were collected in three stages from students, parents, classroom teachers, and administrators. To determine the relationship between achievement, family SES, and educational expectations, the study broke down the complex data into three categories of low, middle, and high SES and three categories of low, middle, and high achievement. Stull (2013) concluded that parental expectation is a function of the family SES, stating that a student's family SES had both direct and indirect effects on achievement. Perhaps the most surprising result of this study was that 87% of high SES parents of low-

achieving students expected their child to earn at least a bachelor's degree. Whereas, low and middle SES parents had much lower expectations for their high-achieving students (Stull, 2013). By understanding that family SES impacts parental expectations of a child's academic success, schools may be better equipped to compensate for these differences. However, a more relevant and poignant discussion may involve why parental expectations vary among different SES groups.

Kim, Sherraden, and Clancy (2013) recognized that a large body of research has identified the connection between family SES and parental educational expectations, but these researchers chose to investigate what specific factors explained parental expectations beyond race/ethnicity or SES classification. By surveying over 2500 caregivers (primarily mothers) of children in Oklahoma that represented white, African American, American Indian, and Hispanic ethnicities, researchers found that educational expectations varied among different racial and ethnic groups. The results also found that SES was a greater indicator of parental expectations over race or ethnicity (Kim, Sherraden, & Clancy, 2013). Further, given the same economic resources, parental educational expectations were more closely related to SES regardless of race or ethnicity. Additionally, this study discovered that physical family assets might be more significant in influencing educational expectations than income alone. For example, health insurance coverage, parental education level, and speaking English in the home, may have a greater impact on parental educational expectations. Finally, Kim, Sherraden, and Clancy (2013) concluded that educational expectations might be adjusted if changes occur within family SES, a child's academic ability, or the relationship between parent and child.



A similar study observed the effects of parental beliefs and behaviors on child achievement based on family SES and parental education (Davis-Kean, 2005). By utilizing data collected on 8,000 families and individuals in a 30-year study from the Child Development Supplement of the Panel Study of Income Dynamics, Davis-Kean (2005) was able to evaluate parental education, family income, child demographic information, parental expectations, parental behaviors (such as reading and playing), and child achievement. This study determined that parental education indirectly influenced child achievement based on parental achievement beliefs and an academically and emotionally rich home environment. Contrary to other studies, Davis-Kean (2005) suggested that many low SES children still perform well in school regardless of limited educational resources within the household, indicating that negative effects of income can be minimized within an emotionally stable and educationally stimulating home. Furthermore, as children grow, parental education level may have a greater impact over family SES on achievement. Parents are more likely to assist adolescents with homework, as well as provide a higher cognitive environment within the home, thereby indicating the value of family resources on educational outcomes (Davis-Kean, 2005).

### **Family Resources**

Huang (2013) found that household assets (vehicles, electronic equipment, appliances) might play a pivotal role in educational attainment, stating that low SES children often live in less stimulating environments with fewer learning resources, such as books, educational toys, and computers. According to Huang (2013), children from households with greater assets are more likely to have a higher self-esteem, self-efficacy, and future orientation, which contribute to academic success. By examining two cohorts

(1984 and 1994) of 2466 adolescents and young adults from a longitudinal study spanning a decade, Huang (2013) studied the intergenerational relationship between parent and child schooling based on household income and assets. The results indicated that the connection between household assets and educational attainment holds true, in that low SES children are academically limited as household assets are limited. The findings differed depending on maternal college completion and student gender. Interestingly, Huang (2013) concluded that female children from households with more financial resources and assets had an increased probability of graduating from college than male children, particularly in the 1994 cohort whose mothers also graduated from college, indicating that educational mobility is largely driven by women.

Further research discovered that students from lower resource communities had aspirations that exceeded their expectations (Boxer, Goldstein, DeLorenzo, Savoy, & Mercado, 2011). In other words, adolescents who were at risk socioeconomically were more likely to believe that they were not able to achieve to their desired education level. As a result of their research on aspiration-expectation discrepancy, Boxer et al. (2011) suggested school districts should strive to increase expectations through academic self-efficacy in order to align low SES students with higher aspirations. Research has shown that family SES has a significant impact on student academic achievement (Huang, 2013; Stull, 2013). Additional research finds that family SES also influences leadership development (Oliver et al., 2011; Zhang, Ilies, & Arvey, 2009).

### **Leadership Development**

Oliver et al. (2011) theorized that a supportive family (one with shared decision making, communication, support, and low levels of conflict) would produce more

transformational leadership qualities. Additionally, an intellectually and culturally stimulating home atmosphere during adolescence would produce higher levels of transformational leadership qualities in early adulthood, and these processes would be expressed through a positive self-concept. The research found adolescent family context was related to transformational leadership potential in early adulthood, as well as a more positive adolescent self-concept. Observing over a hundred participants for nearly two decades produced a thorough and reliable analysis. An impressive number of legitimate strategies were utilized to measure the various indicators to validate the three theories presented in the study. Thus, these findings attempt to posit that the inclusion of low SES families in leadership development programs will contribute to future successes among this group of adolescents.

Participating in leadership as an adolescent improves the student's chances of getting into college and builds a foundation for future leadership development (Murphy & Johnson, 2011). Early developmental factors including genetics, parenting style, and early learning experiences are representative of the influence in future leadership effectiveness. Although genetics and early influences contribute to leadership in adulthood, development continues to occur as new behaviors and skills are learned throughout a life span (Murphy & Johnson, 2011).

Zhang, Ilies, and Arvey (2009) studied the moderating effects of the familial social environment during adolescence on the genetic influences on leadership role occupancy in adulthood. After studying 89 pairs of adult male twins, researchers found that genetic influences played an inferior role to the environment in which adolescents were raised in a home with a higher SES and more parental support, but genetic

influences were greater for those raised in lower SES environments (Zhang, Ilies, & Arvey, 2009). The findings of this study pose significant implications regarding the influence of genetics and adolescent environment on adult leadership. By creating a more enriching, supportive environment for adolescents, leadership development opportunities for adults may be more successful. Because this study was one of the first to consider the role of the developmental environment's influence on the genetic influence on leadership, future studies on low SES and adolescent leadership are warranted.

Interestingly, the review of these scholarly articles uncovered differing results concerning public school socioeconomic desegregation, low SES educational programs, and family environment. Although the United States continues to fight the War on Poverty, a tremendous gap remains between low SES adolescents and academic achievement, including decreased post-secondary attrition rates, in spite of increased financial aid, university assistance, and other means of support.

### **Post-Secondary Attrition of Low SES Students**

A bachelor's degree is becoming essential for economic prosperity and social mobility (Wells & Lynch, 2012). According to the Federal Reserve Bank's Survey of Consumer Finances (2013), the net worth of college-educated American households with children increased by 47% between 1989 and 2013, while the net worth of high school-educated households fell by 17%. Regarding average wages, a college degree was worth 50% more than a high school diploma in 1980, but by 2008 the college degree was worth 95% more (Autor, 2010). It is estimated that within the next few years, over 60% of jobs in the United States will require a college education, creating a shortage of around 20 million college-educated adults within a decade (Moore, Bridgeland, & Dilulio, 2010).

Currently, only about 10% of low SES students earn a college degree by age 24 (Rotherham, 2010). In contrast, according to the National Center for Education Statistics (2012), the national graduation rate among first-time, full-time undergraduate students who began their post-secondary education at a 4-year, degree-granting institution was 59%. Research has suggested a number of explanations for this disparity that coincides with previously reviewed literature on socioeconomic environment (Engberg & Wolniak, 2014; Vignoles & Powdthavee, 2009; Walpole, 2003; Wells & Lynch, 2012) and ineffective or unsubstantiated post-secondary preparation/outreach programs (Domina, 2009; Dyce, Albold, & Long, 2013; Muhlhausen, 2012). Yet, the SES achievement gap remains even though many post-secondary institutions vigorously attempt to assist low SES students, and the federal and state governments continue to provide financial aid and program support.

### **Socioeconomic Environment**

With few low SES students enrolling and graduating from post-secondary institutions, Walpole (2003) studied student co-curricular and academic activities of college students as they relate to SES environment, including parental expectations, student aspirations, and educational attainment with the hope of understanding the gap in post-secondary attrition among low SES students. Walpole (2003) conducted a longitudinal quantitative study, which included three surveys of 12,376 student respondents from 209 four-year institutions across the United States and found that SES background plays a tremendous role in college experiences and outcomes. Walpole (2003) concluded that low SES students worked more, studied less, and had lower GPAs than their high SES peers. As a result, nine years after college entry, low SES students

reported lower incomes, lower levels of educational attainment, and lower levels of educational aspirations than those students did from higher SES backgrounds. This study discovered how students from low SES backgrounds experience college differently than their higher SES peers, which inhibits low SES students' social mobility. For these reasons, post-secondary institutions and policymakers should consider ways in which the needs of low SES students can be better met in order to ensure matriculation and future success.

Education researchers from the United Kingdom found that student SES influences post-secondary attrition regardless of geography. Vignoles and Powdthavee (2009) investigated post-secondary dropout rates among SES groups, while accounting for prior academic achievement, family economic and social background, and university characteristics. The sample consisted of nearly 122,000 students attending 120 post-secondary institutions in the United Kingdom. Researchers found that a significant gap in post-secondary matriculation exists between advantaged and disadvantaged students in the U.K., even though students' prior academic achievements were similar. Vignoles and Powdthavee (2009) determined that the difference in dropout rates was a result of parental occupation and/or academic preparation (versus achievements), indicating that those students with parents working in managerial/senior official positions were less likely to drop out than students with parents working in sales or customer service. Furthermore, low SES students typically did not enroll in advanced coursework while in secondary school, resulting in a disadvantage entering post-secondary institutions.

High school SES has a significant influence on student college enrollment, according to researchers Engberg and Wolniak (2014), who claimed that schools with

significant economic, financial, informational, social, and cultural resources compensate for a deficit in resources for low SES students. Using existing data from the Educational Longitudinal Survey of 2002 (ELS), Engberg and Wolniak (2014) revealed that lower SES schools reported the least amount of human, cultural, and social capital with the fewest number of students enrolling in post-secondary education. Additionally, they found that high SES schools have the strongest organizational effects in relation to academics, while lower SES schools benefit from aspirational and social influences, surmising that low SES schools should focus on creating supportive environments that encourage post-secondary enrollment and attendance (Engberg & Wolniak, 2014). Although some low SES schools provide college outreach programs that contain these elements, the efficacy of these programs has been highly debated.

### **Post-Secondary Preparation/Outreach Programs**

Domina (2009) stated that there are over 1,000 active college outreach programs in the United States designed to encourage and support low SES students to prepare for, enroll in, and graduate from college. Domina (2009) raised the question as to the effectiveness of such programs, recognizing that little research has been conducted on the topic. Muhlhausen (2012) agreed, stating that federal social programs are not appropriately evaluated to determine effectiveness but continue to be funded without scientific assessments. He suggested that scientifically rigorous impact evaluations are necessary and suggested that Congress require timely and aggressive multisite experimental evaluations for all social programs.

Many college outreach programs are funded from multiple sources with varying designs but subscribe to the ideal that the intervention of low SES students can ultimately

affect the future educational careers of these students (Domina, 2009). Domina (2009) analyzed four outreach programs: Quantum Opportunities Program (QOP), Upward Bound (UB), Talent Search (TS), and Gear Up (GU). QOP is a community-based organization, whereas UB, TS, and GU are all U.S. Department of Education TRIO grant programs.

By conducting two quasi-experiments from data obtained from the same Educational Longitudinal Survey of 2002 (ELS) used by Engberg and Wolniak (2014), Domina (2009) calculated the effects of outreach program participation and the effects of school-wide outreach. He found that all college outreach programs attempted to improve low SES student educational achievement and increase the probability of enrollment in post-secondary educational institutions. Through bivariate comparisons, Domina (2009) found that program participants were not as successful as non-participating peers. This conclusion was surprising considering most outreach programs target students who have demonstrated potential for educational success. Research on school-wide outreach programs found that the programs had little impact on college-motivated students but showed slight benefits for those students who were initially uninterested in post-secondary education. Overall, the results suggested that outreach programs and school-wide outreach have little measurable effect on participant educational outcomes (Domina, 2009).

### **Summary**

The review of literature exposed four themes relating to low SES adolescent education and leadership: socioeconomic desegregation, educational programs, family environment, and post-secondary attrition rates. Despite the importance of leader



development in the early years, there was an absence of significant research on adolescent leader development activities or leadership effectiveness (Murphy & Johnson, 2011). Nonetheless, the limited research incorporated the influence of family environment on various aspects of adolescent academic and leadership experiences. By synthesizing the literature, common relationships became evident. Student/family SES combined with school SES may influence student academic success and student leadership opportunities. The relevance of these studies is obvious, yet specific causal inferences were not thoroughly examined (Gerring, 2012). Rather, the research found that although family SES was influential, specific explanations were not provided, so additional research is warranted. The intention of this study was to examine the statistical occurrence of low SES adolescents in positions of leadership among Colorado public high schools.

The following two chapters will discuss the research methodology and findings. The final chapter will provide a summary of the study and the findings with recommendations for further research and implications for action.

## CHAPTER THREE: METHODOLOGY

### **Introduction**

This chapter discusses the research methodology that was utilized in this study of socioeconomic status and adolescent leadership in Colorado public schools. Research questions and hypotheses were reviewed. The method rationale, description of the participants, data collection tools, variables, data collection procedure, data analysis plan, assumptions, and ethical considerations were explored. Chapter 3 is therefore concerned with methodological choice and its impact on the progression and outcome of the research.

### **Research Questions/Research Hypotheses**

The purpose of this quantitative study was to determine whether there was a difference between the number of adolescent students from low and high SES households who serve in positions of leadership in urban and rural Colorado public high schools. The study included quantitative data gathered from Colorado public high school personnel. The quantitative data was used to test whether low SES negatively influences the opportunities for leadership among adolescents in Colorado public high schools. The research questions were developed from an identifiable gap in research in this discipline with the intention of contributing to a greater understanding of adolescent leadership. These questions guided the design of a survey (see Appendix C), which was distributed to Colorado public school personnel.

