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A Mixed-Method Exploration of School Organizational and Social Relationship Factors That Influence Dropout Decision-Making in a Rural High School

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A MIXED-METHOD EXPLORATION OF SCHOOL ORGANIZATIONAL AND SOCIAL
RELATIONSHIP FACTORS THAT INFLUENCE DROPOUT DECISION-MAKING IN A
RURAL HIGH SCHOOL

A Dissertation

Submitted to the School of Graduate Studies and Research

in Partial Fulfillment of the

Requirements for the Degree

Doctor of Education

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Title: A Mixed-Method Exploration of School Organizational and Social Relationship Factors That Influence Dropout Decision-Making in a Rural High School

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This explanatory mixed-method study explored the dropout phenomenon from an ecological perspective identifying the school organizational (academics, activities, structure) and social relationship (teachers, peers) factors that most significantly influence students' decisions to leave school prior to graduation at a rural high school in south central Pennsylvania.

The quantitative phase of the study utilized a 40 question, forced choice survey to isolate the school organizational and social relationship factors that had the most influence on students' dropout decision making, as well as to determine what, if any, correlation existed between the perceptions of students who are not at-risk, those who are at-risk but are still in school, and those who had already formally dropped out of school. The survey respondents included 80 students in school and 10 students who had dropped out of high school. The qualitative phase was composed of in-depth interviews of nine students who had formally dropped out of the rural high school in the study.

The results of the quantitative analyses revealed the following key findings: (1) there was no single predictor factor category which statistically and significantly influenced student persistence; (2) there was no statistically significant difference in the way students who were at-risk, but still enrolled in high school, and those that had already dropped out perceived any predictor category; and finally, (3) the responses of students at-risk (whether enrolled or who

dropped out) were statistically and significantly different from the responses of students who were not at-risk in the predictor categories of school structure and teacher relationships.

The patterns that emerged from the interviews revealed that these students: (1) viewed the school structure as a barrier to diploma attainment; (2) believed the lack of content relevancy lead to detachment from school and justified the decision to quit school; and (3) shared that had an adult within the school intervened at the beginning of his or her divergence from the path to graduation, the results of his or her high school experience would have been different.

Several implications for practice emerge given these findings. First, proactive strategies such as multiple curricular pathways and the use of transition academies should be applied systematically for all students enrolled in school. These structural elements of the school's organization should be paired with instructional strategies that promote student engagement. Second, targeted interventions should be designed to meet the needs of students who are at-risk for dropping out of high school. Targeted intervention should include the: (1) use of an instrument that identifies students who are developing or who possess negative perceptions of the school and school staff; (2) at-risk students being assigned an education advocate to promote meaningful and sustainable relationships; and (3) school leaders' efforts to creatively develop personalized learning for all students who are considered at-risk for early school departure.

DEDICATION

To my daughters, Tegan and Avery who have taught me that love and family are truly the greatest gifts that life has to offer. Remember to always dream big and never allow others to define what is possible in your lives. May you each go the distance.

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Life is a journey filled with twists and turns, ups and downs, and unexpected curves and bumps that are both exhilarating and horrifying at the same time. The dissertation process is truly analogous to the journey of life and better if not traveled alone. I would be remiss if I did not thank those individuals who traveled this journey with me.

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CHAPTER 1

INTRODUCTION

The student graduation rate in American high schools is not a recent concern for school and legislative personnel. In fact, for the past thirty years school reform efforts have targeted high school graduation as an area necessary for improvement. The National Commission on Excellence in Education (1983) produced *A Nation at Risk*, which reported, “The educational foundations of society are presently being eroded by a rising tide of mediocrity that threatens our very future as a Nation and a people” (United States Department of Education, 1983, p. 5). This report prompted federal action to improve the content taught, the time allocated to teaching, the learning expectations, and the instructional quality in American schools. Included in its recommendations, The National Commission on Excellence in Education called for improved high school graduation rates. This would not be the final call from the federal government to improve the quality of education and ensure an increased high school graduation rate. The passage of the No Child Left Behind Act of 2001 (NCLB), specifically part H, The Dropout Prevention Act, imposed enhanced accountability measures for the graduation rates of local schools. The increased expectations were paired with the provision of federal grants to support school districts in the development of programs that support students’ attainment of a high school diploma and re-enroll students who had already dropped out of school (U.S. Department of Education, 2002).

Even with federal legislation calling for improved graduation rates among American high schools, the true cause of the dropout epidemic is unclear. The challenge has been that for decades states have been permitted to utilize different calculation formulas, which have included event dropout, status dropout, and cohort dropout methods when reporting their yearly dropout rates. An example of the discrepancy caused by various calculation formulas can be observed

upon review of two conflicting reports, both conducted regarding the most recent class of high school dropouts in 2012.

The National Center for Educational Statistics (NCES), in their most recent annual report, *The Condition of Education 2012*, revealed that the percentage of 16-through-24 year olds not enrolled in school or who have not earned a diploma or general education development certificate (GED), has declined from 12% in 1990 to 7% in 2010 (Aud, Hussar, Johnson, Kena, Roth, Manning, Wang, & Zhang, 2012). This report also revealed that between 1990 and 2010 the status dropout rate for all ethnic groups decreased, showing improvement across all student populations in the United States. The decrease for Caucasians from 9.1% in 1990 to 5.1% in 2010, and the decrease for Blacks from 13.2% in 1990 to 8.0% in 2010, revealed an improvement in school outcomes. Dropout rates for Hispanics decreased from 32.4% in 1990 to 15.1% in 2010; however, as a subgroup, Hispanics continued to experience significantly higher rates of dropout than other racial and ethnic groups (Aud et al., 2012). The NCES, along with the Current Population Survey (CPS) and Common Core of Data (CCD) databases, were used to provide the most current analysis of dropout and school completion rates. When reviewing the NCES statistics, it appears that United States schools have improved in graduating a greater percentage of high school students.

However, the status calculation method used by Aud et al. (2012) is just one method for determining the completion and dropout rates. A very different picture of school completion rates in the United States emerges when using the average freshman graduation rate. The average freshman graduation rate is used to estimate the number of diplomas earned in any given year divided by the number of freshman enrolled four years earlier (Aud et al., 2012). NCES averaged freshman graduation rate data from the 1990-1991 school year to the 2008-2009 (most

current longitudinal data) school year. This statistic has shown fluctuation through the last two decades. For the 2008-2009 school year the averaged freshman graduation rate was determined to be 75.5%, which is higher than the 73.7% rate calculated for the 1990-1991 school year (Aud et al., 2012). However, when the data are disaggregated to the state level, signs of continued progress are less promising. In their analysis of averaged freshman graduation data, Aud and colleagues (2012) revealed that 30 states demonstrated graduation increases and 20 states experienced a decrease in their graduation rates, exposing continued need for improvement measures.

The use of these varied methodologies created inconsistencies among the data from different states; it was these inconsistencies that compelled the United States Department of Education (USDE) to tighten the regulations on graduation calculation. In 2008, the USDE identified a standardized 4-Year Cohort Calculation Method for state and local education agencies to use when calculating their graduation rates. Beginning in the 2012 school year, the 4-Year Cohort Calculation Method was utilized to determine if a high school has met the adequately yearly progress (AYP) benchmark, which was set at 85% following two years of pilot testing. The new calculation method is reported to provide a more uniform and accurate method that will allow for comparisons to be made in the graduation and dropout rates among states. Using a unified calculation method is expected to provide a clearer understanding of how many students in the United States leave school prior to graduation (Pennsylvania Department of Education, 2010).

These federal mandates and accompanying supports may have been the catalyst for the increase of graduation rates to 72% for the class of 2011 (Editorial Projects in Education, 2011). The graduation rate of the class of 2011 marks the highest graduation level in the last two

decades. Although the dropout rates in this country have declined, the number of students dropping out of American schools each year is immense and understanding the factors relevant to high school dropout could prove to be very helpful in the effort to ensure that all students earn a high school diploma

Outcomes of Dropping Out of High School

The continued commitment of the United States Department of Education to improve the graduation rates in this country is likely due to the financial and social consequences of dropping out of high school. Failure to earn a high school diploma has fiscal implications for both the student who has dropped out and for society as a whole. On the individual level, high school dropouts are more likely to experience joblessness, underemployment, poverty, and incarceration (Sum, Khatiwada, & McLaughlin, 2009). In a study conducted for the Center for Labor Market Statistics at Northeastern University, Sum and his colleagues found that in 2008 only 45.7% of high school dropouts were gainfully employed. This employment rate was 22 percentage points below that of high school graduates. Also, it was found that 58% of dropouts were living below the poverty level. In their 2011 Issue Brief, the Alliance for Excellent Education reported that even when high school dropouts do earn gainful employment, their average annual income is \$7,840 less than that of peers who earned a high school diploma.

The economic impact of dropping out of high school is not isolated to the individual who drops out of school but also has implications for society. According to the Alliance for Excellent Education (2011), the additional earnings of one class of dropouts would yield \$154 billion in additional revenue for the national economy. However, if the current trend of one million dropouts per year continues for the next decade, the nation could lose \$1.5 trillion dollars. Not only do high school dropouts cost the nation in lost earnings, tax contributions, and social

contributions, but they also drain the economy of millions of dollars in incarceration, crime prevention, and health care costs (Sum et al., 2009; Muenning, 2005).

Decreased personal earning potential is not the only consequence associated with dropping out of school. Incarceration appears to be an outcome for many high school dropouts. According to The Alliance for Excellent Education (2011), high school dropouts are eight times more likely to be incarcerated than their peers who earned a high school diploma. Conversely, studies have shown that individuals who earn a high school diploma live longer (Muenning, 2005), are less likely to commit crimes (Raphael, 2004), rely less on public assistance (Garfinkel, Kelly, & Waldfogel, 2005), and have a more stable lifestyle due to their career earning potential (Alliance for Excellent Education, 2011). While not all high school dropouts end up being incarcerated, the reality exists that high school dropouts are far more likely to commit criminal offenses that result in incarceration. In its Issue Brief, The Alliance for Excellent Education (2011) reported that 75% of America's state prison inmates, 59% of federal inmates, and 69% of all prison inmates were individuals who had not completed high school. The financial cost associated with incarcerating these individuals is over \$22,000 per inmate. The Alliance for Excellent Education (2011) estimated that if the nation's graduation rate increased a mere five percent, \$5 billion dollars expended to incarcerate these individuals would be saved and an additional \$2.8 billion dollars in revenue would be added to the national economy.

A benefit of earning a high school diploma is that an individual earns a greater annual income and often has access to health insurance, which allows for adequate health care services. In fact, Muenning (2005) found that if every student had graduated from the class of 2006, the nation could have saved \$413,706 in Medicare costs for each uninsured individual over the course of each dropout's lifetime. Given that 1.2 million students dropped out of high school by

the conclusion of the 2006 school year, the nation could have saved \$17 billion dollars in health care costs accrued to maintain the health and welfare of these individuals over the course of their lifetimes. With the growing costs of healthcare in this country, it is evident that supporting students' persistence in high school and affording them a quality education aligned with the post-secondary and workforce needs of this country offers improved health for American citizens and savings to the national economy.

With evidence clearly showing that dropping out of high school is detrimental to the individual and to society as a whole, the federal government had to tighten federal requirements for state and local education institutions to increase graduation rates. These heightened federal graduation requirements, paired with the harsh social and economic realities of high school attrition, make research to identify causes and possible interventions timely.

An Ecological Perspective

As early as 1979, sociologists and other researchers supported the idea that interactions among and between students and their environment have an impact on students' decisions to graduate from high school (Bronfenbrenner, 1979). Bronfenbrenner, in his book *The Ecology of Human Development: Experiments by Nature and Design* (1979), defined a theory of bioecological systems to explain how a child's individual attributes and the child's environment influence how a child grows and develops. Ultimately, the interactions between the individual and the environment impact the decisions the child will make in the future, including the commitment to graduate high school. Bronfenbrenner's theory described the critical importance of a child connecting with an adult in a relationship in which the child knows unconditional love from this adult. Bronfenbrenner (1979) also defined the child's opportunity to engage in mutual interactions with an adult and his or her exposure to an adult's public support and praise as key

variables in promoting a child's positive social development and his or her ability to persist through difficult situations or experiences.

Bronfenbrenner's theory has many implications for today's schools due to the disintegration of the family structure, which limits a child's opportunity to attain the engagement, affirmation, support, and even unconditional love necessary to successfully navigate the educational experience. Bronfenbrenner (1979) suggested that the exploration of school contexts alone limits researchers' abilities to explain why students disengage from the high school environment. Moreover, Bronfenbrenner suggested that the mutually beneficial relationships that exist within high schools are essential for student engagement (Bronfenbrenner & Ceci, 1994). Researchers such as Roderick (1993), Mulroy (2008), and Tinto (1987, 2003) have utilized Bronfenbrenner's ecological systems theory to investigate and define variables associated with a high school or college student's decision to exit school prior to graduation. Tinto's and Pusser's (2006) report, "Moving from Theory to Action: Building a Model of Institutional Action for Student Success," showed the results of a meta-analysis of the research on college persistence and advocated for a model of institutional student success that is designed to incorporate critical institutional aspects that shape student persistence.

The institutional aspects described by Tinto and Pusser (2006) create an image of a school that embodies the tenets of Bronfenbrenner's ecological systems theory. While Tinto's and Pusser's intent was to describe the organizational features that support college persistence, each institutional aspect the researchers identified has emerged in other studies of factors related to high school persistence (institutional commitment [Lee, Özgün-Koca & Cristol, 2011; Mulroy, 2008], high expectations for students [Amerin & Berliner, 2003], academic, social, and financial support [Allensworth & Easton, 2005; Battin-Pearson & Newcomb, 2000; Roderick, 1993],

frequent feedback on performance [Mulroy, 2008], and active involvement [Perdue, Manzeske & Estell, 2009; Ream & Rumberger, 2008]).

The landmark work of Bronfenbrenner (1997) and Tinto and Pusser (2006) demonstrated the link between students, their environment, and school success. Further research on the relationships among students and their teachers and peers has added to the findings of Bronfenbrenner, Tinto, and Pusser. Multiple studies on student-teacher relationships and high school completion have concluded that positive relationships with teachers resulted in greater student commitment to school, higher levels of school engagement, and an increased likelihood of earning a high school diploma (Knesting, 2008; Lee & Burkam, 2003; Mulroy, 2008). Similar research conducted by Guillory (2007) has shown peer influence (both positive and negative) to be the greatest predictor of school completion. The relationships formed by students within their high school environment were found to foster school attachment, which led to higher levels of engagement and academic commitment (Guillory, 2007; Perdue et al., 2009; Ream & Rumberger, 2008). Furthermore, strengthening the teacher and peer relationships within schools is associated with a decrease in the dropout rate within high schools (Guillory, 2007; Mulroy, 2008; Ream & Rumberger, 2008; Tinto & Pusser, 2006). Bronfenbrenner's (1979) ecological systems theory was used to explore which organizational and social relationship factors promote or inhibit school completion in a rural high school in Pennsylvania. The findings extend the research conclusions of Tinto and Pusser (2006) and others.

Statement of the Problem

Studies on the dropout phenomenon are abundant but predominately use quantitative methodology and large national databases, such as the Common Core Data (CCD), National Education Longitudinal Study (NELS), or the High School and Beyond database (HSB) as data

sources. While these databases offer extensive information that is longitudinal, the quantitative nature of these data is not designed to provide an in-depth perspective of why students drop out. Furthermore, while multiple researchers (Guillory, 2007; Kaczynski, 1989; Knesting, 2008; Lessard, Butler-Kisber, Fortin, Marcotte, Potvin, & Royer, 2008; Mulroy, 2008) have utilized qualitative methodology to explore the causes for high school dropout, only two studies (Guillory, 2007; Lessard et al., 2008) were found that included high school dropouts as participants in the study. The lack of research that includes the lived experiences of dropouts limits the knowledge about how and why specific school factors led to the decision to drop out of school before graduation. In addition to the limited number of stories from students who have dropped out, there is also a limited use of rural schools in the exploration of the dropout phenomenon. Hardré and Sullivan (2006) confirmed the absence of rural research through an analysis of literature and found that only 6% of the research conducted included a rural school context, with the majority of research occurring in urban and suburban locations. This supports Steffes' (2008) position that "the focus on rural education in the United States has been far outstripped by the education of our urban center, and from an educational standpoint, the country child has been left far behind" (p. 181). The absence of rural research is particularly concerning for a state like Pennsylvania where, as The Center for Rural Pennsylvania (2010) reports, 27% of the 12.7 million residents live in one of the 48 rural counties and attend one of the 243 school districts that are classified as rural. With over half of the counties and school districts reflecting a rural population, the absence of rural research presents an obvious concern. The importance of understanding the dropout phenomenon of rural schools plays a vital role in supporting the individual student, the community, and society as a whole.

Mulroy (2008) worked to fill the void of research in rural settings when she studied at-risk youth in a rural high school in northeastern Pennsylvania. In her research the theories of Bronfenbrenner (1979) and Tinto (1987) were utilized to explore if caring adults engaging with at-risk students led to student success and perseverance to graduation. Utilizing record review, focus groups, and student interviews, Mulroy (2008) listed the following as factors that impacted student persistence to graduation:

- positive adults involved with students, both formally and informally;
- written documents and policies, including the mission and vision of the district, considered in developing and maintaining a culture of caring and accountability;
- the existence of programs and practices that encourage a systemic culture of caring, support, and accountability;
- mitigation of large school sizes by personalizing the school environment; and
- alleviation of the negative impact of standardized testing with the use of varied alternative assessments as vehicles for meeting graduation requirements (p.195).

Mulroy's (2008) study enhanced the understanding of student perceptions of dropping out, but with the limited sample size (six students interviewed) and a single location in northeastern Pennsylvania, the data cannot be generalized across a broader population of students.

This study is aimed at adding to the body of research on high school persistence in rural areas and offers insights relative to the dropout crisis for an underrepresented subgroup (Steffes, 2008). Furthermore, this research helps to broaden the understanding of student perceptions regarding the causes associated with dropping out of high school and the identification of predictive factors for high school attrition. The findings may allow district personnel, departments of education, and lawmakers to focus their reform and funding efforts to abate the

influence of the significant school organizational and social relationship factors that impact high school attrition. This study explored the dropout phenomenon from the ecological perspective. The explanatory mixed-method approach allowed for the isolation of school organizational and social relationship factors that most significantly influence students' decisions to leave school prior to graduation through quantitative analyses. At the same time qualitative methodology was used to incorporate the perspective and perceptions of high school dropouts from a rural high school in south central Pennsylvania.

Significance of the Study

The existing research on high school attrition has typically focused on two major themes. The first theme involves the exploration of the individual attributes that are often possessed by students who have dropped out of high school. The second theme that frequently emerges in the research includes the factors within the school environment that impact students' ability to earn a high school diploma. The research on dropout prevention is extensive and contains a wealth of information for both educators and policymakers.

This study however, focused on two new aspects: the school organizational and social relationship factors that have the most influence on students and a more in-depth exploration of strategies for dropout prevention, both which are derived from actual students who currently face or have recently faced the decision to leave school. This study also addressed several unresolved issues in attrition research. First, the study sought to determine what factors have the greatest influence on dropout decision-making. Previous studies often focused on the impact of a single factor and relied predominately on the quantitative data from large national databases to reach the conclusions. The current study expands this area of research by using a mixed-methods research design where the data in both phases are gained from currently enrolled juniors and

seniors in high school, as well as students who had previously dropped out of high school.

Second, there has been little research exploring how factors known to impact dropout decision-making influence varying subgroups of students. Specifically, little research has been done on how these factors influence students who are at-risk but are still enrolled in school, students who have dropped out, and students who would not be considered at-risk to drop out of school. The focus of this study was to examine the impact of these school-level factors on each of these student groups. Given the negative outcomes for students who fail to earn a high school diploma, it is important for practitioners to have a clear understanding of the needs of these various student groups within the school to design relevant interventions that increase the likelihood that all students achieve a positive school outcome.

Finally, this study contributes to the dropout literature specifically as it relates to the perceptions and needs of student dropouts. Students who have made the decision to drop out of school provide a valuable perspective in the discussion of dropout prevention. The researcher has listened to the voices of these students who have struggled and ultimately abandoned their pursuit for a high school diploma and has done so with the belief that the perceptions of these former students will assist educators in designing school environments where individual student needs are valued, and relevancy and engagement are established through meaningful curriculum and programs that align with the desired post-secondary goals of individual students. It is critical for school leaders and teachers to have a clearer understanding of why students leave school and what steps could have been taken to assist in their attainment of a high school diploma.

The Purpose of the Study and Research Questions

The purpose of this explanatory mixed-methods study was to determine which of the school organizational and social relationship factors had the most influence on high school

attrition, as well as how and why these factors may have created insurmountable obstacles to high school graduation for student dropouts.

The questions guiding the research were as follows:

1. What specific school organizational and social relationship factors have the greatest influence on student persistence?
 - 1(a) What is the comparative influence of school organizational versus social relationship factors on student persistence?
2. What, if any, correlation exists between the school organizational and social relationship predictor factors for students who have seriously considered dropping out and students who have formally dropped out of school?
3. What, if any, patterns emerge in the cause for dropping out of school among students who have left school prior to graduation?

Research Hypotheses

The research hypotheses used for the exploration of school organizational and social relationship factors that influence dropout decision making included:

1. The participants in this study will identify no difference in the influence of the five predictor groups (academics, activities, structural, teacher, and peers) on persistence towards high school graduation.
 - 1a. School organizational (academics, activities, structural) and social relationship (teacher and peers) factors have no influence on student persistence towards graduation.
2. The responses of currently enrolled students who have seriously considered dropping out of high school and those who have already dropped out will have average

equivalent mean scores for all five predictor groups (academics, activities, structural, teacher, and peer predictor categories).

3. Specific school organizational and social relationship factors will impact the decision to leave school prematurely of each dropout who participated in this study.

3a. High school dropouts will be able to identify a single factor that caused them to drop out of high school.

3b. Each high school dropout will be able to identify strategies that could have been used by school personnel to help each persist to graduation.

3c. Social relationships factors will have a greater influence on the high school dropouts that participate in this study than school organizational factors.

Review of the Method

Explanatory mixed-method design was chosen by the researcher to fully explore the dropout phenomenon in a rural high school in south central Pennsylvania. The quantitative survey data incorporated in phase one of this study was collected from 90 participants. A purposeful sampling technique was utilized to include 80 out of 112 juniors and seniors currently enrolled at this single high school. The individuals included satisfied three criteria. They were eligible to quit school in accordance with Section 1330 of Pennsylvania School Code, had a signed parent consent, and assent to participant in the study. The 10 additional students included in the quantitative phase had previously dropped out of high school and the criterion for their participation is described below.

Using survey data, the researcher calculated the means and ran a multiple logistic regression analysis to determine each factor's individual influence, and the mean of each predictor category was calculated to determine which predictor group had the most influence on

drop out decision-making. Additionally, the researcher conducted analyses which included Pearson Product-Moment Correlation, Spearman Rho Correlation, and Independent samples *t*-test to investigate the strength of the relationship between the predictor variables and the outcome variable (drop out decision-making), and to determine if there was a difference in how school organizational and social-relationship factors influenced dropout decision-making for various subgroups of the school population (at-risk students, high school dropouts, and students not at-risk for attrition).

The qualitative phase of this study included the 10 participants that were purposefully selected by the researcher due to their status as a high school dropout. A list of 45 names of students who dropped out was provided to the researcher by school personnel. Of the 45 names provided, only 30 had a current address or phone number available in either the student management system or archived student file at the school. All 30 former students were contacted via phone and subsequently mailed a letter requesting their participation in the current study. The 10 students included in the study represent the 10 students who dropped out who agreed to participate following phone contact with the researcher. The 20 other possible participants were contacted via phone two additional times, but did not respond. Each of the 10 participants agreed to meet with the researcher and consented to complete the survey, but only nine of those participants agreed to be interviewed. The nine participants were interviewed following a semi-structured interview format. The interview protocol utilized was developed to elicit information about three main themes: the catalyst for the decision to quit high school, the thoughts on possible prevention strategies that could have been employed by school staff to alter their decision to quit, and their perceptions of the school organizational and social-relationship factors that most significantly influenced their decision to quit school. Students' responses to the

questions were recorded and subsequently transcribed by the researcher. The researcher then used the strategy of priori coding to code the data according to factors and themes described in previous research on high school attrition as well as the aspects of Bronfenbrenner's ecological systems theory. This permitted for the reduction of the data into a manageable set of themes or categories (Gay, Mills, & Airisan, 2009). Once the data were categorized into themes, it was analyzed further to determine what, if any, patterns exist across the participants; these patterns are described and discussed in Chapter 4 and Chapter 5 of this study.

The participants and statistical methods incorporated in this study were utilized to provide a comprehensive critique of the dropout phenomenon. The inclusion of at-risk students still enrolled in high school and students who have already dropped out offered a varied perspective of this problem, which allowed the researcher to determine what, if any, difference existed between the influence of school organizational and social relationship factors on dropouts and their peers who have considered dropping out but did not. Additionally, the inclusion of the stories of high school dropouts provided insight as to how school personnel can mitigate the impact of these factors to make high school graduation a possibility for all high school students in the future.

Assumptions, Limitations and Delimitations

Three assumptions in this study have been made. First, that the use of expert and usability panels increases the validity of the research instruments. By following the recommendations of Creswell (2008) regarding content validity, it is assumed that the instruments are clear, accurate, and represent the critical features of the high school dropout phenomenon. Secondly, it is also assumed that the participants in the study will respond to both survey and interview questions with honesty. Finally, it is assumed that researcher has utilized a

sufficient number of mechanisms for reflectivity to prevent individual bias from influencing the researcher's actions, interpretations, and conclusions.

There are several delimitations of this study that should be acknowledged. The first is that of transferability due to the use of a single rural high school in Pennsylvania. The school utilized in this study was a small rural high school that had limited ethnic and racial diversity; therefore, limiting the generalizability of the findings to schools with varying size and student demographics. Secondly, the sample population was that of rural high school students who were currently enrolled in eleventh and twelfth grade. This population was purposefully selected because these students, according to Pennsylvania School Code, can drop out of school without parent consent; however, this excluded the perceptions of students enrolled in ninth and tenth grade, who could also potentially quit school prior to graduation. Third, the perceptions regarding how and why the school organizational and social relationship factors created seemingly insurmountable obstacles to graduation were limited to students who have dropped out of high school and did not include those of currently enrolled students who were at-risk for premature school exit. If the perceptions of these students could be obtained they might provide a varied view of how and why these factors led students to quit school. Finally, this study sought to include six common variables that, based on previous research, are associated with the causes for high school attrition; however, it is not an exhaustive list, and the actual reasons that some students dropped out could have been associated with other risk factors.

There are also several limitations of the study that must be acknowledged. First, the qualitative data was collected from on nine out of the 45 former students from the rural high school in this study; therefore, the results are limited to those individuals who were willing to participate in the research study. Secondly, the catalyst for dropping out of high school for three

of the nine former students was a life-altering experience and not one of the school organizational or social relationship factors being researched. Therefore, the possibility of these students graduating had they not had this life-altering event is unknown. Finally, the range in time elapsed since dropping out of high school extended from two weeks to ten years, with the majority of participants interviewed for this study having dropped out more than six years ago. The variation in time from the date of dropping out of school may have resulted in varied perspectives on the influence of the factors explored in this study, as well as an understanding of the true impact of these factors on their decisions to quit school.

Definitions of Terms

The following terms are defined according to their usage in this study.

At-risk youth: When students within a school demonstrate attributes or characteristics that impact their potential for successfully completing school (Hubner & Wolfson, 2001).

Averaged Freshman Graduation Rate (AFGR): A statistical percentage calculated using the enrollment data for an incoming freshman class against the diplomas awarded four years later (NCES, 2010).

Comprehensive School Reform: The implementation of scientifically-based research and effective practices so that all children, especially those in low-performing, high poverty schools, can meet challenging state content and academic achievement standards (United States Department of Education, 2002).

Deviant affiliation: When a child establishes friendships with anti-social peers (Battin-Pearson & Newcomb, 2000).

Dropout: A student who exits school prior to graduation that has not died or enrolled in another school (PDE, <http://www.education.state.pa.us>, n.d.).

Dropout Rate: The proportion of students who dropped out divided by the number who originally enrolled in a single school year (PDE, <http://www.education.state.pa.us,n.d.>).

General deviance: Behavior that is counter to the expected norms of a school environment, such as disrespect, promiscuity, and disengagement (Battin-Pearson & Newcomb, 2000).

Graduation requirements: The courses, assessments, and required credits necessary to earn a diploma based on how local officials interpret the recommendations from the Pennsylvania Department of Education (PDE, 2012).

National Center for Educational Statistics (NCES) School Completion Rate: A whole grade level calculation of to track those ninth grade students who entered school and completed in four years (NCES, 2006; Swanson & Chaplin, 2003).

Pennsylvania Information Management System (PIMS): A database run by the Pennsylvania Department of Education intended to store student-level data to support the abilities of school districts to make instructional decision to ensure academic growth of students (PDE, n.d.).

Pennsylvania System of Student Assessment (PSSA): A standards-based assessment administered to students enrolled in Pennsylvania school district to determine the success of instruction in supporting all students reaching proficiency in the academic standards (PDE, 2012).

Poor family socialization: When parents or guardians have set low expectations for academic achievement and school participation for their child and/or a lack of education of their parents themselves, thus decreasing the parents' abilities to academically support their children (Battin-Pearson & Newcomb, 2000).

Remedial classes: School district courses designed to support and remediate students' skills in targeted subjects to ensure academic proficiency (PDE, 2006).

Rural-Distant: "Census-defined rural territory that is more than five miles but less than or equal

to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster” (Common core of data, identification of rural locales, n.d.).

Status Dropout Rate: Calculation of students not in enrolled in high school at any given point in time regardless of when the officially dropped out of high school (Aud et al., 2012).

Structural strain: Factors such as gender, ethnicity, and low socio-economic status that have been shown to impact students’ abilities to persistence in high school (Battin-Pearson & Newcomb, 2000).

4-Year Cohort Rate: The formula mandated by the USDE requires that school districts apply a standardized formula to calculate the graduation rate. Schools must first take the number of students who entered in ninth grade, then add to that quantity any students who transferred into that given class and then subtract any students who transferred out of the class, giving them the divisor for the equation. Next, the schools must divide the number of on time graduates by the divisor (described above) and finally multiply this quotient by 100, giving them their four-year adjusted cohort graduation rate calculation (PDE, 2010).

Summary

The United States is combating an epidemic of students failing to earn high school diplomas, which has caused a decline in an employable citizenry for a globally competitive job market (Aud et al., 2012). While national graduation rates increased to 72% for the 2010 school year, one million young adults opted to leave school without graduating (Editorial Projects in Education, 2011). Although this crisis has gained the attention of legislators, educators, and business and industry, current reform efforts have not yielded significant gains towards improving the completion rate of young adults in high school in the United States.

Studies have shown that high-stakes testing (Amerin & Berliner, 2002a, 2002b, 2003; Nichols, Glass, & Berliner, 2006), increased graduation requirements (Allensworth & Easton, 2005; Lillard & DiCicca, 2001), and application of retention practices (Alexander, Entwistle, & Dauber, 2003; Jacob & Lefgren, 2009; Jimerson, 2001; Jimerson, Anderson, & Whipple, 2002) can be obstacles to graduation. Positive teacher (Knesting, 2008; Lee & Burkam, 2001; Mulroy, 2008) and peer relationships (Guillory, 2007; Ream & Rumberger, 2008) can promote student persistence. Given the amount of research investigating school organizational and social relationship factors related to high school dropout, the need that emerged in the literature was to investigate whether organizational decisions made by rural school administrators influenced student-teacher and peer relationships (Bronfenbrenner, 1979, 1986; Bronfenbrenner & Ceci, 1994; Mulroy, 2008; Tinto & Pusser, 2006) from the perspective of at-risk students and students who have already dropped out of school. To that end this study used explanatory mixed-method design to both determine the influence of each school organizational and social relationship factor, and then deepen the understanding of why these factors may have caused rural high school students to drop out (Gay et al., 2009). Identifying the influence of school and social-relationship factors associated with a student's decision to dropout offers practitioners who are working at the school level an opportunity to use the results revealed in this study to assess their school environment and implement strategies that could reduce the dropout level in the rural school environment. Having a clearer understanding of the specific factors that have the most significant impact on students allows school administrators, teachers, and counselors the ability to develop specific interventions that target and minimize the impact of that factor on an individual student. Ultimately, if each school utilized a mechanism, such as the survey used in this study that assesses the impact of school level factors on each student, and worked with the

individual student to mitigate the impact of that factor, the attainment of a high school diploma could be a realistic possibility for all students.

CHAPTER 2

REVIEW OF LITERATURE

The purpose of this chapter is to review the literature related to the prevalence and impact of school organizational and social relationship factors within high schools and how those factors are associated with students' decisions to remain in school until graduation. This literature review describes the impact of the dropout epidemic and the school reform efforts that have been implemented to reduce the number of students quitting school each year. Following the background is a discussion of the research related to school factors influencing dropout decision-making along with a description of Bronfenbrenner's ecological systems theory which served as the theoretical foundation for the current study. The factors discussed include: engagement, teacher relationships, peer relationships, high-stakes testing, graduation requirements, retention, and school size. This literature review concludes with a chapter summary.

Background of the Problem

Each year close to one-third of students in the United States take part in a procession out of high school for the final time. This final walk is not symbolic of their success in attaining a diploma, but symbolizes the abandonment of their educational journey. This decision made by over one million students is a tragic one because research has shown that high school dropouts experience greater levels of poverty, unemployment, incarceration, and poor health (Sum et al., 2009).

With more than a decade since the passage of federal law H. R 1 No Child Left Behind in 2001, Americans have waited for a sign of educational recovery where all students are academically proficient at grade level and receive a meaningful diploma that will prepare them for a career in the 21st Century (Swanson, 2011). In a research report the Editorial Projects in Education Research Center (2011) reported a 71.7% national graduation rate for the class of

2008. Although these data reflect the highest level of graduation in the past two decades, it is also emblematic that the dropout crisis continues, as nearly 30% of those students who could have graduated high school did not. Even with school reform efforts aimed to prevent high school attrition, this tragic cycle has repeated itself for decades, and has dangerous consequences for communities and the nation.

In their annual report, “Building a Grad Nation” (2012), the Alliance for Excellent Education (2012) reported that the class of 2011 could have amassed an additional \$154 billion dollars in earnings had they persisted to graduation. Additionally, if just half of these dropouts would have remained in school, the United States taxpayers could have saved \$45 billion tax dollars (p.5). With these staggering economic losses, politicians and educators alike have sought reform efforts to enhance academic standards and more accurately calculate graduation rates throughout the United States; the most recent of those reform efforts being federal law H.R.1 No Child Left Behind.

The lack of economic contributions is not the only way high school dropouts impact the United States economy; dropouts’ propensity to engage in criminal activity is also an expensive fiscal burden to society (Sum, et al., 2009). In conjunction with the Center for Labor Market Studies at Northeastern University, Sum et al. (2009) utilized results of an American Community Survey (ACS) that was administered to 16 to 24 year olds across the nation in 2007. They found high school dropouts are eight times more likely to be in jail or prison. Young offenders pose an economic and social challenge to society and this challenge could possibly be addressed through educational reform. Due the lack of educational proficiency, the employability of young offenders is limited, which often leads to repeated criminal activity and the expenditures that are associated with further prosecution, incarceration, and parole (Levin, Belfield, Muenning, &

Rouse, 2007). With the heavy social and economic consequences of high school attrition, it is prudent to explore how schools can design their organizational structure and environment to prevent students from dropping out and ensure the possibility of a career and promising future for each of them.

Impact on Rural Schools

The aforementioned economic losses are felt in all communities; however, over the last 30 years rural communities have consistently experienced higher unemployment and underemployment rates than those in metropolitan areas. The employment challenges of rural community members are linked to educational attainment, which directly impacts the economic stability of these individuals and the communities in which they live (The Center for Rural Pennsylvania, 2009). This economic reality is particularly true in the state of Pennsylvania where employment trends are similar to national statistics overall, but whose rural residents have experienced a 20% underemployment rate, which is greater than the national average (Center for Rural Pennsylvania, 2009).

In a 2009 study, the Center for Rural Pennsylvania analyzed the trends of employment using data collected from the United States Bureau of Labor and Statistics from 1976-2005 for each of the counties in Pennsylvania. Through an analysis of the year-to-year data of each county, the researchers showed a persistent employment gap between metro and non-metro areas, signifying a long-term problem for rural communities. Utilizing the March Current Population Survey and the Labor Utilization Framework, the researchers found that an individual's educational level was a strong predictor of unemployment and that having a high school diploma decreased an individual's likelihood of being underemployed during his or her adult life. These findings highlight the importance of exploring the dropout phenomenon in all

geographic regions of the United States and not simply considering it a plight of urban communities.

The dropout crisis poses significant concerns for educators within rural communities, where the dropout rate has been calculated as being nearly twice the national average (National Center for Educational Statistics, 2001). Mendez-Morse (1990) asserted that, “Educators in rural communities are not limited to merely providing a suitable education for their students and insuring they graduate, but in some cases their tasks extend to the very survival of their school systems and communities” (p.3). The challenges to the rural educational system are particularly concerning in the state of Pennsylvania. According to The Center for Rural Pennsylvania (2012), 48 of its 67 counties were identified as rural, and 243 of the 501 public school districts in the state are rural and have the responsibility to educate the state’s 421,700 rural students. In a state where almost half of the school districts are considered rural, it becomes imperative for legislators and educators to focus on education as a determinant of long-term economic stability (Rural America at a Glance, 2011).

Calculating Dropout Rates

Recognizing the importance of education to the economic stability of the United States, federal law H. R.1 No Child Left Behind of 2001 was enacted to improve the academic performance of all students and to hold schools accountable for graduation rates. In the decade since the passage of NCLB, schools have been faced with the implementation of cohort graduation calculations, high-stakes testing measures, and increased graduation requirements to ensure students meet the mandated academic standards. This increase in accountability set the stage for educators and politicians to begin to address the inconsistent statistical methods used for the calculation of high school dropout rates across different states. Until recently, the

differences in data collection policies and practices, coupled with the fact that there was no national standardized operational definition of *dropout*, created a lack of consistency in the calculation and reporting of high school dropout rates. This inconsistency limited the abilities of states and local school districts to determine the impact of, and isolate the factors associated with, the high school dropout epidemic. Ultimately, these inconsistencies resulted in an unclear assessment of the magnitude of this educational crisis.

In December 2008, the United States Department of Education (USDE), for the first time, presented regulatory guidance and accompanying guidelines for the implementation of a 4-year cohort calculation for high school graduation. Included in this set of regulations were:

- the use of a cohort graduation calculation formula for accountability determination beginning in 2010 that reported only students that graduate in exactly four consecutive years when calculating the graduation/dropout rate; and
- a requirement to disaggregate graduation rates to determine accountability for each NCLB subgroup (USDE, 2008, Education Regulations Section, para.1).

These strict expectations were a significant shift from the multiple options originally outlined in the NCLB Act of 2001. Prior to USDE's regulatory guidance in 2008, there were four methods for calculating dropouts that schools could use. These methods included: a) The Center for Educational Statistics' (NCES): Common Core Data (CCD); b) the longitudinal graduation rate used to determine individual student school completion; c) cohort leaver rate calculation; and d) Cumulative Promotion Index (CPI), which assesses the rate of completion for each grade (Swanson & Chaplin, 2003, pp. 13-19). The use of these multiple formulas for the calculation of high school completion led to potentially significant misrepresentation of graduation data. Due to the critical impact that high school completion has on an individual's

ability to attain advanced education, to be workforce ready, and to contribute to the United States economy, the United States Department of Education was compelled to tighten graduation calculation regulations for school districts.

Using United States Department of Education guidelines, Governor Edward Rendell, with the support of the Pennsylvania Department of Education (PDE), agreed to voluntarily implement the cohort formula by signing the National Governors Association Graduation Counts Compact in 2005. In accordance with this agreement, PDE began the development of the Pennsylvania Information Management System (PIMS), which serves as the warehouse for all Pennsylvania school data including the initial cohort graduation data on September 30, 2010. These data were used as the baseline for the 2011 and 2012 graduation rate report from PDE. In January 2012, PDE submitted their accountability system, which included goals and established the graduation rate target at 85% for all school districts in Pennsylvania. The formula mandated by the USDE required that school districts apply a standardized formula to calculate the graduation rate. Schools must first take the number of students who entered in ninth grade, then add to that quantity any students who transferred into that given class, and then subtract any students who transferred out of the class, giving them the divisor for the equation. Next, the schools must divide the number of on-time graduates by the aforementioned divisor and finally multiply this quotient by 100, giving them their four-year adjusted cohort graduation rate calculation. This calculation is expected to establish a more precise calculation of dropouts, since it accounts for students who either move into or out of the district during their high school career. Baseline goals and proficiency targets have been identified by PDE, and cohort calculations are now used to determine if a district has met the 85% graduation benchmark. To meet this AYP benchmark, high schools in Pennsylvania will only be able to count students who

earn a regular high school diploma in 4 years or less (PDE, 2010, p. 4). Although calculation methods are not inherently the cause of high school attrition, it is important to note this significant calculation change as it is the first time that schools nationwide will be reporting high school attrition in a consistent manner.

As the United States looks to recover from its current economic challenges, it cannot ignore the potential \$355 billion dollars that the 1.3 million American students who elected to drop out could have contributed as working adults (Alliance for Excellent Education, 2009). The unified calculation method for high school graduation rates for United States schools is an initial step towards a systematic commitment to solving this national crisis and preventing unemployment, incarceration, and the expense of public assistance associated with high school dropouts (Zvoch, 2006). School reform has often been identified as a way to mitigate the personal and societal losses that are incurred by the decision to drop out of high school. This reform strategy is underscored by the need for identifying the causes of early high school departure, particularly in rural communities where high unemployment rates seem to be pervasive. This study aimed to move the discussion of the dropout phenomenon away from the individual attributes of high school dropouts and instead use an ecological perspective to explore school organizational and social relationship factors that serve as precursors to dropping out for students in a rural high school setting.

School Social-Relationship Factors

Theoretical Framework

Bronfenbrenner (1979) developed an ecological systems theory to explain how genetic makeup and a child's environment affect a child's development, and ultimately, how this impacts the future decisions a child will make. Bronfenbrenner's ecological systems theory defined five

contexts in which each child develops. He identified these systems as the microsystem, mesosystem, exosystem, macrosystem, and chronosystem. Bronfenbrenner's study of human ecology and the development of his ecological systems theory influenced how psychologists and social scientists assessed the significance and enduring impact of a child's family (microsystem), as well as the interplay between family and school influences (mesosystem) on a child's development. Additionally, Bronfenbrenner explored the effects that cultural or sub-cultural beliefs (macrosystem) had on the developing child, as well as how settings (other than the home or school) affect or are affected by the developing child (exosystem). Bronfenbrenner described the critical importance of a healthy relationship between a child and an adult in which the child knows that unconditional love from an adult and believes he or she is the best child he or she can be. Also, Bronfenbrenner identified the child's opportunity to engage in mutual interactions with an adult in an unconditionally loving relationship as critical to his or her emotional connectedness. A child's exposure to an adult's public support and praise were identified as the essential variables in promoting a child's positive social development and ability to persist through difficult situations or experiences.

Bronfenbrenner cited the disintegration of family as what leaves a child without reciprocal interactions with an adult a necessary element for the child's development. In a review of data from children living in the United States for the last four decades, Bronfenbrenner (1999) found two distinct threads. First, there has been an increasing conflict between work and family in homes in the United States that has resulted in a decline in parental involvement in children's lives. Second, neighborhood ties among families in the United States have been eroding, leaving children of working parents with little or no supervision or adult interactions. The lack of community support once prevalent in American society, particularly in rural

communities, further compounds the effects family disintegration has on a child's capacity to navigate his or her future (Bronfenbrenner, 1999). This reduction of adult support from the home environment has heightened the importance of a child's relationships with adults in schools and the impact of these relationships on student engagement and high school completion. The significance of Bronfenbrenner's (1979) work and the resulting theory has many implications for today's schools, given the organizational structures within a school may limit a child's opportunity to have the engagement, affirmation, support, and even unconditional love needed for healthy development. These limitations may be caused by schools having to meet increased accountability measures and the newly mandated cohort graduation calculation method.

Through their respective research, Lee and Burkam (2003), Mulroy (2008), and Tinto and Pusser (2006) explored Bronfenbrenner's belief that the relationships that exist within the mesosystem (school) support student persistence and are strong enough to compensate for the negative influences of certain school organizational structures. The findings of these three researchers' large-scale studies reveal the importance that the relationships embedded in a school's ecology have on high school attrition. A synthesis of research reveals that not only do these relationships minimize the impact of school organizational factors, but they can also mitigate the impact of individual factors (race, ethnicity, socioeconomic status) commonly associated with high school attrition. The research conducted by Lee and Burkam (2003), Mulroy (2008), and Tinto and Pusser (2006) forged a direct link between the relationships within the school (mesosystem) and dropout prevention, each recommending systematic school reform to place social relationships as a priority in dropout prevention. This recommendation represents an important facet to framing prevention through an ecological perspective thus warranting

further explanation of each of these three studies.

Tinto (1987, 2003) and Tinto and Pusser (2006) have utilized the fundamental premise of student engagement and relationship with adults to investigate and to define variables associated with a college student's decision to exit school prior to graduation. In his book, *Leaving College, Rethinking the Causes and Cures for Student Attrition*, Tinto (1987) mapped out a longitudinal model that made explicit connections among the school environment, the individuals who influenced students, and how those relationships impacted student retention during their initial year in college. While his early research was limited to quantitative studies of residential universities, it identified the five conditions that could be employed to keep students in college until graduation, many of which resemble the essential elements of Bronfenbrenner's theory (1979).

Tinto's and Pusser's (2006) report, "Moving from Theory to Action: Building a Model of Institutional Action for Student Success," was a meta-analysis of the research on college persistence which resulted in a proposed a model of institutional student success designed to incorporate critical institutional aspects that shape student persistence. Tinto and Pusser (2006) described the aspects as:

- Institutional commitment;
- High expectations of students;
- Academic, social, and financial support;
- Frequent feedback regarding performance; and
- Active involvement, especially with other students and faculty. (p. 6)

Tinto and Pusser contended that although students enter institutions with varying personal attributes (gender, social class, race, and ethnicity), academic skills, and attitudes,

implementing an institutional model around the five conditions drawn from the empirical evidence can promote student success. These findings corroborate Bronfenbrenner's conclusions about the importance of relationships, and although the conditions defined by Tinto and Pusser were related to college persistence, they likely have application across all educational settings.

The importance of the ecological environment was also explored by Lee and Burkam (2003) who sought to identify the link between school organization and structure and students' decisions to stay in school or drop out. Lee and Burkam used the high school effectiveness data, which was supplemental to the National Educational Longitudinal Study (NELS: 88) in 1988 data, as aggregate data for their study. The National Center of Education Statistics (NCES) commissioned the NELS: 88 study in which 25 eighth grade students in each of the 1,000 middle-grade schools from the 30 largest metropolitan areas were surveyed and given achievement tests twice between 1988 and 1990 (NCES, 1997). Using the original NELS: 88 data, Lee and Burkam (2003) selected 10th grade participants from a total of 190 schools based on race/ethnicity, gender, socioeconomic status (SES), test-scores, transcript information, and dropout status (p. 18). The researchers utilized hierarchical linear modeling due to the dichotomous nature of the dependent variable, which was whether or not a child dropped out of school after the 10th grade. Using longitudinal data from 3,840 students from the NELS: 88 study and principal survey information conducted between 1990 and 1992, the researchers utilized both descriptive and analytic analyses to identify how a school's structure, academic organization, and social organization impacted students' decisions to stay or leave high school before graduating.

Lee and Burkam's (2003) findings challenged the common assumptions that students leave high school prior to graduation based solely on their academic and social background and

found that a school's organizational attributes can have a more significant impact on a student's decision to exit school. They found the following organizational elements as being critical to the retention of youth: (a) a constrained common curriculum with limited non-academic or remedial courses; (b) smaller school size increased organizational trust; (c) the commitment and common purpose held by members of a school building, and (d) the positive relationships present within the school.

In addition to their findings related to the impact of the school organization on student retention, Lee and Burkam (2003) also found the individual factors, affiliation with and performance of deviant behaviors, poor family socialization, and structural strain, played an equally critical role in the decision to drop out of school. These individual factors are often not incorporated in comprehensive reform efforts but represent important factors in improving high school completion rates. School personnel play a critical role in altering the life course of students through the meaningful interactions they have with the students. A positive student-teacher relationship within a school organization was found by Lee and Burkam (2003) to reduce the likelihood of students dropping out of school. The findings of Lee and Burkam exposed the potential that individuals within organizations have on students and may set the foundation for prevention strategies that can mitigate student risk factors, such as socioeconomic status, ethnicity, and academic capacity, all of which schools cannot control.

It was the power of these social relationship factors that served as a focus of Mulroy's (2008) study "School Related Factors and Experiences that Impact High School Graduation Rates." The study was conducted in a rural high school in northeastern Pennsylvania that had high retention rates, even with an urban student base. Mulroy utilized document review, interviews, and focus groups in her immersion case study to gather information on student

perceptions regarding how school organizational and social relationship factors influenced students' decisions to remain in school until graduation. The purpose of the study was to determine not only what kept at-risk youth from dropping out but to specifically identify the school-related factors that impacted students' ability to persist.

Mulroy (2008) identified five main themes that had emerged in research related to early exit from high school across all school settings:

- academic mediation – poor academic achievement as measured by grade point average and achievement scores;
- general deviance – anti-social, deviant behavior and sexual involvement;
- deviant affiliation – bonding to anti-social peers;
- poor family socialization – low parental expectations and parents' lack of education; and
- structural strain – gender, ethnicity, and low socio-economic status.

Using these themes to shape the questions, Mulroy conducted interviews with six students, four counselors, two teachers and three administrators. She identified and coded common themes which correlated with the literature on student persistence. Mulroy's (2008) study identified the following themes:

- the importance of positive adults being involved with students in both formal and informal ways;
- written documents and policies, including the mission and vision of the district, should be considered in developing and maintaining a culture of caring and accountability;
- the existence of programs and practices that encourage a systemic culture of caring, support, and accountability; and

- large school size can be mitigated by personalizing the school environment, and the negative impact of standardized testing can be allayed with the use of varied and alternative assessments and vehicles for meeting graduation requirements. (p. 195)

Mulroy's (2008) research, which took place in a rural setting with a higher than expected graduation rate, supports Bronfenbrenner's (1979) theory that a relationship that fulfills a student's need for belonging and engagement within his or her educational environment, and exudes a culture for caring and flexibility, is necessary for promoting the retention of at-risk students.

Another important facet of relationships that emerges in the studies conducted by Lee and Burkam (2003), Mulroy (2008), and Tinto and Pusser (2006) is that of student engagement. What these studies reveal is that it is not simply the existence of relationships that impacts persistence, but rather, what it evokes within each student at-risk that truly matters. Student engagement has been discussed by researchers and practitioners as a fundamental necessity for learning; however, there is not a singular description that defines this critical element. Barkley (2010) describes engagement as a "synergistic interaction between motivation and active learning" (p.8). Research has supported the notion that this synergy is heavily influenced by teachers and should be considered their primary professional responsibility. Umbach and Wawrzynski (2005) contend that "faculty members play the single-most important role in student-learning" (p.21). The research also suggests that as students move out of elementary school and into the secondary grades, they become more disengaged from the learning process (Richards, 2011). It is this process of disengagement that leads to students dropping out of high school.

The recognition that student engagement is a critical factor to attrition and that teachers

play a vital role in creating an environment where all students can engage in the learning process have been critical in the discussion of dropout prevention. In fact, there has been substantial research to specifically explore the impact of engagement on dropout decision-making and how the relationships an at-risk student has with teachers and peers can influence school dropout. The elements of engagement, teacher relationships, and peer relationships are the social-relationship factors that compose the ecology of a school environment. The research on how these ecological factors within a school influence student dropout decision-making warrants discussion.

Teacher Relationships

A critical component within the ecology of a high school environment is the relationships that exist between teachers and students. Research has shown that the stronger the relationship between a student at-risk and his or her teacher the more likely he or she is to persist to high school graduation (Finn, 1989; Knesting, 2008; Lessard et al., 2008). Critical attributes of this relationship are: listening without judgment (Kaczynski, 1989; Knesting, 2008); acknowledgement of the personal interests of the child (Knesting, 2008; Lessard et al., 2008); flexibility of the organization to support student needs and interests (Heck and Mahoe, 2006; Kaczynski, 1989); and sustained long-term involvement with that child to support persistence (Finn, 1989). There has been compelling research conducted on each of these attributes critical for harnessing the power of student-teacher relationships to promote student engagement and school persistence.

In her book, *The Path to Dropping Out: Evidence for Intervention*, Roderick (1993) analyzed transcript data from an urban school in Massachusetts to explore student disengagement from school. By calculating the academic mean averages of dropouts and graduates from a

cohort of students initially identified as seventh graders in 1980, Roderick analyzed this cohort's journey from fourth grade through graduation in an attempt to identify if there was a specific path that led to dropping out of high school. Using transcript data from this cohort, Roderick conducted descriptive and logistical analyses to examine attendance, grades, retention, and the experiences of these children in relation to their decision to drop out of school. Roderick identified the significant finding of this research as the discovery of two different paths these children traveled towards high school graduation (p.129). In her work, Roderick cited Tinto's (1987) theory that student interaction in the social and academic communities promotes attachment to the institution toward the goal of continued schooling. Roderick's work affirmed the principles of Bronfenbrenner's (1979) and Tinto's (1987) theories of persistence and offered important insights regarding the specific causes for high school withdrawal. Roderick found that the transition to high school marks a critical junction in a developmental phase in children's lives. It is a time when they are seeking to become more independent, which can often lead to the withdrawal from school activities and peer groups to friendships outside of the school. Roderick found this to be particularly true for students who experience academic difficulty beginning in elementary school or who were retained at some point during their education.

Looking specifically at the differences between early (before 10th grade) and late (after 10th grade) dropouts, Roderick drew the following conclusions:

- Early dropouts struggled academically as early as kindergarten, which led to more than half of them being retained sometime before third grade.
- Late dropouts' academic performance is commensurate with their peers until their transition to high school.

- Common for both early and late dropouts was a marked decline in attendance and reduction in social relationships following the transition between fifth and sixth grade as well as between ninth and tenth grade.

Roderick notes that a detachment from school and social settings marks a pivotal departure from the path to graduation. This departure is one that Roderick believes can be redirected if schools view their decisions from an ecological perspective. Specifically, she suggests that grading practices, transitions, and the structure of schools themselves must all be explored in an effort to reduce the impact they have on students' abilities to cope with this difficult developmental phase. Roderick's work moves the discussion about the dropout phenomenon away from the attributes of the individual and places the responsibility on school leaders and the organizational decisions they make. This transition calls for additional research to be conducted on what Roderick (1993) calls "key school factors that influence youth's ability to cope successfully with dramatic changes they experience during adolescence" (p.132). The isolation of these factors may facilitate the development of more effective school-based decisions and dropout prevention measures, which are much needed in an era where millions of students leave school without a high school diploma.

Finn's (1989) study, "School Engagement and Students At-Risk," also shifted the exploration of the dropout phenomenon away from the individual by linking school connectedness and the social-psychological perspectives of student dropout using the frustration-self-esteem and self-identification models. Finn's (1989) research analyzed the data from two studies that focused on student engagement and achievement. The data from both studies were based on the NELS: 88 research conducted by the National Center for Education Statistics. As noted earlier, 25 eighth grade students, their parents, and teachers in each of the 1,000 middle-

grade schools from the 30 largest metropolitan areas were surveyed. Students were assessed through achievement tests twice between 1988 and 1990 to discern the details of their progress through graduation (NCES, 1997). Finn's work investigated the findings of these two studies and explored the relationship between status risk factors (demographic characteristics) and behavioral risk factors, and participation and student achievement. The participation-model that emerged suggested that the extent to which children participate in the classroom is fundamental to establishing emotional ties to school. When identification with school occurs, students internalize the feeling that they belong. These emotional ties foster student engagement, which can sustain a child through his or her educational journey towards graduation. Finn's work revealed the importance of a teacher's instructional practices on engaging students within his or her classroom. His work exposed the importance of teacher feedback, student choice, and the power of a nurturing environment on student engagement and commitment to school work.

Another study that focused on teacher relationships was that of Lessard et al. (2008) who conducted a longitudinal study of 80 high school dropouts whose educational journey ended prior to graduation because these students did not receive the support necessary to help them persist. Lessard et al. (2008) had the participants describe in detail how the experiences lived shaped their decisions to drop out of high school. This work represents one of the few studies within the literature on dropout phenomenon that sought the perceptions of those who had left school prematurely. Lessard et al. (2008) identified 92 possible participants from the 808 participants who had dropped out since their participation in a study conducted by Fortin, Marcotte, Potvin, Royer, and Joy (2006). Lessard et al. were able to gain participation from 80 students who, when interviewed, were asked to describe their relationships with other students and school personnel. The interview data were first condensed and then analyzed to determine

an abstract (summary of determining events in the life of a participant), an orientation (a description of events that contributed to shaping the educational journey of a participant), a complicating action, a resolution (elements to help make sense of dropping out), an evaluation (elements presented by the participant describing the participant's evaluation of the resulting situation), and a coda (elements pertaining to the participants outlook on the future, considering the past events) (p.30).

The findings of Lessard et al. (2008) supported the findings in much of the literature regarding school organizational factors and experiences associated with a student's decision to exit high school early and provided rich detail on pervasiveness of family turmoil and lack of school efforts to redirect the path of a student who has lost his or her way to high school graduation. Additionally, their research exposed the importance of student-teacher relationships. The findings revealed that feeling acknowledged and valued lengthened the students' enrollment in high school, while conflicts with teachers proved to be the catalyst for exiting school early. The findings of Lessard et al. further shaped schools' understanding of students' need for engagement, affirmation, support, and even unconditional love from an adult to successfully navigate through their educational experience.

Similarly, Knesting (2008) explored the influence of school factors, such as adult support, on a student's decision to leave school. Knesting believed that research focusing solely on individual student characteristics offered a limited understanding of the dropout problem. Instead, she shifted the focus to the influence of school factors, including the organizational structure, leadership, and the teachers within the school. The study was conducted in a medium-sized, comprehensive high school for students in grades 9 through 12. The school was selected for its reputation as having a large number of at-risk youth and the community's perception of

having high dropout rates. Utilizing semi-structured interviews, Knesting conducted interviews with 17 students, seven teachers, four guidance counselors, one social worker, one assistant principal, and one principal. In addition, she conducted 22 open-ended narrative classroom observations (p.5). Knesting sorted and coded the data from both sources to establish themes related to student persistence and school context.

Knesting (2008) found that at-risk students believed having quality academics and several extracurricular choices supported their persistence to graduation. What were most prevalent in the data were the students' beliefs that the school tried too hard to control rather than educate them. The students also revealed the feeling of not being valued at school by some of the school officials and teachers because they were not as academically capable as their peers. All of the students felt there was a caste-like system that placed them on the bottom and made them feel inferior at school. Additionally, she found that students believed that both teachers and school administrators had the potential to make a difference in their ability to persist; however, this was not a commonly held belief among school staff. The students reported a positive impact of teachers who listened, developed supportive relationships, and maintained high expectations on their commitment to graduate. Knesting's work exposed the benefit from listening more carefully to students about their experiences and aligning those who are struggling with supportive teachers and administrators. Both Knesting (2008) and Bronfenbrenner (1979) confirmed through their respective research that it is these connections that increase a child's opportunity to remain engaged and receive affirmation and support, all of which are essential to his or her successful navigation to high school graduation.

The work of Heck and Mahoe (2006) also expanded the literature on the understanding of the reasons that students from varying social categories and their structural compositions

influence a student's decision to complete high school. Utilizing data collected from the NELS: 88 study, Heck and Mahoe focused specifically on school structure and the courses taken by at-risk youth, and how these variables impacted student persistence. In addition, they wanted to describe "how individuals, their social groups, and the organizational features of schools intersect in ways that have consequences for students' likelihood for receiving a diploma" (Heck & Mahoe, 2006, p. 418). By applying the NELS sample panel weights to the individual-level data in Mplus statistical software, the researchers were able to utilize ordinal regression to isolate the interrelationship of the behavioral categories associated with persistence. To analyze the relationship, the researchers initially examined main effects, then established interaction terms, and finally removed non-significant interaction terms to analyze the statistical fit of the final model against the main effects. This process utilized and revealed the effects that social integration and academic performance have on the level of persistence a student has towards graduation. The researchers contended that a student's social category and the interactions associated with the various social groups are directly related to how the student progressed toward graduation. Also, Heck and Mahoe (2006) proposed that the "consequence of within-school relationships regarding persistence, are contingent (enhanced or diminished) on a school's context, structure and process" (p. 423). Their research was specifically designed to elicit data that would assist them in determining how students' social factors, such as race, social class, and their social integration influenced their ability to persist, and how the school contextual and process variables impacted the likelihood of the student graduating.

Heck and Mahoe (2006) concluded that there are multitudes of ways that interactions between social categories and indicators of academic or social integration affect the pathways

that high school students experience in pursuit of high school graduation. They outlined the following conclusions based on the analysis of their collected data:

- There is a strong relationship between misbehavior and students' likelihood of transitioning to high school successfully.
- There is a positive effect of membership in a more rigorous academic program and likelihood of graduation.
- Academic growth is strongly associated with persistence. (p. 439)

From these findings Heck and Mahoe (2006) recommended that schools focus on structuring their programs to support students' social transitions to high school, expose all students to college-preparatory classes to avoid racial-ethnic clustering in lower level courses, and focus on promoting student persistence towards graduation through the development of programs to target the different individual (family structure, poverty, course-taking) and institutional (curricular programs, attendance) aspects of a child's educational experience. This recommendation adds credence to this proposed study and the critical need for schools to address students' social and emotional needs as they are shown to be significantly related to students' decisions to persist to high school graduation.

In addition to traditional high school settings, recent studies have investigated other locations, such as alternative and evening schools, to explore and define attributes that facilitate engagement. Direct parallels to Bronfenbrenner's (1979) ecological systems theory have also been drawn. One such study is that of Kaczynski, who in the 1989 qualitative study, "Traditional High School Dropouts: A Qualitative Study at an Alternative High School," explained why traditional high school dropouts elect to attend school in an alternative setting. Kaczynski's intent was to provide a greater understanding of the reasons that high school

dropouts attend an alternative school and how student control impacts the effectiveness of the alternative school.

Following thorough coding, analysis, and visual modeling procedures, Kaczynski determined that students at this alternative school had significant levels of informal control. The research supported four major assumptions:

- These students experience greater freedom than they previously experienced at a traditional high school.
- Student choice has a positive impact on the effectiveness of the alternative school;
- Students, as a group, monitor and adjust individual student behavior in relation to acceptable group behavior.
- Students enjoy the experience of success while attending school. (p. 12)

Kaczynski's findings also support the theory that a child is seeking a connection with one or more adults whom he/she perceives to care for and is supportive of his or her success. The data from Kaczynski's research indicated that children within this alternative setting had a common belief that the teachers who were working with them were advocates for their needs and were willing to listen and to support them in their academic and personal endeavors.

The relationship between students and the adults within their school represents an important component in the discussion related to high school attrition. Research has shown that if students perceive that the adults within the school care about them and their academic success, they are more likely to persist through school even if they possess a multitude of personal at-risk factors (Knesting, 2008; Lee & Burkam, 2001; Lessard et al., 2008; Mulroy, 2008). Each researcher exposed the link between these relationships and greater levels of student engagement, which has the capacity to assist them in overcoming the impact of difficult

transitions (Roderick, 1993), academic difficulty (Stewart, 2008), and retention (Jimerson, 2001). Recognizing the importance of this relationship, schools must first identify what specific organizational features cause their breakdown (Bronfenbrenner, 1999), and then design an infrastructure that mitigates the impact of these features and reflects a caring culture where relationships are fostered, students are engaged, and organizational decisions are made with students success at the forefront.

Peer Relationships

Peer relationships have the power to significantly influence how students perceive their experience in high school. Research has shown positive peer networks are associated with higher academic achievement, greater attachment to the school organization, and higher levels of school completion (Perdue et al., 2009; Stewart, 2008; Ream & Rumberger, 2008). In fact, Guillory (2007) contends that peer influence is the most significant predictor of school completion. Positive connections among peers within a school lead to high levels of student engagement; however, association with deviant peers or exposure to negative peer relationships is detrimental to school completion (Stewart, 2008; Vitaro, Larocque, Janosz & Tremblay, 2001). Peer relationships represent another essential factor when discussing educational outcomes for students; therefore, a full exploration of relevant research on this facet of a school's ecology is warranted in this literature review.

Peer interactions influence student performance for students of varied student backgrounds (Ellenbough & Chamberland, 2007; Guillory, 2007; Ream & Rumberger, 2008) and socioeconomic levels (Perdue et al., 2009). Using a sample of all Caucasian students, Ellenbough and Chamberland (2007) aimed to discern the impact of peer relationships by mapping the social networks of 191 students from a suburban Montreal school. Included in the

social network maps were students' friends from school and from outside of school, and these friends' employment and school enrollment status. Included in the network map of each student was a peer-report that documented three individuals they would like to engage in activities with and three individuals with whom they would not want to be involved. The social network models developed showed that there were differences between the social networks of at-risk students and those that were not considered at risk. Specifically, at-risk youth tended to have fewer friends and the friendships they did establish were often with individuals who had dropped out of school. The transition from having friendships with peers in schools to friendships with those not enrolled in school reflects a gradual disengagement from school and severs the peer interactions and support that is critical for maintaining engagement in school (Guillory, 2007).

Similarly, Guillory (2007) conducted a study of 203 African American males between the ages of 18 and 24 years. Guillory sought to determine whether social supports or peer influences within schools were critical to high school completion. Guillory (2007) used a cross-sectional, non-experimental, retrospective, comparative design to explore the perceived influence of relationships between high school graduates and high school dropouts (p. 39). To collect data multiple instruments were used based on their purposes. The instruments utilized were: the Texas Christian University/Prevention Management and Evaluation System (TCU/DMES-FFS) to assess peer influences and the Young Adult Social Support Index (YA-SSI) to determine the participants' perceptions of the social support present in their lives. Using descriptive statistics and bivariate statistical analyses, two significant findings emerged: (a) peer influence among African Americans is the single best predictor for high school completion; and (b) African American males who completed school reported positive peer influence as being a more significant factor in their success than other social supports, such as teachers and family.