#### **Research Question #1 (R1)**

What is the relationship between adolescent students' SES and their opportunity to serve in positions of leadership in rural Colorado public high schools?

**Alternative Hypothesis #1 (H1)**

High SES students are more likely to serve in positions of leadership than low SES students in rural Colorado public high schools.

**Null Hypothesis #1 (HO1)**

There is no relationship between low SES and high SES students' positions of leadership in rural Colorado public high schools.

**Research Question #2 (R2)**

What is the relationship between adolescent students' SES and their opportunity to serve in positions of leadership in urban Colorado public high schools?

**Alternative Hypothesis #2 (H2)**

High SES students are more likely to serve in positions of leadership than low SES students in urban Colorado public high schools.

**Null Hypothesis #2 (HO2)**

There is no relationship between low SES and high SES students' positions of leadership in urban Colorado public high schools.

**Method**

A quantitative method was used to identify data sources, select participants, create surveys, analyze data, and report findings. After the problem was defined and relevant literature was researched, survey questions were developed (Creswell & Plano Clark, 2011). This project utilized a correlational explanatory design (Creswell, 2012) to survey urban and rural Colorado public school personnel. The rationale in choosing this quantitative method stemmed from the desire to objectively measure and numerically categorize data to illustrate the occurrence of low SES adolescent leadership in Colorado

public high schools. The design consisted of one distinct phase: a 5-question, cross-sectional survey with the purpose of identifying leadership among adolescents from different SES households in both urban and rural school districts (Newman & Wylly, 2006). The survey requested demographic information, including SES, of students in specific school leadership positions (class/club officers, student council, team captains). The number of students in specific school leadership positions was compared to the overall percentages of low SES students in each school, as well as to the number of leadership positions overall for all levels of SES.

The purpose of a correlational explanatory design is to measure the degree of association among the variables (Creswell, 2012). By using this approach, the researcher collected and analyzed the quantitative data, including the qualification of urban/rural school and the assignment of SES to adolescents serving in positions of leadership within individual high schools. Justification for choosing this method is clearly explained in the narrative below. As noted by Creswell and Plano Clark (2011), the quantitative data provided a general understanding of the research problem through an advocacy or emancipatory worldview. This worldview was purposeful with the intention of using this project for the greater good, or the Jesuit charism *Ad majorem Dei gloriam* (Byron, 2000).

### **Description/Rationale of Participants/Sample**

During the period of this research project, the Colorado Department of Education (CDE) listed 179 public high school districts (Data and accountability, 2013). One superintendent reported that the district no longer had a high school (K. Ewing, personal communication, October 6, 2014), reducing the public high school district research

population to 178. The CDE categorized the 43 urban school districts as either Denver metro, urban-suburban, or an outlying city and the 136 rural school districts as outlying town or remote. A 5-question survey was sent electronically through SurveyMonkey (<https://www.surveymonkey.com/>) to each school district superintendent. This brief survey was designed to collect data on those students in specific leadership positions (student body president, class officers, and club officers) who receive free/reduced lunch benefits. Although free and reduced lunch eligibility may be considered a poor measure of socioeconomic status (Harwell & LeBeau, 2010), state-defined student economic status is typically determined by free and reduced lunch eligibility (Hoffman, 2012). The state of Colorado's definition of economically disadvantaged for No Child Left Behind Accountability Reporting is determined by free and reduced lunch eligibility (U.S. Department of Education, 2011). This acknowledged limitation did not severely affect the inferences for this study (Preskill & Torres, 1999). Two follow-up requests were sent to non-responders to ensure not only a sufficient response rate, but also a reasonable demographic sampling (Creswell, 2012). The overall response rate of participants was 26% with 89.1% self-identified as rural and 10.9% as urban districts.

According to Dr. Dan Jorgensen, Principle Consultant with the Colorado Department of Education (personal communication, July 25, 2015), individual school district policies determine permission to participate in research. Consent from the Colorado Department of Education is not warranted. Consent was required of all participating districts (see Appendix B). All Colorado public school districts had the opportunity to respond to the survey. In an effort to ensure a significant response rate, the researcher carefully designed the survey, managed survey length, pre-notified school

personnel to establish survey importance, sent an invitation to participate in the survey (see Appendix A), provided ample (3) response opportunities, monitored survey response, and provided feedback, (Rogelberg & Stanton, 2007). Colorado high schools not supported by public funds (private, parochial, home schools), as well as charter schools, were excluded from this study on the basis that the mission and organizational structure of these schools differ from public schools. A comparison would make a valuable follow-up study.

### **Data Collection Tools**

This project utilized a correlational explanatory design (Creswell, 2012) to survey urban and rural Colorado public school personnel. Variables measured included the following information:

- Current position of employment of survey contributor
- School district classification of rural or urban
- Total population of students in grades 9 -12
- Percentage of students in grades 9 - 12 who receive free or reduced lunch benefits
- Top 10 most popular student organizations in each high school and whether the student leader receives free or reduced lunch benefits

Survey data was gathered and recorded for analysis through SurveyMonkey ([www.surveymonkey.com](http://www.surveymonkey.com)), and responses were coded by assigning numeric values to each response. For question five of the survey, respondents were asked to identify the top 10 most popular student organizations, whereas, 234 functional responses were received from 46 respondents and placed in 9 categories: Academic, Athletic, Civic/Service,

Ethnic/Diversity, Outreach, Performing Arts, Spirit/Cheer, Student Government, and Vocational. Pearson's chi-square test was selected for data analysis of the research questions because the sample was sufficiently large and the expected value of each dependent variable was greater than five (Creswell, 2012). Additional analysis of the category responses was completed using Fisher's exact test because some of the expected values were fewer than five (Creswell, 2012).

Microsoft Excel was used to format the data, assign activity-type categories, edit data, and prepare simple data tables. SPSS Statistics Version 22.0 for Windows (<http://www.spss.com/>), was used for the analysis of the quantitative data (Pallant, 2010; Connolly, 2007). Individual school district names or other identifying information was not requested. Any information inadvertently provided that might have been used to potentially identify the district was masked in the dataset used to prepare the statistical analysis (i.e. a school spirit organization with the school mascot in its title). In addition to addressing research hypotheses, the data was reviewed to identify any empirical trends based on activity type, size of school district, and SES status.

### **Variables**

The following independent and dependent variables correspond with the two research questions for the current study. Each research question had one independent variable (either urban or rural) and one dependent variable (either low SES or high SES). All four variables were measured categorically (Creswell, 2012). Respondents were asked to classify the school district as rural or urban, as well as select the student population of the high school from a list of six categories: fewer than 100 students, 101-250, 251-500, 501-750, 751-1000, or more than 1000. Additionally, respondents were

asked to select a percentage of students in grades 9 - 12 who receive free or reduced lunch benefits from a list of five categories to determine the SES of each school participating in this study. The number of occurrences for each combination of the two categorical variables was then analyzed. Those findings are presented in the following chapter.

**Independent Variable 1 (IV1)**

SES of adolescent students in rural Colorado public high schools (SES is further defined by low SES or high SES)

**Dependent Variable 1 (DV1)**

Low SES adolescent students serving in leadership positions in rural Colorado public high schools

**Independent Variable 2 (IV2)**

SES of adolescent students in urban Colorado public high schools (SES is further defined by low SES and high SES)

**Dependent Variable 1 (DV2)**

Low SES adolescent students serving in leadership positions in urban Colorado public high schools

**Data Collection Procedures**

An invitation (see Appendix A) to participate in the current research study was emailed to 179 Colorado public school district superintendents on October 1, 2014, followed by two more invitations on October 8 and November 12, 2014. The invitation contained detailed instructions and the password to access the survey. Prior to beginning the study, each participant agreed to the detailed statement of informed consent (see



Appendix B) before continuing. The opportunity to respond to the survey (see Appendix C) ended on December 8, 2014, and data analysis began immediately following the close of the survey. A follow-up survey was not necessary. The quantitative results determined that the initial research questions were answered, and that a relationship among variables existed (Creswell & Plano Clark, 2011).

### **Data Analysis Plan**

Survey data was gathered for analysis through the electronic survey tool SurveyMonkey ([www.surveymonkey.com](http://www.surveymonkey.com)). A random code was assigned to each response to ensure anonymity of the data respondents. The SurveyMonkey dataset was initially imported into a Microsoft Excel spreadsheet then transferred to SPSS for purposes of completing statistical analyses using the Pearson's chi-square and Fisher's exact tests. Two modifications to the dataset were completed. The first modification was to mask any activity type responses that could reveal the identity of the school district that responded to the survey. These included geographic identifiers in the name of the activity and mascot names. The second modification was to add an "Activity Type" category based on the name of the activity. Respondent misspellings and abbreviations were not modified. The Activity Type categories were determined from the name of the activity and researcher's background in secondary education (see Appendix D).

Database functions available in Excel were used to calculate the percentage of positive responses. Multi-field queries were used to calculate the responses based on two or more independent variables. The multi-field queries were used to prepare tables that showed the responses for a range of variables in one table. For example, a table showing the percentage of low SES students in leadership positions, categorized by the size of the

school or percentage of low SES students in school population was prepared so one could determine if there were empirical trends based on school size or percentage of low SES student in school population. Data was also compiled in a graphical format to help researcher and others visualize data. SPSS Statistics Version 22.0 for Windows (<http://www.spss.com/>) was used to complete additional statistical analysis of the quantitative data responses.

### **Assumptions**

Several assumptions were made about the methodology, participants, instrument, and analysis of this study. It was assumed that the chosen research methodology was based on epistemological norms about what constitutes legitimate knowledge and ways of acquiring that knowledge (Bryant, 2004), and that reality was something that could be studied objectively. Therefore, it was assumed that the researcher remained independent of research participants and their environment in order to predict, explain, and understand the occurrences of low SES adolescent leadership in Colorado public high schools. Additionally, it was assumed that the participating high school personnel who answered the survey questions did so in a manner that honestly and accurately reflects their professional opinions and the condition of the school environment (Creswell, 2012). Confidentiality was preserved and participants who volunteered were able to withdraw from the study at any time. It was also assumed that the sample used in this study was representative of the population from which inferences within this study were made. Finally, it was assumed that the data was suitable for analysis using a Pearson's chi-square analysis and Fisher's exact test, and that this study could be replicated and that

generalizability among high school adolescents in positions of leadership was possible (Creswell, 2011).

### **Ethical Considerations**

The purpose of contemplating and providing ethical considerations was to ensure that the research was not tainted and that no harm occurred as a result of the research process. The following considerations were made involving the Institutional Review Board (IRB), the rights of human subjects, data collection/analysis/interpretation, and the communication of the results. As required by the Institutional Review Board under the Code of Federal Regulations, research records and data will be retained for at least three years after completion of the research and accessible for inspection by authorized representatives (U.S. Department of Health & Human Services, 2005). After which, the software product CyberScrub (<http://www.cyberscrub.com/>) will be utilized for the elimination of electronic data. The researcher ensured that the individual schools and personnel representatives completing the survey remained anonymous. Research data was stored securely to maintain safety and confidentiality throughout the dissertation process on a password-protected computer secured by McAfee (<http://www.mcafee.com/us/>). The most effective way to protect the data was to limit who had access to the data, and the only parties provided access to the information were the researcher and data analyst. Further, all project data was protected from physical damage as well as from tampering, loss, or theft; written data and electronic back-up files were kept in a locked, fireproof filing cabinet. Privacy and anonymity was assured by replacing names and other information with encoded identifiers, with the encoding key kept in a different secure location.

The research proposal and all university-required documents were submitted to Creighton University's IRB committee for review and approval to ensure that those participating in the study were protected (Roberts, 2010). The rights of human subjects were considered through the completion of informed consent documentation and an explanation of confidentiality. No psychological, financial, or social harm to participants occurred as a result of this research. Informed consent, including an explanation of confidentiality, was required of participants in order to complete the online data survey tool. Carefully composed unbiased survey questions were designed by the researcher with the approval of the IRB committee and completed by high school personnel unknown to the researcher. All participant responses were given fair consideration. In the state where this research was conducted, individual school districts had the authority to allow employees to participate in research, so gaining access to each research site/school district was required. As part of the introductory letter sent to each district, written permission was requested. Throughout data collection, codes were utilized to assure confidentiality and reported in aggregate so that no one school was identified either by name or by demographics. Data was analyzed then validated using an external auditing strategy (Creswell, 2012). Efforts were made to ensure the communication of the results was honest and complete through the assistance of multiple editors, appropriate knowledge of plagiarism laws, and avoidance of assumptions or biased language.

### **Summary**

This project utilized a correlational explanatory design (Creswell, 2012) to survey urban and rural Colorado public school personnel. The purpose of this study was to determine whether there was a difference between the number of adolescent students

from low and high SES households who serve in positions of leadership in urban and rural Colorado public high schools by answering the following research questions:

- What is the relationship between the SES of adolescent students in rural public high schools in Colorado and adolescent students serving in leadership positions in rural public high schools in Colorado?
- What is the relationship between the SES of adolescent students in urban public high schools in Colorado and adolescent students serving in leadership positions in urban public high schools in Colorado?

Independent and dependent variables were identified. The data was collected and recorded using SurveyMonkey and analyzed using Pearson's chi-square and Fisher's exact tests through Microsoft Excel and SPSS. Research assumptions and ethical considerations were discussed. Chapter 4 will provide a summary and presentation of the findings, including a post-hoc analysis. The reliability and validity of the study is discussed, and a proposed solution is comprehensively presented.

## CHAPTER FOUR: FINDINGS AND THE EVIDENCE-BASED SOLUTION

### **Introduction**

This chapter will analyze and discuss the research findings from the survey data to determine if there is a difference between the number of adolescent students from low and high SES households who serve in positions of leadership in urban and rural Colorado public high schools by answering the following two research questions:

- What is the relationship between adolescent students' SES and their opportunity to serve in positions of leadership in rural Colorado public high schools?
- What is the relationship between adolescent students' SES and their opportunity to serve in positions of leadership in urban Colorado public high schools?

Following a summary of respondent demographic information, the chapter is divided into four sections. The first section provides a summary and presentation of the findings. The second section details the results for survey questions on leadership. The third section presents an analysis and synthesis of findings. Finally, a proposed solution is systematically presented.

### **Purpose of the Study**

The purpose of this quantitative study was to determine whether there was a difference between the number of adolescent students from low and high SES households who serve in positions of leadership in urban and rural Colorado public high schools. The study included quantitative data gathered from Colorado public high school personnel.

### **Aim of the Study**

The aim of this study was to assist schools and community leaders in recognizing the occurrence of adolescent leadership within Colorado public high schools and to encourage inclusive leadership development and opportunities.

### **Summary and Presentation of Findings**

The summary and presentation of findings section begins with a brief explanation of the data analysis procedures. The presentation of findings portion is organized by survey question, while answering each research question. An analysis of reliability and validity of the data completes this section.

### **Data Analysis Procedures**

Data for the survey was recorded using the electronic survey tool SurveyMonkey (<https://www.surveymonkey.com/>). Responses were coded by assigning numeric values to each response, and the data was then analyzed using SPSS (<http://www.spss.co.in/>) to calculate Pearson's chi-square cross-tabulations and Fisher's exact tests. The detailed analysis uncovered additional pertinent information worthy of particular attention following the initial findings.

In October 2014, a letter of invitation to participate in this project was sent to 179 Colorado public school district superintendents to gain district approval to take part in this study (see Appendix A). One superintendent responded stating that the district high school recently consolidated with another and could not respond to the survey, reducing the possible respondents to 178. The invitation included a detailed description of the study, as well as instructions to complete the 5-question, cross-sectional survey. Each district was provided ample (3) response opportunities. Survey responses were closely monitored and feedback was provided when necessary (Rogelberg & Stanton, 2007).

Once permission was granted, school district superintendents selected school district personnel best suited to complete the survey.

To help identify the participants for the survey, the first question of the survey requested the position of employment within each school district (see Table 1). The appropriate demographic information required to complete the survey is not typically accessible to all school district personnel and thus, the survey requested that a counselor or administrator complete the survey. Establishing authority prior to examining responses was imperative.

**Table 1**

*Current Position of Employment*

Position of employment	(n=46)
Counselor / Registrar	5 (11%)
High School Administrator	30 (65%)
Superintendent	11 (24%)

The second question provided respondents the opportunity to self-identify their school district as either rural or urban with 89.1% self-identified as rural and 10.9% as urban. With a positive overall response rate of 26%, Table 2 shows calculations for the margin of error for question 2.

**Analysis of Reliability and Validity of Data**

The consistency and accuracy of the survey used in this research contributed to the reliability and validity of the data (Creswell, 2012). The same survey was administered to each participant. The survey contained good content validity in that the



Table 2

*Calculation of Margin of Error for Sample*

Variable	Value
p - sample proportion	0.50
n - sample size	43.00
N - population size	178.00
Calculations	Value
Margin of error - infinite population	15.2%
Finite population correction	87.3%
Adjusted margin of error	13.3%

*Note:* p assumed to be 0.5 since sample proportion was not known (Salkind, 2010).

data measured what it was intended to measure. A potential threat to the construct validity of this research may be generalizability with only 11% of Colorado urban schools responding to the survey within the allotted time frame. Statistical data was externally validated by an expert mathematical analyst unaffiliated with the project. External validation assured that the data was connected to the research questions and the hypotheses were either supported or rejected.

### **Results for Survey Question on Leadership**

To answer both research questions, a Pearson chi-square analysis was performed to determine whether there was a significant association between the two categorical variables from the population without making assumptions about the distribution of the population (Creswell, 2012). Results are shown in Table 3, which illustrates no

statistically significant deviation between the expected frequency and the observed frequency of low SES students in leadership roles was evident in both urban and rural schools.

Table 3

*Statistical Analysis of Low SES Student Leaders in Urban and Rural School Districts*

School district classification	Low SES student leaders	Other student leaders	Total
Urban	10	11	21
Rural	118	95	213
Total	128	106	234

*Note:*  $\chi^2 (1, N = 234) = 0.467, p = 0.49$

The expected frequency relates to the number of occasions on which a low SES student would be selected at random from the general student population, whereas the observed frequency is based on the survey responses that indicated a low SES student was in a leadership position. If the observed frequency is close to the expected frequency, then the square of the deviations will be small.

The Pearson chi-square statistic was 0.467, which resulted in an asymptotic significance (2-sided) of 0.494. Generally, asymptotic significance above 0.10 indicates the observed frequency did not deviate in a statistically significant manner from the expected frequency. Based on the Pearson chi-square analysis, the null hypotheses (HO1, HO2) for R1 and R2 were confirmed. There was no statistically significant deviation between the expected frequency and observed frequency of low SES students in leadership roles in rural or urban school districts. However, further investigation revealed

other valuable findings with regards to leadership within certain activity types including Academic, Athletics, Civic/Service, Ethnic/Diversity, Outreach, Performing Arts, Spirit/Cheer, Student Government, and Vocational.

### **Post-Hoc Analyses**

Post-hoc analyses (Klockars & Hancock, 2000) answered the following exploratory research questions.

#### **Exploratory Research Question #1**

What is the relationship between adolescent students' SES and their likelihood to serve in leadership positions at low SES Colorado public schools?

#### **Exploratory Research Question #2**

What is the relationship between adolescent students' SES and their likelihood to serve in leadership positions within certain activity types?

A Pearson chi-square analysis indicated that there was a statistically significant relationship between low SES leadership and the population of low SES students in a given school (see Table 4). The Pearson chi-square for this analysis was 10.01, resulting in asymptotic significance of 0.002. This calculated significance was well below the threshold of 0.10 that is typically used to determine if there is a statistically significant deviation between the observed and expected frequency. In addition, the Fisher's exact test of 0.002 was well below the threshold of 0.10 that would indicate a statistically significant deviation.

These findings suggest that low SES students tend to be more involved in leadership while attending low SES schools. This suggestion supports prior research by Crosnoe (2009) as discussed in Chapter 2 of the current study. Crosnoe (2009) found that

low SES students in low SES schools were at a significant advantage academically and psychosocially than low SES students in high SES schools.

Table 4

*Statistical Analysis of Low SES Student Leaders by SES Student Population*

Low SES student population	Low SES student leaders	Other student leaders	Total
Less than 50%	35	93	128
Greater than 50%	70	36	106
Total	105	129	234

*Note:*  $\chi^2 (1, N = 234) = 35.10, p < .01$

### Student Leaders by Activity Type

Table 5 displays additional post-hoc analyses based on an observation of data for the various activity types within each school identified in survey question five by individual respondents (see Appendix D). The initial tabulation indicated that certain activities were more likely to be led by a low SES student leader than other activities. In particular, Spirit/Cheer, Student Government, Ethnic/Diversity, and Civic/Service activities appeared more likely to have a low SES student leader, compared to a high SES leader. Additional analysis was completed using a single variable Pearson's chi-square test for each activity. The limitation to this approach was that three activities had an observed frequency of fewer than five, indicating the sample size was too small to rely upon the results. Two activities with a sufficiently large sample revealed a statistically significant deviation between the expected and observed frequency (Creswell, 2012). For Student Government and Civic/Service activity types, there was a statistically significant

deviation between the expected and observed frequency. This deviation was demonstrated by an asymptotic significance of less than 0.10.

Table 5

*Statistical Analysis of Low SES Student Leaders by Activity Type*

Activity type	Low SES leader	Observed N	Expected N	$\chi^2$ for activity type
Academic	Yes	17	19.0	$\chi^2 (1, N = 34) = 0.42, p = 0.52$
	No	21	19.0	
Athletics	Yes	21	21.0	$\chi^2 (1, N = 42) = 0.00, p = 1.00$
	No	21	21.0	
Civic/Service	Yes	13	8.5	$\chi^2 (1, N = 17) = 4.77, p = \mathbf{0.03}$
	No	4	8.5	
Ethnic/Diversity	Yes	5	3.5	$\chi^2 (1, N = 7) = 1.29, p = 0.26$
	No	2	3.5	
Outreach	Yes	1	0.5	$\chi^2 (1, N = 1) = 1.00, p = 0.32$
	No	0	0.5	
Performing Arts	Yes	15	15.5	$\chi^2 (1, N = 31) = 0.32, p = 0.86$
	No	16	15.5	
Spirit/Cheer	Yes	8	4.0	$\chi^2 (1, N = 8) = 8.00, p = \mathbf{0.01}$
	No	0	4.0	
Student Government	Yes	22	17.0	$\chi^2 (1, N = 34) = 2.94, p = 0.09$
	No	12	17.0	
Vocational	Yes	26	28.0	$\chi^2 (1, N = 56) = 0.29, p = 0.59$
	No	30	28.0	

*Note:* **Bold** indicates  $p < 0.05$ .

This analysis showed statistical significance between expected and observed frequency of low SES student leaders for the three activity types shown in boldface in Table 5. The likelihood of statistically significant deviation was calculated by subtracting

the asymptotic significance from 100%. Results revealed a 97.1% likelihood of a statistically significant deviation from the expected frequency for low SES student leaders participating in Civic/Service organizations in a given school, and 91.4% likelihood for low SES student leaders participating in Student Government organizations in a given school. The results for the two categories described in this paragraph were based on a sufficiently large sample to ensure an expected frequency of at least five. These findings suggest that students from low SES backgrounds tend to serve in more positions of leadership in certain activity types. In addition, school SES influenced the types of activities in which low SES student leaders serve. These findings are significant as the statistical analysis indicated at least a 95% probability that activity type played a role in determining the likelihood a given student organization would have a low SES student leader.

### **Student Leaders by Activity Type and School SES Population**

Table 6 summarizes a statistical analysis of low SES student leaders for the nine activity types with the sub-categorization of overall SES student population percentage based on school SES. This analysis was completed using a 2x2 Pearson chi-square analysis as well as a Fisher's exact test analysis (see Appendix D). The Outreach and Spirit/Cheer categories reported all leaders were low SES students, which rendered the Pearson's chi-square and Fisher's exact test inappropriate. Two categories had expected frequencies of fewer than five students in a particular category: Ethnic/Diversity and Civic/Service. According to the Institute for Digital Research and Education (2015), Fisher's exact test was a more appropriate statistical analysis method for these activity types because the expected frequency is five or fewer. The Pearson's chi-square test was

included for informational purposes only. Four categories exhibited either a Pearson's chi-square asymptotic significance or Fisher's exact test below 0.05, indicating a 95% likelihood that the observed frequency deviated in a statistically significant manner from the expected frequency. The four categories were Academic, Civics/Service, Performing Arts, and Student Government. The Civics/Service category showed a Fisher's exact test significance of 0.053 and Pearson's chi-square significance of 0.027.

Table 6

*Statistical Analysis of Low SES Student Leaders Chi-Squared and Fisher's Exact Test Calculated by Activity Type and School SES Population*

Activity type	$\chi^2$ for activity type	Fisher's exact test
Academic	$\chi^2 (1, N = 34) = 8.20, p < 0.01$	<b>&lt; 0.01</b>
Athletics	$\chi^2 (1, N = 42) = 2.59, p = 0.11$	0.19
Civic/Service*	$\chi^2 (1, N = 17) = 5.24, p = 0.02$	<b>0.05</b>
Ethnic/Diversity*	$\chi^2 (1, N = 7) = 0.06, p = 0.06$	1.00
Outreach**		
Performing Arts	$\chi^2 (1, N = 31) = 14.30, p < 0.01$	<b>&lt; 0.01</b>
Spirit/Cheer**		
Student Government	$\chi^2 (1, N = 34) = 11.57, p < 0.01$	<b>&lt; 0.01</b>
Vocational	$\chi^2 (1, N = 56) = 1.98, p = 0.16$	0.19

*Note:* \* indicates fields with expected frequencies less than five. \*\* indicates no statistics were computed because 100% of responses were in one category. **Bold** indicates  $p \leq 0.05$ .

The Pearson's chi-square analysis was less reliable because of the low expected frequency for this particular category. This result was deemed significant because the

Fisher's exact test showed nearly a 95% likelihood of having a statistically significant deviation from the expected frequency. The Academic category showed a more than 99% likelihood of a statistically significant deviation from the expected frequency, using both the Pearson's chi-square significance and Fisher's exact test, indicating that a non-random variable was likely correlated to a low SES student being in a position of leadership in Academic activities. The Performing Arts and Student Government categories showed a nearly 100% likelihood of a statistically significant deviation from the expected frequency, using both the Pearson's chi-square significance and Fisher's exact test. This analysis indicated that a non-random variable was correlated with the likelihood of a low SES student being in a position of leadership in Performing Arts and Student Government categories, suggesting that low SES students tend to serve in positions of leadership specifically in these categories.

In summary, four of the seven activities with sufficient responses showed a statistically significant likelihood that a non-random variable was correlated with the likelihood of an activity having a low SES student leader. Two additional activity types could not be analyzed using the 2x2 chi-square analysis because 100% of the student leaders were in the low SES category, though the Spirit/Cheer activity showed a statistically significant likelihood of having a non-random correlation using a single variable chi-square analysis (see Table 5). Five of the eight activities with more than one response showed a statistically significant result using either the single variable or 2x2 Pearson's chi-square analysis. This indicated there were non-random variables affecting the likelihood of an activity having a low SES student leader.