Ream and Rumberger (2008) also explored the impact of peer relationships utilizing a sample of 1,062 Mexican American students and 8,504 Caucasian students who had participated in the NELS: 88 study. The researchers sought to determine if there were significant differences between student participation in academic and extracurricular activities and school-peer group relationships. Additionally, they wanted to determine whether participation in activities and peer groups could mediate engagement and school completion between Mexican American and Caucasian students. Through the use of structural equation modeling, Ream and Rumberger determined that Mexican American students were less engaged in school related activities both in and out of school, and they associated with peers who had low educational aspirations or who had dropped out, each of which could lead to school disengagement.

Ream and Rumberger (2008) concluded that for Mexican American students engagement behaviors could be positively influenced if schools were to: (a) offer reform strategies that minimize socioeconomic discrepancies between students, (b) establish mechanisms to promote or enhance beneficial friendship networks, and (c) work to engage these students in curricular and extracurricular activities. Through engagement in school related activities, students remain involved with peers and adults within the school setting, which serves to sustain their engagement within the school. Divergence from these positive peer and adult relationships often results in students establishing relationships with deviant peers, which leads to the erosion of student attachment to school (Vitaro et al., 2001).

In a longitudinal study of 751 Caucasian students, Vitaro et al. (2001) developed an inter-correlation matrix and conducted discrete time-survival analysis modeling to discern what negative social experiences were related to dropping out of high school. These researchers utilized the Socio-Familial Adversity Index, Social-Behavior Questionnaire, academic

achievement tests, and the Pupil Evaluation Inventory to examine if social, academic, behavioral, and developmental variables impact the age at which students' dropout. By following 751 male students from kindergarten through their expected graduation year, the researchers had data from 134 dropouts and 617 graduates from which they drew their conclusions. Vitaro et al. determined through their research that disruptiveness and academic performance were more significant than peer relationships and parental support on a student's decision to drop out of school. This conclusion contradicts the findings from other studies (Guillory, 2007) that peer influence is more significant than other social supports provided by family members and teachers and that peer relationships sustain engagement in school (Ream & Rumberger, 2008). There is, however, agreement that student association with deviant peers outside of the school setting makes an additive contribution to school disengagement, and when coupled with a propensity for deviant behavior and poor academic achievement during early adolescence, dropping out of school is likely (Ellenbough & Chamberland, 2007; Ream & Rumberger, 2008; Vitaro et al., 2001).

Although there is some disagreement among researchers as to the overall impact of peer relationships on high school dropout rates, these relationships represent a facet of school culture that may play a role in student decisions to leave school before graduation. If school engagement is fundamental to school completion (Bronfenbrenner, 1979; Finn, 1989; Tinto & Pusser 2006) the exploration of how peer relationships either promote or hinder students' levels of engagement in school becomes essential when designing school-based interventions to promote school completion. Framing the discussion about high school attrition from the ecological perspective requires the exploration of the unique interplay of relationships between students and their teachers; however, studying relationships alone would not provide a comprehensive look at

this phenomenon. Essential to the discussion of relationship impacts is the organizational decisions that either sustain or deter students on their path to graduation.

School Organizational Factors

During the research analysis on how the school's ecology and specifically the relationships that exist between an at-risk student and his or her teachers and peers impact graduation, a common theme emerged. This theme was that relationships played a critical role in supporting students as they contend with the organizational barriers they encounter when in high school. The organizational elements of high-stakes testing, narrowed curriculum, school size, and retention were specifically cited as catalysts for high school attrition (Knesting, 2008; Lee & Burkam, 2003). Even prior to the accountability movement, Bronfenbrenner (1979) cautioned educators that if schools transformed from educating the whole child to merely focusing on academic standards, schools would alienate students who were not receiving the unconditional love and support within their home environment (microsystem). It appears that in an era of heightened accountability, Bronfenbrenner's cautions to educators may have been warranted.

Studies have shown that the decisions made by educational leaders and policymakers to ensure proficiency on a prescribed set of academic standards has in fact influenced the ability of schools to provide students with the sense of belonging, support, and affirmation necessary to increase persistence towards high school graduation. The organizational structures of high-stakes testing, increased graduation requirements, school size, and retention have all been linked to student dropout decision-making. The studies included in this literature review expose how these organizational elements impact relationships and student engagement, thus making them critical in the conversation on dropout prevention.

High-Stakes Testing

In response to the low academic performance of students in the 1980s and 1990s, accountability measures have been imposed on school districts throughout the United States. These new accountability systems became known as *standards-based education*. The standards-based movement has continuously evolved over the course of the last decade, ultimately challenging schools to ensure that students are meeting the standards with 100% proficiency. The apex of the accountability movement was reached when under the direction of President George W. Bush and Secretary of Education Rod Paige: *No Child Left Behind* (NCLB) was constructed and passed by Congress (2001). This ambitious piece of legislation was initiated to improve the achievement of all students in the United States, and it outlined specific criteria and requirements for schools across the nation. States must:

- identify a set of academic standards for core subject areas at each grade level;
- create a state assessment system to monitor student progress toward meeting these state-defined standards;
- require schools and districts to publish report cards identifying academic achievement of its students in aggregate and disaggregated by ethnicity and other sub groups (e.g., for racial minorities, students for whom English is a Second Language (ELS), and special education students);
- create a system of descriptors that communicate to the community how local schools and districts are performing;
- create a plan (i.e., Adequate Yearly Progress or AYP) that would ensure 100% of its students will reach academic proficiency by the year 2014–2015; and

- develop a system of accountability that includes rewards and sanctions to schools, educators, and students that are tied to whether they meet the state's goals outlined in the AYP plan. (No Child Left Behind Act, 2001, § 1001, 20 U.S.C. § 6301)

The passage of NCLB set the bar at 100% proficiency by the year 2014, and states responded by implementing yearly benchmark assessments to measure the effectiveness of the instruction occurring within schools (NCLB, 2001). In addition to summative measures, many schools imposed additional formative and diagnostic assessments throughout the academic school year to monitor student growth towards meeting the standards, which students are tested at the end of the year on the PSSA. This comprehensive assessment system is duplicated in schools throughout the country and aimed to support educational reform to increase student achievement and enhance students' college and career preparedness. These high-stakes testing practices were designed to ensure that all students were meeting high levels of academic achievement. Integral to the discussion of high-stakes testing is whether or not these testing mechanisms actually result in increased achievement or if they have greater costs than benefits for students.

The findings of some research regarding the correlation between high stakes testing and increased academic performance have differed (Amrein & Berliner, 2002a, 2002b; Jones, Jones, & Hargrove, 2003; Nichols & Berliner, 2005). Some studies have found that imposing high stakes measures did not yield significant improvement to student achievement while others have found mixed or inconclusive results on the impact of high stakes tests (Braun, 2004; Carnoy & Loeb, 2002; Nichols et al., 2006). The effectiveness of high-stakes testing and increased student achievement is a debate that will continue among educators and policymakers. Peripheral to the discussion of effectiveness is that regarding the unintended consequences associated with the

increased demands in this era of accountability. Various studies have shown that the proliferation of testing practices in schools has: narrowed the curriculum, diminished student engagement, created undue pressure on students, and yielded no sustainable academic gains for students (Amerin & Berliner, 2002a; Amerin & Berliner, 2002b; Nichols et al., 2006).

Discussion of the research that exposed the consequences of high-stakes testing is essential to gaining clearer insight on how organizational constructs influence graduation rates. Specifically, the research of Amerin and Berliner (2002a, 2002b), Battin-Pearson and Newcomb (2000), Carnoy (2005), Natriello and Pallas (1999), and Nichols et al. (2006) will be discussed.

Amerin and Berliner (2002a, 2002b) utilized NAEP performance and exemption data from 1994-1998 and 1996-2000 to explore the correlation between states with high-stakes testing and states without these testing measures, and student academic growth as measured by the NAEP assessment. In their original analysis of 18 states which had high-stakes testing policies, Amerin and Berliner (2002a) concluded the following:

- states that utilized high-stakes testing yielded inconsistent growth on NAEP, ACT, SAT, and AP exams. (p. 56)
- there is no consistent pattern of increased performance as a function of high-stakes testing. (p. 57)
- the negative effect of testing was most significant with poor and minority students. (p. 58)
- teachers may narrow what is taught in a domain so that the scores on the test will be higher, but the narrowing of the curriculum consequently invalidates the score because the score does not reflect what a student knows about the entire domain. (p. 15)

These conclusions received methodological scrutiny by fellow researchers (Braun, 2004;

Carnoy & Loeb, 2002; Rosenshine, 2003). Therefore, Amrein-Beardsley and Berliner (2003) adjusted their methodology and in their reanalysis included a control group and exclusion rates to analyze NAEP trends over time. The findings of their reanalysis included:

- states with high-stakes testing outperformed those without these assessments on fourth grade mathematics at a statistically significant level; however, those same states did not outperform others in fourth grade reading or eighth grade math at statistically significant levels. (p. 12)
- gains posted by states with high-stakes tests on two of the three NAEP tests are more related to the rates by which students are exempted from the tests than they are related to high-stakes tests themselves. (p. 13)

Following this reanalysis, Amrein-Beardsley and Berliner (2003) continued to support their position that high-stakes testing did not consistently yield increased student achievement, and that the potential unintended consequences of high-stakes testing was the narrowing of curriculum and increased student dropout. These researchers suggested further analysis to confirm their conclusions.

In his paper, Carnoy (2005) further supported the position of Amrein-Beardsley and Berliner (2003) that one of the unintended consequences of high-stakes testing was dropping out of school, and contended that the relentless focus on accountability has limited teachers' capacities to engage students in inquiry and problem-based educational experiences, which is necessary for school completion. Teachers may be resorting to drill and practice exercises that may impact students' connectedness to school. Carnoy arrived at this conclusion following an analysis of the retention, progression, and graduation rates of data from nine states that had

implemented high school exit exams by the 2001-2002 school year. Through the use of descriptive statistics and stacked regression analysis of data derived from the National Center for Education Statistics' Common Core Data, Carnoy (2005) estimated graduation rates controlling for race/ethnicity. His analysis concluded that high-stakes testing has a "small but significant negative correlation with progression rates, a small but significant positive correlation with retention, and has had a much smaller effect on graduation rates than proponents expected" (p. 30). His research showed that increasing accountability measures was not the solution to enhance the progression rates of high school students, and in fact, these measures could have a negative effect due to the narrow test-driven instruction students receive in the classroom. It is this instructional alteration that disconnects children from their learning and reduces their engagement in learning which is essential to school completion (Bronfenbrenner, 1979; Carnoy, 2005; Mulroy, 2008; Tinto and Pusser, 2006).

Nichols et al. (2006) found the evidence against high-stakes testing when they studied the effects of high-stakes testing through the compilation of portfolios from 25 states. The portfolios for each state contained a summary of past and current accountability implementation plans, sanctions for not meeting standards, and a reward summary for accountability implementation, as well as any news media artifacts that captured the cultural response to the implementation of these accountability measures. Utilizing the law of comparative judgments, individual evaluations of each state were developed and ultimately, the evaluation yielded a ranked score (from high to low) on a continuum of accountability matrix. Once ranked, scores for each state were established and a series of correlation and regression analyses were run to determine if a relationship between student achievement and the intensity with which state accountability

measures were implemented. Through these analyses, Nichols et al. (2006) drew the following conclusions:

- increased pressure of state accountability measures yielded a positive correlation with eighth-ninth grade progression. (p. 49)
- a negative correlation existed between increased testing pressure and progression to twelfth grade, which may lead to a greater number of high school dropouts. (p. 50)
- a causal relationship existed between high-stakes testing and student achievement in fourth grade mathematics. (p. 51)
- there was no evidence that high-stakes testing yields increased reading achievement. (p. 51)

The second finding of Nichols et al. (2006) raises concern regarding the impact of high-stakes testing, and fellow researchers Battin-Pearson and Newcomb (2000) and Natriello and Pallas (1999) drew similar conclusions regarding the influence of accountability measures on student performance and high school graduation. One such concern was expressed by Natriello and Pallas (1999), who cautioned “that without the exploration of the motivational consequences of high-stakes testing across all ethnic, racial, and socioeconomic subgroups, the practice could exacerbate the already substantial inequities of schooling outcomes” (p. 16). These researchers arrived at this conclusion following the analysis of test scores from students of varying ethnic and racial backgrounds from New York, Texas, and Minnesota. Each of these states had a history of administering high-stakes state exams even before large-scale state-wide assessments became the cornerstone of NCLB. Through the exploration of performance data for each state, Natriello and Pallas conducted correlation analyses and found that students from varying ethnic, racial, and socioeconomic groups had lower rates of performance. The researchers suggested

that this was due to the lack of resources afforded these populations of students.

Other possible motivational consequences were posed in Battin-Pearson and Newcomb's (2000) study, which suggested that in order to maximize the engagement of high school students, the course work must be relevant, and students must be invested in the school and the community. The researchers identified five factors for high school dropout: (a) full academic mediation, (b) general deviance, (c) deviant affiliation, (d) poor family socialization, and (e) structural strain. They then conducted structural equation modeling with confirmatory factor analysis to determine factor loadings, model fit, and the pattern of intercorrelations among factors for each of the proposed theories (p. 572). The findings revealed:

- poor academic performance was strongly and significantly influenced by low bonding to school, high bonding to antisocial peers, high sexual involvement, low parental expectations, parental lack of education, gender, and ethnicity. (p. 578)
- poor academic achievement is the strongest predictor of high school dropout (p. 579).
- general deviance, bonding to antisocial peers, and socioeconomic status had direct effects on dropping out of school. (p. 579)

Battin-Pearson and Newcomb presented findings that directly link a child's academic performance to the likelihood that he or she will graduate, which makes the high-stakes testing measures a logical effort in supporting high school persistence. The reality, however, is that high-stakes testing is just one factor, and when it is implemented, it may alter other elements within the school, such as instructional engagement (Carnoy, 2005), curriculum (Amrein & Berliner, 2002b), and student motivation (Natriello & Pallas, 1999), all of which are associated with and have an impact on high school completion.

With academic achievement being paramount to student success, it becomes critical that

the strategies utilized to ensure high levels of achievement for all students are equitable, afford all students the same resources and opportunities, and do not create adverse effects on students from varied social, ethnic, and socioeconomic backgrounds. The exploration of the impact of high-stakes testing is not isolated to merely federal, state, and local testing mechanisms but must also include an explanation of how school-based organizational strategies to increase student achievement impact students themselves. These school-based strategies include: (a) increasing graduation credit requirements, (b) utilizing retention to ensure attainment of standards, and (c) restructuring the school environment to produce a setting more conducive for learning. Each of these decisions may play an important role in altering a student's path towards graduation making them critical elements within this present study.

Increased Graduation Requirements

Graduation requirements have been a part of public high school systems since the early 1900s and have provided school systems with guidance on the necessary instructional time for students to master curriculum (Lillard & DiCicca, 2001). These recommendations were initially recommended because they were essential for college entrance, which set the average requirement at 17.78 Carnegie units to complete high school. This requirement was fairly stagnant until the mid-1980s when a *Nation at Risk* (1983) was published. At that time, many states elected to raise their graduation requirements by 3 to 4 units (Lillard & DiCicca, 2001, p. 461). This pattern of increased expectation would again unfold following the implementation of NCLB, which outlined more rigorous performance standards and newfound accountability measures. While states maintained control of the testing instrument utilized to measure student performance, each state was required to have a plan that outlined the accountability targets in relation to the annual yearly progress expected for each school year (Swanson & Chaplin, 2003).

To ensure that students met these new performance benchmarks, schools were encouraged to increase their graduation requirements (Learning Point, 2007). The intended impact of heightened graduation requirements was to enhance student performance in content areas while reducing the impact that socioeconomic background had on academic growth. However, this increase in credit requirements may in fact have had a negative consequence if the requirements were deemed insurmountable by students, which could potentially lead to an increased number of dropouts (Hoffer, 1997). If the advice from researchers such as Hoffer (1997) and organizations like *Learning Point*, who were commissioned by the U.S. Department of Education to facilitate the implementation of NCLB, were accurate, improvement in student performance would be a result of these increased credit expectations. Evidence from Allensworth and Easton (2005) and Lillard and DiCicca (2001) suggests that this strategy for improved student achievement may not yield the intended performance increase but rather have negative consequences on students' abilities to persist to high school graduation.

Lillard and DiCicca's (2001) study, "Higher Standards, More Dropouts? Evidence Within and Across Time," explored the relationship between increased graduation credit expectations and school dropout rates. Using the conceptual framework that "the net effect of higher requirements depends on how the increases affect the cost and benefit of human capital" (p. 461), the researchers questioned whether the increase in graduation rates would impose greater cost than benefit to high school students. Allensworth and Easton (2005) defined *cost* as the students need to take additional required courses and fewer elective courses, and *benefit* as the increased educational output and resulting wage increases once employed (p. 461).

Aggregate data for Lillard and DiCicca's (2001) study was drawn from multiple sources, including The United States Census of Population, The Digest of Education Statistics, Series

P60, Geographic Profile of Employment and Unemployment, and the Statistical Abstract of the United States between 1980 and 1990, while individual data were gathered from the High School and Beyond Survey (HSB) and NELS: 88. The resulting sample included 728 observations and included 18,606 individuals from NELS: 88 and 14,787 individuals from the original HSB sample. Using the aforementioned sample, Lillard and DiCicca (2001) used aggregate analysis and established coefficient estimates for five models of attrition, then used the generalized least squares technique to produce effect modeling to explore if any relationship existed. Using this methodology, the researchers found that if the graduation requirements were raised one standard deviation or 2.5 credits, the attrition rate would increase as much as 9.7%. When translated to student numbers, this figure implies that between 104,000 and 208,000 more students would leave school early than had dropped out previously.

Using a hypothetical before and after increase in graduation credits, Lillard and DiCicca (2001) established a predicted probability of dropping out for each individual, and then they ordered those probabilities from least to greatest. From this ranked group, the researchers established differences into quartiles and estimated the mean characteristics of each group. This analysis revealed the most significant impact of increasing graduation credits was on

“students whose summative assessments scores in both math and reading were one standard deviation lower than the average student, and who came from families which were poor, disrupted, black or Hispanic, had three or more siblings, and whose parents also dropped out of high school” (Lillard & DiCicca, 2001, p. 470).

This research exposed how increased graduation rates, coupled with students’ lack of aptitude and individual attributes, impacted their ability to accrue the necessary course credits to remain on-track towards meeting graduation credit expectations. This resulted in higher high school

attrition rates.

Echoing Lillard and DiCicca's (2001) findings were those of Allensworth and Easton (2005) who, in their work for the Consortium on Chicago Research, utilized the on-track indicator method to determine the relationship between being on-track during freshman year and the likelihood of graduation from the Chicago Public School System. Being on-track towards graduation was defined as having no more than one semester F in a core subject area and accumulating five full course credits at the conclusion of the freshman school year. These criteria were considered essential to being on-track because students' failures to meet both criteria impacted their abilities to accumulate the 24 total credits to graduate. This was similar to Lillard and DiCicca (2001), who correlated students' aptitudes with advanced course mastery and credit accrual. Allensworth and Easton's (2005) study, "The On-Track Indicator as a Predictor of High School Graduation," examined students' statistical likelihood of graduating from the Chicago Public Schools using the aforementioned parameters for being on-track towards graduation.

Allensworth and Easton (2005) used the on-track indicator method to analyze the 2003-2004 freshman cohort of the Chicago Public Schools. The findings of this longitudinal study identified the interconnectedness of the two factors because course failures resulted in fewer credits earned, and being on-track at the conclusion of the freshman year was highly predictive of students' likelihood of graduating. The strength of the relationship suggested that freshman year performance is a better indicator of high school attrition than other characteristics based on students' individual backgrounds. They reached this conclusion by running a statistical analysis that determined the extent to which being on-track in isolation was indicative of graduation, as opposed to students' background characteristics. From this analysis, Allensworth and Easton (2005) determined that, while individual characteristics are associated with attrition, student

backgrounds did not predetermine being off-track for graduation, and the on-track indicator method was a good predictor of graduation regardless of individual attributes (p. 9). While merely a piece of the complex puzzle, Allensworth and Easton (2005) suggested using this as the measure between 9th and 10th grades to decide whether to implement interventions to mitigate the lack of credit accrual and performance. These interventions would assist students in making it through to graduation. Suggested interventions included improved communication with parents and students, monitoring of student attendance and class work, the development of strong relationships, mentoring between students and teachers, and greater individualized strategies (p. 17). These recommendations serve as methods to engage students in positive mutual interactions with a caring adult that has the potential to increase the child's ability to persevere through difficult periods in his or her academic career.

While exposing students to more advanced coursework may potentially yield greater performance on mandated assessments, the consequences of this demand may serve to inhibit school completion for some students. The balance between increased graduation expectations and school structural elements and supports should reflect a comprehensive system that provides a caring culture (Mulroy, 2008), and affords all students adequate and equitable intervention resources (Allensworth & Easton, 2005). Two commonly practiced strategies to ensure academic competency are the restructuring of the school community to reflect that of a smaller school size and the utilization of retention to ensure academic success at grade level. Understanding the nature and effectiveness of these strategies is important when discussing the educational trajectories of students.

School Size

One commonly utilized organizational structure used to enhance student learning and

achievement is the reduction of school and grade-level size. These efforts have been described in the educational world as the creation of small learning communities, schools-within-schools, and learning academies. Literature regarding school size has focused on the correlation between the number of students enrolled in a high school and the level of student achievement attained. Research from rural schools often yielded results that reflected greater academic achievement for students (Johnson, Howley, & Howley, 2002). In fact, there is a significant amount of research that contends that a rural school's small size can mitigate the most significant at-risk factor for attrition - low-socioeconomic status (Howley, 1996; Howley & Bickel, 1999; Huang & Howley, 1993; Johnson et al., 2002; McMillen, 2004; Lee & Burkam, 2001; Lee & Smith, 1997). The theory is that social relationships are more prevalent in small schools, and that they have the capacity to minimize an individual's personal at-risk factors, such as economic status, family structure, and academic capacity, is more often assumed than empirically tested (Crosnoe, Johnson, & Elder, 2004). Without thorough exploration of the attributes that make smaller schools better for educating and retaining students, it becomes difficult to isolate what specific school element is most influential for students. This lack of specificity raises questions as to whether there is a specific size that is essential, or if perhaps other organizational features, such as teaching style, relationships, or curriculum, none of which are related to size, are the key to a school's success (Strike, 2008). From an ecological perspective, school size may be the most relevant factor to consider. The findings for current research related to small schools and small-school initiatives reveal a strong connection between student enrollment and school completion. For the purposes of this study, the in-depth discussion of this current research on the relationship between school size and high school completion is essential.

Using multilevel modeling techniques to analyze data from a sample of 14,966 students

from 84 schools that participated in the National Longitudinal Study of Adolescent Health, Crosnoe et al. (2004) sought to identify how school size was directly related to the interpersonal relations of students, specifically those of varying ethnic backgrounds. Following their analysis, the researchers concluded that student attachment to school, teacher bonding, and extracurricular participation were at their highest with school populations below 1,700 students. When looking specifically at minority student data, the research revealed that the increase in school size had an negative impact on minority students, suggesting that reform efforts targeted to reduce school size would maintain all students' attachments to school until graduation.

Similar to Corsnoe et al. (2004), Lee and Burkam (2003) concluded in an extensive study related to the impact of school size that there is a correlation between school size and premature high school exit, but school size alone is unlikely to directly influence dropout rates. Lee and Burkam (2003) found that within small schools "teacher-student relationships in school are a measure of school-based social capital, and may indeed reduce the probability that students will drop out high school" (p. 27). School size, although not a direct cause of dropping out, appears to be an organizational feature that influences the frequency and significance of the student-teacher relationships that occur within schools of varying sizes. Thus, Lee and Burkam suggested it is the "social features that accompany smaller schools, such as: trust, commitment, common purpose, and more frequent contact with adults that reduce the probability of premature exit from high school" (p.27). As evidenced by research (Howley, 1996, 2000, 2006; Howley & Bickel, 2000; Huang & Howley, 1993; Johnson et al., 2002; Lee & Smith, 1997; Lee & Burkam, 2003; McMillen, 2004), school size does have an impact on students either because students receive greater academic attention in a small school, or because these schools may have a greater ability to leverage the power of the social relationships, which are more easily facilitated in a

small environment.

The small school concept has emerged as a transformational model for enhancing student achievement and retention rates within larger urban high schools (Lee, Özgün-Koca, & Cristol, 2011). With research suggesting that small schools offer stronger student-teacher relationships, which promote an increased likelihood of graduation (Crosnoe et al., 2008; Lee & Burkam, 2003; Strike, 2008), urban schools have taken steps to restructure into small learning communities or what have been called schools-within-schools, academies, and small learning communities. These restructuring efforts aim to offer students a more collaborative environment which facilitates stronger connections with teachers and among peers. To assess the effectiveness of this strategy, Lee et al. (2011) conducted a study of the small school concept utilized as a reform effort in the Ohio Public Schools from an outcome perspective. To draw conclusions about the effectiveness of the school-within-a-school strategy on graduation rates, attendance, and student performance, the researchers collected graduation and attendance data submitted to the state by each school as well as the results of standardized assessments administered by each high school. The methodology of the study included the Wilcoxon to compare differences for each school separately, the Mann-Whitney to test for differences between schools, and the Friedman to test non-interval data. Using these three nonparametric tests, Lee et al. drew the following conclusions about the effectiveness of the school-within-a-school reform strategy: a) there were no statistically significant findings between reform and traditional schools related to attendance; b) both reform and traditional schools had statistically significant findings related to increased graduation rates; however, traditional schools showed a steady yearly increase in graduation rates and reform schools did not; and c) dropout rates remained consistent with no increasing or decreasing pattern between 2003-2007. Following the

analysis of the data, Lee et al. concluded that the small school approach alone is not the answer and that schools must have a strong community feeling where teachers and administrators care about the students and work diligently to make the subject matter relevant.

The works of Corsnoe et al. (2007), Lee et al. (2011), and Lee and Burkam (2003) reveal that while there is research to support the idea that small school size can have a positive impact on student achievement, attendance, and graduation rates, the challenge becomes whether it is the actual size of the school that yields the impact or if there are other organizational elements such as culture, curriculum, or instruction that bring about the change. What is evident from the research is that the structure and organizational decisions made by school officials have the potential to impact students' academic experiences and social relationships and ultimately their decision to drop out of high school (Lee & Burkam, 2003). As a result of this research, school size was a relevant factor in this study.

Retention Practices

Restructuring the school environment is not the only strategy implemented in schools to ensure student proficiency and success; another is grade retention. Grade retention emerged as a solution for social promotion, and it was utilized as a common practice in the 1970s and 1980s to assist struggling learners. Since inception, retention has been scrutinized by researchers who caution about its use because of a lack of overall academic effectiveness (Holmes & Matthews, 1984; Holmes, 1989). Following the unveiling of *A Nation at Risk* report in 1983, greater attention was paid to the practice of retaining students, which was once believed to be the only solution to prevent students from moving from grade to grade without a mastery of the skills and concepts needed for promotion (Bowman, 2005). The practice of retaining students who fail to meet grade level criteria or to promote them with their peers is an unsettled educational issue.

The research on retention is plentiful, with much of it aimed towards settling the debate between whether retention or social promotion yields a more successful educational trajectory for students. However, in recent years with state and federal policies tightening the requirements for academic proficiency, retention is once again in the forefront of educational discourse.

Retention being utilized in the academic setting as a way for students to catch-up has been investigated by researchers such as Jimerson (2001), Jacob and Lefgren (2007), and Stearns, Moller, Blau, and Potochnick (2007). These studies sought to determine the effectiveness of retention as a strategy for academic improvement and whether there were long-term consequences for students who were retained. One outcome each study aimed to prove or disprove was the link between retention and school dropout.

At the onset of NCLB, Jimerson (2001) recognized the possible increase in retention being used as an intervention strategy for academic failure, and he conducted a comprehensive review of the research related to retention by Holmes and Matthews (1984). To provide guidance to educators who might rely on retention as a tool for improved student achievement during an era of increased accountability, this meta-analysis focused on all 20 studies related to grade retention between 1990 and 1999 in an effort to understand the variables, practices, socioemotional and behavioral outcomes for the sample of retained students within each study. Additionally, Jimerson wanted to analyze the conclusions drawn by the authors of each study. To assess the impact of retention, Jimerson (2001) utilized 20 studies that met the following criteria: (a) were peer-reviewed and published, (b) included the efficacy of results in the study, (c) utilized a comparable group of promoted students as part of the methodology, and (d) was conducted between 1990 and 1999.

Jimerson and two research assistants coded the analysis of each of the 20 studies to assess

the statistical significance of the findings. The computation of effect sizes were then summed and averaged to measure the relative benefit of retention. The analysis of achievement outcomes yielded 174 different analyses, of which nine favored retention, 82 favored promotion, and 84 yielded no level of statistical significance. Additionally, Jimerson (2001) reported that, of the 169 effect sizes that were established in the meta-analysis, only six reported higher achievement of the retained students in comparison with those that were promoted. When assessing the potential impact of retention on students' socioemotional status and behavior, Jimerson found that of the 148 analyses conducted, 127 yielded no significant difference between retained and promoted students, 13 favored promotion, and eight favored retention. The effect size calculations showed that the mean sizes for retained students were lower in the areas of social, emotional, behavioral, and self-concept categories than their peers who were promoted. Jimerson (2001) concluded his research by offering a neutral perspective on retention, noting that student achievement and attrition are complex and "rather than stating that retention is associated with outcomes in a causal manner, the transactional perspective reminds us to consider the complex interplay of individual and experimental influences across time" (p.432). Other researchers who have explored the impact of retention have not been inclined to take a neutral position but have reported research results which indicated that retention is far more detrimental to student outcomes than promotion. Instead, they have suggested that schools provide creative solutions to remediate student skills needed to maintain the pace of their peers (Alexander, Entwistle, & Dauber, 1994; Jacob & Lefgren, 2009).

There are numerous studies that have established a strong connection between grade retention and high school dropout rate (Alexander et al., 1994; Jacob & Lefgren, 2009; Stearns et al., 2007). One aspect of retention that is often discussed is the impact of retention on a student's

connection to the school environment. From an ecological perspective the experience of being retained has the potential to alter how a child interacts with those within the school environment, and this could alter the child's future educational experiences (Jimerson et al., 2002).

To explore the alteration of students' connections to school following retention, Stearns et al. (2007) conducted a study using the three ecological theories of participation-identification, frustration-self-esteem, and social capital to explain a student's decision to drop out of school. Using data from the NELS: 88 study, the researchers intentionally grouped students into early and late dropouts in hopes of identifying different reasons for dropping out at different stages of a school career. Stearns and her colleagues utilized logistical regression to analyze the dependent variables and regression composition to look at the relationship between retention and dropping out. These analyses showed that students, who were retained, regardless of ethnicity, were more prone to drop out of school than peers who were promoted. While the likelihood of school completion was impacted by retention for all students, the data revealed that students who were retained came from a low socioeconomic background, lived in predominately single homes, had low achievement scores, and were not optimistic about their education (Stearns et al., 2007). When looking at the impact of retention on relationship and engagement, Stearns et al. found that students with high levels of involvement in social groups and academics, as well as those with strong bonds with teachers, had a greater likelihood of completing high school as did students whose parents talked to their children about the importance of school. Recognizing the individual characteristics of those who are retained, as well as the adverse consequence retention has on student engagement in schools, the question of when to retain a student and what type of student should be retained has been a consideration of educators and educational researchers for the past two decades.

Other research on retention sought to determine if the grade in which retention occurred had an impact on the likelihood that students would drop out of school. One such study was that of Alexander et al. (1994) who conducted a longitudinal study which began in 1982 and included 20 randomly selected Baltimore City Public Schools. Using a random selection sampling technique, the researchers identified 790 first grade students to participate in the study. The subjects in this study engaged in face-to-face interviews beginning in 1982 with subsequent interviews being conducted twice annually for the next five years. In addition, the parents of the participants were asked to complete surveys, which were administered using the same timeline. Additional student data regarding academic performance, socioeconomic status, attendance, grade retention, course placement, and family demographics were collected using school records or it was self-reported by participants or their families. Using this data, Alexander et al. conducted several analyses using both descriptive statistics and multivariate regression analyses and found the following conclusions:

- eleventh grade represents the year students most frequently selected to leave school, making 10th grade the highest grade attained by most dropouts in the cohort;
- student achievement as early as first grade is often predictive of high school attrition due to continued poor academic performance and course tracking;
- grade retention increases the likelihood that a student will drop out regardless of socioeconomic status; and
- children's attitudes towards school are important through their years, but their self-confidence and engagement are more critical during their later high school years.

(p.785)

Through their analyses, Alexander et al. (1994) were able to identify the importance of parent and student attitudes towards school as key variables to school completion, but they found that organizational decisions, such as retention and course tracking often sever students' connectedness to the school, thereby increasing their likelihood of exiting prematurely. Instead, Alexander et al. (1994) recommended that schools use "imaginative approaches to re-engage disenfranchised youth and provide them with alternatives to finding success" (p. 805).