### **Analysis and Synthesis of Findings**



The current research study suggests that low SES adolescents are serving in positions of leadership within Colorado public high schools. The post-hoc analysis found that low SES adolescents lead more frequently in Spirit/Cheer, Student Government, Ethnic/Diversity, and Civic/Service activities. Typically, these types of activities are not those that require extra expenses or fees charged to participate. The current study also suggests that school SES may influence the occurrence of low SES adolescents in positions of leadership. Although the literature review for the current study presented substantial evidence that students from low SES backgrounds are at a disadvantage in a number of areas, the current survey data did not reveal precisely how adolescents are selected and trained for leadership positions, nor the effectiveness of those positions. Attempts to narrow the opportunity gap between low and high SES students are numerous and span decades, but many disparities remain. Adolescents from low SES backgrounds are leading their peers while in high school, but generally do not appear to be transferring these leadership experiences into college and adulthood. This research, combined with the review of literature, demonstrates a need for a solution to improve the leadership experiences of low SES adolescents with the intention of developing skills necessary for effective transference into adulthood.

### **Leadership Development of Low SES Adolescents: A Proposed Solution**

Public high schools are an ideal environment in which to influence the leadership development of low SES adolescents with the purpose of extending leadership skills and experiences into adulthood. The data collected in this study showed that low SES adolescents are more likely to serve in positions of leadership in low SES schools and within certain activity types, creating concern over the inclusivity of leadership

opportunities for low SES adolescents in higher SES schools and within all activity types. In addition, the literature review revealed a tremendous disparity among low SES adolescents and leadership development opportunities (Oliver, Gottfried, Guerin, Gottfried, Reichard, & Riggio, 2011; Rotherham, 2010; Zhang, Ilies, & Arvey, 2009). By incorporating a leadership curriculum that identifies potential leaders, provides ongoing support and training, develops leadership skills through school and community partnerships, and eliminates pay-to-play policies for extracurricular activities, public high schools can offer low SES adolescents a greater potential for effective leadership regardless of school SES or activity type.

### **Identify Potential Leaders**

As previously mentioned in Chapter One, the best and most critical time for leadership development is during adolescence when leadership skills are introduced and practiced (Lerner, Phelps, Forman, & Bowers, 2011; Li & Wang, 2009). Unfortunately, many adolescent leaders may not be accurately identified or efficiently developed. Adolescent leaders of school activities are frequently peer-nominated by popularity or by the influence of perceived power, as social hierarchies begin to form during late childhood and early adolescence (Corsaro & Eder, 1990). Occasionally, adolescent leaders are appointed by a teacher/administrator based on judgment of leadership-oriented behavior. However, adults should also consider leadership from a student perspective (Dempster & Lizzio, 2007). Prior research studies have shown that students who are perceived as popular and/or peer leaders were among the most disliked (Farmer, Estell, Bishop, O'Neal, & Cairns, 2003; Garandeanu, Lee, & Salmivalli, 2014). Both scenarios raise concerns regarding the willingness for adolescents to serve as leaders, as

well as the effectiveness of the leadership. Therefore, local school districts should consider incorporating a quality leadership curriculum based on the needs and talents of students in individual high schools in order to identify potential leaders who will positively affect the school community and ultimately transfer the leadership skills and experiences into adulthood. It is necessary for school districts to develop a curriculum that is realistic and worthwhile for both students and staff.

Although the post-hoc analysis of this research showed that low SES students serve in positions of leadership, the literature review revealed that students from low SES households have a limited knowledge of, and exposure to, leadership development opportunities (Oliver, Gottfried, Guerin, Gottfried, Reichard, & Riggio, 2011; Zhang, Iliès, & Arvey, 2009), further indicating the need for a school-based leadership curriculum to identify and develop potential leaders. An effective leadership curriculum should be part of the regular program of study involving all academic subjects and extracurricular activities and be available to all students. By implementing an inclusive leadership curriculum, the stigmas associated with SES and adolescent leadership may be lessened. Additionally, with ongoing support and training, a new generation of qualified, effective leaders may emerge.

### **Provide Support and Training**

Most leadership literature and research is based on adult leadership processes, as studies involving youth leadership development are rare. Even fewer applications of teaching adolescents' leadership development have been conducted (Ricketts & Rudd, 2002). Therefore, understanding the complexity of youth leadership is necessary for the adults selected to provide support and training for adolescent leaders.

DesMarais, Yang, and Farzanehkia (2000) mentioned four critical elements necessary in the support and training of adolescent leaders:

1. Adolescents should be granted decision-making power and required to take responsibility for consequences.
2. Adolescent experiences, knowledge, and skills should be recognized by the adults providing support and training. This is especially important for low SES adolescents who are often overlooked or misunderstood.
3. Adolescents should be provided a broad context for learning and service.
4. Youth/adult partnerships should be appropriately developed and secure.

Similarly, Ricketts and Rudd (2002) developed a Model for Youth Leadership Curriculum in response to the concern that current educational systems and institutions have not been producing leaders due to a lack of formal adolescent leadership training. This model includes the integration and development of leadership knowledge and information; leadership attitude, will, and desire; decision making, reasoning, and critical thinking; intrapersonal and interpersonal skills; oral and written communication skills (Ricketts & Rudd, 2002). Such a curriculum model should be available to all students.

The success of adolescent support and training rests on the shoulders of individual school district personnel who have the greatest insight on the specific needs and aptitudes of potential adolescent leaders within their schools. A one-size-fits-all training program is unrealistic when considering important aspects such as individual school finances or urban/rural school demographics. For example, the goals and purposes of school for urban schools may be inappropriate for rural schools (Bauch, 2001). Nonetheless, by understanding the critical elements (DesMarais, Yang, & Farzanehkia, 2000) necessary in

the support and training of adolescent leaders and following the Model for Youth Leadership Curriculum (Ricketts & Rudd, 2002), each school district can more effectively serve all potential leaders, regardless of SES. Since the majority of what is known about leadership development involves adults, it may seem most beneficial for adolescent leader development to include partnerships with school and community leaders.

### **Develop Leadership Skills through School and Community Partnerships**

Youth leadership development depends on the support of adult leaders (van Linden & Fertman, 1998) who exemplify responsible behavior and encourage adolescent leadership efforts. Informal mentoring has a tremendous, positive impact on low SES students who typically do not have the wide range of informal mentors as do students from affluent backgrounds (Erickson, McDonald, & Elder, 2007; Hastings, Barrett, Barbuto, & Bell, 2011). Students from low SES households have limited knowledge of and exposure to leadership development opportunities (Oliver, Gottfried, Guerin, Gottfried, Reichard, & Riggio, 2011; Zhang, Ilies, & Arvey, 2009), creating the need for caring adult mentors outside the family. Community, church, and school adult leaders such as business owners, clergy, teachers, coaches, and employers have an impact on how youth leaders develop when partnerships are appropriately established. Unfortunately, adolescent leadership development and community engagement opportunities are virtually untapped (Mortensen, Lichty, Foster-Fishman, Harfst, Hockin, Warsinske, & Abdullah, 2014).

The opportunities for school and community partnerships abound, but must be established, organized, facilitated, and supported. Individual partnerships should be

carefully identified and nurtured. Adult leaders should be trained on youth development and leadership, as research has indicated several differences between adult and adolescent leadership (Mortensen, Lichty, Foster-Fishman, Harfst, Hockin, Warsinske, & Abdullah, 2014; Ricketts & Rudd, 2002). Hastings, Barrett, Barbuto, and Bell (2011) found that when adolescents were personally invited by an adult mentor to participate within the school or community, relationships formed and leadership opportunities developed. Additionally, they discovered that when the adult/youth partnerships equally collaborated, ideas were generated, prioritized, and connected to resources to produce results. In other words, the adult leaders encouraged the adolescent leaders to take ownership and responsibility, in turn gaining a sense of empowerment and confidence.

School and community partnerships enable low SES adolescent leaders to develop a greater sense of community with the potential to transfer this knowledge into college and adulthood. Schools and communities benefit by capitalizing on new leadership potential, maintaining new partnerships, and changing attitudes and assumptions (Hastings, Barrett, Barbuto, & Bell, 2011). Most importantly, school and community partnerships must be made available to all students regardless of SES. Most school districts, however, maintain a pay-to-play policy for extracurricular school and community activities, which limits opportunities for adolescent leadership development for low SES students.

### **Eliminate Pay-to-Play Policies**

Fifty years ago, extracurricular activities were part of everyday schooling, regardless of SES or family background, as administrators understood the value of participating in sports, music, vocational organizations, and community service (Putnam,

2015). In addition to cognitive skills, teamwork, leadership, and sociability are developed among participants in extracurricular activities (Covay & Carbonaro, 2010; Lleras, 2008). Putnam (2015) stated that school-related extracurricular activities have traditionally narrowed the opportunity gap for low SES students over the past century, suggesting that the skills learned through such participation are important for economic and professional success. Unfortunately, a reduction in extracurricular activities, including sports, has occurred because of budget constraints, high-stakes testing, and increased curriculum mandates (Putnam, 2015), especially among low SES schools (Bennett, Lutz, & Jayaram, 2012). For those schools that provide extracurricular activities, many have instituted pay-to-play policies that inhibit involvement for all students.

Some schools offer fee waivers for low SES students, but teenagers are often embarrassed, refuse to accept the waiver, and choose not to participate. In 2012, 60% of students who played school sports were required to pay-to-play, but only 6% received a waiver (Putnam, 2015). The Supreme Court of California found such pay-to-play policies to be unconstitutional for students enrolled in free public schools (*Hartzell v. Connell*, 1984). Parents, organizations, and additional states are following suit by questioning the constitutionality of pay-for-participation policies within free public schools (Darden, 2013), although the majority of states agree that pay-to-play fees are legal (Fieldman, 2011). The debate stems from what activities are required for graduation, opposed to what activities are essential for a quality, comprehensive public education. Regardless, pay-to-play policies do not allow all students equal opportunities to participate in extracurricular activities, thereby requiring a feasible solution. To help eliminate pay-to-play policies, school districts should consider the following options:

- reducing the number of extracurricular activities offered by adopting a quality versus quantity approach
- recruiting volunteer medical personnel to complete free or low-cost physical exams required for school participation in activities
- implementing an equipment and supplies share program with other schools, colleges, and community organizations (like the YMCA) where students could donate, trade, borrow, and share quality used sports gear, art materials, books, and musical instruments
- inviting local businesses and organizations to support district-wide extracurricular activities through advertisements, volunteerism, and funding

The proposed solution of incorporating a leadership curriculum that identifies potential leaders, provides ongoing support and training, develops leadership skills through school and community partnerships, and eliminates pay-to-play policies for extracurricular activities is feasible based on the data collected from this research. Additional research on the influence of pay-to-lay policies on low SES adolescent leadership may be warranted.

### **Support for the Solution from Data Collected**

The data collected in this study indicates that adolescents from low SES backgrounds are serving as leaders, more frequently in low SES high schools and in Spirit/Cheer, Student Government, Ethnic/Diversity, and Civic/Service activities. Even though this study determined that low SES adolescents serve in positions of leadership, their leadership activities were limited primarily to non-athletic and non-academic areas, perhaps because of the ways leaders are identified, supported, and/or trained. Since the majority of pay-to-play policies involve athletic or academic activities that require



expensive equipment, supplies, and game/conference travel, low SES adolescent leaders may not be financially capable to lead in these areas, or low SES schools may not offer such activities.

The evidence from the data collected in this study provides a rationale for the proposed solution. If several aspects of the proposed solution were implemented, many uncertainties regarding low SES adolescent leadership could become clearer. The proposed solution could help to equalize leadership opportunities for adolescents across the spectrum of extracurricular activities.

### **Existing Support Structure and Resources**

Past research supports the notion that the solution for educational opportunity for low SES students involves local communities and state agencies (Rebell and Wolff, 2014; Watson, 2014). These studies coincide with the proposed solution to involve school and community leadership training opportunities and partnerships. Schools naturally provide a network of educated, committed staff to facilitate a leadership curriculum. Most communities have businesses, non-profit organizations, and religious institutions that can provide interorganizational alliances and joint ventures to influence adolescent leadership development, share resources, and reduce redundancies (Burke, 2011).

Since President Johnson's declaration of the "War on Poverty", dozens of local, state, and federal programs are currently in place to support low SES adolescents, and President Obama has continued this course of action by implementing several more programs to reduce poverty (CEA, 2014). Gaining access and evaluating the effectiveness of such programs are the keys to utilizing the existing support and resources the programs provide.

The organizational composition of individual high schools is fundamentally the most important aspect of implementing the proposed changes to low SES adolescent leadership. School districts willing to accept and execute the proposed changes will begin the process of improving adolescent leadership. Those schools benefitting from socioeconomic desegregation or economically integrated schools may have an advantage (McDermott & Nygreen, 2013; Kahlenberg, 2012; Rebell, 2012), as low SES schools often become a dumping ground for ineffective teachers and limited extracurricular opportunities (Putnam, 2015). Nonetheless, the proposed solution is feasible when utilizing the current support structure and resources including school and community partnerships, current programs, and individual school district support.

### **Policies Influencing the Proposed Solution**

Individual public school districts operate on numerous policies and mandates established by local school personnel, state boards of education, and the federal government. According to Cross (2014), federal policies have historically had a positive influence on the students most at-risk, such as disabled, minorities, and low SES. On the contrary, research has overwhelmingly revealed that those at-risk are underserved and receive differential treatment in spite of federal policies (Espinoza, Areas da Luz Fontes, & Arms-Chavez, 2014; Glock, Krolak-Schwerdt, Klapproth, & Bohmer, 2013; Harber, Gorman, Gengaro, Butisingh, Tsang, & Ouellette, 2012; Hosterman, DuPaul, & Jitendra, 2008). With regard to the proposed solution, local school districts that employ open enrollment policies and eliminate pay-to-play policies could potentially have the greatest influence on low SES student leadership development.