Jacob and Lefgren (2009) also examined the timing of grade retention and found differing outcomes for students retained during different stages of their educational career. The researchers utilized administrative data to gather achievement and demographic information for 11,777 sixth graders, as well as 7,509 eighth graders who were enrolled in the Chicago Public School System during the first three years (1997-1999) of Chicago's accountability policy implementation. The accountability policy required all third, sixth, and eighth grade students who did not meet the end-of-the-year benchmark in the areas of reading and math to complete a six week summer program to remediate deficit skills within one or both of the content areas. After the completion of the six week program, students were re-administered the end-of-year test. If they demonstrated proficiency, they were promoted; if not, they were retained.

Using the data from this representative sample of 11,777 sixth graders and 7,509 eighth graders, the researchers identified three failure groups, representing each respective year and utilized an estimation strategy to ascertain the causal effect of grade retention. This analysis resulted in a two-stage, least-square procedure which compared grade retention with the student index scores (test performance score). Following this methodology, the researchers found a positive correlation between student test scores and high school completion. Utilizing traditional regression discontinuity design, Jacob and Lefgren (2009) explored how demographic variables

(age, ethnicity, gender, socioeconomic status, free and reduced lunch, limited English proficiency, special education enrollment, non-parent caretaker status, and social status) and achievement variables (August test scores) related to retention. Through this analysis, the researchers found that grade retention among low-achieving students in Chicago had no impact on high school completion for sixth grade students or older eighth graders (those that attended a transition center in the event of retention), but substantially increased the likelihood of dropping out among eighth grade students. The researchers offered possible explanations for the differences in how retention impacted students from various grade levels. Jacob and Lefgren (2009) suggested that sixth graders were not significantly impacted by retention because the additional time at that grade level during the summer program allowed them to gain the deficit skills needed to rejoin their original cohort in subsequent years. They also suggested the difference in impact on eighth graders may be due to the effectiveness of the transition center that students were required to attend if they did not receive high enough scores on the promotional exam in August. Then, the overall achievement potential of those older eighth grade students or the difference in the social/emotional impact for the older and younger eighth grade students was assessed.

Jacob and Lefgren (2009) offered two important considerations for schools. The first was that schools must strive for higher student achievement but must also match those expectations with interventions and programs that provide remedial instruction. The second was the exposure of the potential long-term effects of retention as well as the benefits and potential drawbacks of the treatments (summer school, transition centers) for student underachievement on end-of-year exams.

This research on retention showed that students who drop out of high school were five

times more likely to have been retained than those that earned a high school diploma (National Center for Research Statistics, 2006). The outcomes for students who have been socially promoted are equally as dismal. Recognizing the ineffectiveness of retention and promotion, the gap in the research appears to be the understanding of why students struggle and what barriers are preventing school success. This information is perhaps best obtained from the students themselves.

Summary

The dropout problem is multifaceted and complex, which is likely why reform efforts, such as No Child Left Behind, have had little impact on reducing dropout rates in the United States. This lack of substantial growth in graduation rates could be because reform efforts in recent decades have targeted schools' organizational elements rather than their ecological elements as a means for prevention.

The research has shown student engagement to be the most critical factor for school success; yet policy makers and educators continue to impose structural barriers within school which lead to disengagement. As described in this literature review, the use of high-stakes testing, increased graduation requirements, and retention do not always yield the benefit of increased student achievement and may in fact contribute to the continuation of the dropout epidemic in America.

Conversely, research has shown that the ecological element of relationships within a school can be essential to preventing school dropout. The positive nature of teacher and peer relationships leads to increased school attachment, academic performance, and likelihood of graduation. Research also reveals that these relationships are more easily developed and maintained within a smaller school setting.

As the search for a solution to the dropout crisis in America continues, so does the exploration of these key school organizational structures and social relationship factors; however, the solution may evade educators unless the discussion is reframed from the student perspective. Glaringly absent from the research are the perspectives of students presently navigating the educational system. These key stakeholders could perhaps tell how best to ensure the graduation of all youth in the United States. The insights of students who are at-risk but remain in school along with their peers who have dropped out provide a unique perspective about school that cannot be gleaned from even the most comprehensive statistical data. Student voice is an overlooked component of research but offers valuable information for school reform. This study sought the perspectives of currently enrolled students and students who dropped out in order to analyze the influence of those factors described in this literature review that have been shown to decrease the likelihood of graduating.

CHAPTER 3

METHODOLOGY

This chapter describes the methodology used for this explanatory mixed methods study. The chapter begins with an overview of the historical importance of high school graduation and the factors related to school completion, which led to the identification of the research problem. The purpose of this study is presented along with the three research questions. In addition, justification for the use of explanatory mixed method design to answer the research questions is presented. Outlined in this chapter are a description of the selection criteria, study procedures, and data analysis. The chapter concludes with a summary statement.

Background of the Problem

The exploration of why students drop out of school remains critical even with the national graduation rate at 72%, its highest level in two decades (Editorial Projects in Education Research, 2011). The cause for the increased graduation rates is likely the No Child Left Behind Act of 2001 (NCLB), specifically part H, The Dropout Prevention Act, that holds schools accountable for graduation rates while offering school districts federal grants to increase graduation rates and reenroll students that have already dropped out of school. Even with federal legislation targeted to improve completion rates, schools continue to face the harsh reality that 1.3 million students do not earn a high school diploma each year (Editorial Projects in Education, 2011). The number of annual dropouts is staggering, and the statistics associated with dropping out of school are equally bleak. In this country an individual who does not earn a high school diploma is more likely than those who have earned a diploma to experience joblessness, incarceration, and poverty (Sum et al., 2009). The individual consequences of dropping out also have an effect on the economic stability of our nation. At the micro level the “negative net fiscal contribution of -\$5,200 for each student drop out and \$292,000 in lower tax revenues” may not

appear excessive (Sum et al., 2009, p.16); however, at the macro level these 1.3 million students who fail to earn a diploma each year result in a cumulative loss of 154 billion dollars to the United States economy (Alliance for Excellent Education, 2011). If the pattern of over one million dropouts per year continues for the next decade, the Alliance for Excellent Education research group projects a 1.5 trillion dollar loss to the nation. These economic burdens continue to challenge the stability of the nation and have led to the exploration of the causes for dropping out and subsequent development of strategies to prevent students in United States schools from dropping out.

The current literature on high school attrition includes a significant number of quantitative studies that use national databases, such as National Education Longitudinal Study (NELS), as their data sources to reveal the impact of school organizational and social relationship factors on high school attrition (Heck & Mahoe, 2006; Lee & Burkam, 2003; Lee et al., 2011; Ream & Rumberger, 2008; Stewart, 2008). Other researchers, such as Kaczynski (1989), Knesting (2008), Lessard et al. (2008), and Mulroy (2008), have shed light on the importance of student-teacher relationships and the establishment of caring and responsive schools to maintaining a high level of student commitment to learning through the use of qualitative research design. The present study uses a combination of quantitative and qualitative methodology to explore both the impact of organizational decisions and the importance of social relationships on dropout decision-making. The quantitative phase of the study developed an understanding of which school organizational and social relationship factors were significant, while the qualitative phase revealed why and how these factors influenced participants' decisions to drop out of school.

Research Problem

There are organizational and social relationship factors within schools that can either positively or negatively influence students' decisions to earn high school diplomas regardless of the individual risk factors, such as ethnicity, race, socioeconomic status, or academic aptitude.

Research Purpose

The purpose of this explanatory mixed methods study was to determine which of the school organizational and social relationship factors, if any, have the most influence on high school attrition. The study also explored how and why these factors might create insurmountable obstacles to high school graduation.

Research Questions

The three research questions and one subsidiary question of this research study are:

1. What specific school organizational and social relationship factors have the greatest influence on student persistence?
 - 1a. What is the comparative influence of school organizational versus social relationship factors on student persistence?
2. What, if any, correlation exists between the school organizational and social relationship predictor factors for students who have seriously considered dropping out and students who have formally dropped out of school?
3. What, if any, pattern emerges related to the cause for dropping out of school among students who have left school prior to graduation?

Research Design

Rationale

Explanatory research design was used to investigate the impact of school organizational

and social relationship factors on students' persistence towards graduation for students who have considered dropping out and those that have already dropped out of high school. This mixed-methods research design was selected over exploratory research design due to its sequential nature. The use of explanatory design allowed the researcher to conduct the quantitative data collection and analysis prior to the qualitative phase of the study, as opposed to the concurrent nature of exploratory research design. The benefit of this design was that the qualitative data served to deepen the understandings and findings of the quantitative phase of this study (Gay et al., 2009). Phase one of the study included the collection of demographic information and administration of a student perception survey on high school persistence. Phase two of the study included interviews of nine high school student dropouts. These former students were asked to share their experiences of what led to their premature exit from high school and what, if anything, school personnel could have done to support them in earning a high school diploma. This design was used to investigate the school organizational and social relationship variables that are believed to have the most significant influence on the complex phenomenon of dropping out of high school (Gay et al., 2009). The factors of high stakes testing, graduation requirements, school size, retention, and teacher and peer relationships emerged as relevant factors in the literature on high school attrition. Each of these factors have been found to impact student engagement in school and a student's decision to persevere in school until graduation; therefore, these factors warranted inclusion in the present study.

An explanatory mixed-method design was also used in an effort to offer a more in-depth understanding of the dropout phenomenon. Mixed-method research design allowed for the collection of quantitative survey data to determine the significance and impact of the school organizational and social factors described above among current students and those that have

dropped out of high school (Gay et al., 2009). The data collected during the quantitative phase allowed for the isolation of significant factors that impact students' decisions to drop out of high school; however, it was the qualitative phase of the study that asked nine high school dropouts to provide in-depth explanations of the reasons they felt these factors became insurmountable obstacles towards graduation. The interviews gave these former students the opportunity to share what, if anything, school personnel could have done to support their persistence towards graduation. The use of both quantitative and qualitative research methodology strengthens the understanding of the impact of school organizational and social relationship factors on students' decisions to graduate.

Setting

The primary site of this study was a comprehensive high school designated a rural-distant locale by the United States Department of Education (USDE). It is located in a county in the south central section of Pennsylvania that encompasses 146.25 square miles. The per capita income of county residents within this area is \$19,666, and the family median income is \$33,903. The American Community Survey (2009) estimated the population of the district at approximately 5,850 residents. The ethnic distribution of the county's population is 98.9% Caucasian, with all other ethnicities representing less than 1% of the population's ethnic composition. There are 2,304 households within the district, 24.1% of which are headed by single parents. Only 12.6% of parents have earned a college degree.

The National Center for Educational Statistics (2012) reported that 809 students from this area were being educated in one junior/senior high school and one elementary school. Currently there are 394 high school students, and their ethnic distribution shows that 99.2% of the students are Caucasian, and all other ethnicities represent less than 1% of the high school population.

Approximately 32.2% of enrolled students in the high school are identified as economically disadvantaged based on their qualification for free and reduced lunch (NCES, 2012).

Participants

In order to effectively answer the research questions, purposeful sampling technique was used for participant selection. This sampling technique allowed for the selection of participants who were believed to be representative of a given population through the use of explicit criteria (Gay et al., 2009). In an effort to establish a comprehensive look at the dropout phenomenon two groups were established based on the following selection criteria: Group 1 included currently enrolled eleventh and twelfth grade students who were asked to describe their perceptions of high school social and school factors. Group 2 included formerly enrolled students who dropped out of high school between September 2002 and June 2012.

The first criterion was established because the population of interest for this study was high school students who are 17 years of age or older which, in accordance with Section 1330 of the Pennsylvania School Code, allows them to drop out of high school without parent signature or documentation of permanent employment and work permit (Pennsylvania Department of Education, n.d). The goal of this study was to fill the current gap in the literature related to the influence of school organizational and social relationship factors on high school persistence; therefore, inviting students who are enrolled in school but who have the option to leave was essential to understanding this phenomenon.

The second group was comprised of students who had dropped out of high school. This criterion was established based on a review of existing research and the recommendations for additional study for this population as a means to better identify the attributes within a school that could be altered to facilitate greater student completion rates within high schools. Exploring

this phenomenon through the perceptions of the students who faced the decision to stay in school or dropout is underrepresented in the research (Glazier, 2005; Mulroy, 2008; Smyth, 2006). Critical to providing a comprehensive critique of this problem was the incorporation of students who had left high school prematurely to isolate what, if any, difference existed between the influence of school organizational and social relationship factors on dropouts and their peers who have considered dropping out but did not. Researchers, such as Kaczynski (1989) and Lessard et al. (2007) have conducted qualitative studies using dropouts as their samples, and their work has provided rich feedback on the school and social factors that influenced a student's decision to leave. However, none of the researchers explored which factor had the most significant influence on the decision to leave school. The comparison of perceptions between at-risk students still enrolled in school and students who had dropped out offered a unique comparison of the influence of factors associated with drop out decision-making. It was through the incorporation of the voices of student dropouts that this study aimed to isolate the most significant school organizational and/or social relationship factors in students' decisions to dropout. According to Beekhoven and Dekkers (2005), this has been underrepresented in the research.

Instrumentation

Quantitative phase. As per the recommendations of Robson (1993), a survey was utilized to collect data on student perceptions of the school organizational and social relationship factors and their influence on the decision to drop out of high school. Robson (1993) recommended the use of a survey to collect data from a specific population or a sample from that population, and typically a questionnaire or an interview is used as the survey instrument. The versatility of a survey allowed the researcher to administer the tool in both a paper-pencil and

interview format based on the enrollment status of the individual participants. The survey instruments utilized during phase one of the study (see Appendix A and Appendix B) were designed to incorporate the common school organizational (high stakes testing, retention, school size, and graduation requirements) and social relationship (engagement, teacher and peer relationships) factors associated with high school persistence research. The two different surveys (see Appendix A and Appendix B) were developed by the researcher to be administered to enrolled and formally enrolled students, and although the surveys were identical in content, they were structured differently based on the population being surveyed.

Formerly Enrolled Student Survey (Appendix A). The survey instrument contained 39 Likert-scale items grounded in the work of Bronfenbrenner (1979), Tinto (1987) and Tinto and Pusser (2006) on school persistence and student engagement. The survey questions were designed to elicit the perceptions of formerly enrolled students from this single rural high school to determine which organizational or social factors, if any, within that school made it difficult for them to earn a high school diploma.

Enrolled Student Survey (Appendix B). Part one of the currently enrolled student survey instrument (see Appendix B) generated demographic information based on each enrolled respondent's grade level and dropout consideration. The *yes* or *no* response to the first question of the demographic section of the enrolled student survey was utilized to establish two different groups (students at-risk and students not at-risk for high school dropout); the data collected from question one was analyzed to answer the first two research questions. Part two of the survey instrument contained 39 Likert-scale items grounded in the work of Bronfenbrenner (1979), Tinto (1987) and Tinto and Pusser (2006) on school persistence and student engagement. The survey questions were designed to elicit the perceptions of currently enrolled students from this

single rural high school to determine which organizational or social factors within that school made it difficult for them to earn a high school diploma.

Qualitative phase. The goal of the qualitative phase of this explanatory mixed methods study was to gain greater insight and understanding (Gay et al., 2009) about the influence of organizational and social relationship factors within a school from the perspective of the high school dropouts. To elicit this perspective, dropouts from the rural south central Pennsylvania high school were interviewed. Using an interview guide (see Appendix C) that consists of pre-determined, open-ended questions, participants were asked to describe the causes for leaving school prior to graduation and what possible interventions, if any, school personnel could have used to support their persistence to graduation.

Pilot Study

A pilot study was conducted to validate the survey instrument and interview protocol used in the quantitative and qualitative phases of the study.

Survey Instrument

Establishing content validity is critical because it represented the degree to which the instruments developed for the study measure the content being studied (Gay et al., 2009). A college statistics professor with experience in research on school persistence, an experienced secondary school administrator, and a researcher whose work on high school persistence was foundational to this study were utilized to establish content validity of the instruments used for the present study. The experts were sent an email (see Appendix D) that outlined the intent and purpose of the study, and a request was made for their assistance in establishing item and sampling validities of the survey instruments and interview guide. These experts were asked to carefully review the process used to develop the instruments, as well as the instruments

themselves, in order to make a judgment about how well the survey and interview questions represented the organizational and social relationship factors prevalent in the research on school persistence. These experts were also asked to analyze each question and provide recommendations or suggestions to ensure alignment with the purpose and intent of this study. The experts were asked to assess the clarity and structure of the survey and interview questions in an effort to avoid wordiness, jargon, unbalanced response options, and redundancy, all of which have been found to impact the quality and usefulness of an instrument (Creswell, 2008). Based on their recommendations the following changes were made:

- removed Demographic Question 1 which was deemed irrelevant to the research questions
- re-worded directions to remove redundancy and to refer to scale.
- re-worded question 5 to make it applicable to the Likert-scale
- removed the word “or” from question 27
- removed the Likert-scale options from below each individual question and placed them at the top of the first page of the survey

Analysis of the recommendations and suggestions of all three experts occurred and the necessary modifications to the instruments utilized in the study were made. Following revisions made from the recommendations of the expert panel, a usability panel was established consisting of seniors enrolled in an English 12 class in a rural high school in Pennsylvania with similar demographic, achievement, and graduation levels to those in the high school used in the actual study. To establish this usability panel, the superintendent in a district with a high school of similar rural status, achievement level, and graduation level was contacted to request approval to conduct a pilot study (see Appendix E). Upon approval from the superintendent (see Appendix F), the high school principal and the guidance department were contacted to coordinate the pilot

study procedure. A cover letter and parent consent form (see Appendix G and Appendix H) were sent home to families that had a senior enrolled in English 12 during the 2012-2013 school year. Two methods were used to ensure that consent forms reached participants' parents or guardians. Following an explanation of the pilot study, consent forms were provided to the teacher to distribute to the students during their English class, and students were asked to take them home to their parents and to return them within one week. In addition to the student delivery, an email (see Appendix I) was sent to all families that have a family member enrolled in English 12. The message included the cover letter (see Appendix G) and a pdf file of the parent consent form (see Appendix H) for parents to print, sign, and return. Following the conclusion of the one week return window, a list of 30 students with parent consent was shared with the school principal and guidance staff. These 30 seniors were invited to participate in the pilot study.

Seniors with signed parental consent forms were called to the auditorium at the beginning of first period where 30 students received a description of the nature of the study and a request for their agreement to participate was made. In addition, an explanation of the student assent (see Appendix J) was provided, and the students were told that signing this document signified their willingness to participate; however, they were also told that they had the freedom to leave at any time prior to the completion of the survey without penalty. Participants were given the chance to ask questions, and those who signed the assent form were asked to complete the enrolled student survey. When all students completed the survey, participants were asked questions regarding the clarity of survey. Specifically, the students were asked the following:

- were the directions clear and easy to understand?
- were the questions clear and understandable?

- was there any part of the survey that was confusing to you?

If students responded *yes* to any questions, follow up questions were asked to identify the specific verbiage or instructions that were unclear or confusing. The recommendations offered by the students and researcher observations included the following:

- directions were added on the top of each page so students did not need to flip over to review the scale on the top of the initial page of the survey.
- school size questions were re-worded because the students felt they couldn't respond to survey items about schools of other sizes only their current high school.

Following the discussion, students were asked to place the survey in an envelope and in a box located on the table in the front of the room prior to their exit from the auditorium.

Interview Protocol

The superintendent of a high school with similar rural status to that of the high school for the actual study was contacted with a request to conduct a pilot study relating to the interview protocol (see Appendix E). Following superintendent approval (see Appendix F), the building principal and guidance staff were contacted at the high school to identify the former students who had dropped out of school in the previous two school years. Utilizing the Pennsylvania Information Management System (PIMS), the school counselor provided the researcher with the names and the most recent address and phone number of two former students. The researcher contacted both former students by phone. Phone contact (see Appendix K) was made with the students and during the conversation a description of the purpose and intent of the pilot study was given and a request for participation of the student was made. Both individuals consented to participate and were included in the study. Upon agreement to participate, a mutually agreeable time and location for the administration of the survey and interview was identified. Suggested

locations, such as the local library or a coffee shop, which offered some privacy and quiet, were offered to the participants. Both of the pilot interviews occurred in the quiet section of a local bookstore. At the onset of the meeting with the former high school students, an explanation of the study's purpose and reminder to the participant that participation was voluntary and that he or she was free to leave prior to completion of the survey and subsequent interview if he or she desires was provided by the researcher. Each participant was then asked to sign an informed consent form (see Appendix L). Once the informed consent was signed, the initial phase of this meeting required the completion of the survey using procedures identical to those outlined in the description of the survey instrument. Following the survey completion and discussion about instrument clarity, the former students were asked to participate in an interview. During the qualitative phase of the pilot, each dropout was asked to respond to three semi-structured interview questions aimed to discern his or her perceptions regarding his or her school experiences, and how these experiences impacted school completion. During the participant responses, any confusion or misunderstanding expressed either verbally or non-verbally by the participant was noted. While the participants did not note any confusion, the researcher noted the following during the pilot study interviews:

- although participants were offered to have the survey read aloud to them, neither elected that option.
- the survey took the participants approximately 15 minutes to complete, while both the interviews lasted approximately 30 minutes in duration.
- follow up prompting was necessary to get participants to more fully describe their experiences in high school.

These notations, along with the duration of the interview, were used to make adjustments to the interview questions and procedures and to assist in the scheduling of meetings with the participants in the actual study.

Data Collection

Stevens (1992) recommends 15 subjects per predictor to establish a reliable regression equation that will cross validate and that has generalizability. The present study has five predictor categories; therefore, a minimum sample size of 75 participants meets Stevens' (1992) recommended parameters for maintaining high probability and a small amount of shrinkage. Using the procedures to secure participants described below, a total of 80 currently enrolled students and 10 high school dropouts was achieved, exceeding Stevens' (1992) recommendation for sample size. The procedures to secure the participation of these individuals are described in the following section.

Procedures for Collecting Data from Enrolled Students

A request for site approval was made to the superintendent (see Appendix M), and once access was granted (see Appendix N), the process of gaining student participation began by sending an introductory email (see Appendix O) to the parents of all juniors and seniors. An invitation to a parent and guardian meeting was incorporated in the introductory email and was also posted on the district website to elicit greater parent participation. The parent and guardian meeting was scheduled for a week after the introductory email at 7:00 pm in the high school auditorium; only two parents/guardians attended. The intent of this meeting was to provide a forum to explain to parents/guardians the purpose and procedures of the study. In addition to the explanation of the study, consent and assent forms (see Appendix P and Appendix Q) required for participation were distributed and explained to parents and guardians. The parents/guardians

were informed that student participation was voluntary and that students were free to end participation prior to the study without penalty. At the conclusion of the meeting, the parents/guardians were offered the opportunity to ask questions. No questions were asked, and the meeting concluded at approximately 7:25 p.m.

On the same day as the parent/guardian meeting, the high school principal and researcher conducted an informational meeting with 112 juniors and seniors enrolled at the high school. At this meeting a description of the nature of the study, as well as the following research elements of student and parent assent and consent forms, the survey, and the Scantron response sheet were shared with all students. Students were informed that assent and consent forms indicate agreement to participate, but that they may withdraw from participation in the study at any time without any penalty. At the conclusion of the class meeting, each student was provided with the cover letter (see Appendix R) detailing the nature of the study and specific details regarding the procedures for the administration of the survey. Included in the packet that was taken home by the students was the parent consent form (see Appendix P) with the specific return deadline outlined for families. To increase the participation rate, a second distribution was scheduled for one week after the initial meetings with a one-week return deadline. This made the total participation consent timeframe total of two weeks. Following a two-week return window, a list of 80 out of 112 students with signed parental consent forms was compiled. A copy of each consent form was mailed to participants' parents/guardians for their records.

All students with signed parent/guardian consent forms were asked to come to the library at the beginning of first period. As per the recommendation of Freeman and Mathison (2009), assent was sought by providing a clear explanation of the research, assurance that participation is voluntary, inclusion of the methods to ensure safety, confidentiality, respect for personal

boundaries, and minimization of risk of physical or psychological harm to the student. Using Freeman's and Matheson's recommendations for assent as a guide, a meeting with students that had signed parental consent forms was conducted regarding the proposed research. Specifically, the students and the researcher discussed the goals and procedures of the study, confidentiality, risk, a student's right to withdrawal from participating without penalty, and an opportunity to ask questions regarding the study was provided. Following this explanation, students were asked to sign assent forms (see Appendix Q). All 80 students with signed parent consent elected to sign the student assent form; therefore, all 80 students were included in the study.

Next, each participant was provided with an information packet in an envelope. Enclosed in each information packet was the enrolled student survey (see Appendix B) and a Scantron response sheet. Each envelope was coded with a number from 1 to 80, and all forms enclosed in each envelope had the identical number code. Once all participants had been provided with a packet, they were asked to open the envelope, read along as the instructions were read aloud, and then complete the survey. Participants were given approximately 45 minutes to complete the survey and upon completion were asked to place the survey, instructions, and Scantron forms back into the envelope and seal it. Once all students completed the survey and sealed the envelope, they were thanked for their participation and asked to return the envelope to a file box located on the table in the front of the room prior to their exit from the auditorium.

Procedures for Collecting Data from Students who Dropped Out

Maximal variation sampling was selected for the identification of participants in the qualitative phase of the study because it allowed for the presentation of multiple and more in-depth perspectives on a topic, which in this case was the dropout phenomenon (Creswell, 2008). In accordance with the maximal variation technique, coordination between the high school

principal and counselors occurred to identify the students who had dropped out of the high school within the past ten school years. Specifically, the Pennsylvania Information Management System (PIMS) data and archived student records were used to identify the names and last known addresses and phone numbers of high school dropouts. Using these resources, a list of 45 former students was generated; however, only 30 of these former students had current contact information. All 30 participants were initially contacted via a phone call (see Appendix K) and subsequently mailed a letter requesting their participation in the study. The ten participants included in this study represent the individuals from the list that the researcher was able to contact via phone. In addition to the initial phone call and letter, the 20 other possible participants did not respond to two additional phone contact attempts made by the researcher. The ten individuals the researcher was able to contact participated in a phone conversation that described the purpose and intent of the study and their participation was requested. The participation of 10 high school dropouts was sought for the study, and participation of 10 former students was achieved. Upon agreement to participate in the study, permission from the participant was sought in order to send him or her a copy of the cover letter (see Appendix S) and informed consent form for review and to determine a mutually agreeable time and location for the administration of the survey and interview. A location, such as the local library or coffee shop that offers some privacy and quiet, was suggested to the participant, but several elected to meet at their homes. The mailing of a copy of the cover letter and informed consent form followed the phone call to each student who agreed to participate.

The scheduled interviews with the formerly enrolled students were conducted individually within the timeframe and location agreed upon by the participants and researcher. Prior to the administration of the survey, each participant was asked to sign the informed consent

form (see Appendix T). Once informed consent was obtained, the participant was provided with an envelope that was coded on the outside with the numbers 101-110 and which contained a former student survey (see Appendix A) and a Scantron response sheet. All materials inside the envelope were coded with the same numerical code as on the outside of the envelope. Then the participants were reminded of the freedom to end participation at any time without penalty. Participants were then asked to complete the survey following the enclosed instructions, and when they were completed, to place all forms back into the envelope provided to signify completion. Participants were asked if they preferred to have the survey read aloud by the researcher, but each chose to complete the survey on his or her own.

Once the survey envelope was sealed, the researcher collected the envelope and asked the participant if he or she was willing to continue to the interview phase of the meeting, which was audiotaped. Nine of the ten formerly enrolled students agreed to participate in the interview. The one participant who elected not to participate was thanked for his time prior to leaving the interview location. Upon agreement, nine participants were interviewed. Following the interview, the participant was thanked for his or her time as a signal for the conclusion of the interview. The audio recording was transcribed by the researcher immediately following each interview. As recommended by Creswell (2009), the member checking strategy to ensure self-reflection was utilized, and each participant was sent the transcript via email or through the postal service and asked to review the transcript for accuracy. Each participant was contacted via phone to discuss the accuracy of the transcript; all affirmed the accuracy, and no changes were made to any of the nine transcripts.

Data Analysis

The explanatory mixed-method design of this study called for the use of both quantitative

and qualitative data analysis techniques. The data analysis procedures for each research question are based on the recommendations of Field (2005), Creswell (2008), Gay et al. (2009) Robson (1993), Stevens (1992), and Freeman and Mathison (2009) and are outlined in Table 1.

Table 1

Data Analysis Grid

Research Questions	Survey/Interview Questions	Sample	Data Analysis
Q1. What specific school organizational and social relationship factors have the greatest influence on student persistence?	<i>School Organizational</i> Academics questions:1-7, 10, 11, 15, 16 Activities questions: 8, 9 Structural questions: 12-14, 17 <i>School Social</i> School staff questions:18-28 Peers questions:29-39	N= 90 80 eleventh and twelfth grade students 10 Students who dropped out over the last 10 years	Descriptive analysis The researcher will calculate the mean of each school and social relationship factor. Confidence interval chart
Subsidiary Q1. What is the comparative influence of school organizational factors versus social relationship factors on student persistence?	<i>School Organizational</i> Academics Questions: 1-7, 10, 11, 15, 16 Activities questions: 8, 9 Structural questions: 12-14, 17 <i>School Social</i> School staff questions:18-28 Peers questions: 29-39	N= 90 80 eleventh and twelfth grade students 10 Students who dropped out over the last 10 years	Multiple Logistic Regression Survey responses were grouped into predictor categories.
Q2. What, if any, correlation exists between school organizational and social	<i>School Organizational</i> Academics questions:1-7, 10, 11,	N= 90 80 eleventh and twelfth grade students	Multiple logistic regression Survey items were grouped into 5

relationship predictor factors for students who have seriously considered dropping out and students who have dropped out?	15, 16 Activities questions: 8, 9 Structural questions: 12-14, 17 <i>School Social</i> School staff questions:18-28 Peers questions:29-39	10 Students who dropped out over the last 10 years	predictor categories. Spearman Rho Pearson Product Independent samples <i>t</i> -Test
Q3. What, if any, pattern emerges related to the cause for dropping out of school among students who have left school prior to graduation?	Open-ended Questions 40, 41	N= 9 9 Students who dropped out over the last 10 years	Interviews will be transcribed Data will be coded Emergent themes identified Identification of patterns across participants will be explored

Phase One Data Analysis

To explore the impact of each independent variable (school organizational and social relationship factors) individually and comparatively, multiple logistic regression was utilized to analyze the survey data. Based on the recommendations of Field (2005), multiple logistic regression was employed due to the dichotomous nature of the outcome variable (dropout consideration) and the categorical nature of the predictor variables (school organizational or social relationship). This statistical analysis allowed the researcher to determine the relationship between school organizational and social relationship variables and dropout consideration. Specifically, multiple logistic regression allowed for the calculation of the correlation coefficient for each independent variable and to display the results in a correlation matrix. Using survey data the researcher calculated the mean of each predictor factor to determine each factor's

individual influence. In addition, the overall mean of each predictor category was calculated to determine which predictor group had the most influence on drop out decision-making. These calculations allowed the researcher to determine the strength of the relationship between the predictor variables and the outcome variable (drop out decision-making). This established which factor is a stronger predictor for drop out decision-making. To assess the influence of school organizational and social relationship factors on dropout decision-making, the researcher conducted direct logistic regression analysis. A series of correlation analyses which included Pearson Product and Spearman Rho were used to determine if any correlation existed between predictor groups among students who are at-risk, students who are not at-risk, and students who had previously dropped out of school. The final analysis conducted was an independent samples *t*-test to compare the survey responses of all three student groups to determine if there was any difference in the way that these groups perceived the impact of each of the predictive categories.

Phase Two Data Analysis

Qualitative data collected from the interviews of nine high school dropouts were transcribed following each individual interview. Each study participant's responses to the interview questions were recorded separately. The subsequent qualitative data analysis began with the process of coding the interview data. The priori codes that were used were: extracurricular, high stakes testing, graduation requirements, school size, retention, teacher relationships and peers relationship. Transcripts were analyzed and phrases and statements were highlighted based on code assignment. This permitted for the reduction of the data into a manageable set of themes or categories (Gay et al., 2009). The coded phrases were then grouped by code, and the researcher then sought to identify any pattern that existed among respondents' perceptions.

To ensure the accuracy of the data analysis, external auditing was utilized. An external auditor who possessed a doctoral degree in educational administration and had experience in qualitative data analysis was commissioned to review the transcripts, code the data, identify themes, and isolate any patterns that emerged across participant interview responses. Upon review of the data collected, the external auditor was asked to offer interpretations related to the data. The auditor's interpretations were compared to those of the researcher to determine if discrepancies existed. Had discrepancies been present, a third external auditor would have been asked to conduct an analysis of the data and offer an additional interpretation; however, due to consistency in analyses a third auditor was not necessary.

While internal validity was addressed through expert analysis and a usability panel, other threats to the study existed and had to be addressed to ensure the integrity of the research findings. Two threats to validity commonly associated with qualitative research are bias and reactivity, which is the effect the researcher, has on participants in the study (Maxwell, 1996). Maxwell (1996) contended that researchers "cannot eliminate their theories, beliefs, and perceptual lens; however, these can influence the study, so it was critical that the researcher recognize them and establish mechanisms to prevent their influence on the outcomes of the study" (p.108). For the purpose of this study, the researcher's personal and professional interest in the dropout phenomenon was acknowledged, and the practice reflexivity was utilized. As a secondary school administrator responsible for ensuring the success of high schools students, the dropout phenomenon represents an area of personal and professional interest. The practice of reflexivity was warranted as the researcher could not completely separate the dropout phenomenon and the preconceived ideas and feelings established from years as an educator. Following the recommendations of Finlay (2002), the researcher built in mechanisms to reflect

on her own actions, feelings, and preconceived notions during research. To ensure credibility of this study, the researcher conducted member checking, which allowed participants the opportunity to validate and clarify the interpretation of the interview transcripts. Additionally, an external auditor was utilized as a mechanism to further validate the researcher's interpretations and expose possible prejudices in the analysis. Finally, triangulation of data was used to further support the credibility of the study's findings. The use of quantitative and qualitative data collection techniques, paired with the multiple data sources, allowed for the corroboration of findings across multiple individuals, thus enhancing the credibility of the study (Creswell, 2009).

Protection of Human Subjects

This study could not occur without the involvement of high school students; therefore, Institutional Review Board (IRB) approval was especially important to obtain prior to conducting the aforementioned research. Following IRB approval, the approval of the school Superintendent was sought (see Appendix M). Upon the Superintendent's approval, the initial letter detailing the primary purpose and procedures associated with the study was shared with the principal of the selected high school.

Before administering the survey and interviews, parent and student letters to request participation were sent to all students and their parents or guardians. The request letter explained the purpose of the research as part of this researcher's doctoral study at East Stroudsburg University, the risks associated with the study, the voluntary nature of participation, and that all information will be kept strictly confidential. Parent consent (see Appendix P), student assent (see Appendix Q), and informed consent (see Appendix L) forms were distributed to participants and their families. These forms further explained the purpose of the research as part of a

doctoral study at East Stroudsburg University. Signatures were requested to acknowledge each individual's willingness to participate in the study.

To protect participants from exposure to harm and undue risks, confidentiality was established by restricting access of data collected for the study. All documents related to the study, including consent forms, Scantron response forms, and transcripts, were kept for documentation purposes in a secure and restricted file box, and all electronic data was kept on a password protected laptop that is secured in a locked drawer at the home of the researcher.

Summary

The use of explanatory mixed method design was utilized to identify the school factors that significantly affect students' decisions to drop out of school as well as how and why these factors become insurmountable obstacles to graduation. The quantitative findings related to the significance of factors that influence dropout decision making was obtained from 80 juniors and seniors currently enrolled in a single rural high school in south central Pennsylvania, as well as 10 individuals who had dropped out. In addition, the lived experiences and perceptions of these school organizational and social relationship factors were elicited using interviews of individuals who have dropped out of school. The literature review contains both quantitative and qualitative studies on the individual and school related factors for attrition and the role of relationships on persistence; however, mixed method research that explores the phenomenon simultaneously is lacking in the literature, as are studies that conduct research in rural school environments.

To promote dependability, confirmability, and transferability, an expert panel and a pilot study were utilized to ensure construct validity of the survey instruments and interview protocol. Member checking and external auditing was used to enhance the credibility of the qualitative data. Qualitative data were coded, themes were identified, and patterns across participants were

analyzed. Multiple logistic regression was used to analyze the quantitative data. All data were analyzed, and interpretations were made to reveal which of the organizational and social factors had the most influence on high school attrition and how and why these elements inhibited high school graduation. The results of this study are presented in Chapter 4.

CHAPTER 4

RESULTS

There are organizational and social relationship factors within schools that can either positively or negatively influence a student's decision to earn high school diploma, regardless of the individual risk factors, such as ethnicity, race, socioeconomic status, or academic aptitude. The purpose of this explanatory mixed-methods study was to determine which of these school organizational and social relationship factors have the most influence on high school attrition, as well as how and why these factors created insurmountable obstacles to high school graduation for students that have dropped out of school. In this chapter the data analysis and findings of this study are provided.

Three primary and one subsidiary research question guided the data collection and served as a framework for this chapter. The research questions were as follows:

1. What specific school organizational and social relationship factors have the greatest influence on student persistence?
 - 1(a) What is the comparative influence of school organizational versus social relationship factors on student persistence?
2. What, if any, correlation exists between the school organizational and social relationship predictor factors for students who have seriously considered dropping out and students who have formally dropped out of school?
3. What, if any, pattern emerges related to the cause for dropping out of school among students who have left school prior to graduation?

The research design included a quantitative phase followed by a qualitative phase, and the results are discussed in that sequence. The quantitative phase of the study incorporated the

administration of a student perception survey to 80 currently enrolled juniors and seniors and 10 former high school students. Additionally, students who had previously dropped out from this high school were interviewed for the qualitative phase of the study using a semi-structured interview guide. The participants in the qualitative phase were purposefully selected based on their enrollment status as students who withdrew from this rural high school prior to earning a high school diploma.

The survey data collected from the 80 currently enrolled students and 10 students who dropped out of school underwent statistical analyses which included mean calculation, Pearson correlation, and independent samples *t*-tests. The qualitative data collected from the nine students who dropped out of school underwent transcription, priori coding, and analysis to gain greater insight on the impact of the school organizational and social relationship factors that influence students' decisions to drop out of high school.

Analysis of Data

Descriptive Characteristics of Participants

A total of 112 juniors and seniors were currently enrolled at the rural high school, which served as the site for this study. The participant sample ($n=80$) represents 71% of the juniors and seniors currently enrolled in the high school. The high school guidance personnel provided the researcher a list of 45 students who had dropped out; however, only 30 had current address and phone contact information. The participant sample ($n=10$) represents 22% of the students who dropped out of the high school in the last ten years. A breakdown of participants is shown in Table 2.

Table 2

Participant Summary

Classification	No. of Participants	Percentage
Juniors	30	33.0
Seniors	50	56.0
Students who have dropped out	10	11.0
Total	90	100.0

Note. Possible enrolled student sample was 112 juniors and seniors and possible population of students who dropped out of school was 30.

Demographic information was collected from each participant in the sample of currently enrolled participants to determine if they had ever seriously considered dropping out of high school. Students who indicated they had, in fact, seriously considered leaving school prior to graduation were considered at-risk, and their results were combined with the results of those participants that had already dropped out of high school. A description of the way participants were grouped for analysis is shown in Table 3.

Table 3

Participant Grouping Summary

Grouping	Frequency	Percent
Students Not at-risk	68	75.6
Students At-risk	22	24.4
Total	90	100.0

Note. The treatment participant group ($n=22$) is a combination of currently enrolled at-risk students ($n=12$) and former students that dropped out of high school ($n=10$).

Table 3 shows that one-fourth of the participants were at-risk; this included the 10 students who had previously dropped out of school and 12 currently enrolled students who had seriously considered dropping out. The data collected from the participants were analyzed using

both the whole participant sample and as two separate groups depending on the nature of the research question.

Participants were asked to respond to 39 Likert scale questions with response options ordered: (a) *Strongly Disagree*; (b) *Disagree*; (c) *Agree*; and (e) *Strongly Agree* (see Appendix A and Appendix B). Participants were not given a neutral response option; therefore, they were forced to select one of the response options provided. Of the 90 participants there were no missing data, and all responses were included in the data analyses.

As shown in Table 4, the questions embedded in the survey instrument were designed to reflect current research in the area of high school attrition. These questions were grouped into the five predictive groups found in the research, academics, activities, structural, teacher relationships, and peer relationships, which were then categorized as a school organizational or social relationship factor.

Table 4

Survey Question Factor Assignment

Predictor Factor Group	Survey Item
Academics	2, 3, 4, 5, 7, 8, 11, 17
Activities	9, 10
Structural	6, 12, 13, 14, 15, 16, 18
Teacher Relationships	19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29
Peer Relationships	30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40

Note. Survey item 1 was a demographic question; therefore, it was not included in this grouping. Complete survey questions are provided in Appendix A and Appendix B.

For comparative analysis, the quantitative data derived from the surveys were separated into two groups: students at-risk and students who are not at risk; several patterns emerged. Figure 1 depicts the overall comparison of the mean averages between students who were not at-risk and those that were at-risk. The comparison reveals that students who are not at-risk have a more positive perception of each predictor category.

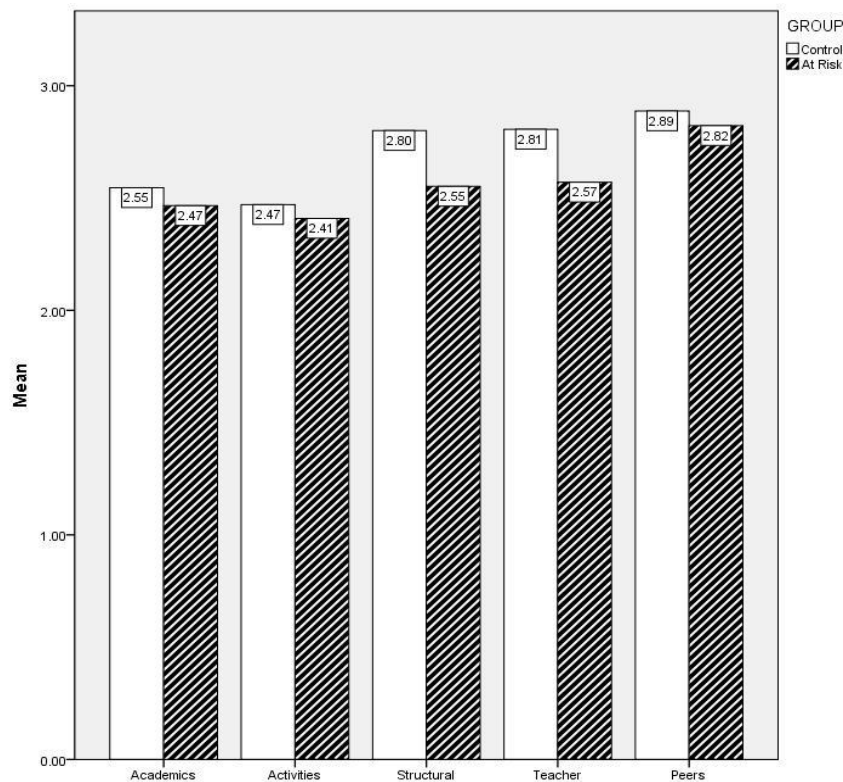


Figure 1. Comparison of predictor group means between students not at-risk and students at-risk.

Further investigation of the responses between students at-risk and those that are not within each of the predictor groups offers more insight into factors within the school that are perceived very differently between these two populations. When exploring academic factors (see Table 5 and Figure 2), there were not large discrepancies in how these factors were perceived with the exception of item 8. This question asked if having to repeat classes made it difficult to graduate, for which 81% disagreed, and in the mean analysis (see Figure 2) the

students who were categorized as at-risk indicated a stronger impact of course repetition than those who were not at-risk for dropping out of high school. These at-risk participants also responded more negatively to item 2, which asked if the coursework offered in high school was relevant to their future. Based on the responses to this question, the participants who were at-risk were less likely to agree that what they were learning in high school had an impact on their future career or schooling. This finding was supported during the qualitative portion of the study as the participants interviewed described a feeling of disconnect between what they wanted to do in their future and what they were being asked to study in school.

Table 5

Responses to School Academics Items: Frequency and Percentage Data

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
Item 2	8 (8.9%)	20 (22.2%)	52 (57.8%)	10 (11.1%)
Item 3	3 (3.3%)	25 (27.8%)	56 (62.2%)	6 (6.7%)
Item 4	9 (10.0%)	24 (26.7%)	46 (51.1%)	11 (12.2%)
Item 5	14 (15.6%)	43 (47.8%)	28 (31.1%)	5 (5.6%)
Item 7	5 (5.6%)	20 (22.2%)	22 (24.4%)	43 (47.8%)
Item 8	43 (47.8%)	35 (38.9%)	6 (6.7%)	6 (6.7%)
Item 11	15 (16.7%)	25 (27.8%)	40 (44.4%)	10 (11.1%)
Item 17	10 (11.1%)	30 (33.3%)	46(51.1%)	4 (4.4%)

Note. Item frequency count is presented first with the percentage followed in parentheses. Percentages are based on the full sample of 90 participants.

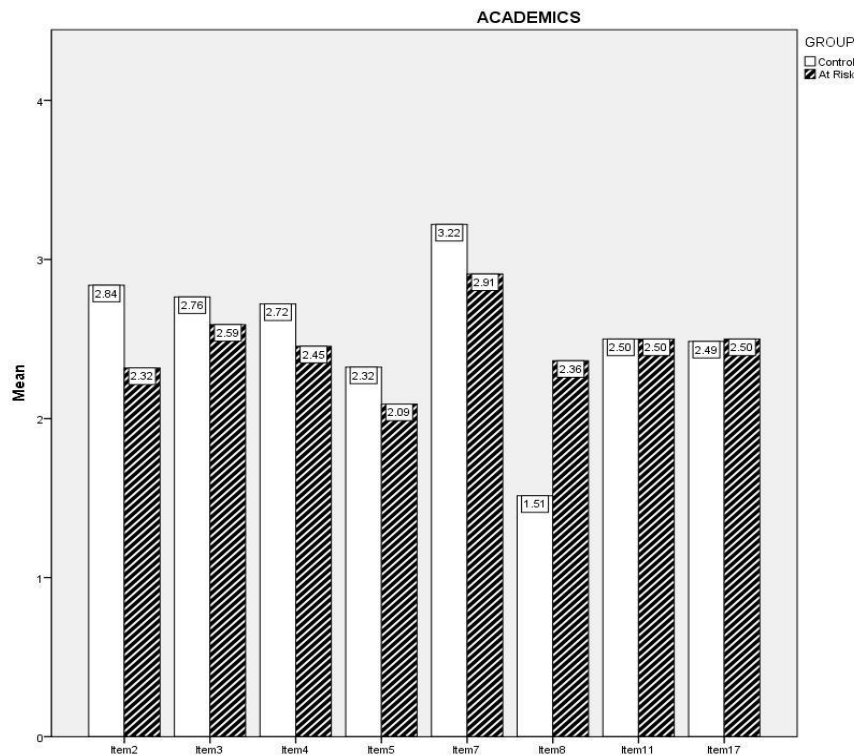


Figure 2. Comparison of academic predictor item means between students not at-risk and students at-risk.

Upon analysis of the response patterns related to the role and influence of activities on high school attrition (see Table 6 and Figure 3), it appears from the responses that at-risk and students who are not at-risk have similar perceptions of this element of high school. As noted in Table 6, 60% of participants believe that the high school offered enough extracurricular options to encourage involvement, and 75% of respondents disagreed that these extracurricular activities were the sole reason for remaining in high school. During the qualitative phase of the study students who had dropped out of school had very little to share about school-based activities. The responses offered revealed that this school organizational factor did not have a significant influence on students' decision to drop out.

Table 6

Responses to School Activities Items: Frequency and Percentage Data

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
Item 9	6 (6.7%)	15 (16.7%)	41 (45.6%)	28 (31.1%)
Item 10	29 (32.2%)	46 (51.1%)	10 (11.1%)	5 (5.6%)

Note. Item frequency count is presented first with the percentage followed in parentheses. Percentages are based on the full sample of 90 participants.

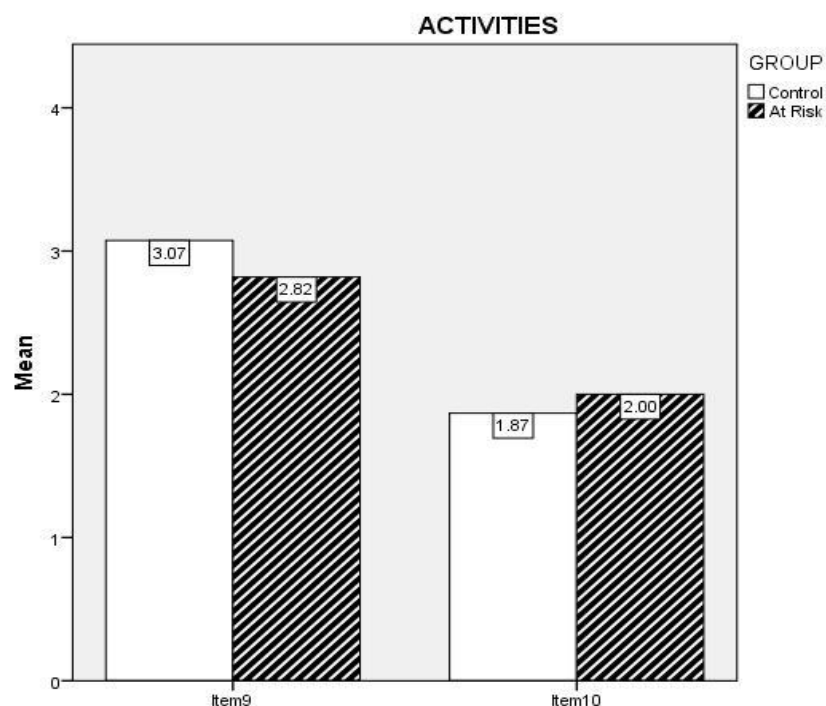


Figure 3. Comparison of activities predictor item means between students not at-risk and students at-risk.

When exploring the influence of school organizational structure on dropout decision making, several interesting patterns emerge. When investigating responses from the whole participant sample (see Table 7), 65% of the respondents disagreed that failing courses would make them consider dropping out of high school, which was the premise of item 16 on the student perception survey. The data from item 12 revealed that 76% of the participants would participate in summer school to ensure graduation with their graduating class. Interestingly, the

qualitative data collected from students who had dropped out of high school revealed that summer school was not an option due to work or family obligations. The results from item 18 show that 74% of those surveyed believe that the high school they attend had multiple ways to earn a high school diploma. Again, this was not the perception shared in the qualitative interviews, where those who had dropped out felt that the school was rigid and inflexible when it came to earning graduation credits. These qualitative responses were more reflective of the mean comparisons between at-risk and not at-risk responses that are outlined (see Figure 4). Looking specifically at the response pattern of at-risk students it appears that students who are at-risk have a more negative impression of the school environment. As noted by the responses to item 13 and item 15, at-risk students did not believe that their small school size resulted in an environment where personal attention and support is offered.

Table 7

Responses to School Structural Items: Frequency and Percentage Data

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
Item 6	16 (17.8%)	21 (23.3%)	46 (51.1%)	7 (7.8%)
Item 12	8 (8.9%)	6 (6.7%)	48 (53.3%)	28 (31.1%)
Item 13	6 (6.7%)	16 (17.8%)	35 (38.9%)	33 (36.7%)
Item 14	6 (6.7%)	26 (28.9%)	40 (44.4%)	18 (20.0%)
Item 15	4 (4.4%)	27 (30.0%)	44 (48.9%)	15 (16.7%)
Item 16	34 (37.8%)	31 (34.4%)	17 (18.9%)	8 (8.9%)
Item 18	2 (2.2%)	14 (15.6%)	54 (60.0%)	20 (22.2%)

Note. Item frequency count is presented first with the percentage followed in parentheses. Percentages are based on the full sample of 90 participants.

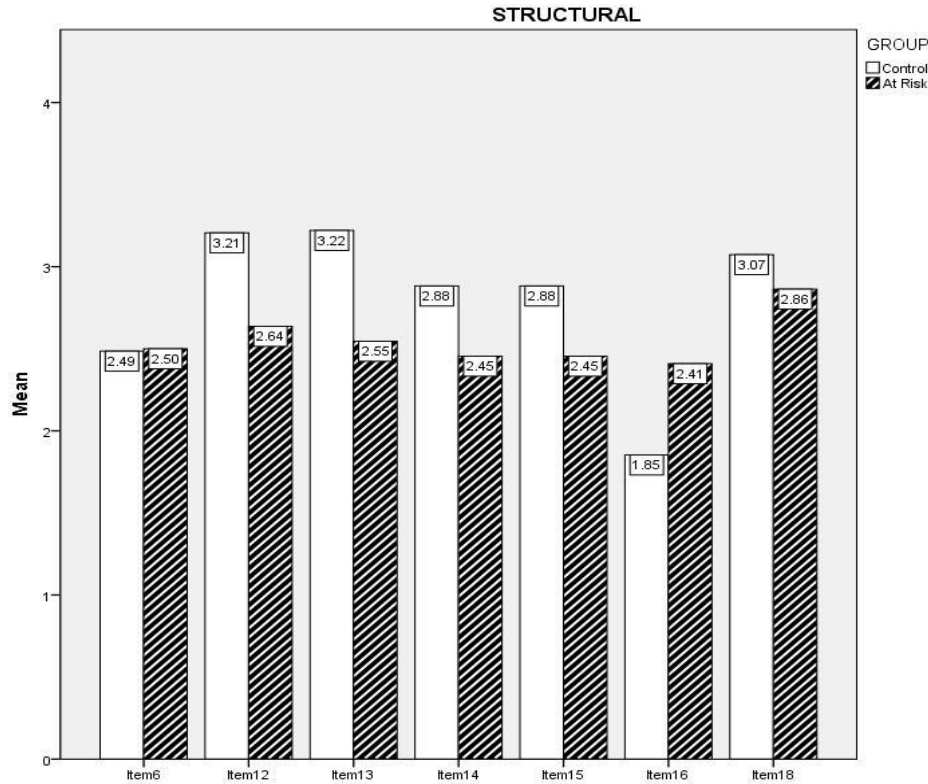


Figure 4. Comparison of structural predictor item means between students not at-risk and students at-risk.

The items incorporated in the survey aimed to gain participants' insights of both the school organizational and social relationship factors in a single rural high school in Pennsylvania. Table 8 and Table 9, along with Figure 5 and Figure 6; depict the perceived influence of the social relationship factors within this high school. Table 8 and Figure 5 are specific to how participants perceived the influence of teacher relationships as it relates to dropout decision making, while Table 9 and Figure 6 are specific to the influence of peer relationships.

The influence of teacher relationships on dropout decision-making has been detailed in previous research and the results of this research add validity to those findings. Looking at the responses of the entire participant sample, there were several notable survey items that warrant

discussion. Item 12 asked participants if they believed that their teachers expected them to do well in school, and 84% of respondents agreed that this was the expectation (see Table 9).

Participants were also asked if the principal (item 20) and their teachers (item 26) expected them to graduate from high school. The responses as noted in Table 9 indicated that 82% of those surveyed held the belief that both the principal and the teachers expected them to earn a diploma. Drilling deeper into these responses showed that students deemed at-risk did not share those same beliefs. As noted in Figure 5, students who were at-risk held a more negative perception of teacher relationships, a discrepancy was most notable in responses to items 19, 21, 26, and item 29. The following is revealed by this mean sum score analysis:

- at-risk students ($M=2.86$) did not perceive that their teachers expected them to do well in their classes at the same level of students who were not at-risk for high school dropout ($M=3.31$).
- at-risk students ($M=2.50$) did not perceive that their teachers cared about their success in school at the same level of students who were not at-risk for high school dropout ($M=2.96$).
- at-risk students ($M=2.86$) did not perceive that their teachers expected them to graduate at the same level of students who were not at-risk for high school dropout ($M=3.49$).
- at-risk students ($M=2.32$) did not perceive that their teachers treated them with dignity and respect at the same level of students who were not at-risk for high school dropout ($M=2.75$).

Table 8

Responses to Teacher Relationship Items: Frequency and Percentage Data

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
Item 19	2 (2.2%)	4 (4.4%)	58 (64.4%)	26 (28.9%)
Item 20	0 (0.0%)	8 (8.9%)	55 (61.1%)	27 (30.0%)
Item 21	4 (4.4%)	22 (24.4%)	48 (53.3%)	16 (17.8%)
Item 22	5 (5.6%)	12 (13.3%)	53 (58.9%)	20 (22.2%)
Item 23	22 (24.4%)	31 (34.4%)	24 (26.7%)	13 (14.4%)
Item 24	3 (3.3%)	35 (38.9%)	42 (46.7%)	10 (11.1%)
Item 25	11 (12.2%)	44 (48.9%)	35 (38.9%)	0 (0.0%)
Item 26	2 (2.2%)	6 (6.7%)	42 (46.7%)	40 (44.4%)
Item 27	19 (21.1%)	27 (30.0%)	33 (36.6%)	11 (12.2%)
Item 28	14 (15.6%)	33 (36.7%)	37 (41.1%)	6 (6.7%)
Item 29	11 (12.2%)	17 (18.9%)	55 (61.1%)	7 (7.8%)

Note. Item frequency count is presented first with the percentage followed in parentheses. Percentages are based on the full sample of 90 participants.

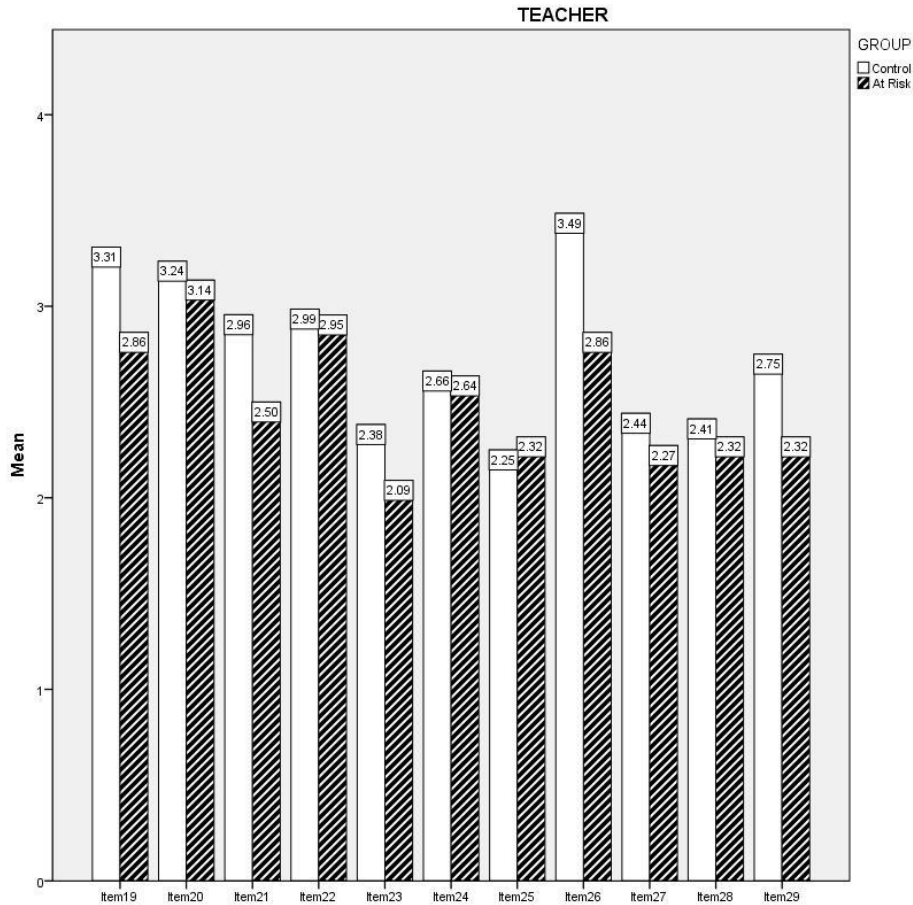


Figure 5. Comparison of teacher relationship predictor item means between students not at-risk and students at-risk.

Peer relationships also represent an important factor within the schools, and as noted in the literature section of this study, peer relationships have been found to influence dropout decision-making. The items within the student perception survey given to this study's participants sought to discern the influence of peer relationships in a small rural high school. When looking at the responses of the entire sample, the following notable items emerged (see Table 9).

- 85% agreed they had friends in their high school setting;
- 78% agreed that their friends cared about graduating from high school;
- 73% agreed that their friendships were important to their academic success; and

- 84% agreed their friendships were with students who attended their high school.

These responses represented the entire participant sample (N=90); however, when the responses were viewed through a comparison of the mean sum scores between subgroups, a different view of peer relationships presented itself. As noted in Figure 6, there was a difference in how peer relationships are perceived between those at-risk for attrition and those that are not at-risk.

- at-risk students ($M=2.82$) reported that their friends care less about graduating than the friends of students who were not at-risk for high school dropout ($M=3.50$).
- at-risk students ($M= 2.55$) reported a greater likelihood for dropping out of school if their friends were not at school with them, compared to students who were not at-risk for high school dropout ($M = 2.04$).
- at-risk students ($M= 2.91$) responses indicated less likelihood for their friends graduating high school than students who were not at-risk for high school dropout ($M = 3.51$).

At-risk students elaborated on their survey item responses during the qualitative phase of the study, where interview participants spoke of friendships outside of school and with other peers who had also dropped out of high school. The influence of peer relationships will be further described later in this chapter.

Table 9

Responses to Peer Relationship Items: Frequency and Percentage Data

Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
Item 30	6 (6.7%)	21 (23.3%)	37 (41.1%)	26 (28.9%)
Item 31	2 (2.2%)	3 (3.3%)	38 (42.2%)	47 (52.2%)
Item 32	3 (3.3%)	9 (10.0%)	33 (36.7%)	45 (50.0%)
Item 33	1 (1.1%)	16 (17.8%)	34 (37.8%)	39 (43.3%)

Item 34	1 (1.1%)	5 (5.6%)	57 (63.3%)	27 (30.0%)
Item 35	21 (23.3%)	28 (31.1%)	34 (37.8%)	7 (7.8%)
Item 36	29 (32.2%)	32 (35.6%)	14(15.6%)	15 (16.7%)
Item 37	3 (3.3%)	19 (21.1%)	54 (60.0%)	14 (15.6%)
Item 38	23 (25.6%)	31 (34.4%)	21 (23.3%)	15 (16.7%)
Item 39	14 (15.6%)	39 (43.3%)	23 (25.6%)	14 (15.6%)
Item 40	2 (2.2%)	8 (8.9%)	35 (38.9%)	45 (50.0%)

Note. Item frequency count is presented first with the percentage followed in parentheses. Percentages are based on the full sample of 90 participants.

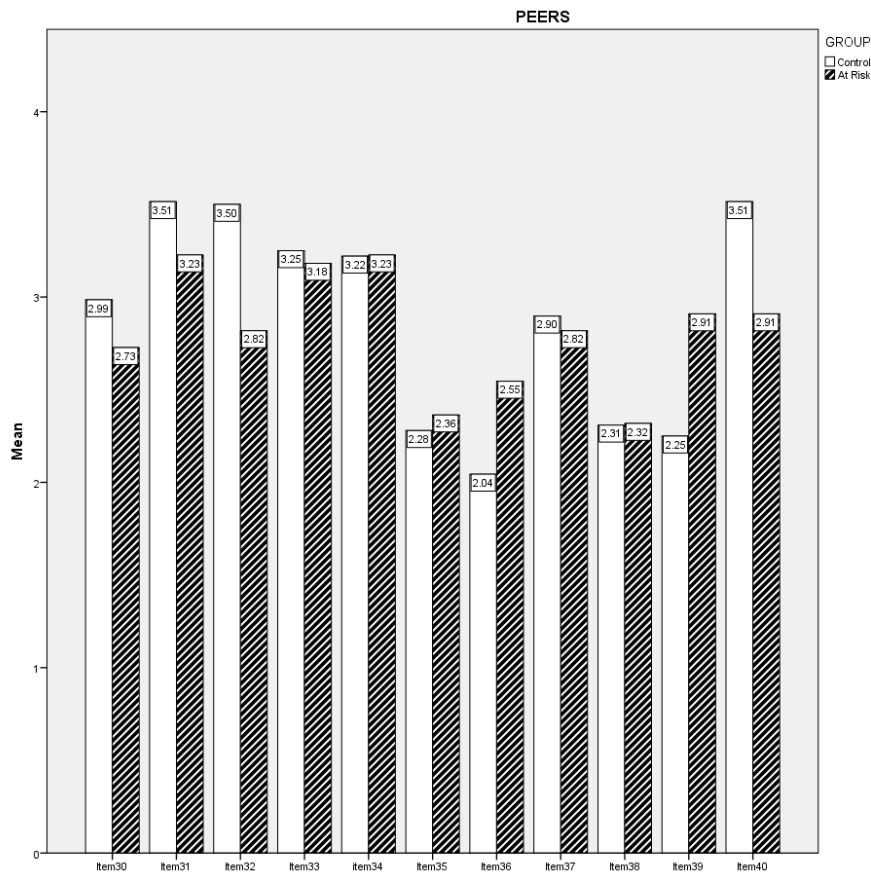


Figure 6. Comparison of peer relationship predictor item means between students not at-risk and students at-risk.

Phase One Data Analysis

An explanatory mixed-method research design was used to explore the phenomenon of high school dropout decision making at a single, rural high school in south central Pennsylvania. The dropout phenomenon is a complex issue; therefore, the use of mixed-method research allowed for the quantification of factors associated with the decision to drop out of high school, as well as the capacity to obtain a deeper understanding of why a student decides to leave or remain in high school until graduation. Research questions 1 and 2, and subsidiary question 1a, pertain to the quantitative data collected during phase 1 of the study. Research question 3 pertains to the interview data collected during the qualitative phase of this study. Each research question, sub-question, and their associated null hypothesis are presented, followed by a description of the data analysis. The data related to each research question are then reported, and an analysis of findings presented.