In most communities, there are neighborhoods of poverty and neighborhoods of prosperity. This demographic inequality is commonly reflected in the public schools even though federal and state policies guarantee school compatibility in areas such as per pupil spending and student-teacher ratios. The disparity becomes evident when the student population of each school is measured by SES, ethnicity, English proficiency, achievement, and extracurricular opportunities (Putnam, 2015). Low SES students attend exceedingly different schools than those students from higher SES backgrounds. Residential sorting by income has created this division (Ryan, 2010). Nonetheless, some districts provide open enrollment policies that allow students to choose to attend a school other than their neighborhood or district school, but often have admission requirements based on academic or athletic skills, disciplinary record, or proficiency in English (Smith, 1995). A proper open enrollment concept creates a more balanced environment to develop adolescent leaders, regardless of student or school SES.

Many school districts have pay-to-play policies that inhibit involvement in extracurricular activities for some students. Each school district ultimately determines the advantages and disadvantages of requiring payment for extracurricular activities. The primary benefit to the pay-to-play policies is that these funds offset the actual expenses of extracurricular activities, because federal and state allocations are insufficient (Putnam, 2015; Fieldman, 2011). Fieldman (2011) found that pay-to-play fees only cover a fraction of a school's overall budget, stating that without legislative limitations, school districts may continue to increase fees and become dependent upon this source of funding. Putnam (2015) stated that a nationwide estimate for extracurricular participation is \$400 per student per activity per year, or \$1,600 for two students in a family participating in

two activities a year. These figures may help explain why low SES students are three times less likely to participate in either sports or clubs and half as likely to participate in both sports and clubs (Theokas & Bloch, 2006). Consequently, current pay-to-play policies should be reconsidered.

### **Potential Obstacles to Proposed Solution**

The proposition of a solution implies that something is broken and in need of being fixed or changed. Organizational change is difficult (Burke, 2011) and is often faced with both external and internal obstacles. External obstacles are those beyond the control of the individual school districts, such as government legislation. For the purpose of this project, primarily internal obstacles, or those within the direct control of the school districts, are discussed. Several potential internal obstacles to the proposed solution include organizational composition, interorganizational composition, political resistance, and finances.

#### **Organizational Composition**

The organizational composition of schools may present several potential obstacles when implementing the proposed solution, beginning with the hierarchy of authority. The organizational hierarchy of authority is not flat, but rather vertical, indicating a division of authority within different hierarchical levels (Hatch & Cunliffe, 2008). Although school administrators manage daily operations, all decisions should be aligned with state and federal mandates dictated by those above school administrators, often creating external obstacles involving multifarious curriculum requirements and budgetary restrictions. This linear hierarchy may seem simple, but a further analysis identified a

complex organizational composition of schools that include the physical structure, the learning environment, curriculum, personnel, and students.

When the school building is dilapidated, too small, or in an unsafe environment, obstacles to student leadership arise. In two separate but similar accounts, Putnam (2015) and Kozol (2012) found devastating disparities between the high SES and low SES schools in the United States. Low SES schools tend to be poorly maintained and in unsafe neighborhoods. The learning environment often consists of overcrowded classrooms, less-qualified teachers, and drastically fewer resources like textbooks (Putnam, 2015; Kozol, 2012; Lankford, Loeb, Wyckoff, 2002). Student leadership development may be considered a lesser priority than the needs of the physical buildings regarding the allocation of time and resources. Yet, even when the physical structure is functioning efficiently, other organizational obstacles may be present.

School personnel should not only represent the students and staff that make up the school, but should also work toward their interests as a group. School administrators should be active agents between their own skills in relation to the school identity as a whole (Haslam, Reicher, & Platow, 2011). Likewise, teachers and staff should be equally as committed to the organization and its students. Unfortunately, poor organizational composition involving personnel can present a number of obstacles. Ineffective leadership involves school administrators and teachers who may be incompetent, rigid, callous, or corrupt (Kellerman, 2008). Such toxic leadership creates barriers to the proposed solution (Johnson, 2012).

The literature review revealed many organizational obstacles to low SES student success including school SES (Caldas & Bankston, 2014; Crosnoe, 2009; Putnam, 2015;

Zwick & Himelfarb, 2011) and student family environment (Froiland & Davison, 2014; Huang, 2013; Kim, Sherraden & Clancy, 2013; Oliver, Gottfried, Guerin, Gottfried, Reichard, & Riggio, 2011; Stull, 2013). These conditions adversely impact adolescent leadership development. As noted by Lavery and Hine (2013), schools are responsible for providing students with genuine leadership opportunities that contribute to the school and community. Unfortunately, independent of leadership aptitude, student leadership is often determined by popularity or the manipulation of granting the positions of leadership to those who will simply do the work to get the job done. Left to lead in an environment that often neglects to develop and nurture leadership skills, students are frequently unsuccessful. Consequently, the organizational composition of a school district and its interorganizational relationships determines the success of adolescent leaders and the likelihood that the proposed solution will occur.

### **Interorganizational Composition**

The proposed solution involves interorganizational strategic alliances or joint ventures between individual schools and community based on shared resources, improved cost-effectiveness, and reduced redundancies (Burke, 2011). By establishing youth/adult mentorships and soliciting community financial support to eliminate pay-to-play policies, potential obstacles may arise. According to Burke (2011), interorganizational obstacles often occur when the purpose is unclear, progress measurement is undefined, power imbalance is evident, or unrealistic expectations regarding the success of the relationship are present. Therefore, as school districts change policies to implement the proposed solution, potential interorganizational composition obstacles should be addressed. Both organizational and interorganizational compositions

play a significant role in the success of the proposed solution. Undefined leadership curriculum, selection, training, objectives, and key players contribute to potential obstacles. Even when the organizational and interorganizational compositions are efficient, political resistance to change may occur once the proposed solutions are initiated.

### **Political Resistance**

Political resistance occurs when those involved in or affected by the proposed solutions believe that they may lose something of value if change occurs (Burke, 2011). Resistance of the unknown is common. School districts willing to accept the proposed solution should be aware of this barrier. Most school districts follow the traditional hierarchical organizational structure, which tends to be more resistant to change (Burke, 2011).

Political resistance barriers could result from a lack of training for teachers and staff on effective implementation of a leadership curriculum, especially if mandated by upper management. If administration fails to request input from teachers, students, community partners, and parents, additional resistance could arise. However, by involving the stakeholders and disclosing the potential benefits of or alternatives to the proposed solutions, resistance barriers may be minimal. The potential obstacles relating to organizational, interorganizational, and political resistance are apparent but manageable, making financial and budget issues the greatest potential obstacles facing school districts considering the proposed solution.

### **Financial/Budget Issues Related to Proposed Solution**

Swail (2000) stated that the educational system is not designed to provide the resources that low-income, underrepresented, high-need students require. These specific financial needs, combined with the continued reduction of federal and state funding, force school administrators to cut the academic programs and instructional personnel that are critical to supporting quality public education, improving student learning, and giving students the best educational opportunities available (Ellerson, 2012). The lack of resources and resource allocation choices pose a number of potential obstacles to the proposed solution. When budgets are stretched, adolescent leadership development curriculum involving extracurricular activities, community partnerships, and eliminating pay-to-play policies may seem to be a low priority to many school districts. School districts must find alternative funding options to meet the financial requirements of such programs to benefit low SES adolescents specifically. As mentioned previously, feasible options for eliminating pay-to-play policies included reducing the quantity of activities, recruiting volunteer medical personnel, implementing an equipment and supplies share program, and inviting local business and organizations to support the activities. Although some schools, families, and communities work to assist with budgetary issues by charging for game admittance, purchasing yearbook and program advertising, and conducting bake sales and car washes, these actions are not typical in low SES neighborhoods and low SES schools (Putnam, 2015). Therefore, creative alternatives must be taken to overcome the growing financial needs of local school districts to consider the proposed solution.

Large corporations regularly contribute to the sponsorship of college and professional sports, ranging from team-related advertising to the purchasing of naming



rights for stadiums and arenas. Glasspiegel (2014) reported that there are 68 professional sports stadiums or arenas in the United States named for publicly traded companies, uncovering tremendous financial gains for such sponsorship. Most sports stadiums are located in major metropolitan communities where high-poverty schools are disproportionately located (Logan, Minca, & Adar, 2012). According to the Sports Business Journal (2011), Citigroup bought the naming rights for the baseball stadium in Queens, New York for \$400 million. In Houston, Texas alone, Reliant Energy paid \$310 million for football stadium naming rights, Coca-Cola paid \$178 million for baseball stadium naming rights, and Toyota paid \$95 million for basketball arena naming rights. In 2013, global sports sponsorship amounts were estimated at \$53.3 billion (Radicchi, 2014). Many school districts have recognized the potential benefits of large corporate sponsorships, although the idea is just beginning to catch on.

The Colorado-based company, Education Funding Partners, was established to connect corporate sponsors to individual school districts (Caley, 2013). The suggestion of companies advertising with schools is not a novel idea, as businesses have traditionally paid for advertising in sports and theatre programs and yearbooks for decades. Local businesses often purchase advertising space on scoreboards or hang banners during sporting events. In a rural Colorado town, one local bank collaborated with another company to purchase a scoreboard for the football field, as the competing bank purchased the scoreboard for the gymnasium, both displaying the company names. These instances of philanthropy are fairly common, but not adequately meeting the increasing budgetary shortfalls of many school districts, especially in relation to leadership development opportunities.

The idea of corporate sponsorship also presents the potential for conflict. Pierce and Bussell (2011) reported that some school administrators hold a philosophical opposition to sponsorship, because of personal beliefs or school policies prohibiting sponsorship. Interestingly, their research also discovered that those schools that charged pay-to-play fees were twice as likely to accept corporate sponsorship, as opposed to those schools that did not charge pay-to-play fees. Nonetheless, individual school districts must weigh the benefits against the limitations of accepting corporate sponsorships in order to meet the financial needs of schools in general, but specifically those schools willing to adopt the proposed solution.

### **Change Theory**

This study found that low SES adolescents in Colorado public high schools are serving in positions of leadership within certain extracurricular activities, although the literature review showed that adolescents from low SES backgrounds are at a tremendous disadvantage in a number of areas including leadership development (Oliver, et al, 2011; Zhang, Ilies, & Arvey, 2009). According to Murphy and Johnson (2011), participating in leadership as an adolescent improves the student's chances of getting into college and builds a foundation for future leadership development. As low SES adolescents enter adulthood, however, fewer are graduating from college or working in careers that narrow the opportunity gap (Putnam, 2015). Consequently, simply serving in a position of leadership does not necessarily indicate future success. Therefore, public school districts should incorporate a leadership curriculum that identifies potential leaders, provides ongoing support and training, develops leadership skills through school and community partnerships, and eliminates pay-to-play policies for extracurricular activities. Large

changes that affect the entire school system require an understanding of change theory and a well-developed change strategy (Burke, 2011).

The three stages of change involve unfreezing, movement, and refreezing (Lewin, 1958). By unfreezing, school districts must recognize the urgent need for change and work to educate students, teachers, and community organizations of this need. The movement stage involves the physical changes in curriculum and policies suggested by the proposed solution. The final refreezing stage is vital if change is going to be maintained. During this stage, the leadership curriculum and policy changes must be reinforced with a strong infrastructure (Lewin, 1958). With this particular solution, change should be evolutionary, occurring over time to maintain the fundamental structure of the school district (Burke, 2011).

Following Bronfenbrenner's (1979) design, a Socio-Ecological Model of Education (see Figure 1) was developed to indicate those factors interrelated with the changes associated with the proposed solution. Individual, interpersonal, organizational, community, and policy factors are displayed to show how each factor influences the other factors. The "Individuals" factor includes the knowledge, attitudes, skills, and beliefs of each individual associated with the change. The "Interpersonal" factor involves the various social networks and relationships among the individuals. "Organizational" factors entail the school district structure and culture. The "Community" factor encompasses the complex relationships with each component as they contribute to the proposed solution. The "Policy" factor extends beyond the individual school and into society. The purpose of the Socio-Ecological Model of Education was to demonstrate the complex relationships associated with the proposed change. Organizational change is difficult

(Burke, 2011), but in the case of low SES adolescent leadership development, change is necessary.

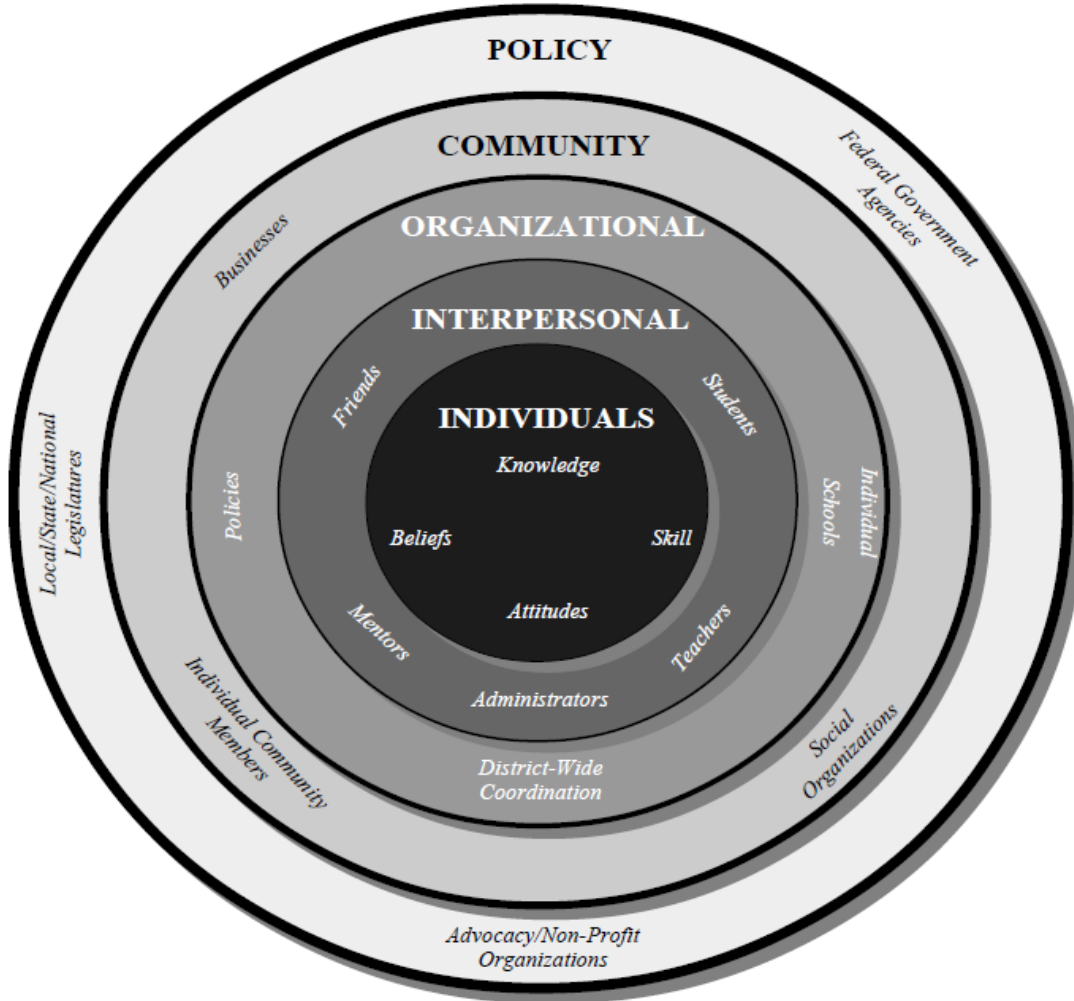


Figure 1. Socio-Ecological Model of Education illustrating factors influencing change.