To ensure reliability and validity of the quantitative findings within this study, and to allow for adequate power of the statistical analyses run, a minimum sample size of 75 participants was needed. Stevens (1992) recommended 15 subjects per predictor to establish a reliable regression equation that would cross validate and have generalizability. The present study had five predictor categories; therefore, a minimum sample size of 75 participants meets Stevens (1992) recommended parameters for maintaining high probability and a small amount of shrinkage. The participant sample was 90, which exceeded Stevens (1992) recommended sample size for adequate statistical analysis. The level of significance, α was set at .05. To ensure the trustworthiness and reflexivity of the qualitative findings, the researcher utilized member checking and external auditing.

Research Question 1

What specific school organizational and social relationship factors have the greatest influence on student persistence?

H₀: The participants in this study will identify no difference in the influence of the five predictor groups (academics, activities, structural, teacher, and peers) on persistence towards high school graduation.

H_a: The participants in this study will identify a difference in the influence of the five predictor groups (academics, activities, structural, teacher, and peers) on persistence towards high school graduation.

The student perception survey was administered to all study participants ($N=90$) to indicate their individual perception of the common factors attributed to attrition based on their experience within this rural high school setting. Survey question predictor factor assignments are shown in Table 4. Using the responses from each participant, the means for each predictor group was determined. The mean calculations for each predictor group are shown in Table 10 and Figure 7.

The results of the mean calculations of the five predictor groups indicated a statistical difference in the perceived influence on persistence; therefore, the researcher rejected the null hypothesis. As indicated in Table 10, it was with 95% confidence that the true means of the predictor groups of structural (2.73), teacher (2.74), and peers (2.87) were statistically and significantly different than that of academics (2.52) and activities (2.45). The findings of the qualitative phase affirmed that school structure and teacher relationships were highly influential to dropout decision-making but did not corroborate the importance of peer relationships in the decision-making process. What did not emerge as statistically significant, but was repeatedly

cited by participants, as important, were academics, an organizational factor. These qualitative findings will be further discussed later in this chapter.

Table 10

Mean Sum Score for Each Predictor Category on the Student Perception Survey

	<i>N</i>	Mean	95% CI for Mean
Academics	90	2.52	[2.45, 2.59]
Activities	90	2.45	[2.31, 2.59]
Structural	90	2.73	[2.65, 2.82]
Teacher Relationships	90	2.74	[2.64, 2.84]
Peer Relationships	90	2.87	[2.80, 2.94]

Note. Items 7, 8, 11, 16, 35, 38, and 39 were reversed scored on a four-point Likert scale where 1 = *Strongly disagree* and 4 = *Strongly agree*.

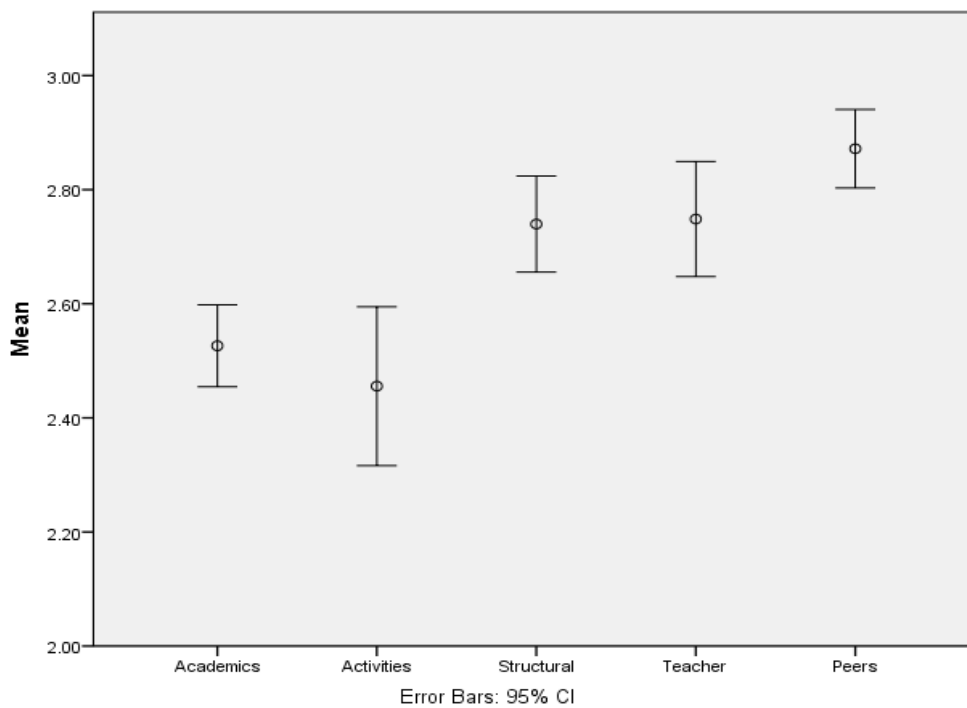


Figure 7. Confidence interval chart for five predictor categories for student perception survey.

Research Question 1(a)

What is the influence of school organizational factors versus social relationship factors on student persistence?

H₀: School organizational (academics, activities, structural) and social relationship (teacher and peers) factors have no influence on student persistence towards graduation.

H_a: School organizational (academics, activities, structural) and social relationship (teacher and peers) factors do have an influence on student persistence towards graduation.

Because the dependent variable was dichotomous and the independent variables were considered to be ratio/interval, a logistic regression analysis was conducted to examine the relationship between students' perceptions of the common factors associated with attrition and being at-risk for dropping out of high school. Direct logistic regression was performed to assess the influence of a number of school organizational and social relationship factors on the likelihood that participants were at risk for dropping out of high school. The model contained five independent variables (academics, activities, structural, teacher, and peers). The full model containing all predictors has a chi-square value for the Hosmer-Lemeshow Test of 3.592 ($p > .05$), indicating a goodness of fit and support for the model. The model as a whole explained between 8.7% (Cox & Snell R square) and 13.0% (Nagelkerke R squared) of the variance in at-risk status and correctly classified 77.8% of the cases.

The results of the logistic regression analysis indicated that no specific predictor category had statistical significance ($p > .05$), thus none having the most influence on a student's ability to persist until high school graduation. As noted in Table 11, no single predictor category (academics, activities, structural, teacher, and peers) was found to have statistical significance ($p < .05$); therefore, the researcher failed to reject the null hypothesis. The strongest predictor

trending towards significance of influencing students' at-risk status was that of high school's structural elements. Analysis of participants' responses collected during the qualitative portion of this study revealed that a single predictive factor could not be isolated as a catalyst for premature school departure. The influence of school structure on dropout decision-making was corroborated by students who had dropped out of this rural high school. The specific structural elements will be described in the discussion of the qualitative findings.

Table 11

Logistic Regression Model for Factors Influencing High School Completion

Variable	B	S.E.	Wald	Sig.	Exp(B)	95% CI for Exp (B)
Academics	-5.28	.889	.35	.552	.590	[.103, 3.365]
Activities	-1.67	.405	.169	.681	.847	[.382, 1.874]
Structural	1.61	.891	3.28	.070	5.02	[.876, 28.75]
Teacher	.540	.686	.619	.431	1.71	[.447, 6.583]
Peers	.700	.792	.781	.377	2.01	[.427, 9.508]
Constant	-4.89	2.93	2.78	.095	.007	

Note. $R^2 = .087$ (Cox & Snell). $R^2 = .130$ (Nagelkerke).

Research Question 2

What, if any, correlation exists between school organizational and social relationship predictor factors for students who have seriously considered dropping out and those that have already dropped out of high school?

H₀: The responses of currently enrolled students who have seriously considered dropping out of high school and those who have already dropped out will have equivalent mean scores for all five predictor groups (academics, activities, structural, teacher, and peer predictor categories).

H_a: The responses of currently enrolled students who have seriously considered dropping out of high school and those who have already dropped out will have unequal mean scores for all five predictor groups (academics, activities, structural, teacher and peer predictor categories).

Because the dependent variable was dichotomous and the independent variables were considered to be ratio/interval, a logistic regression analysis was conducted to first determine if a correlation exists between the independent variables (academics, activities, structural, teacher, peers) associated with attrition and being at-risk for dropping out of high school. The results shown in Table 12 indicate the level of correlation between the responses for each predictor group, specifically revealing how participants were likely to respond to other predictive factor groups. The analysis revealed a significant correlation ($p < .001$, 2-tailed) between the following predictor groups:

- the academic predictor group was significantly correlated with the responses in the school organizational predictor group of structure ($p = .473$) and the social relationship group of teacher ($p = .324$).
- the school organizational predictor group was significantly correlated with the school organization factor of academics ($p = .473$) and the social relationship factor of teacher ($p = .591$).
- the social relationship factor group, teacher, was significantly correlated with the school organization groups academics ($p = .324$) and structure ($p = .591$).

The data in Table 12 also showed there were no significant correlations between participant responses in the predictor group of the school organizational factor, activities, or the social relationship group, peers, and any other predictor group. Thus, how participants responded

to questions in these predictor groups did not indicate how they would respond to questions in any other predictor group.

Table 12

Pearson Product Moment Correlations of Predictive Factors for School Persistence (N=90)

	Academics	Activities	Structural	Teacher	Peers
Academics	---	.212*	.473**	.324**	.265
Activities	.212*	---	.241*	.167	.238*
Structural	.437*	.241*	---	.591**	.036
Teacher	.324**	.167	.591**	---	.036
Peer	.265*	.238*	.036	.084	---

* Correlation is significantly different from 0 at the .05 level

** Correlation is significantly different from 0 at the .01 level

The relationship between the perceptions of students who were not at-risk for high school dropout and the perceptions of students who were at-risk (self-report or actual dropouts) was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of assumptions of normality, linearity, and homoscedasticity.

To explore the comparative influence of the five predictor groups (academics, activities, structural, teacher, and peers) between currently enrolled students who self-reported being at-risk (selected yes on demographic question 1 on enrolled student survey) and students who already dropped out of school (treatment group), the Spearman Rho test of nonparametric correlations was conducted. The Spearman Rho was utilized to account for the small sample size used in this analysis. The results shown in Table 13 indicate that there is a correlation between the responses of at-risk students in the predictor groups of academics and structure ($p = .916$), while Table 14

shows that there is no correlation of responses for students that have already dropped out of high school.

These data demonstrated that at-risk students who were still in school found a connection between their school's structural organization and the academic program that was being offered; therefore, if the students felt positively that the small size of the school created a personal learning environment (structure), they were likely to feel positively that the school offered help to ensure academic success (academics). This correlation was not present for students who had already dropped out of school. The responses from the sample of high school dropouts revealed that they viewed each group of factors as separate, and one factor group did not relate to another.

Table 13

Spearman Rho Correlation of Predictive Factors for At-Risk Students (n=12)

	Academics	Activities	Structural	Teacher	Peers
Academics	---	.220	.916**	.216	.000
Activities	.220	---	.398	-.128	.154
Structural	.916**	.398	---	.204	-.104
Teacher	.216	-.128	.204	---	-.261
Peer	.000	.154	-.104	-.261	---

* Correlation is significantly different from 0 at the .05 level

** Correlation is significantly different from 0 at the .01 level

Table 14

Spearman Rho Correlations of Predictive Factors for Dropouts (n=10)

	Academics	Activities	Structural	Teacher	Peers
Academics	---	-.165	.389	.098	.439
Activities	-.165	---	.435	.196	.196
Structural	.389	.435	---	.457	.401
Teacher	.098	.196	.457	---	.230
Peer	.439	.196	.401	.230	-

* Correlation is significantly different from 0 at the .05 level

** Correlation is significantly different from 0 at the .01 level

The independent samples *t*-test was conducted to compare the survey response scores for students at risk and high school dropouts. As shown in Table 15, there was no significant difference in any of the predictor scores for at-risk students ($n = 12$) and high school dropouts ($n = 10$). The results show no significant difference between at-risk students ($M = 2.4271$, $SD = .5069$) and dropouts ($M = 2.5125$, $SD = .3030$; $p = .113$) for academics; activities ($M = 2.2500$, $SD = .6571$) and dropouts ($M = 2.6000$, $SD = .6992$; $p = .837$); structural ($M = 2.5119$, $SD = .4697$) and dropouts ($M = 2.6000$, $SD = .35507$; $p = .215$); teacher ($M = 2.4697$, $SD = .35066$) and dropouts ($M = 2.6909$, $SD = .40475$; $p = .642$); and peers ($M = 2.8106$, $SD = .32306$) and dropouts ($M = 2.8364$, $SD = .38042$; $p = .469$). Given the results of the independent samples *t*-test, the researcher retained the null hypothesis.

Although the responses of at-risk students still in school or who had dropped out were not significantly different for any predictor group (academics, activities, structural, teacher, and peers), this group's responses were statistically and significantly different from the student responses within the sample that were considered not to be at risk for dropping out of high school (see Table 15).

Table 15

Independent Samples t-Test of Predictive Factors between At-Risk Students and Dropouts (n=22)

	Levene's Test		t-test for Equality of Means						
	<i>F</i>	Sig.	<i>t</i>	<i>df</i>	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Academic	2.749	.113	.467	20	.646	.08542	.18300	-.29632	.46715
Equal Variances Assumed									
Equal Variances Not Assumed			.488	18.336	.631	.08542	.17493	-.28161	.45244
Activities	.043	.837	1.209	90	.241	.35000	.28961	-.25412	.95412
Equal Variances Assumed									
Equal Variances Not Assumed			1.201	18.794	.245	.35000	.29133	-.26022	.96022
Structural	1.641	.215	.488	20	.631	.08810	.18069	-.28881	.46500
Equal Variances Assumed									
Equal Variances Not Assumed			.500	19.850	.622	.08810	.17605	-.27931	.45550
Teacher	.222	.642	1.374	20	.185	.22121	.16098	-.11458	.55701
Equal Variances Assumed									
Equal Variances Not Assumed			1.356	18.014	.192	.22121	.16318	-.12161	.56403
Peers	.545	.469	.172	20	.865	.02576	.14988	-.28688	.33840
Equal Variances Assumed									
Equal Variances Not Assumed			.169	17.806	.868	.02576	.15222	-.29428	.34580

* Correlation is significantly different from 0 at the .05 level

** Correlation is significantly different from 0 at the .01 level

As indicated in Table 16, the independent samples *t*-test conducted to compare the responses of at-risk students ($n = 22$) and students who are not at risk ($n = 68$) revealed statistically and significantly different responses in the predictor groups of school structure and teacher relationships. The results indicated that in the area of school structure, students who were not at risk ($M = 2.8004$, $SD = .38169$) answered questions more positively (higher Likert score) by a mean difference of .24847 than participants who were considered to be at-risk ($M = 2.5519$, $SD = .41426$; $p = .011$). Additionally, the results also indicated that in the area of teacher relationships, students who were not at risk ($M = 2.8061$, $SD = .4986$) answered questions more positively (higher Likert score) by a mean difference of .2359 than participants who were considered to be at risk ($M = 2.5702$, $SD = .3838$; $p = .045$). These results revealed that although there was no difference between the perceptions of the two groups of at-risk students utilized in this study, there was a difference in the perceptions of what factors influenced persistence between students who were at-risk and students who were not considered to be at-risk to drop out of high school.

Table 16

Independent Samples t-Test of Predictive Factors for Participants (N=90)

	Levene's Test		t-test for Equality of Means						
	<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	<i>Sig.</i> (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper
Academic									
Equal Variances Assumed	2.899	.092	.952	88	.344	.80005	.08410	-.08709	.24718
Equal Variances Not Assumed			.823	29.069	.417	.80005		-.11880	.27889
Activities									
Equal Variances Assumed	.020	.888	.375	88	.708	.06150	.16383	-.26407	.38707
Equal Variances Not Assumed			.369	34.707	.714	.06150	.16647	-.27656	.39956
Structural									
Equal Variances Assumed	.032	.858	2.599	88	.011	.24847	.09559	.05852	.43843
Equal Variances Not Assumed			2.492	33.331	.018	.24847	.09971	.04568	.45127
Teacher									
Equal Variances Assumed	3.456	.066	2.030	88	.045	.23590	.11621	.00496	.46684
Equal Variances Not Assumed			2.318	45.904	.025	.23590	.10175	.03107	.44073
Peers									
Equal Variances Assumed	.286	.594	.811	88	.420	.06539	.08065	-.09488	.22566
Equal Variances Not Assumed			.789	34.128	.435	.06539	.08283	-.10293	.23370

* Correlation is significantly different from 0 at the .05 level

** Correlation is significantly different from 0 at the .01 level

In summary, the quantitative analyses revealed several important findings. First, no single predictor group (academics, activities, structural, teacher, and peers) was a predictor for high school attrition. Further analysis indicated that the area of school structure ($p = .070$) was the most influential predictor group; however, it was not statistically significant at the .05 level. The data also revealed that the responses of students who were at-risk but remained in school, and those who were deemed at-risk and dropped out, were not significantly different. However, when combined, the responses of these at-risk students were significantly different from participants in the study who were not considered to be at risk in the areas of structure ($p = .011$) and teacher relationship ($p = .045$).

Phase Two Data Analysis

The purpose of the qualitative phase of this mixed-method study was to provide the researcher the opportunity to gain a deeper understanding of what leads a student to make the decision to drop out of high school, and what, if anything, school personnel can do to prevent students from leaving prior to earning a high school diploma. This more in-depth understanding was obtained through the interviews of nine high school students who had dropped out of school. A semi-structured interview guide was developed to provide a framework for the data collection of the research study (see Appendix C). This interview guide was designed to reveal three key pieces of information from each participant: (a) what event or combination of events led him or her to leave school prior to graduation, (b) what, if anything, school personnel could have done to prevent him or her from dropping out of school, and (c) to identify any common patterns related to the influence of a predictive factor (academics, activities, structure, teacher, and peers), and explore why and how each former student believed an individual factor significantly influenced his or her decision to leave high school. The interview guide (see Appendix C) is

structured in three segments, each representing the three themes necessary to answer research question 3. These interview guide components were established to provide the perspectives of high school dropouts, which is limited in the research on the phenomenon of high school attrition. The interpretation of the findings was a result of quantifying the data, triangulating the data with other research, and by supporting the quantitative data collected with the statements of the high school dropouts themselves. Research question 3 and its three distinct subparts served as the framework for reporting the findings within this section.

Descriptive Characteristics of the Interview Participants

The nine interviewees were selected based on the following criteria: they had been (a) identified by the guidance personnel at the rural high school as a student who dropped out prior to earning a high school diploma, and (b) agreed to be interviewed by the researcher. In collaboration with the school personnel of the high school, 45 students were identified from the student management system and archived records as students who had dropped out over the course of ten years. Of the 45 names, the researcher was only able to obtain the addresses and phone numbers of 30 former students. The researcher then called each of the 30 former students to seek agreement to participate in the study. Of the 30 former students who had dropped out of high school, 10 agreed to participate in the survey and nine agreed to be interviewed regarding their individual high school experiences. Each of the nine formerly enrolled students (dropouts) was assigned a numerical code that was then used throughout the remainder of the study to identify that individual's responses when discussing the qualitative findings.

Research Question 3

What, if any, pattern emerged related to the cause for dropping out of school among students who have left school prior to graduation?

The literature on high school attrition has identified several school organizational and social relationship features that impact a student's decision to drop out of high school. Using the semi-structured interview guide (see Appendix C), each student who had dropped out of school was interviewed, and following each interview the audio recording was transcribed verbatim. The transcript data were then coded based on the priori codes that were gleaned from the literature on school organizational and social relationship factors that impact attrition. The prior codes used were: extracurricular, high-stakes testing, graduation requirements, school size, retention, teacher relationships and peer relationships. Transcripts were analyzed and phrases and statements were highlighted based on code assignment. The coded phrases were grouped by code and the researcher then sought to identify any pattern that existed among respondents' perceptions. An external reviewer was used to ensure the accuracy of the interpretations. The remainder of this chapter is structured in the order of the segments outlined in the interview guide.

The intent of the initial question of the interview was for the participants to reflect on why they finally reached the decision to leave. The responses to this initial question varied; however, of the nine interviews conducted, several themes among the respondents emerged and are depicted in Table 17.

Table 17

Dropout Cause Summary

Themes for Attrition	No. of Participants Identifying the Theme
Personal Life-Altering Event	3
School Disciplinary Incident	2
Lack of Relevance	2
Personal Failure	1
Retention	1

Note. $n = 9$

Catalysts for Quitting

As shown in Table 17, three of the participants indicated that there was a single, personal, life-altering event that led to the decision to quit school. All three of these individuals indicated that they were involved in school, doing well in their classes, and had fully planned on earning a high school diploma. Two of these participants interviewed experienced the birth of a child during high school. The participants described the impact of this event on their academic path in the following ways:

Mainly having a kid and then I got behind [in school]. I had to take eight weeks off ... I was so far behind and they weren't helping me catch up, and then when I went back, I was too far behind. (Participant 203, personal communication, March 11, 2013)

Having a kid was definitely the, probably the biggest reason. But, because of that [having a baby], I had all the other reasons, like, ending up living out of my parent's

house and stuff. It caused a lot of problems at home. (Participant 204, personal communication, March 11, 2013)

While each of the participants shared the mutual cause as childbirth, how it led to each leaving school was very different. These participants had differing opinions regarding the responsibility of school personnel on minimizing the impact of this life-changing experience. Participant 204 shared that his decision to drop out of school “had nothing to do with the school, actually, at all.” (Participant 203, personal communication, March 11, 2013) The long hours of work he needed to invest in order to care for this new child left little time to focus on academics. This new financial responsibility could not have been altered by any one person within the school; therefore, he was quick to take full responsibility for the decision to quit. That absolution of responsibility was not forthcoming from the perspective of Participant 203. As she discussed her experience, she shared that the school arranged for a homebound teacher to meet with her and provide instruction, but the experience was not a beneficial one. Participant 203 described this support as follows:

They [the school] sent a substitute teacher to come to my house, but she would just drop my stuff off and leave. It didn’t help at all. They [the school] could have set me up to go to school and somebody there to do it [tutoring], or an actual teacher come and helps. (Participant 203, personal communication, March 11, 2013)

Participants 203 and 204 spoke about the need to reprioritize their lives, and the fact that the upbringing and financial support of their newborn children was more important than attempting to remain in school and earn a high school diploma.

The birth of a child was not the only life-altering event that led a participant to leave school. Participant 207 spoke of the onset of a seizure disorder that began in high school. This

debilitating medical condition did not directly prevent him from attending and completing school, but it did disrupt his life-long dream of joining the military. This participant shared that “there was no school factor, not my friends, not teachers; there wasn’t an isolated experience other than I just gave up on myself” (personal communication, March 6, 2013). He goes on to describe the decision to drop out in the following statement:

I wanted to get a diploma so I could go to the military... unfortunately that dream was shattered when I started having seizures, which meant I medically couldn’t join the military. At that point I really didn’t care anymore and I didn’t care about getting a diploma. As soon as I was 18 I dropped out. (Participant 207, personal communication, March 6, 2013)

Other participants cited events that took place in school as the catalyst for their decision to drop out of high school. For participants 208 and 209, the primary cause was the way in which school personnel handled a disciplinary situation and how they felt this situation altered their treatment in school. The participants explained how the school’s approach to discipline impacted their ability to persist through graduation.

I was given an ultimatum from my high school ... I was in a fight ... so they (the principal) basically said you don’t have a choice. (Participant 209, personal communication, March 20, 2013)

[During high school] I was in their office about once a week ... I was either out of school suspended or in school suspended. (Participant 209, personal communication, March 20, 2013) They suspended me for something I didn’t do ... after that I wanted to come to school and do whatever I wanted because they didn’t care about me so why should I care about them. [Following the suspension] I was mistreated, harassed, the whole nine ... It

was never the same. (Participant 208, personal communication, March 12, 2013)

Both participants who identified a disciplinary situation as the catalyst for quitting school spoke of being targeted as a trouble-maker following the incident for which they were suspended. They noted that it was not immediately following the incident that they dropped out, but shortly after their return where they experienced what they believed was unfair treatment by their teachers and administrators. One participant described the experience in the following statement:

I'd be the one getting the out-of-school suspension while the other one [person in the fight] is still in school for starting the fight that we were just at. If my name was brought up in the principal's office, I was automatically in school or out of school suspension depending on how bad the fight was. (Participant 209, personal communication, March 20, 2013)

While perception played a major role in the decisions to leave school by Participants 208 and 209, the theme of relevance emerged as a cause for leaving school for two other participants. Participants 201 and 205 believed that the content of the subjects they were being taught has no relevance to future careers or their success as adults. Therefore, they deemed remaining in school unnecessary. These participants shared the following thoughts on why obtaining a degree was not important in their lives.

The subjects offered here are totally pointless. This is not effective. I have this science class because I had to fill up credits, and we are making mousetrap cars right now. How pointless is that? I got yelled at so many times because I didn't want to do any of it because it's totally pointless. (Participant 201, personal communication, March 11, 2013) I think I should have a choice [in what I learn] ... I don't really know what I want

to do with my future, it doesn't have to deal with any of these [subjects], I know that.

(Participant 201, personal communication, March 11, 2013)

It was a series of things ... our graduation requirements have become ridiculous. Then when I would ask for classes I need to go to college or things that I need and they wouldn't give them to me. Stuff that I need they wouldn't give to me, but then I take, like, extra classes upon classes that I don't and that I'm not going to use. (Participant 205, personal communication, March 18, 2013)

While some participants identified personal factors, school-based policies and practices, or the lack of relevance of content as the determining factor to quit high school, the final two participants share more personal experiences that led to their departure. For Participant 202, it was the feeling of shame caused by being held back in the 10th grade. She indicated that she had missed many days of school, which in turn resulted in her having to repeat 10th grade. This participant shared the following thoughts about her experience:

I missed too many days of school to be passed through the 10th grade so they [the school] suggested summer school as my only option to pass, which I could not do due to transportation. I was 17 years old and I was not going to do another year of 10th grade at age 18 years old. I felt I had no choice. (Participant 202, personal communication, March 25, 2013)

This participant's main concern was not that she would have to repeat the content or be with the same teachers; rather, she felt she could not subject herself to the experience of being much older than her classmates.

The final participant was a senior in high school who believed strongly that he would have earned a high school diploma. However, in the final weeks of school he learned that

graduation was not likely due to his average in several classes. Participant 206 shared his perspective on why the prospect of failing classes caused him to quit school.

I believe the biggest factor is, I guess, what was expected of me and ... how I was performing. I wasn't meeting up to I guess what was expected of me and kind of got to a point where I'm like ... I don't care anymore. (Participant 206, personal communication, March 26, 2013)

I have friendships with all my teachers and stuff like that. So when I started to come off the path of where I should be ... I got a lecture from everybody because everybody felt I should do better. I had good relationships and as backward as it sounds, I think that kind of pushed me away from it [school], because I got to the point where it's like I don't want to hear this again. (Participant 206, personal communication, March 26, 2013)

When asked to isolate the cause for quitting school, each of the nine participants quickly identified a reason. Although these reasons were interwoven with elements both inside and outside of the school environment, each participant was able to clearly articulate that the cause when asked to provide a single factor that served as the catalyst for the decision to leave.

Potential Interventions

Question 3b of the interview protocol was designed to uncover participants' perspectives on what the school staff could have done to prevent each student from dropping out of high school. Whether the former student indicated that dropping out could or could not have been prevented, additional information was sought by the researcher to determine the reasons why or why not the student's decision could have been changed. This follow-up was used to add depth and a clearer understanding of the role of school personnel in preventing high school attrition, and what preventative steps could be utilized to influence a student's decision to quit school. For

each participant, the response to this question was definitive. They felt that by the time they decided to quit, school staff could not have altered their decision. However, each was able to clearly articulate what schools could and should do to ensure that all students earn a high school diploma.

When discussing their final decisions and why staff could not have made an influence on the students, an interesting pattern began to emerge. Each participant interviewed expressed a feeling that quitting was the only option. Although eight participants (201, 202, 203, 204, 205, 206, 207, and 208) acknowledged that the school staff provided a plan for earning a diploma, the students felt that the plans provided were not realistic or feasible, given their life circumstances at the time. Was there *anything* the school could have done?

Yeah, you're a senior; you have to do a lot of papers and senior project, just minus on all that. So take away things that are pointless to graduation. (Participant 201, personal communication, March 11, 2013)

No. I asked if there was any other way for me to pass 10th grade [other than summer school] and they said no. I had no choice, or at least I felt that way. (Participant 202, personal communication, March 25, 2013)

I did go back and try, I returned in February and left at the end of March, so I did go back and try, I was just too far behind. Then I needed to start working and definitely didn't see my kid. I just had to prioritize. (Participant 203, personal communication, March 11, 2013) I think the school did an excellent job in trying to get me to stay in school. Like the principal ... he spent all day with me giving me pointers like, "if you drop out you're going to think about what kind of bills you're going to have and everything else." They were basically saying that I'd have a lack of education, which I

disagree with that ... I don't think I would have been any smarter or stupider than I am now. I had no problem passing the GED test. It was all my decision ... I just thought I needed to [drop out of school]. (Participant 203, personal communication, March 11, 2013)

I mean, our teachers are really involved in people's drama ... since our school is so small. I couldn't stand being there anymore because the teachers were involved in the drama too. It's like you couldn't get away from it. I missed a lot of school because I just couldn't stand it anymore. I just didn't want to go. I couldn't make myself go. (Participant 205, personal communication, March 18, 2013)

I think they [the school] went above and beyond to try and keep me there but it's kinda my mind was made up. And when I went back to try my senior year for the second time, they were still being supportive, but it was just more in my head that I shouldn't [be in school]. You know, it's like my mind had moved on. (Participant 206, personal communication, March 26, 2013)

No way [could they do anything] because at the time there was nothing else that mattered to me anymore. I really just gave up. I didn't care about anything or what anyone could have said to change my mind. (Participant 207, personal communication, March 6, 2013)

No. It was make up these classes or you are not going to graduate. I know I couldn't make it through high school. They offered summer school, but I'm not going. I probably could have made it anyway, but just had no interest. Like I'd wake up in the morning and just go back to bed and be like, what's the point in going to school today? (Participant 208, personal communication, March 12, 2013)

No. They were the ones pushing me out. My teachers, I could tell when everyday I'd

walk into the classroom and my teachers are like great, here we go again. (Participant 209, personal communication, March 20, 2013)

As the conversation with participants continued, it became evident that for each of the former students, the interventions came too late to make a difference in their journey towards graduating. When asked to reflect back and identify what the school should have done to ensure they graduated, each individual, in his or her own descriptive ways, hit on a similar theme that involved designing a personalized and relevant pathway to graduation with built in support systems. One of the participants described this strategy in the following manner:

Schools are designed for a generic line of students ... I think they [the school] just need to talk to them [students] and ask them what they really want. They can't put them in the same line as the rest of the students ... have them marching the same direction. Some people do like to go different directions. When I went to tech school [vocational technical school] I got my feet wet in machining and I realized then I'm not gonna use proper grammar to machine shop or trigonometry. If I could go to tech all the time I would have made it. At tech school they teach you what you need to know about it [for a specific career] and that's it. (Participant 208, personal communication, March 12, 2013)

The participants expressed a need to feel as though their individual needs were being addressed and planned for, and that the school staff was listening to them to make sure their academic course work matched their desired future. Research supports these participants' suggestions to prevent dropout, in that schools must base their intervention strategies on both the individual needs of the students and the structural factors within the school that inhibit growth.

This can only be done by listening carefully to what students at risk for dropping out of school have to say (Heck & Mahoe, 2006; Knesting, 2008).

Emergent Themes for Attrition

The analysis of the nine dropouts' responses revealed the presence and influence of factors that mirrored those in the quantitative portion of the study. Therefore, the discussion of the emergent themes through the framework of school organizational factors (academics, activities, and structure) and social relationship factors (teacher relationships and peer relationships) was logical. As depicted in Table 18 and Table 19, the participants repeatedly referenced the influence of factors under each of the predictor categories during the discussion of why they left school prior to earning a diploma. These factors were identified by discussing with participants any survey questions that they felt were indicative of their experiences. To provide a comprehensive look at these participants' experiences, the frequency of responses outlined in Table 18 and Table 19 was paired with examples of how each participant viewed this factor during his or her high school experience.

School Organizational Factors

In the last decade; schools have elected to make organizational decisions in an effort to increase the likelihood that students would meet the academic expectations outlined in H.R. 1 No Child Left Behind of 2001. Common organizational decisions utilized by district personnel to enhance student performance have been: high-stakes testing practices, increased graduation requirements, school size adjustments (school-within-a-school movement), and the use of retention. Research (e.g. Lee & Burkam, 2002; Mulroy, 2008) has indicated that these organizational decisions have had an adverse influence on high school graduation rates. Therefore, the intent of the interviews was to determine whether or not the participants in this

study identified any of these organizational factors as influential in their decisions to drop out of high school.

Within this study the processes of coding and subsequent identification of themes from the qualitative data confirmed some of the quantitative findings but were discrepant from others. The analysis showed that students who have dropped out of school could not identify a single factor that was most influential to their decision to quit school (see Table 18). This finding supports the data from the logistic regression (see Table 11) conducted by the researcher. Additionally, the school organizational factor, structure, emerged from the quantitative data analysis as trending towards having significance on dropout decision-making and was also supported in the qualitative phase of this study. In particular, the school factor, retention, was identified as highly influential for participants who were retained while in high school. The calculation of mean sum scores for each predictor category revealed school structure, teacher relationships and peer relationships as having more influence on students' dropout decision-making. Analysis of interview data showed that while teacher relationships were influential, relationships with peers were not an important factor considered by these former students when they were deciding to quit school. In fact, the factor category, academics, emerged as much more critical in the decision-making process of these participants. In the proceeding sections of Chapter 4 the perceptions of each of these factors will be discussed to add greater understanding of the influence of each of these factors.

Table 18

School Organizational Factors Identified by Students Who Dropped Out of High School

School Organizational Factors	Participant Number
Academics	
Relevance	201, 205, 208, 209
Support	203, 205, 207, 208
Prevention/Pathways	202, 203, 205, 206, 207, 208, 209
Activities	
Extracurricular Activities	203, 204, 208
Structure	
High Stakes Testing	
Grad. Req.	201, 205, 207, 208
Size	205
Retention	202, 206

Note. Response patterns were based on the interviews of nine students who dropped out of a single, rural high school in south central Pennsylvania.

Academics

Research on school attrition has found that relevance and academic support are critical factors in students' abilities to persist in high school (Battin-Pearson & Newcomb, 2000; Mulroy, 2008). The students who dropped out of high school expressed an absence of connection with what was being taught and the need of their adult lives. Embedded within these responses were the themes of: the absence of academic support, not seeing their schooling as a vehicle to a post-secondary career, and disengagement. The participants in this study shared the following perceptions of how the absence of these elements influenced their decisions to leave school. Two participants shared the desire to have choice and participate in courses related to their interests. These participants shared, "I think we should have a choice. If I could go to

vocational school to learn all my subjects in a position [field of study] where I actually like what I'm doing" (Participant 201, personal communication, March 11, 2013); and "I do construction. If I could have gone to school full time for it [the construction trade] then I'd be a lot better off. I would have earned a diploma and a degree" (Participant 209, personal communication, March 20, 2013). Other participants discussed a lack of thoughtful planning of the course sequence as well as limited support offered to ensure their success. The following thoughts were shared by participants:

The curriculum and everything they taught was terrible. I never received help. Like, if you fail a class and they put you in the same class two more times again and you still keep failing, shouldn't there be a little bit of help there? Repeating classes was not helpful. (Participant 208, personal communication, March 12, 2013)

Yes, some of them did. I had been in physics, which required at least geometry in math and I had just been taking geometry at the same exact time. They [the teacher] offered to tutor me to after school at 3:30. I think that the teachers could have tried helping me more academically. (Participant 207, personal communication, March 6, 2013)

They [school staff] just put you in classes so you have somewhere to go during the day. They gave me classes I'm not going to use for college. No one asked or helped me plan for what came after high school. (Participant 205, personal communication, March 18, 2013)

Unlike the other responses, Participants 204 and 206 spoke of having a real positive experience at the high school and the belief that the course work offered and the supports available were in place. Due to personal reasons these students felt they could not remain enrolled in high school. According to participant 204, "My decision had nothing to do with

school. The school offered support and the school did an excellent job” (personal communication, March 11, 2013). Participant 206 stated, “I just figured I might as well take the information in; I enjoy learning” (personal communication, March 26, 2013). Unlike the responses of their fellow participants, these former students had an interest in the coursework, had the capacity to achieve academic success, but due to an extenuating circumstance (the birth of a child) and what was described as self-apathy, quitting seemed necessary.

Interestingly, when discussing the relevance of the academics coursework within the high school, most participants found little value in the subjects required, but many believed that earning a high school diploma was necessary. Participants 202, 203, 204, 205, 206, and 207, who represent six of the eight former students interviewed, agreed that all students need to earn a high school diploma. Four of these participants (203, 205, 206, and 207) shared their perspectives on the value of earning a high school diploma.

Yeah, I agree [students need to earn high school diploma]. I don’t want my kids following in my footsteps. I want them to wait until after high school to have kids, finish their diploma, and go to college. Yeah, I think they should stay in school. (Participant 203, personal communication, March 11, 2013)

Oh, yeah. Yes, which is why I have other friends that are dropping out and not graduating and upsets me to see that because ... everybody always says “Oh, you dropped out,” whatever. I have friends who dropped out and aren’t doing anything ... which is stupid because they’re not going to go far. (Participant 205, personal communication, March 18, 2013)

I would say if you can get it. Actually yes ... just to say I accomplished this much. The thing that bothers me is there is something about a diploma that is overlooked, the

sentimental value of it. (Participant 206, personal communication, March 26, 2013)

Yes. Dropping out was the dumbest thing that I've ever done in my life. I have no diploma or the skills because I never had any other plan but being in the military. If I had a backup plan I could've gone to college to be a history teacher maybe now. It's too late for me to go to college at this point, but I am working on my GED and so hopefully I can get a better job. Right now I just stay home with my children. I would like to be able to support my family. (Participant 207, personal communication, March 6, 2013)

Recognizing that most participants acknowledge the importance of a high school diploma as it relates to their future, participants were also asked to reflect back on their experience and attempt to identify how their decision to drop out could have been changed. When looking at the responses of those interviewed, what emerged was the need for schools to address each student as an individual and to be flexible and creative in working to develop a plan to achieve the attainment of a diploma. The participants' statements called for a combination of additional academic support, flexible credit recovery options, and mentoring, all of which would be based on the student's needs, as opposed to limiting options to existing interventions. The statements below reflect the suggestions that were offered by the participants in this study regarding what may have changed their decision to drop out of high school.

I just really think that they could have put a plan in place for me to graduate. I mean there are a lot of kids getting pregnant. If they had a plan ... and somebody would've cared I don't think I would have gotten behind. Instead, they're like "Oh well, kids shouldn't get pregnant." (Participant 203, personal communication, March 11, 2013)

I think support is definitely one thing [that would have helped her stay in school]. Our guidance counselor is more professional than caring, so I didn't have a support system.

Definitely tutoring, classes where teachers are more involved ... willing to help one-on-one. (Participant 205, personal communication, March 18, 2013)

Talk to me. If the teachers would have given two shits about what they did instead of just chasing their salary wage. I knew exactly what I wanted to do, if I could have just learned that I could have graduated. (Participant 208, personal communication, March 12, 2013)

While the above participants talked about the planning and support of those working within the school, Participants 206, 207, and 209 discussed the importance of hearing the far-reaching consequences that dropping out had on their future; not from staff, but from someone who had already lived the experience and was dealing with the consequences of that decision. They felt that the experience of speaking with someone who had dropped out of school would have provided an at-risk student with a true perspective on the issue. The participants shared how potential high school dropouts could benefit from this opportunity in the following statements:

They don't feel like they are talking to an adult, they're talking to someone on their level. You know, to just get feedback ... on if you go down this path what it's going to be like. I think for a lot of people who wanna make this decision, some people base it on now and some make decisions based on later. If they [at-risk students] see that what they're doing now affects choices later, I think it would change their mind [to drop out of school].

(Participant 206, personal communication, March 26, 2013)

Have kids talk to others who made the decision. I have sat down with two kids thinking about the decision and I've told them both "Do you really want to be like me?" If you can, get your diploma. If for nothing more than the sentimental value and one day you'll

have kids and if they look at you and say, ‘Did you graduate high school?’ You got to then look them in the eye and say “No.” Then how the hell are you gonna sit there and try to keep your own kid in school. If I could have heard about something that related to me, I would have paid attention. Whether it be about the impact of graduation or teen pregnancy, that’s what I needed to hear. (Participant 209, personal communication, March 20, 2013)

Participant 207 agreed that the opportunity to listen to others share their experiences of dropping out of school and how it impacted the remainder of their lives would have been beneficial. He shared the following thoughts:

I think having someone in the same situation as me at 18 would have given me an idea that I wouldn’t get a job that I couldn’t support my family and that life is easier with a diploma. I also think that school could help kids deal with their problems a little bit better. You know, no one ever asked me why I was dropping out. I think schools should try and reach out and help kids make better decisions about graduation. (Participant 207, personal communication, March 6, 2013)

In discussions with each participant about the importance of a diploma and possible prevention strategies, the pattern of understanding the potential outcome of the decision to drop out was critical. In all of the conversations, the participants spoke about needing to see how the content of courses they took was related to their own personal path towards adulthood. The lack of connection with what the student valued or aspired to become created a disconnect between the student and the school that led to the decision to leave school without a diploma. Many spoke of an individualized pathway to graduation that would have accounted for their personal interests and career ambitions, offered academic and emotional supports when life-altering

events occurred, and provided them perspective on the consequences of dropping out of school from those who have already lived the experience.

Extracurricular Activities

There is a body of research that suggests that students who elect to engage in more school-related activities establish a greater connection to both school and peers, which in turn facilitates greater commitment to academics (Ream & Rumberger, 2008). Only Participant 208 spoke of personal involvement in extracurricular activities offered at the high school. He discussed a perceived level of favoritism due to involvement in a sport by saying the following:

When I played sports I could do whatever I wanted in school. When you are a part of a winning team you do whatever you want to. My first 3 years of high school I got special treatment. I failed classes when I played and it wasn't a big deal. Even if I would have gone back and played a fourth year, I probably would have quit because the coach quit. He was our coach, we respected him and there was a mutual bond. If we were having trouble in school he would be like, "come down to my office and we'll work on it." All the players they all helped each other, so it was teamwork. (Participant 203, personal communication, March 11, 2013)

The participant acknowledged the sense of community and connection to the coach and teammates, which created a greater interest in remaining in school. However, when his participation ceased this level of commitment to school dissolved. The power of extracurricular activities to promote engagement also emerged as a theme when speaking with Participant 203 and Participant 204. Although they did not personally participate in extracurricular activities, they expressed the opinion that school should offer more activities in which students can get involved. These two participants did not make this suggestion to enhance student engagement,

but to teach students how to relate better to their peers and to prevent bullying type of behavior within the school environment.

School Structure

School structure is perhaps the most complex organizational feature that has multiple facets, each having the potential to influence a student's experience in high school. For the purpose of this study, the common structural elements often manipulated by school personnel to enhance student achievement have been high-stakes testing, graduation requirements, school size, and retention practices. In this section each of these organizational elements is discussed and participant perceptions shared. It is important to note that participants did not necessarily see these organizational factors as discrepant. In fact, factors such as high-stakes testing and graduation requirements were not named specifically; therefore, the participants' perceptions of these factors will be synthesized.

High-Stakes Testing and Graduation Requirements

Since the implementation of federal law H.R. 1 No Child Left Behind in 2001, the accountability movement has come under the scrutiny of educational researchers. Researchers, such as Amerin and Berliner (2002a, 2002b); Battin-Pearson and Newcomb (2000); Carnoy (2005); and Nicolas et al. (2006), have found that high-stakes testing practices have motivational consequences on students because they narrow the delivered curriculum, which then impacts engagement and ultimately student motivation and interest.

The organizational decision often utilized to ensure high levels of performance on these high-stakes assessments is that of increased graduation requirements. The decision to increase graduation requirements is believed to better prepare students to meet the expectations of performance benchmarks outlined in federal legislation; however, this practice has been proven

by some researchers to inhibit graduation for some students (Allensworth & Easton, 2005; Lillard & DiCicca, 2001). The following statements reflect participant perceptions of both high-stakes testing and the course requirements necessary for graduation from this small, rural high school in south central Pennsylvania. Although no individual specifically used the terms “course requirement” or “high-stakes testing,” many of the participants indicated that the required course sequence to earn a diploma was required regardless of their academic aptitude, career ambitions, or preference. As it relates to course offering and curricular requirements, the following perceptions were shared by Participant 207 and Participant 208:

No one ever even did anything other than one option to get help even everyone knew my family and medical situation. So I went to the guidance counselor and I tried to get out of physics [because he was taking the prerequisite math course at the same time] and they told me that there was nothing I could do because I had to have so many math credits. So you know this is an example where I just didn't even have a chance. It's one size fits all. It wasn't about what, you know what I needed; it was about what they could fit into their schedule. (Participant 207, personal communication, March 6, 2013)

It was either you make up classes or you're not gonna graduate, repeating a class was definitely not helpful. They give you one plan ... not every single kid is gonna be able to follow the plan exactly. (Participant 208, personal communication, March 12, 2013)

While these two individuals talked specifically about graduation requirements, other participants shared a general disconnect with the purpose of the content and its impact on their futures. Regarding the sequence of the courses offered and credit requirements; these former students did not find meaning in the requirements, calling them “pointless, ridiculous, and bullshit.” So while the school had a clearly articulated course sequence to ensure academic

proficiency and success, many of those interviewed did not understand the goal or necessity for the classes required.

School Size

In a rural community schools tend to have small student populations, which was the case for the high school used in this study. The size of the school was not an organizational decision but an organizational attribute. The impact of school size is a commonly researched element, and there has been evidence that the size of the school alone has the capacity to mitigate one of the most significant at-risk factors, low socioeconomic status. The ability for small schools to positively influence students' decisions to persist is often linked to the more personal learning environment it creates for students, which in turn strengthens students' attachments to school (Crosnoe, Johnson, & Elder, 2004; Lee & Burkam, 2003; Ready, Lee, & Welner, 2004). During the interviews of the nine participants, there was limited mention of how school size impacted the educational experience. In fact, it appeared that the former students had little knowledge of how being a member of a small school community could either positively or negatively impact the decision to drop out of high school. Only Participant 205 alluded to the impact of school size, and from her perspective, being in a small school led to school staff being too involved in the social aspects of students' lives and not necessarily yielding an academic benefit. From this former student's experience, being in a small school did not foster a more individualized and caring school environment but instead led to her complete disengagement.

Retention Practices

Another common practice used to ensure that all students meet grade level and state performance expectation has been that of retention. This practice has been utilized to ensure mastery of skills and concepts for grade promotion but has fallen under scrutiny because of its

lack of effectiveness for enhancing student performance and for increasing the likelihood students will leave school prematurely (Alexander et al., 1994; Jacob & Lefgren, 2009; Jimerson, 2001; Jimerson et al., 2002; Stearns et al., 2007). Not all participants experienced grade retention in high school, but Participant 202 and Participant 206 were retained during their high school careers and both indicated that due to their retention, they decided to drop out of school. Participant 202 shared that she had already been retained once and when the school wanted to retain her again, the age discrepancy was just too embarrassing for her to continue. She indicated that being 18 years old in the 10th grade with kids who were 15 years old “was not going to happen.” Similarly, Participant 206 shared that he was committed to returning for a second senior year, but as early as the first day back, he felt awkward and uncomfortable and did not think he could blend in.

As mentioned earlier, course retention was viewed as a negative experience for students, and many spoke of how it was ineffective and often led to disengagement and frustration as opposed to increased academic proficiency and school success.

Social-Relationship Factors

Exploring the dropout phenomenon from an ecological perspective has offered potential causes and prevention possibilities for high school personnel to consider when attempting to address the concern within their school system. In particular, the role of student-teacher relationships has emerged as a critical factor in enhancing student persistence towards graduation (Bronfenbrenner, 1979; Mulroy, 2008; Tinto, 1987, 2003; Tinto & Pusser, 2006). Including the impact of peer relationships as a relevant social factor was essential because researchers such as Guillory (2007) and Ream and Rumberger (2008) have found that positive peer relationships can strengthen attachment and participation of an at-risk student to the school. However, negative

peer relationships and relationships with peers with deviant behaviors or who have already dropped out of school can derail a student's progress towards earning a high school diploma.

Table 19 outlines the common social relationship factors found in the research and identifies the participants that mentioned them during the interview process. This response table is followed by the personal perceptions of the factors from each participant included in the research study.

Table 19

Social Relationship Factors Identified by Students Who Have Dropped Out of School

Social Relationship Factors	Participant Number
Teacher Relationships	201, 203, 204, 205, 206, 207, 208, 209
Peer Relationships	201, 203, 204, 205, 206, 207, 208, 209

Note. Responses patterns were based on the interviews of nine students who dropped out of a single rural high school in south central Pennsylvania.

Teacher Relationships

Teacher relationships were one of the most cited factors associated with influencing students' decisions to persist through school until graduation. The essential features of the relationship between a student and teacher are those of high expectations, trust, communication, and support. Prevalent in the literature is the importance of positive adult relationships within the academic setting and the impact that this caring relationship has on how much a student values academics and connects with his or her school (Bronfenbrenner, 1979; Mulroy, 2008; Tinto, 1987, 2003; Tinto & Pusser, 2006). Although there are many factors embedded in a relationship between a student and his or her teachers, two common themes emerged for these participants. These themes that were: (a) the absence of mutual respect, and (b) the perception

that teachers did not always care about providing academic support.

When speaking about their personal experiences in high school, many of the participants interviewed believed that teachers were not there for their benefit but rather the teacher's own personal gain. Participant 208 and Participant 201 shared the following:

They're not there for what my well-being or what I wanna do in life ...If they would have given two shits about what they did instead of just chasing their salary wage, I probably would have done better. They're there for the money ... but when you are a teacher you should have a little bit of care for your students and stuff. (Participant 208, personal communication, March 12, 2013)

I think some teachers care ... but probably just because it's their job. (Participant 201, personal communication, March 11, 2013). They don't care enough. Last year there's one teacher that called me a coward because I don't say hi to him ... that's no respect. Then there's a bunch of other teachers who just get on my nerves. (Participant 201, personal communication, March 11, 2013)

Other participants indicated that they had never felt supported or respected during their experience in high school and that teachers were not invested in seeing them succeed. These participants viewed their relationships with teachers as negative and uncaring. Participants shared the following sentiments about their teachers during high school: "The teachers didn't help me they were the ones pushing me out" (Participant 209, personal communication, March 2013). "I wasn't supported or treated with respect. Our teachers belittle you in class and the guidance office seemed to always think that I was having problems" (Participant 205, personal communication, March 18, 2013). "Teachers did not support me, no, not at all. I mean ... I had probably like two teachers that really, you know, were interested and would ask. Others would

ask and just be like, “well you should come to school” (Participant 205, personal communication, March 18, 2013).

For other participants, the experiences they lived in high school were not as clear cut, and based on their life events they perceived a change in how teachers felt about them as students. Participant 207 shared that “Some of my teachers were great and some moved way too fast for me, and some of them did not seem to care at all” (Participant 207, personal communication, March 6, 2013). Participant 203 noted a clear shift of how she was treated following the birth of her child. She described her experience:

Before I got pregnant, I felt respect. Once I got pregnant, it was like a whole stereotype. I mean, “she’s not good enough.” There was only one teacher that seemed to care and the rest didn’t really care. Not the counselor or the principal. (Participant 203, personal communication, March 11, 2013)

Contrary to the perceptions of most of the participants, Participant 204 and Participant 206 spoke of caring relationships with their teachers and a feeling that the school staff made valid attempts to keep each student in school until graduation. These two former students spoke of the personal investments made by their teachers. “I got a lecture from everybody because everybody felt we were on that kind of communication level” (Participant 206, personal communication, March 26, 2013); “I think they [the school staff] did an excellent job in trying to get me to stay. The principal spent all day... the guidance counselor, he did everything he could; they cared” (Participant 204, personal communication, March 11, 2013). When speaking with these two participants, it was clear that the teachers in these individuals’ lives were truly invested in changing their decisions to drop out of high school; however, both expressed that at that point it was simply too late and their minds were made up.

Based on the statements provided, it was clear that the majority of individuals interviewed did not believe that the school staff worked hard enough to promote their completion of high school. These statements seem to add credibility to the work of Bronfenbrenner (1979), Mulroy (2008), and Tinto and Pusser (2006), that relationships play a significant role in ensuring student progress and success through school. The impact of these negative experiences also supports the work of Lessard et al. (2008), who found that poor relationships with teachers would often lead at-risk youth to leave school prior to graduation. However, in consideration of the views of Participant 204 and Participant 206, who contended that they experienced positive, supportive, and caring relationships while enrolled in high school, there was nothing that would have prevented them from leaving. Their experiences raise a challenge to the notion that relationships alone can prevent high school attrition and likely imply that a more multi-faceted solution to this phenomenon is needed.

Peer Relationships

Positive peer relationships have been shown to enhance the connection and engagement at-risk youth have towards their school (Ream & Rumberger, 2008; Stewart, 2008). Conversely, the relationships that at-risk students develop with deviant peers in school or peers outside the school environment can serve to hinder their progression towards graduation. Some participants shared their negative peer experiences: “Bullying is a big reason people quit school and I think school is kind of a bad environment” (Participant 204, personal communication, March 11, 2013); “There were always kids that would pick on other kids or on me for something, and I had to end it” (Participant 209, personal communication, March 20, 2013); and

Once I was pregnant it created problems with other people calling me names and making me not want to be there. Even when I went to the counselor about it nothing was done. I

was left all alone. I was bullied and they [school staff] didn't seem to care at all.

(Participant 203, personal communication, March 11, 2013)

Other participants spoke of their disconnection with peers within school and their preference to socialize with peers who did not attend their high school. They described their peer relationships in the following ways: "In school I kind of kept to myself. Most of my friends graduated or, you know, were cyber schooled, or you know, and were not at my high school. The school was not my social environment" (Participant 205, personal communication, March 18, 2013); "I really had no friends in my class. My friends graduated the year before or the year before that. I haven't hung out with one person in my grade because kids stuck up and think they are better than me" (Participant 201, personal communication, March 11, 2013).

Participants 201, 203, 204, 205, and 209 all expressed disconnect from the peers enrolled in their high school. These individuals expressed stories of isolation due to ridicule from other classmates or chose to isolate themselves by pursuing friendships with individuals who were not connected to the school in any way. These stories affirm the findings of Vitaro et al. (2001), which suggested that students that lack a positive social network within school and instead establish friendships with peers outside of school are more easily disengaged from school and more likely to drop out. However, Participants 206, 207, and 208 offered experiences that ran counter to the findings of Vitaro et al. (2001), calling into question the true influence of peer networks on a student's decision to leave school. These participants shared, "Everybody in my high school knew me and was my friend. If they didn't know me personally, they knew of me" (Participant 206, personal communication, March 26, 2013);

I was pretty popular in school. I had lots of friends and many of them begged me to stay in school when they heard I was dropping out. It's funny. Some of them would do my

homework; help me cheat on tests, just so I could get good grades thinking that would keep me in school. My friends were all good students, none of them dropped out and they all graduated in four years. I even went to that graduation. (Participant 207, personal communication, March 6, 2013)

I was a social butterfly. I was with everybody, and talked to everybody. I didn't go to school because of them. I could care less if I saw them at school; I could see people outside of school. As much as I loved the social part of school, I could care less though about going to school and talking with my friends every day. (Participant 208, personal communication, March 12, 2013)

Interestingly, of the participants who shared their feelings about the influence of friendship on their decision to leave school, none identified it as the sole factor for leaving school or a sole factor which could have made them remain in school until graduation.

Summary

This chapter presented the research findings for the explanatory mixed-methods research study. The research was conducted in a sequential manner, with the quantitative phase occurring prior to the qualitative phase. Both the quantitative and qualitative investigation of school organizational and social relationship factors revealed that no single independent predictor category made a statistically significant contribution to the model. However, school structure emerged in both phases of the study as the strongest predictor trending towards significantly influencing dropout decision-making. When analyzing the influence of these predictor groups among the three subgroups within the study (not-at risk, at-risk, dropouts) during the quantitative phase, the data showed there were no significant difference in the perceived influence of predictor groups between students at-risk and those that have already dropped out.

However, the responses of at risk and high school dropouts compared students deemed to be not at-risk were statistically and significantly different. The statistical differences in responses were found in the predictor groups of school structure and teacher relationships.

The analysis of data from both phases of the study also showed that teacher relationship were important to dropout decision-making, and the students who had dropped out of school confirmed that early intervention by school personnel could have changed their decision to quit school. Although the predictor group, academics, did not emerge in the quantitative findings as significant to dropout decision making, it was an element of school that was heavily cited by former students as influential to their decision-making process.

The key findings related to each predictor group are identified and serve as a framework for the discussion in Chapter 5. The implications for school personnel and their capacity to influence school organization and culture decisions are presented. Suggestions for how schools organize and structure their instructional programs and establish a responsive and caring culture will be proposed. Finally, recommendations for future research to extend the knowledge and understanding of how school structure and relationships impact high school attrition will be provided.

CHAPTER 5

CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

Students begin their educational journey with the expectation of one day earning a high school diploma. Unfortunately, for over one million students per year, that capstone experience is never achieved. These students encounter obstacles during their school experiences that are never resolved and lead to their decision to drop out of high school. The mission of educators is to ensure that all students reach their maximum potential; yet, despite increased expectations, accountability measures, and increased funding allocated to address the dropout epidemic, the reality is that nearly one in four students do not complete high school with their class (Alliance for Excellent Education, 2012).

The lack of improvement in graduation rates is particularly troubling given the decreased availability of career options for high school dropouts. Students that dropped out in previous generations had access to trade and entry-level positions that did not require a high school diploma; these are no longer careers available to high school dropouts (Rumberger, 2011). The knowledge and skill requirements necessary to be gainfully employed in the United States in the 21st century have increased, thereby making the attainment of a high school diploma more necessary than in previous generations. The current demand of the workplace, paired with the implications of the continued exodus of millions of students from high school, has thrust high school completion into the national spotlight and placed a demand on educators to find ways to ensure that all students are college and career ready and earn a high school diploma.

The harsh realities of high school attrition have led to research on how schools' organizational structures impact the ecological environment and student dropout decision-making (Bronfenbrenner, 1979; Mulroy, 2008; Tinto and Pusser, 2006). While these studies

offered insights into the influence of key factors, such as academics, school structure, school activities, teacher relationships, and peer relationships on attrition, they did not attempt to determine which factor held the most significance, on dropout decision-making, nor did they utilize the perceptions of actual high school dropouts in their analyses. Therefore, the purpose of the present study was to take the conclusions drawn from previous research on the factors that influence student dropout decision-making and determine which, if any, have greater significance on students from the perspectives of students at-risk for dropping out as well as those that had already left school prior to graduation.

Using Bronfenbrenner's ecological systems theory as the theoretical framework, along with the factors commonly associated with attrition, the intent of this study was to extend the research on the causes for dropping out of high school. The use of explanatory mixed-methods research design allowed the researcher to conduct the quantitative data collection and analysis prior to qualitative phase of the study, which served to deepen the understanding of the findings within the quantitative phase of this study (Gay et al., 2009). There were three primary research questions and one subsidiary research question used to investigate the influence of factors associated with attrition. The questions that guided this investigation were:

1. What specific school organizational and social relationship factors have the greatest influence on student persistence?
 - 1(a) What is the comparative influence of school organizational versus social relationship factors on student persistence?
2. What, if any, correlation exists between the school organizational and social relationship predictor factors for students who have seriously considered dropping out and students who have formally dropped out of school?

3. What, if any, pattern emerges related to the cause for dropping out of school among students who have left school prior to graduation?

The participants in the quantitative phase of the study included 80 juniors and seniors who were enrolled in a small, rural high school in south central Pennsylvania, as well as 10 participants who had dropped out of that rural high school during the last 10 years. A purposeful sampling technique was used for this study, and nine of the 10 high school dropouts who participated in the quantitative phase also agreed to participate in the study's qualitative phase.

This chapter contains a discussion of the conclusions of the research study. The research questions posed will serve as a framework for the discussion of the conclusions and the implications for school personnel. The chapter concludes with recommendations for future research.

Summary of Findings

Eighty currently enrolled students and 10 students who had previously dropped out of one rural high school in south central Pennsylvania responded to a student perception survey regarding the school organizational and social relationship factors that have the most influence on dropout decision-making. Specifically looking at the predictor categories of academics, school activities, school structure, teacher relationships and peer relationships, several statistical analyses were conducted to determine the factor that had the most influence on the decision to quit school. The findings based on the calculation of predictor groups' means revealed that both current students and high school dropouts in this study perceived school structural elements, teacher relationships, and peer relationships as more influential on the decision to drop out of school than academics or availability of and participation in school activities.

Multiple logistic regression was utilized to explore if any of the five predictor categories

had a greater influence than the others on student dropout decision-making. The results of this analysis showed that there was no single factor category that had the most influence on students' decisions to drop out of school; however, school structure emerged as a factor group that was trending towards statistical significance.

The survey responses from students who are at-risk but remain enrolled in school, students who have previously dropped out, and students not at-risk for dropping out were analyzed using the Pearson Product-Moment correlation, Spearman Rho test for correlation, and the Independent samples *t*-tests to determine how these various groups perceived each of the five predictor categories. The results of these correlation analyses showed that:

- Students at-risk perceived each of the predictor categories as connected. For example, positive perceptions for teacher relationships yielded positive perceptions for the other predictor categories.
- The responses for students who were at-risk but still enrolled indicated a correlation between the structure of the school and the academic program; therefore, if they perceived the structure of the school as negative, they also saw the academic program in negative light.
- The responses of students who had already dropped out of school showed no correlation among any of the predictor categories. For example, a student's negative perception in the area of academics had no relationships with how he or she responded to the areas of structure, activities, teacher relationships, and peer relationships.
- The Independent samples *t*-tests showed that there was a statistically significant difference between the responses of students at-risk (both enrolled and dropouts) and those not at-risk in the school structure and teacher relationship predictor categories.

Interviews of nine students from the rural high school in this study were also conducted to gain greater insight into what led them to make the decision to leave school and what, if anything, school personnel could have done to alter that decision to quit. Several key findings emerged from these interviews. First, students reported that the school's structure was a barrier to earning a diploma and suggested that personalization, as opposed to compliance with rigid course sequence and credit accrual, would have increased the likelihood of their earning a diploma. Secondly, the lack of content relevancy made it easy for students to disengage from academics, activities, and the school environment. This detachment served as their rationale and justification for quitting school. The lack of connection between school and the desired future of each participant dominated the discussion during the interviews. Finally, relationships matter. Each of the nine students indicated that had an adult intervened at the beginning of his or her divergence from the path to graduation, the results of his or her high school experience might have been different.

Discussion

The purpose of this study was to determine which school organizational or social relationship factors students perceived as having the most influence on dropout decision-making in a rural high school in south central Pennsylvania. The findings provide guidance to district personnel on the actions that could be taken to reduce dropout rates.

This study revealed that how students perceive school structure and teacher relationships within their high school was indicative of their at-risk status. For example, this study revealed that students at-risk for dropping out of school as well as those who have already dropped out of school perceive school structure more negatively than students who are not at-risk for quitting school. This finding supports previous research indicating that how schools construct their

course requirements, credit accrual procedures, and pathways to earning a diploma influences dropout decision-making (e.g., Alexander et al., 1994; Lee & Burkam, 2003; Lessard et al., 2008).

Previous research has also concluded that a strong bi-directional relationship between a student who is at-risk for quitting and an adult within the school environment is powerful enough to sustain that student's persistence in high school (e. g. Bronfenbrenner & Ceci, 1994; Mulroy, 2008; Tinto and Pusser, 2006). The results of this study supported the notion that the relationship between student and teacher has the power to influence a student's decision to drop out, but revealed that the power of this relationship was dependent on where the student was in the decision-making process. Consequently, this result begins to deepen the understanding of how and when teacher relationships are effective in preventing attrition. What emerged most significantly in the results of this study was that by the time a student had reached the decision to quit school, the efforts of teachers to intervene was rendered useless. This finding adds depth to the previous researchers' conclusions regarding the influence of teacher relationships as an intervention strategy and implies that early identification and intervention by adults is critical to dropout prevention.

Several factors that had previously been found to strongly influence dropout decision-making did not emerge as critical in this study. For example, this study revealed that peer relationships were not a significant factor to predicting dropout decision-making. However, previous research has indicated that peer relationships are a key contributor to dropout rates (e. g. Guillory, 2007; Ream & Rumberger, 2008). Furthermore, in this study high-stakes testing was not significant to at-risk students who had previously dropped out of school. This is divergent from the findings that the accountability movement initiated with the passage of NCLB in 2001

has negatively influenced high school students and led to greater dropout rates (e.g. Amerin & Berliner, 2002a, 2002b).

Even though the results of this study revealed that the factors identified in previous research and extensively outlined in this study's literature review did not statistically and significantly influence dropout decision-making in the rural high school studied, it does not mean that these factors have no influence on students' decisions to quit high school. The dropouts in this study who had lived through the dropout decision-making process were clear about several facets of the dropout phenomenon, all of which emerged during the analysis of their interview transcripts. These high school dropouts summed up effective prevention in the following statements:

- Just listen to me.
- Work with me to design a plan to make learning relevant to my needs and interests.
- Intervene before I already decide to quit school.

Several implications emerge from the understanding that the conclusions of this study are not entirely new to the discussion of high school dropout prevention. Given the conclusions drawn, school administrators, teachers, and other school personnel can prioritize their efforts and resources to prevent high school dropouts. Having a clearer understanding of the factors that have greater influence on student decision-making reframes the discussion of restructuring school and designing targeted interventions to reduce the occurrence of high school dropouts in the rural school included in this study. Due to greater clarity established from the present analysis regarding the school organizational and social relationship factors influencing dropout decision-making, several implications for practice arise.

Implications for Practice

The importance of research on the topic of high school attrition cannot be overstated due to the fact that over one million students walk out of high school doors without earning a diploma. The present research study along with previous research conducted on the factors for attrition have highlighted the common themes of relevance, relationships, and personalization as being critical to promoting high school persistence, yet seven thousand students drop out of school every day (Alliance for Excellent Education, 2009). This study's findings reinforce the importance of those factors, which suggest that the intervention and reform efforts implemented in recent decades have not comprehensively addressed these factors, thus making them ineffective.