### Summary

This study utilized a correlational explanatory design to determine if there was a difference between the number of adolescent students from low and high SES households serving in positions of leadership in urban and rural Colorado public high schools. A 5-question, cross-sectional quantitative survey was administered to Colorado public high

school personnel. The findings report that the null hypotheses, HO1 and HO2, were confirmed, suggesting there is no relationship between the SES of adolescent students in rural or urban public high schools in Colorado and adolescent students serving in leadership positions in rural or public high schools in Colorado. In addition to answering both research questions, the data analyses discovered new and insightful results indicating that low SES students are serving as leaders in certain activities, depending on the SES of the school. Following the analysis and synthesis of findings, a viable solution was proposed. Support from the data collected, existing support structure and policies, obstacles, and financial issues related to the proposed solution were discussed. Finally, change theory as it relates to the proposed solution was investigated and a Socio-Ecological Model was developed. The following chapter provides a summary of the research, detailed instructions on the implementation of the proposed solution, implications for action, and recommendations for future research.

## CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

### **Introduction**

The purpose of this study was to determine if there was a difference between the number of adolescent students from low and high SES households who serve in positions of leadership in urban and rural Colorado public high schools. A comprehensive literature review found that students from lower SES background are linked to lower academic achievement and slower rates of academic progress as compared with higher SES communities. However, little research exists regarding the influence of SES and leadership during the pivotal adolescent years of development. This study attempted to narrow the gap in research and strived to contribute to a better understanding of the underrepresented group to encourage change from current attitudes, barriers, and perceptions. In the previous chapter, the results of this quantitative study were discussed in detail and a solution to the problem was thoroughly examined. This chapter provides a brief summary of the study and discusses the implementation of the proposed solution. Implications for action and recommendations for future research are mentioned. The chapter concludes with a discussion of the value of this research.

### **Summary of the Study**

By utilizing a correlational explanatory design to survey urban and rural Colorado public school district personnel, the project design consisted of one distinct phase that involved a 5-question, cross-sectional quantitative survey to determine the urban/rural school population and the assignment of SES to adolescents serving in positions of leadership within individual high schools. The survey was sent electronically to each Colorado public school district superintendent. This brief survey was designed to collect

data on those students in specific leadership positions (student body president, club officers) who also receive free/reduced lunch benefits.

In an effort to ensure a significant response rate, the researcher carefully designed the survey, managed survey length, pre-notified school personnel to establish survey importance, sent an invitation to participate the survey (see Appendix A), provided ample (3) response opportunities, monitored survey response, and provided feedback, (Rogelberg & Stanton, 2007). Responses were coded by assigning numeric values to each response and analyzed using Pearson's chi-square test to find how the expectations compared to the results within various categories. SPSS (<http://www.spss.co.in/>) was used for the analysis of the quantitative data calculated in Pearson's chi-square cross-tabulations and Fisher's exact tests.

With a survey response rate of 26%, the statistical analyses using the Pearson's chi-square test confirmed the null hypotheses, HO1 and HO2: There was no relationship between the SES of adolescent students in urban or rural public high schools in Colorado and adolescent students serving in leadership positions in urban or rural public high schools in Colorado. In addition to answering both research questions, a post-hoc data analyses discovered original findings:

- Low SES students statistically were more likely to serve in a position of leadership while attending low SES schools.
- Low SES students statistically were more likely to serve in positions of leadership in certain activity types.
- School SES was statistically shown to influence the types of activities where low SES student leaders serve.

Specifically, this study showed that adolescents from low SES backgrounds are leading their peers in specific activities and more frequently while attending low SES high schools. However, the literature review revealed that low SES adolescents generally do not appear to be transferring these leadership experiences into college and adulthood. Public high schools are an ideal environment to influence the leadership development of low SES adolescents with the purpose of extending leadership skills and experiences into adulthood. For that reason, school districts should consider incorporating a leadership curriculum that identifies potential leaders, provides ongoing support and training, develops leadership skills through school and community partnerships, and eliminates pay-to-play policies for extracurricular activities.

The literature review conducted in this project revealed that student SES combined with school SES may influence student leadership opportunities. The scholarly literature combined with the results of this study, specifically the post-hoc analyses, provided the necessary justification for the proposed solution. The existing school and community support structures, policies, and resources available indicate that the potential barriers to the solution are surmountable. In the previous chapter, change theory was discussed and a Socio-Ecological Model of Education was developed to assist with an understanding of how the proposed solution influences all those involved with change.

### **Purpose of the Study**

The purpose of this quantitative study was to determine whether there was a difference between the number of adolescent students from low and high SES households who serve in positions of leadership in urban and rural Colorado public high schools. The study included quantitative data gathered from Colorado public high school personnel.



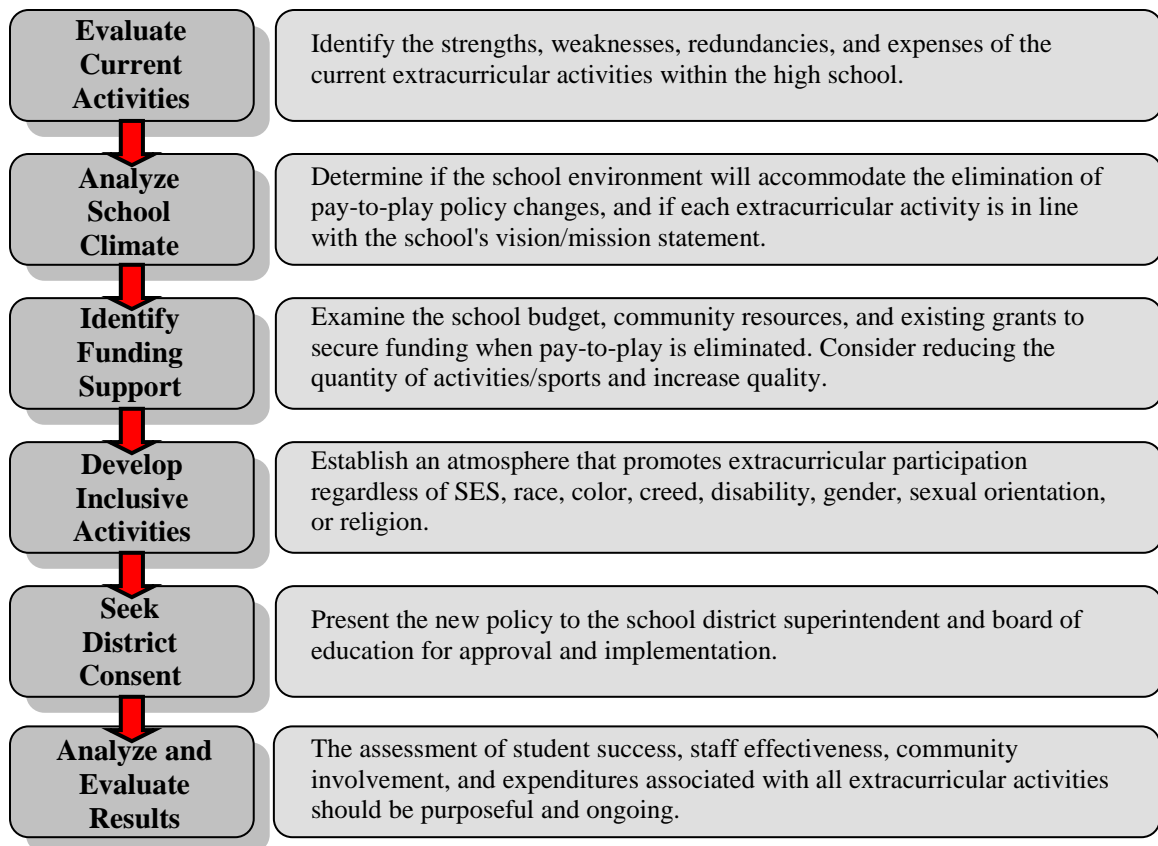
### **Aim of the Study**

The aim of this study was to assist schools and community leaders in recognizing the occurrence of adolescent leadership within Colorado public high schools and to encourage inclusive leadership development and opportunities.

### **Implementation of Solution Processes and Considerations**

Leadership is learnable (Bowman, 2014), so it is necessary for school districts to provide significant opportunities for potential student leaders to be identified, trained, and developed through the elimination of pay-to-play activity fees and an inclusive leadership curriculum. Extracurricular activities and athletics provide substantial leadership possibilities that the traditional classroom setting may not. Activities and athletics are often considered a necessary supplement to classroom academics to develop the whole child (Dewey, 1916). The Constitution of the Colorado High School Activities Association (2014) declares in its mission statement, "In pursuit of educational excellence, the Colorado High School Activities Association strives to create a positive and equitable environment in which all qualified student participants are challenged and inspired to meet their highest potential." To fulfill this mission, the association states that it will provide diverse and equal opportunities for participation in an environment that enhances personal development through leadership among other skills. This association is among many educational organizations and school districts with mission statements pledging equal opportunities for all students, yet many require students to pay for various activities. Pay-to-play policies are understandable given the severity of budgetary constraints on local school districts, but if low SES adolescents are to have equal opportunity to participate in these activities, the proposed solution to eliminate such

policies must be implemented. The Process to Eliminate Pay-to-Play Policies in Public High Schools (see Figure 2) may assist school district personnel to evaluate the extracurricular activities of individual schools, eliminate pay-to-play policies, and provide equal opportunity for all students to participate regardless of SES.



*Figure 2.* Process to Eliminate Pay-to-Play Policies in Public High Schools.

Meaningful student learning is created by a curriculum rooted in authentic, real life situations (van Merriënboer & Kester, 2008). Over a decade ago, the Commonwealth of Virginia Department of Education (2001) recognized the importance of leadership development by providing an optional K-12 classroom leadership curriculum for Virginia Public Schools. The curriculum framework was written to allow teachers to incorporate leadership development into existing instruction within all subject areas or as an independent course. By integrating the leadership curriculum within the classroom, low

SES students are provided equal access to developing leadership aptitude. Such a leadership curriculum should be implemented within individual school districts by following the seven steps clearly outlined in the Process to Implement a Leadership Curriculum in Public High Schools (see Figure 3).

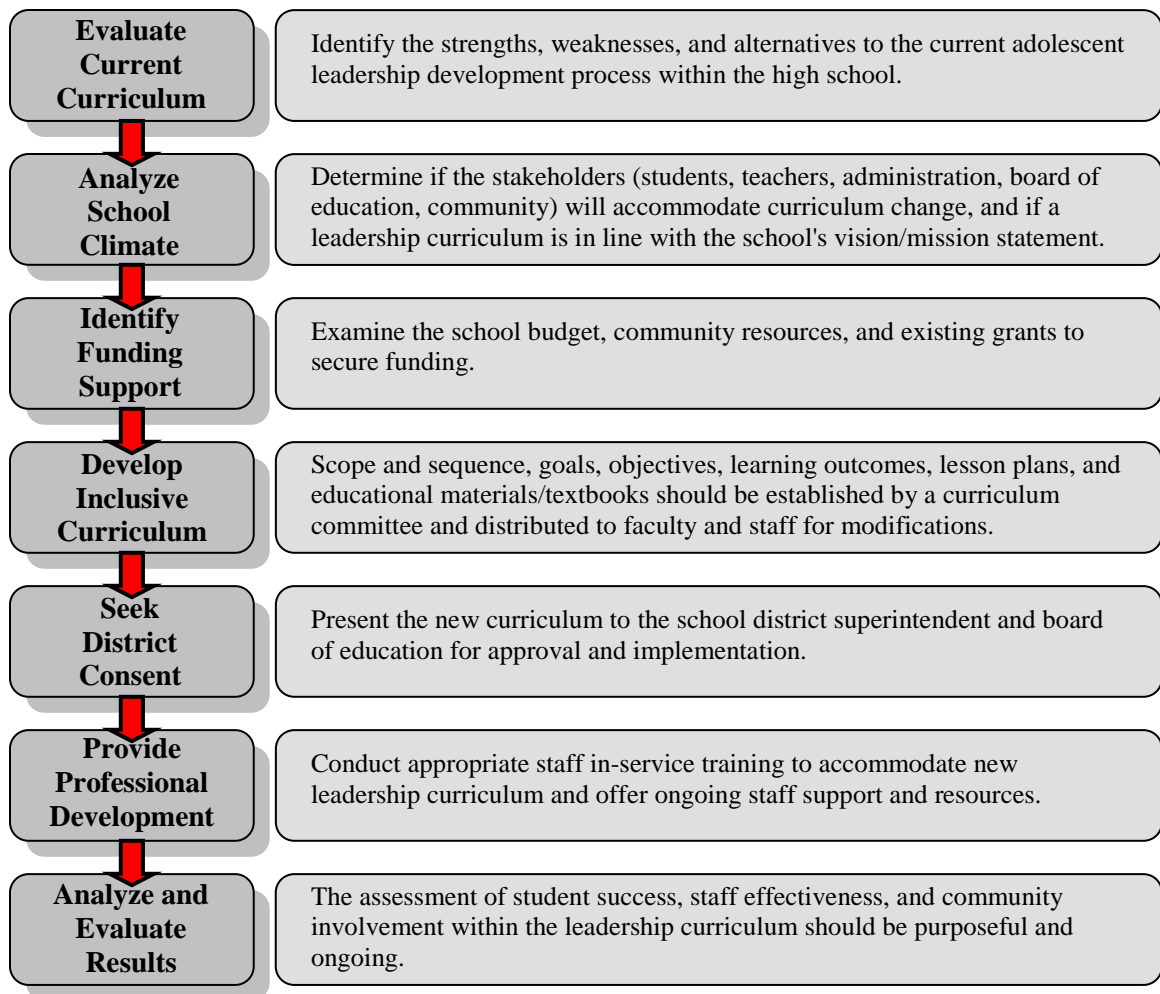


Figure 3. Process to Implement a Leadership Curriculum in Public High Schools.

The process to implement a leadership curriculum is potentially as diverse as the individual school districts, the students served, and the opportunities provided. By analyzing the school climate and identifying funding support, several considerations should be made prior to eliminating pay-to-play policies and implementing a leadership

curriculum. The relevance of equal opportunity for extracurricular activities and of a leadership curriculum to the school's mission or philosophy of education should be reviewed. A cooperative school staff and supportive community network should assist in the adoption and implementation of a new curriculum or changes in policies. The current knowledge base of leadership within each school should be considered to ensure accountability for quality teaching and learning. Finally, the overall financial impact to eliminate pay-to-play policies and implement a leadership curriculum should be thoroughly considered.

**Timeline for Implementation and Assessment**

The Process to Eliminate Pay-to-Play Policies in Public High Schools (see Figure 2) and the Process to Implement a Leadership Curriculum in Public High Schools (see Figure 3) are similar and may be simultaneously or consecutively implemented and assessed using the Timeline for Implementation and Assessment (see Figure 4). By following the school calendar, the ten phases illustrated in Figure 4 provide district personnel a realistic schedule for implementation and assessment.

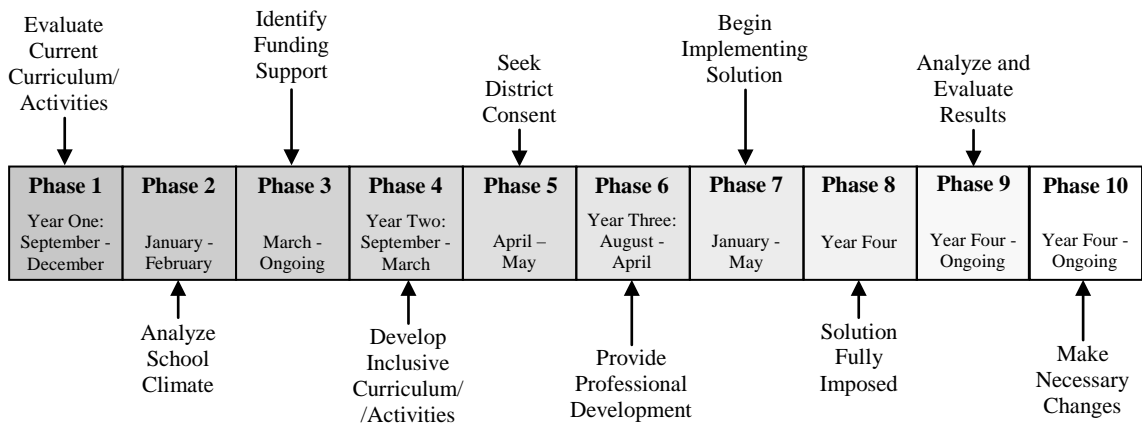


Figure 4. Timeline for Implementation and Assessment

Successfully implementing curriculum and budgetary changes across an entire school district will take time. To keep the timeline flowing, it is vital that each key player understands individual roles and responsibilities throughout this process.

### **Roles and Responsibilities of Key Players in Implementation**

The successful implementation of the proposed solution requires an understanding of the roles and responsibilities of each key player. The key players involved in the implementation of the proposed solution include the school board of education, school superintendent, high school administrators, teachers, curriculum committee, students, and community members. The curriculum committee should be comprised of the district curriculum coordinator, school administrator, a team of selected teachers, students, and community members interested in the proposed solution. With such a complex group of players involving multi-level organizational and interorganizational collaboration, it is important to establish a formal method to identify individual roles and responsibilities.

By using the RACI Matrix (Jacka & Keller, 2009), roles and responsibilities specific to the proposed solution are systematically clarified (see Figure 5). The four identified levels of involvement within the RACI Matrix include: Responsible, Accountable, Consult, and Inform. Responsible (R) represents the key players who perform the tasks. Accountable (A) represents the individual with authority over specific tasks. Consult (C) represents those key players consulted before the changes can occur or tasks are performed. Inform (I) represents the key players who need to be aware that a decision has been made or that an action is taken, but are not necessarily directly involved in the tasks (Jacka & Keller, 2009). Although the RACI Matrix outlines the roles and responsibilities of those involved with implementing the proposed solution,

every player should communicate effectively to maintain efficiency and avoid role confusion.

### RACI Matrix

Tasks	Board of Education	District Superintendent	School Administrators	Teachers	Curriculum Committee	Students	Community Members
Evaluate Current Activities	C	A	R	C		C	I
Evaluate Current Curriculum	C	A	R	C	R		
Identify Funding Support	C	R/A	R	I	I		I
Develop Inclusive Opportunities	I	C	A	I	R	I	R
Develop Inclusive Curriculum	I	C	A	I	R	I	
Seek District Consent	A/C	R	C		C		
Provide Professional Development	I	A	R	I	I		
Analyze and Evaluate Results	C	R/A	R	I	C		I

Figure 5. RACI Matrix Identifying Roles and Responsibilities of Key Players

The leader's role is visibly mapped out on the RACI Matrix by identifying those accountable (A) for task completion. Dependent on the task, the leadership role in the implementation of the proposed solution is then shared among the board of education, district superintendent, and school administrators. The most vital leadership role, however, is convincing others to support the proposed solution.

#### Convincing Others to Support the Proposed Solution

Research on the educational and leadership disparities between low and high SES adolescents and their families presents a critical need for local school districts to implement the proposed solution to incorporate a leadership curriculum and eliminate pay-to-play policies for extracurricular activities. Reardon (2011) stated that the achievement gap between high and low SES children is nearly 40% larger among children born in 2001 than those born in the mid-1970s, indicating that the current policies, programs, and curriculum may be ineffective for low SES students. By the year

2000, a family's SES had become more important than test scores in predicting which eighth graders would graduate from college (Fox, Connolly, & Snyder, 2005). Since participating in leadership as an adolescent improves a student's chances of getting into college and builds a foundation for future leadership development (Murphy & Johnson, 2011), the proposed solution may be key in not only developing leaders, but providing greater opportunities for low SES adolescents to improve academically, matriculate through college, and narrow the opportunity gap. The post-hoc analysis of this research showed that low SES students tend to serve in positions of leadership within certain activities and more frequently in low SES schools, even though research revealed that these students have a limited knowledge of and exposure to leadership development opportunities (Oliver, Gottfried, Guerin, Gottfried, Reichard, & Riggio, 2011; Zhang, Ilies, & Arvey, 2009). Serving in a position of leadership may not necessarily imply successful leadership, particularly without proper development. Effective leaders generate meaningful actions for the activities, teams, and organizations they lead by encouraging followers to achieve a common purpose that is in the best interest of everyone (Bowman, 2014). Leadership is therefore a process to be learned and practiced, rather than an event or a set of activities. Since the best and most critical time for leadership development is during adolescence (Lerner, Phelps, Forman, & Bowers, 2011; Li & Wang, 2009), the implementation of the proposed solution will provide low SES adolescents with the leadership skills and extracurricular opportunities necessary for future academic and professional success.

The elimination of the pay-to-play policies is essential to the success of low SES adolescent leadership, as these policies do not allow all students equal opportunities to

participate in extracurricular activities. Recognizing that school budgetary concerns are at the forefront of this issue, alternatives to pay-to-play policies were offered in the previous chapter and included: reducing the number of extracurricular activities, recruiting volunteer medical personnel to complete free or low-cost physicals, implementing an equipment and supplies share program, and inviting local businesses and organizations to support district-wide extracurricular activities. In addition to school budgetary concerns, more American families are struggling financially. From 2009 to 2012, the real incomes of the top 1% of American families increased by 31%, whereas, the real incomes of the bottom 99% increased by less than 0.5% (Saez, 2013). Without the changes in the pay-to-play policies, only the wealthiest students will be able to participate in extracurricular activities, creating an even wider opportunity gap. Putnam (2015) stated that school-related extracurricular activities have traditionally narrowed the opportunity gap for low SES students over the past century, stating that the skills learned through such participation are important for economic and professional success.

### **Internal and External Implications and Considerations for School Districts**

Looking at the Socio-Ecological Model of Education (see Figure 1), individual, interpersonal, organizational, community, and policy factors are influenced by the implementation of the proposed solution. Internal and external implications to the entire social context should be considered by local school districts considering the proposed solution. The individuals (students, teachers, administrators, school board of education, community mentors) directly involved in the proposed solution come with an array of attitudes, beliefs, skills, and knowledge. The proposed solution has a strong potential for improving interpersonal relationships among these individuals as well as involving



community support. The literature review revealed that low SES students are not exposed to as many educational or leadership opportunities and experiences as their higher SES peers (Oliver, Gottfried, Guerin, Gottfried, Reichard, & Riggio, 2011; Zhang, Ilies, & Arvey, 2009). The proposed solution would potentially provide low SES adolescents with personalized interaction while gaining leadership knowledge, skills, and experiences to which they are currently not exposed. In addition to the obvious implications for low SES adolescents, the perceptions of this group from other individuals may change, creating a positive transformation in attitudes and beliefs that may reach socio-ecological factors external of the individual and interpersonal contexts.

Currently, teachers and administrators are those primarily responsible for recruiting students for extracurricular activities and leadership positions, as well as restricting others who may not meet academic standards (McNeal, 1998). The implications for the status-quo are dismal as inadequate leadership development opportunities and pay-to-play policies restrict many students. The proposed change requires local teachers and administrators to identify the specific needs and abilities of all students, while promoting staff engagement in the process of integrating new leadership curriculum. At the organizational level, local school districts plan and implement a school-specific leadership curriculum and discover creative ways to eliminate pay-to-play policies. The design of personalized instruction and policies based on practical knowledge and the unique circumstances of each community eliminate a one-size-fits-all method to leadership development and extracurricular options. The internal and external implications of this approach include:

1. Influencing local, state, and national policy and practice (Bascia, Carr-Harris, Fine-Meyer, & Zurzolo, 2014)
2. Establishing interpersonal and financial relationships within school and community (Gonsalves, 2011)
3. Reshaping the idea that curriculum is more than a set of standards to be tested, but an "internally-focused construct" (Ross & Prior, 2012, p. 101)
4. Producing a leadership environment for more inclusive engagement and development to ultimately provide society with a generation of effective leaders

The implications of the proposed solution present a hopeful outlook. The process, however, will take time and require effective implementation and evaluation.

### **Evaluation Cycle**

Once planning and implementation of the proposed solution have occurred, continuous evaluation is necessary to monitor the progress and assess the curriculum efficacy. Following the CIPP Model for Evaluation (Stufflebeam & Coryn, 2014), an evaluation cycle was developed for the proposed solution. The CIPP Model includes four phases for assessing the context, input, process, and product. The context evaluation phase determines if the goals and objectives are appropriate, there is a need for change, the environment is suitable, and the stakeholders are capable. During the input phase, the plans, procedures, and resources used to implement the curriculum and policy changes are evaluated. The process evaluation phase establishes if the curriculum and policy changes being implemented are in accordance to the plan and within budget. The product evaluation phase verifies the outcomes of the proposed solution. This phase measures the

achievement of objectives, interprets the results, and determines what changes should be made. The cycle repeats.

The RACI Matrix (see Figure 5) illustrates that school superintendents and principals are responsible to complete the evaluation phase of the Timeline for Implementation and Assessment (see Figure 4). By following the Evaluation Cycle (see Figure 6), administrators determine if the newly implemented leadership curriculum and the changes to pay-to-play policies are producing the desired results, as well as where improvements should be made (Glatthorn, Boschee, Whitehead, & Boschee, 2015).

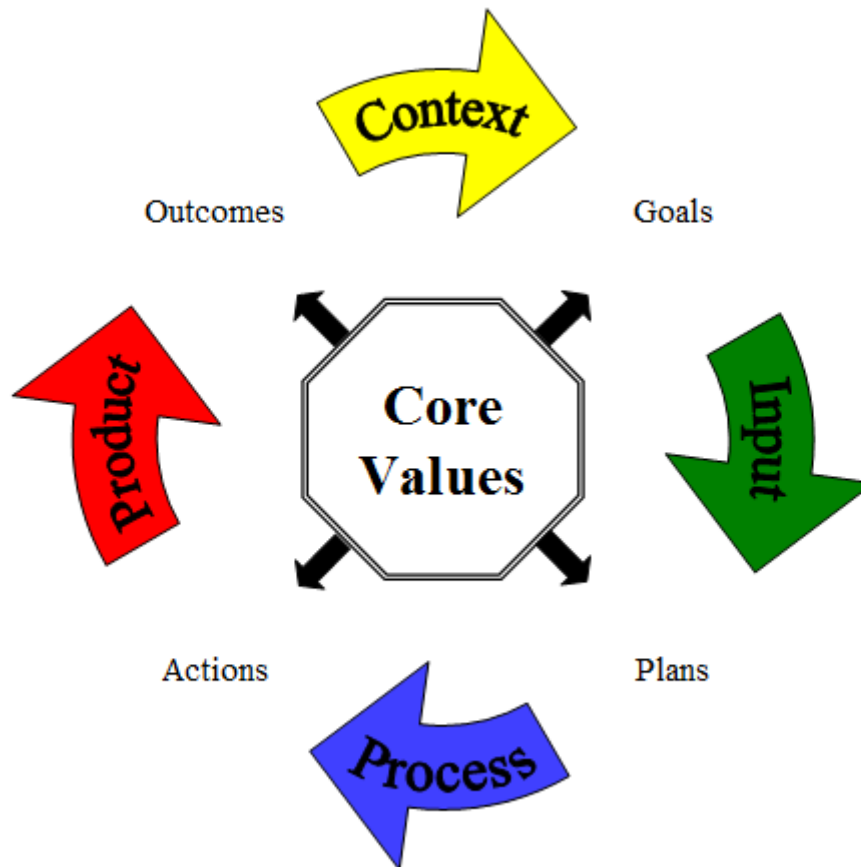


Figure 6. CIPP Model of Evaluation (Stufflebeam & Coryn, 2014)

### **Implications for Action/Recommendations for Further Research**

The intention of this quantitative study was to provide a general understanding of the research problem through an advocacy or emancipatory worldview by representing the marginalized low SES adolescent leadership group and encouraging future research to promote change (Creswell & Plano Clark, 2011). This project was designed to complement past research by studying the occurrence of leadership among low SES adolescents within Colorado public high schools and help fill the gap in scholarly research and literature in the area of adolescent leadership as it specifically related to student SES. This project strived to contribute to the greater good by providing a better understanding of the underrepresented group and encouraging change from current attitudes, barriers, and perceptions by improving educational policy and practice. Students, teachers, curriculum specialists, administrators, community members, and future educational researchers may all benefit from various segments of this study.

Low SES adolescents are perhaps the individuals who receive greatest benefit of the outcome of this research. Students who serve in positions of leadership have advantages over those who do not serve as leaders (Pedersen, Yager, & Yager, 2012; Shook & Keup, 2012; Wooten, Hunt, Leduc, & Poskus, 2012). Any improvements to adolescent leadership development or leadership opportunities may help this demographic matriculate as adult leaders and thrive in society. Although this study showed that low SES adolescents serve in certain categories of leadership, other research found that low SES adolescents struggle academically (Huang, 2013; Rotherham, 2010) and attend college at a lower rate (Vignoles & Powdthavee, 2009; Walpole, 2003).

Additional research is needed to understand this variance and if serving in a position of leadership shows any correlation to improved academic success.

Teachers, curriculum specialists, and administrators could use this research as a basis for implementing leadership curriculum and policies relating to how and under what circumstances adolescent leaders are chosen and developed. This study showed specific organizational categories where low SES students were more likely to serve as leaders, and may assist education personnel in observing behaviors and talents of students who would benefit from leadership opportunities which otherwise may go unrecognized and lost. The proposed solution allows local school districts the justification and the tools to create and facilitate opportunities to examine, evaluate, and implement strategies for adolescent leadership development within classroom curriculum, as well as suggests the elimination of pay-to-play policies for extracurricular activities. The implications of this study are numerous with the potential of influencing low SES adolescent leaders, school personnel, school leadership curriculum and policy, and future research. This study has provided a beginning to this type of research connecting student socioeconomic status to adolescent leadership, but additional research is warranted.

With the limited data in some of the categories, further research is needed to focus on one or more of the activity types that showed a significant statistical deviation. For example, a survey of Academic, Ethnic/Diversity, Civic/Service, and Student Government leaders could determine more conclusively if a non-random correlation exists and what factors are involved by considering the SES of the individual organization and the likelihood of low SES members to be involved. Once the correlating

factors are discovered, school staff could be better equipped to encourage low SES participation and leadership in these activities.

Working directly with the sponsor of specific organizations may improve response rates, particularly within larger school districts. A survey directed to the sponsor of the National Honor Society or to the athletic director may provide more detailed information and higher response rates. A survey by individual positions could assess whether the low SES student leaders are concentrated in any particular position of leadership. This research used the term "student leaders" as opposed to naming specific positions like Student Council President. Studying the proportion of low SES student leaders in top positions like president compared to other officer roles may be worthy of additional research.

Finally, this study demonstrated that low SES adolescents are serving in positions of leadership. Nonetheless, a thorough literature review of additional scholarly research established that a tremendous deficit in low SES achievement exists. It was not clear if participating in a position of leadership while in high school correlated to success in college or simply meant that low SES adolescent leaders peaked while in high school. Further qualitative research of low SES adolescent leadership may provide the necessary insight needed to understand the influence of socioeconomic desegregation, educational programs, family environment, and post-secondary attrition rates on low SES achievement.

### **Summary**

Chapter 5 provided a summary of the research, detailed instructions on the implementation of the proposed solution, implications for action, and recommendations

for future research. This project showed that a research gap in low SES and adolescent leadership literature exists and attempted to fill that gap by examining the statistical occurrence of low SES adolescents in positions of leadership among Colorado public high schools. Through a correlational explanatory survey design, data analyses confirmed the null hypotheses. The post-hoc analyses yielded additional information related to what types of activities are more likely to be led by low SES adolescents, which contributed to narrowing the gap in research. Future research is warranted to determine what independent variables would cause a low SES adolescent to be drawn to leadership in certain activities. Additional research on the influence of pay-to-play policies on low SES leadership and low SES post-secondary success should be considered. Finally, research pertaining to low SES adolescent leadership in general is necessary.

Although the quantitative data illustrated what is happening in adolescent leadership in Colorado public high schools, this type of data did not answer why or how specific students are serving in certain positions of leadership, raising more questions relating to the development of low SES leaders. The concern as to whether these opportunities are sufficient for low SES adolescents serving as leaders to transfer leadership skills into adulthood and out of a low socioeconomic environment remains. Therefore, a practical solution was proposed. By incorporating a leadership curriculum that identifies potential leaders, provides ongoing support and training, develops leadership skills through school and community partnerships, and eliminates pay-to-play policies for extracurricular activities, school districts may have a greater potential to influence the postsecondary achievements of low SES individuals.

Ultimately, this project provided a general understanding of the research problem through an advocacy or emancipatory worldview (Creswell & Plano Clark, 2011). This worldview was purposeful with the intention of using this project for the greater good, or *Ad maiorem Dei gloriam*, the Jesuit charism (Byron, 2000). Pope Francis (2013) compassionately affirmed, "Almost without being aware of it, we end up being incapable of feeling compassion at the outcry of the poor, weeping for other people's pain, and feeling a need to help them, as though all this were someone else's responsibility and not our own... [When] we isolate [young people], we do them an injustice: young people belong to a family, a country, a culture, a faith... they really are the future of a people."



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## Appendix A

## Informational Letter for Invitation to Participate in Research Survey

Dear \_\_\_\_\_:

This letter is an invitation to participate in an original study as part of the dissertation research that I am conducting for my interdisciplinary Ed.D degree in Leadership Studies at Creighton University under the supervision of Dr. Rob Koonce. You were selected to participate in this study because you are an administrator of a public high school in Colorado. The purpose of this study is to determine the relationship between students' socioeconomic status and high school leadership positions in Colorado. Most high school counselors will have the demographic information necessary to complete this survey. You may choose to complete the survey or forward this invitation and survey link directly to the individual(s) in your district with this information.

Participation in this study is voluntary. It will involve a brief 5-question online survey. You may decline to answer any of the questions if you so wish. Further, you may decide to withdraw from this study at any time without any negative consequences. All information you provide is completely confidential. Your name will not appear in any report resulting from this study. Throughout data collection, codes will be utilized to assure confidentiality and reported in aggregate so that no one school will be identified either by name or by demographics. Only researchers associated with this project will have access. There are no known or anticipated risks to you as a participant in this study.

If you have any questions regarding this study, or would like additional information to assist you in reaching a decision about participation, please contact me at 719-748-0312 or by e-mail at JenniferBaublits@creighton.edu. You can also contact my supervisor, Dr. Rob Koonce by e-mail at RobKoonce@creighton.edu.

I would like to assure you that this study has been reviewed and received ethics clearance through the Office of Research and Compliance at Creighton University. If you have any comments or concerns resulting from your participation in this study, please contact the Director of Research & Compliance at 402-280-2511.

I hope that the results of my study will be of benefit to those directly involved in the study, other educational organizations not directly involved in the study, as well as to the broader research and educational communities. Thank you for your assistance in this project.

Sincerely,

Jennifer L. Baublits, M.S.Ed.  
Doctoral Candidate at Creighton University

## Appendix B

## Online Survey Consent Form

You are being invited to participate in a research study entitled, "The Influence of Socioeconomic Status on Adolescent Leadership in Colorado Public High Schools." Jennifer Baublits of Creighton University is conducting this study. You were selected to participate in this study because you are an administrator of a public high school in Colorado. The purpose of this study is to determine the relationship between students' socioeconomic status and high school leadership positions in Colorado public high schools.

If you agree to take part in this study, you will be asked to complete a brief online survey. This survey will ask 5 questions and it will take you approximately 10 minutes to complete.

We believe there are no known risks associated with this research study; however, as with any online-related activity the risk of a breach of confidentiality is always possible. To the best of our ability, your answers in this study will remain confidential. We will minimize any risks by adhering to the ethics guidelines provided by the Institutional Review Board and the Office of Research and Compliance at Creighton University.

Your participation in this study is voluntary and you can withdraw at any time. You are free to skip any question that you choose.

If you have questions about this project or if you have a research-related problem, you may contact the researcher, Jennifer Baublits, at 719-748-0312. If you have any questions concerning your rights as a research subject, you may contact the Director of Research & Compliance at Creighton University at 402-280-2511.

By clicking "I agree" below you are indicating that you are at least 18 years old, have read and understood this consent form, and agree to participate in this research study. Please print a copy of this page for your records.

Appendix C

Survey Sent to Public School District Personnel

1. What is your current position of employment?
  - a. Colorado High School Counselor
  - b. Colorado High School Administrator
  - c. Colorado High School Teacher
  - d. Other (please define) \_\_\_\_\_
  
2. Do you consider your school district to be
  - a. Rural
  - b. Urban
  
3. What is the total population of students in grades 9 -12?
  - a. Fewer than 100
  - b. 101-250
  - c. 251-500
  - d. 501-750
  - e. 751-1000
  - f. More than 1000
  
4. What percentage of students in grades 9 – 12 receive free or reduced lunch benefits?
  - a. Fewer than 10%
  - b. 11 – 25%
  - c. 26 – 50%
  - d. 51 – 75%
  - e. More than 75%
  
5. Please identify the top 10 most popular organizations for students in your public school. For each organization, please indicate by placing a check mark in the appropriate box if the organization has a current student leader who receives free or reduced lunch benefits.
 

1. _____	Yes _____	No _____
2. _____	Yes _____	No _____
3. _____	Yes _____	No _____
4. _____	Yes _____	No _____
5. _____	Yes _____	No _____
6. _____	Yes _____	No _____
7. _____	Yes _____	No _____
8. _____	Yes _____	No _____
9. _____	Yes _____	No _____
10. _____	Yes _____	No _____

## Appendix D

*Activity-Type Categorization for Individual Responses*

Categories / Activities	(n = 251)
<b>Academics</b>	
Academic Club	1
Book Club	1
French Honor Society	1
French / Spanish Club	1
International Baccalaureate	1
Knowledge Bowl	8
MatchWits	1
National Honor Society	20
Pre-Collegiate	1
Science Club	1
Science Olympiad	1
Spanish Honor Society	1
Yearbook / Annual / Publications	4
<b>Athletics</b>	
Archery	1
Athletics (No Specified Sport)	6
Basketball	12
FCA	2
Fencing	1
Fish Club	1
Football	10
Rock Climbing	1
Ski Team	1
Soccer	1
Softball	2
Track	2
Volleyball	5
<b>Civic/Service</b>	
Adopting Communities of Excellence (ACE)	1
Big Brother/Big Sister	1
Boy Scouts	1
Care Team	1
Chamber of Commerce- Youth Track	1

Friends and Family	1
Hi-Teens	1
Key Club	1
Leo club	2
Octagon Club	1
Peer Counselors	1
SHOTS Students Helping Others Through Service	1
SMART Kids Smart Choices	1
TRAK-Try Random Acts of Kindness	2
True Blue Organization	1
XXXXXX Youth in Community Service	1
Ethnic	
Culture Club	1
Diversity Club	2
French/Spanish Club	1
Hispanic Club	1
Native American Club	1
Native American Youth Association	1
Outreach Program	
Link Crew	1
Performing Arts	
1-Act Play	1
Art Club	3
Band	3
Choir	4
Dance	1
Debate	1
Drama	8
Forensics	1
Interact	2
Marching Band	3
Mock Trial	1
Pep Band	2
Speech	2
Speech and Debate	2
Theatre	2
Thespians	1
Spirit/Cheer/Yearbook	
Annual Pub	1

Cheerleading	5
Junior Aggies	1
Pep Squad	1
Student Government	
Leadership	1
STUCO	2
Student Council	26
Student Government	2
Student Leadership	2
Student Senate	1
<hr/>	
Vocational	
Agriculture	1
Career Tech	1
DECA	1
FBLA	24
FCCLA	6
FFA	22
Health Leaders	1
HOSA	1
TSA	1
VoAg	1