It has been said that the best offense is a good defense. This thought is one that can be applied to dropout prevention in that systematic efforts should aim to prevent students from reaching a level of disengagement where dropping out is believed to be the only viable option. The implications for practice suggested from this research are divided into two categories: proactive strategies applied systematically for all students enrolled in the school, and targeted interventions utilized to meet the needs of students who are deemed at-risk based on data obtained from an early identification instrument. While there are dozens of dropout prevention strategies that have been implemented in the last several decades, the school-wide strategies suggested in the following section are limited to the scope of the findings within this study.

Proactive Reform Strategies

As suggested by the findings of this study, each predictor category (academics, structure, activities, and teacher and peer relationships) represents discrete elements that may or may not be correlated depending on the student's at-risk status. Given this understanding, proactive

dropout prevention must be multifaceted and address each factor group within a school-wide approach to dropout prevention. Knowing that intervention early has results, efforts such as Head Start, Response to Intervention, and Instructional Support have been strategies deployed by school personnel to ensure students are academically proficient and remain engaged at the elementary and middle level. The suggestions for school-wide reform in this study will be to address systematic interventions for students who persist to high school.

The participants in the qualitative phase of this study shared experiences of feeling a lack of connection between the courses they were being asked to take in high school and their future aspirations, thus leading to their disengagement from the school environment. This finding paired with the research that has found that at the core of dropout prevention is student engagement; high schools should look to provide all students with rigorous and relevant curricula (Finn, 1989; Mulroy, 2008; Richards, 2011). To engage a full spectrum of learners, schools should offer multiple curricular pathways to diploma attainment. Included in the course offerings would be traditional college preparatory courses, professional technical courses, and courses that are designed to provide real world applications and field-based learning opportunities. The integration of career-based course offerings or the use of learning academies are ways to honor the individual interests of students, establish smaller, more personalized learning environments, and are likely to forge a stronger sense of relevance and applicability to students' post-secondary college and career aspirations (Kemple & Snipes, 2000).

Although peer relationships did not emerge in both phases of this research as critical to dropout decision-making it is important for practitioners to acknowledge that peer relationships do represent an important facet of the ecological environment within a school that has been shown through research to impact student persistence to high school graduation (Bronfenbrenner

& Ceci, 1994; Mulroy, 2008; Tinto and Pusser, 2006). Positive peer relationships have been proven to create a bond between a child and his or her school environment (Stewart, 2008). It is this attachment to school that has been found to enhance student engagement in school, which has been further linked to increased academic performance and commitment to remaining in school until graduation (Guillory, 2007; Perdue et al., 2009; Ream & Rumberger, 2008; Stewart, 2008). Conversely, if a child lacks positive peer relationships within the school environment, has a negative social experience, or affiliates with deviant peers in or outside of school, there is an increased likelihood that he or she will leave school without a diploma (Vitaro et al., 2001). The survey data of the present study revealed that peer relationships as a predictor group was seen by these 90 students as influential on dropout decision making. This finding corroborates the findings of this previous research; therefore, schools must consider how to foster positive peer relationships among classmates early in children's academic careers (e.g. Guillory, 2007; Perdue et al., 2009). Roderick (1993) discovered in her study of cohorts of students in Fall River, Massachusetts, that those students who dropped out between tenth and twelfth grade did not possess warning signs until after they entered high school. The conclusions drawn through the interviews of school dropouts in this study were similar to those of Roderick (1993) and signify that the transition to high school is a critical turning point for students. The transition to high school is also a time when student disengagement in academics, activities, and with peers can happen rapidly. The work of Allensworth and Easton (2005) also cautions that if a student's disengagement leads to the failure of more than one core academic course, that student is less likely to graduate high school. Recognizing the importance of this critical year in a child's educational career, schools must focus prevention efforts in a student's first year in high. While ninth grade often represents a student's first year of high school it is important to acknowledge

that depending on how a district organizes its school system this transitional year could occur at different points in a student's academic career; therefore efforts for prevention should be targeted to support students during their transition to high school.

To prevent students from being overwhelmed by a new environment of high school, which is typically larger in size, more teacher-centered, and more competitive than they experienced in middle school, school personnel should restructure their high school to incorporate a transition academy. Often considered an extension of the middle school philosophy, transition academies should include: teaching teams assigned to a cohort of students; a principal, counselor, and intervention specialist; and freshman activities throughout the school year to forge strong relationships among grade level peers as well as with the teachers (McIntosh & White, 2006). Utilizing the transition academy model serves to address each of the common predictor groups (academics, activities, structure, and teacher and peer relationships) that have been shown to influence dropout decision-making. Specifically, this type of academy offers a smaller learning community where teacher and peer relationships are fostered and maintained, and teaching teams closely monitor academic performance and provide immediate supports and interventions. The transition academy model, in combination with the integration of professional technical courses and field-based learning opportunities, aligns with the conclusion of this study which calls for prevention efforts that address school structure and enhance content relevance and relationships. Unfortunately, even with the universally implemented prevention strategies outlined above, there will continue to be students who need targeted interventions to support their persistence to high school graduation.

Targeted Interventions

This study revealed in both the quantitative and qualitative phases that school structure

and particularly course requirements and sequence significantly influenced students' dropout decision making. Based on this finding and the findings from other researchers, (e.g. Kaczynski, 1989; Knesting, 2008; Mulroy, 2008) that relevance is integral to increasing student persistence and that reform efforts in recent decades have not achieved significant gains in graduation rates in the United States, the need to revolutionize education is a necessity. This educational revolution needs to shift the focus from educating the masses in a uniform fashion to personalizing high school for at-risk students. Previous research has called for personalization to increase graduation rates, but this concept continues to be a paradigm shift that presents significant challenges for those responsible for school reform (Allensworth & Easton, 2005).

A shift to a personalized high school experience for at-risk students would require educators to deconstruct the ingrained notions of what high schools should look like. Abandoning the rituals of forced course sequence, credit accrual, instruction within brick and mortar classrooms, and adherence to the agrarian school calendar and bell schedule that have come to define schools today would be a requirement. Genuine change would ultimately require school leaders to recognize that school organization does influence a student's decision to drop out or remain in high school. Paired with this acknowledgment would be the willingness to accept that a student's needs, interests and desired outcomes should help define diploma attainment in lieu of external measures that have traditionally been applied to the masses.

To move from conceptualizing a school where personalization drives diploma attainment to creating such a school, school leaders cannot simply call personalization an intervention and lay it over the existing school system. Instead, leaders must recreate the organization around the desired outcome (Fullan, 2001). Personalization by definition implies that those who are making organizational decisions are knowledgeable about the needs of high school students. This

knowledge of students is dependent upon three critical components: early identification of a student at-risk for attrition, individualized graduation planning, and the existence of a meaningful and sustained relationship between a student at-risk and his or her teacher. Each of these elements has long been defined as critical to dropout prevention and must become the backbone of how schools are designed if meaningful change is to occur. It is critical that each facet of prevention be in place, for if there is an absence of even one of the three, the system risks becoming ineffective.

Early Identification

The findings of this study showed that at-risk students who are still enrolled as juniors and seniors possess similar perceptions of the influence of school structure, and perceive these school structural elements as working counter to their progress towards graduation. Additionally, these students hold more negative views of teachers' and administrators' willingness to help them in earning a diploma. Research has shown that this negative perception of school staff and the breakdown of the relationship between teachers and students have far reaching negative consequences for at-risk youth (Finn, 1989; Knesting, 2008; Mulroy, 2008). Knowing that at-risk behaviors begin early in children's academic careers, and that by the time they reach eleventh and twelfth grade these negative perceptions of both school and school staff are well engrained, early identification is paramount.

This study found that no one single factor has more influence on a student's decision to quit school than the other; therefore, as educators we must hold them all in equal importance. Additionally, the participants of this study who were interviewed to gain the insights of high school dropouts shared that had someone intervened early in their academic career, the possibility of earning a diploma would have been much more realistic. Both research and the

lived experiences of dropouts themselves indicate that a mechanism for the early identification of a student who is at-risk for dropping out of school is critical.

To that end, school systems must develop an instrument (similar to the survey designed for this study) that assesses student perceptions and feelings towards the educational program. This type of instrument can be used in combination with the analysis of a student's individual at-risk factors (achievement, ethnicity, socioeconomic status) to gain a more comprehensive look at an individual student's likelihood to drop out of school. The findings in this study and previous research have found that a student's negative perception of his or her school can lead to disengagement (e.g. Tinto and Pusser, 2006; Lessard et al., 2008), and disengagement can lead to the decision to quit school. To ensure that schools identify students at-risk for dropout prior to the onset of student disengagement, the use of this early warning instrument should begin in late elementary school and administered annually.

Meaningful and Sustainable Relationships

Educational research has long pointed to the importance of adults establishing relationships with students. The power to influence students' decisions to leave school was outlined extensively in the literature review and results of this study (e.g. Bronfenbrenner, 1979; Mulroy, 2008; Tinto and Pusser, 2006). Yet, the gap between what is known and what is practiced in schools is evident in the words and actions of at-risk youth. During this study, the students who had dropped out repeatedly shared a sense of abandonment and lack of caring, communication, and support from school personnel. When asked about intervention, the "listen to me" cry resonated loudly in the message of each of the participants. The prevention of these negative perceptions and the fulfillment of their need to be listened to must be at the core of dropout prevention programs in high schools and must be executed with purposeful design and

ongoing support.

To reframe a school with this critical element in mind begins with early identification, which then triggers a process where an at-risk student is assigned an advocate or partner for graduation. This advocate is an adult within the building that establishes and maintains a relationship with the student until graduation. The nature of this relationship is two-fold. First, this adult must listen to the student freely and without judgment. Second, this adult must assume the role of this student's educational advocate. The advocacy component of this partnership is critical because as noted in the perceptions of the students who dropped out in this study negotiating the rigid structure and inner workings of a school is not an easy task for a student. This school-based advocate listens and assists in the planning of that individual student's pathway to earning a diploma, then works with school personnel to ensure the implementation of the plan, all the while maintaining constant connection with that student throughout his or her school experience. The establishment of these last partnerships between an at-risk student and teacher has been shown to enhance the likelihood that this child will complete high school (e.g. Mulroy, 2008; Lee & Burkam, 2003; Tinto & Pusser, 2006).

School leaders and teachers may question the logistics of such a structure, but the reality is that the general framework already exists in the form of Instructional Support Teams (IST) and Student Assistance Programs (SAP) that have been used as mechanisms to intervene and support students with academic and mental health concerns. The partnership for graduation would include weekly planned interactions between student and teacher advocate, development and continued monitoring of the plan for graduation, flexibility in course accrual and instructional format, and coordinated meetings which include all stakeholders in the student's education (students, parents or guardians, teachers, administrators). These elements do not represent

insurmountable logistical obstacles, but rather challenge school personnel to release control of the well engrained practices of school and allow students the freedom to design a graduation pathway for themselves.

As with any school reform effort, professional development and teacher training is paramount to effectiveness. If graduation partnerships are to become woven into the fabric of the school system, school personnel will need to be trained on human relations, conflict resolution, the array of content acquisition formats (cyber, blended, vocational) available to students today, and strategies to establish trusting relationships with at-risk students and their parents or guardians.

Personalized Learning

Deconstructing the traditional school will be a challenge facing school leaders if true personalization is to occur. To personalize school means to re-conceptualize how students acquire knowledge and perhaps abandon the ideas that: students must sit in a classroom with others their age; follow the same lessons which are paced the same; use identical assessments to measure learning; take all classes for a prescribed allotment of time; and maintain the traditional bell schedule within the 10-month school calendar. The desire to break free from the constraints of traditional school is evident with the emergence and increased enrollment of students in non-traditional educational programs, such as cyber, magnet, charter, and private schools. Research has indicated that the customization offered by cyber, charter, and private schools more effectively meets the diverse needs and learning preferences of the full continuum of students from those that demonstrate giftedness to those with cognitive impairments (Watson & Gemin, 2008). Public school must recognize that with the departure of 16,000 students to cyber schools and over 50,000 students to charter schools, the time has come to reform America's public

school system (Reach Foundation, 2012).

The idea of personalized learning would have seemed inconceivable a generation ago, but with the array of technologies available to schools today, this type of systematic reform can be a reality. Schools have dabbled in personalization to meet the needs and interests of students through the introduction of online courses, computerized interventions, interactive message boards and discussion tools, along with other digital solutions. This study revealed that students who dropped out of this high school were seeking flexible options for credit accrual along with opportunities to engage in courses they believed were necessary to meet their post high school aspirations. This finding calls for schools to harness technology to meet these students' needs and personalize learning for these at-risk youth. The finding supports the findings of other researchers (e.g. Kaczynski, 1989; Mulroy, 2008) that to begin this reform, educators must start with the students themselves. Through the process of early identification followed by the establishment of student-teacher partnerships, educators can assist students in designing a learning plan through the lens of their individual aspirations. Students will then be given the autonomy to select their pathway for demonstrating mastery of learning. In the last several years this reform effort has gained exposure due to the work of Schwahn and McGarvey (2010), who represent leading proponents for personalizing learning.

To achieve personalized learning school reformers must align their vision for change with several key elements suggested in the report, "Innovate to Educate: System [Re] Design for Personalized Learning" (Wolf, 2010):

- flexible/anytime anywhere learning;
- redefining the role of a teacher;
- the use of project-based and authentic learning; and

- a shift to mastery/competency-based progression and pacing.

This paradigm shift will require school leaders to take the following action steps:

- Gaining support for the vision of personalized learning for all stakeholders;
- Re-training teachers to become facilitators for knowledge acquisition;
- Educating parents and guardians on the changes to the educational landscape and what personalized learning means to their children;
- Re-defining assessment practices to allow for demonstration of knowledge;
- Developing infrastructure within the school where personalization is parallel with strong student-teacher partnerships; and
- Ensuring equity and access to innovative technologies that make personalization possible. (p.7)

The shift to a more personalized learning environment serves to acknowledge the interests and aspirations of the students enrolled in high school. This level of personalization and flexibility for diploma attainment potentially fulfills the needs of at-risk students, who in this study shared a longing to be listened to and offered courses necessary for their future. This finding along with the research regarding the importance of establishing relationships (Bronfenbrenner, 1979; Mulroy, 2008; Tinto & Pusser, 2006) and offering relevant courses (Kaczynski, 1989) to students who are at-risk, urges school leaders and policy makers to work collectively to reinvent the educational system by capitalizing on the digital revolution to ensure personalized learning for students. Through policy revisions and inclusion of on-line learning and digital content for students, true personalization can be achieved and can serve as a means to address the dropout epidemic that has plagued the United States for decades.

Rural Reform Efforts

A critical feature of the high school incorporated in this study was its designation as a rural-remote locale by the Pennsylvania Department of Education. This designation indicates that this community is geographically positioned more than fifty miles from a metropolitan area. Outlined in chapter two were the current conditions of the dropout epidemic in rural school districts, which show the conditions of rural schools being equally as bleak as the conditions of urban schools. Schools from every geographic classification possess their own unique set of challenges, but they also possess a set of strengths that can be leveraged to address and deploy the dropout prevention strategies recommended in this study.

The challenges for rural schools have been documented in the research as limited curricular options which result in limited offerings of elective, vocational and advanced placement courses (Alexander, 2002; Hudson & Schafer, 2002). Some contend that this limited exposure to diverse curricula makes the rural student's education inferior to the programs offered to students in urban and suburban school districts (Edington & Koehler, 1987). The curriculum that is offered in rural schools is often designed to prepare students for employment within the local community; however, with the decline in available jobs within these rural communities it is incumbent upon rural school leaders to shift that thinking and design educational organizations that prepare students with the knowledge and skills necessary to find employment outside their rural community.

Other challenges facing rural schools are limited financial resources, lower expectations for post-secondary options, and limitations due to transportation. Specifically, rural locales often have a limited tax base, which then limits the support offered by local funding. The lack of local funding typically yields lower per pupil expenditures, which in turn then limits the resources and

course offering available to students within rural schools (Johnson, Strange, & Madden, 2010). These fiscal implications have been shown to impact teacher quality due to lower salary wages for teachers in rural schools; limited access to technology, which then in turn limits students' exposure to online course options; and limited access to after school programs and activities resulting from increasing costs of transportation (Howley, 2013; Johnson, Strange & Madden, 2010; Owens & Waxman, 1996). As outlined in the findings of this study, high expectations and harnessing technology to personalize learning for at-risk youth are critical to dropout prevention; therefore, rural school leaders must utilize the strengths found in rural schools to mitigate the challenges faced by rural schools students and educators.

Rural school leaders can leverage the unique features of rural schools to implement the proactive strategies and targeted interventions described in this study. Research has shown that rural schools possess the following assets: high levels of family engagement, a smaller, more personalized learning environment, and perhaps greater flexibility for creative program development (Barley & Beesley, 2007; Howley, 2013; Lee & Burkam, 2003).

For decades research has concluded that family engagement is critical to promoting academic success of students (Fan & Chen, 2001; Barley & Beesley, 2007). Rural schools are in the unique position of often being the hub of the community, which draws residents of the community into the schools for both school and community events, which yields a greater connection between home and school (Witte & Sheridan, 2011). To further enhance this connection is the reality that it is typical for the teaching staff within rural schools to be the advisors of sports and clubs, reside within the school community where they are employed, and have likely grown up within this community resulting in multigenerational connections with the students they teach (Howley, 2013). It is these strong relationships that rural school leaders can

leverage to enact school reform efforts to improve the completion rates of rural high schools. Specifically, these relationships are likely to yield greater support for the vision of personalized learning, a more collaborative relationship between the advocate and parents and guardians, and greater trust and support for the personalized plan developed to support school completion for a student at-risk for dropping out of school.

A second feature of rural schools that can enhance dropout prevention efforts is that of smaller school size. While this study's findings did not isolate school size as highly influential to dropout decision making, extensive research has concluded that small school size does impact the completion rates of high schools (e.g. Corsnoe et al., 2004; Lee & Burkam, 2003). The research has shown that smaller schools often have a more supportive and personalized environment, which yields stronger connections between teachers and students. It is these connections that have been found in this study as well as in previous research to support student persistence (Bronfenbrenner, 1979; Mulroy, 2008; Roderick, 1993; Tinto & Pusser, 2006). Small schools have the capacity to more easily harness this asset to support the implementation of the student-teacher advocate partnership that was described in this study as a means of dropout prevention.

Finally, there is one feature of rural school environments that cannot be missed, which is the creativity and flexibility of those who lead rural school reform. These attributes are necessary in a rural school leader due to the limited access rural schools have to outside resources which are easily accessible to urban and suburban schools. The power of creativity and flexibility of rural school leaders to design and implement proactive strategies and targeted interventions outlined in this study is possible due to the relatively flat nature of the school organization in rural settings. Change in small schools is often less complicated due to fewer

layers within the organization and greater communication, responsibility, and support through consensus (Nelson, 2010). Paired with strong family engagement, creative school reform efforts may be more likely to be effective and sustainable with a rural community.

While efforts to categorize schools by geography continue to shape how organizations are defined it is critical that educators and policy makers realize that even schools that are classified similarly possess their unique attributes and needs. While there are assets common among rural schools it is the challenge of leaders within rural schools to determine how these assets can be leveraged to implement sustainable dropout prevention efforts within their individual schools.

Strategies to Enhance Student Engagement

The ability of teachers to effectively engage students in learning is a critical element that should be discussed in combination with the proactive strategies and targeted prevention efforts suggested in this study. Even with systematic efforts to provide students with multiple and personalized pathways for diploma attainment, and transition academies to minimize the impact of the transition to high school and foster stronger relationships between students at risk and their peers and teachers, the quality and effectiveness of daily instruction must also support student engagement. This feature within the school organization is critical given findings of the current study along with the extensive research that student engagement is influential to dropout decision making (e.g. Finn, 1989; Mulroy, 2008; Roderick, 1993; Tinto & Pusser, 2006).

Barkley (2010) defined engagement as “the synergistic interaction between motivation and active learning” (p.8) and Umbach and Wawrzynski (2005) reported that teachers play the most important role in facilitating this interaction; therefore, it is important to discuss the qualities of teaching that have been shown, through research, to promote student engagement. The research reveals that there are strategies that are intended to establish a culture for

engagement as well as instructional practices to facilitate student engagement, and this engagement is seen as necessary to facilitate motivation for learning.

Claxton (2007) suggested the following strategies to establish an environment where student engagement can thrive.

- language – speak “learnish” (talk about process of learning, nature of oneself as a learner, one’s improvements and intentions as a learner)
- activities – a potentiating milieu (learning is both attractive and challenging; activities and topics that stretch the learners)
- split-screen thinking – the warp and weft (keeping both content and process in mind; make sure students understand *how* they just learned some content; embed metacognition into lesson plans)
- wild topics – rich, real, responsible (problems or projects are real, relevant, and make a positive difference in some way – real life feedback and benefits for all)
- transparency and involvement – students as epistemic co-workers (students are made aware of what’s going on, given significant input or control in assessing their own learning and learning styles)
- transfer thinking – looking for wider relevance and application (explicitly discussing where current learning could be useful: What else could we do with this? Where else would this be useful knowledge?)
- progression – stronger, broader, deeper into subjects and learning
- modeling – walking the learning talk (Claxton, 2006, pp. 9-14)

Claxton (2007) suggests that teachers frame their instruction to make learning relevant, transparent, challenging, and safe for students to take risks. However, merely establishing a

culture for engagement is not enough and teachers must implement instructional practices that transform their role to that of a facilitator for knowledge acquisition. Dunleavy and Milton (2009) shared a list of common instructional practices that promote engagement:

- Emphasize conceptual learning and opportunities for students to work with authentic ideas and problems, develop a deep understanding of ideas, sort through misconceptions, learn new ideas and create or improve upon ideas, see conceptual connections across disciplines.
- Require high levels of student participation and provide time for in-depth work.
- Incorporate authentic assessment as a strategy that helps students set goals and assess their own learning.
- Use work that is relevant, interesting, and connects with students' aspirations; is rigorous and allows students to think as "professionals" and create professional" quality outcomes; is challenging and allows students to experience a sense of deep intellectual and emotional investment in learning; is built from diverse and improvable ideas; and is informed by the current state and growing knowledgebase of different subject disciplines.
- Promote students' sense of ownership and responsibility for their own learning.
- Invite students to be co-designers of their learning in classrooms; support student voice and autonomy.
- Provide a high level of social support for learning and encourage students to take risks, ask questions, and make mistakes.
- Foster collaboration and community building.
- Engage students in becoming literate with technologies as social networking knowledge building tools.

- Connect students with opportunities to develop abilities in critical thinking, intellectual curiosity, reasoning, analyzing, problem solving, communicating, etc.
- Bridge students' experience of learning in and outside of school by exposing them to digital technologies in knowledge building environments (Dunleavy & Milton, 2009, p. 13-14).

Dropout prevention reform efforts are multifaceted and require school leaders and educators to explore all facets of the organization to support student persistence. The findings of this study suggest that school structure and teacher relationships are critical to influencing dropout decision making; however, teachers' instructional practices can be shaped to promote students engagement, which has been shown to promote greater completion rates in high schools (e.g. Lee & Burkam, 2003; Mulroy, 2008; Tinto & Pusser, 2006). Principals play an essential role in ensuring that effective instruction is occurring in all classrooms. To facilitate the practice of classroom instruction that engages students, effective principals should offer teachers what effective teachers offer at-risk youth, support. Assuming a proactive role that supports the inclusion of instructional practices that foster student engagement would include: (1) engaging teachers in meaningful discourse about the importance of student engagement and dropout decision making; (2) allocating the resources necessary to implement instructional practices that promote engagement; (3) supervising instruction with feedback specific to instructional engagement; (4) monitoring of at-risk students' progress; and (5) the coordinating professional development to enhance teachers' ability to implement instructional practices that promote greater levels of student engagement. If the instructional practices of teachers are serving to effectively engage students in learning it may serve to limit the numbers of students who are identified as at-risk for quitting school and who need the targeted interventions suggested in this

study.

Recommendations for Future Research

This study extended the literature on the influence of school organizational and social relationship factors in dropout decision-making. The use of explanatory mixed-method design was essential to providing a deeper analysis and understanding of the quantitative findings. The inclusion of the perceptions of high school dropouts is scarce in the literature and offered an insightful perspective of the dropout phenomenon. The implications for practice that emerged from this research were that schools be restructured to specifically address the needs of at-risk students. This restructuring must include an early intervention system to be universally implemented, the allowance for school personnel to design graduation plans that afford at-risk students choice in the pathway to diploma attainment, and the commitment of school resources to ensure the existence of sustained student-teacher relationships. The proposal of a systematic change to a personalized learning model leads to several recommendations for future research.

Recommendation 1- Early Identification

The findings from this study revealed that early identification of students who possess negative perceptions of the school and school staff is critical to intervention and dropout prevention. A researcher might seek to utilize the survey instrument used in this study in combination with school-based record review and focus groups to discover whether the instrument effectively identifies at-risk youth at various grade levels.

Recommendation 2 – Sustainable Student-Teacher Relationships

This study found that student-teacher relationships play an integral role in dropout prevention. Research could be devoted to a detailed examination of the nature of how this relationship influences dropout decision-making. Specifically, a researcher could identify

students at-risk for dropping out and seek to determine the specific supports and interventions necessary for school completion.

Recommendation 3 – Personalized Learning

Relevance is key to promoting persistence (Mulroy, 2008; Roderick, 1993). The nine participants in this study affirmed that the absence of relevance for learning was a significant contributor to the decision to quit school and shared that more flexibility in what, where, and how they learned the content could have prevented them from dropping out. To that end, additional research should be dedicated to exploring the effectiveness of the varied instructional pathways (e.g. blended learning, cyber learning, and cooperating vocational experiences) on preventing high school attrition.

Recommendation 4 – Personalized Learning

The digital revolution has altered the landscape of education and allowed for greater customization of learning. Based on the importance of personalization in preventing school attrition, research should be devoted to exploring which technologies are the most effective for achieving personalized learning in the K-12 school system.

Recommendation 5- Personalizing Learning

Since the inclusion of the voices of high school dropouts is sparse in the literature, and this study was limited to the inclusion of nine students from a rural school, it is important that replication studies be conducted with larger sample of students who have dropped out from high schools in varied geographic areas.

Conclusion

This mixed-methods explanatory study was initiated as schools in the United States engage in a multitude of reform efforts aimed to prevent more than one million students from

dropping out of high school each year. The backdrop for these reform efforts is the demand of an increasingly skilled workforce prepared to participate in a globally competitive economy. The topic of school attrition has been researched and debated; yet the solution to this epidemic remains elusive.

This study was designed to reveal which of the commonly researched school organizational and social relationship factors have the most influence on student dropout decision-making. In addition, students who had already dropped out of school were included to add depth as to how and why these factors had such an impact, and what school personnel could have done to alter students' decisions to quit school.

Three critical factors to dropout prevention emerge from the findings and implications of this study: early identification, sustained student-teacher partnerships, and personalized learning. Placing these factors at the core of the educational systems calls for a true paradigm shift and dramatic change in how school is conducted in the United States. This change has significant implications for the nation's educators and policy makers, which begins with the shift from the assembly-line educational model used for centuries, to a personalized learning model. This transition will require the development of a reliable early warning instrument, continued research on which digital platforms are most effective for student learning, and extensive professional development for school personnel. This bold transition to a personalized learning model addresses the needs of at-risk youth and offers hope that all students can earn a high school diploma.

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Appendix A

Survey for Formerly Enrolled Students

Directions: On the accompanying Scantron form, please complete each question by filling in the response that reflects your perceptions of high school using the following scale.

(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

1. The classes I took at school were important to my future schooling or career.
2. The classes at my school were challenging.
3. The school offered me help to ensure success in my classes.
4. The classes offered at my school were interesting to me.
5. The dropout prevention program at my high school could have helped me graduate.
6. The stress of standardized testing (e.g. PSSA, SAT, ACT, Keystone) made me dislike school.
7. Having to take re-take classes made it difficult for me to graduate.
8. My school offered enough extracurricular options to keep me involved in school.
9. If I participated more in extracurricular activities I might have remained in high school.
10. Failing a class made it difficult to graduate school on time.
11. I would have gone to summer school if doing so meant I could have graduated high school on time.
12. The small size of my high school created a more personal learning environment.
13. Because my school was small in size I received the academic support I needed from teachers.
14. The small size of my high school allowed my teachers to give me individual attention.

15. The possibility of failing a grade while in high school made me consider dropping out of school.
16. Tutoring programs offered at my high school could have helped me graduate.
17. In my high school, there was more than one way (e.g. vocational-technical programs, on-line courses, college courses, credit recovery courses) to earn a high school diploma.
18. My teachers expected me to do well in their classes.

Survey for Formerly Enrolled Students (Page 2)

Directions: On the accompanying Scantron form, please complete each question by filling in the response that reflects your perceptions of high school using the following scale.

(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

19. My principal expected me to do well in my classes.
20. My teachers cared about my success in school.
21. My teachers offered tutoring opportunities to ensure my success.
22. If I had trouble with my friends, there was an adult at my high school I could talk to.
23. My teachers talked to me about how to improve my schoolwork.
24. My teachers designed lessons that kept me involved during class.
25. My teachers expected me to graduate from high school.
26. There was an adult in my high school that could help me deal with difficult situations in my life.
27. The adults in my high school listened to my concerns.
28. My teachers treated me with dignity and respect.
29. My friends and I participated in school sponsored extracurricular activities together.
30. I had friends who attended high school with me.
31. My friends cared about graduating from high school.
32. Having strong friendships at school was important to my success in school.
33. My friendships were with students who went to my high school.

34. While attending high school, I had friends who had dropped out of high school.

35. Not having friends at school made me want to drop out.

36. My friendships kept me interested in high school until I dropped out.

37. Being bullied would have made me want to drop out of high school.

38. I had friends who had discipline problems at school.

39. My friends all graduated from high school in four years.

Appendix B

Survey for Currently Enrolled Students

Section 1: Demographics

Directions: On the accompanying Scantron form, please complete each question by filling in the response that reflects your individual experience in high school.

1. I have seriously considered dropping out of high school (some examples include: having talked with parents or meeting with school staff about the process for dropping out).

(a) Yes

(b) No

Section 2: School Perception

Directions: On the accompanying Scantron form, please complete each question by filling in the response that reflects your perceptions of high school using the following scale.

(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

2. The classes offered at my school are important to my future schooling or career.

3. The classes offered at my school are challenging.

4. The school offers me help to ensure success in my classes.

5. The classes offered at my school are interesting to me.

6. If I needed it, the dropout prevention program at my high school would support my goal of graduating in four years.

7. The stress of standardized tests (e.g. PSSA, SAT, ACT) makes me dislike school.

8. Having to re-take classes has made it difficult for me to graduate.

9. My school offers enough extracurricular options to keep me involved in school.

10. Extracurricular activities are the reason I stay in high school.
11. Failing a class would make it difficult for me to graduate school on time.
12. I would go to summer school to make sure that I graduated high school on time.
13. The small size of my high school creates a more personal learning environment.
14. Because my school is small in size I receive the academic support I need from teachers.

Survey for Currently Enrolled Students (Page 2)

Directions: On the accompanying Scantron form, please complete each question by filling in the response that reflects your perceptions of high school using the following scale.

(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

15. The small size of my high school allows my teachers to give me individual attention.
16. The possibility of failing a grade in high school would make me consider dropping out of school.
17. Tutoring programs offered at my high school have supported my goal of graduating high school.
18. Within my high school, there is more than one way to earn a high school diploma (e.g. vocational-technical programs, on-line courses, college courses, credit recovery courses).
19. My teachers expect me to do well in their classes.
20. My principal expects me to do well in my classes.
21. My teachers care about my success in school.
22. My teachers offer tutoring opportunities to ensure my academic success.
23. If I am having trouble with my friends, there is an adult I can trust and talk to at my high school.
24. My teachers talk to me about how to improve my schoolwork.
25. My teachers design lessons that keep me involved during class.
26. My teachers expect me to graduate from high school.
27. There is an adult in my high school that can help me deal with difficult situations in my life.
28. The adults in my high school listen to my concerns.

- 29. My teachers treat me with dignity and respect.
- 30. My friends and I participate in school sponsored extracurricular activities together.
- 31. I have friends who attend my high school.
- 32. My friends care about graduating from high school.
- 33. Having strong friendships at school are important to my success in school.

Survey for Currently Enrolled Students (Page 3)

Directions: On the accompanying Scantron form, please complete each question by filling in the response that reflects your perceptions of high school using the following scale.

(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

- 34. My friendships are with students who go to my high school.
- 35. I have friends who have dropped out of my high school.
- 36. If I did not have friends at school I would want to drop out.
- 37. My friendships keep me engaged in high school.
- 38. Being bullied would make me want to drop out of high school?
- 39. I have friends who have discipline problems at school.
- 40. My friends will all graduate high school in four years.

Appendix C

Research Study Interview Guide

Title: A Mixed Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School.

Primary Investigator: Andrea J. Farina

Time: _____ Date: _____ Location: _____

Purpose: The purpose of the study is to identify the school organizational factors (e.g. high-stakes testing, graduation requirements, retention, and school size) and social relationship factors (e.g. student-teacher relationships and peer relationships) that have the most impact on high school students. I am specifically looking to identify the factors that most significantly influence a student's decision to quit school and how these factors become insurmountable obstacles to graduating from high school.

Questions:

1. Was there a specific event that led you to drop out of high school?
 - a. If yes, can you describe what it was?
 - b. If no, then were there any school factors or social experiences that led to your decision to drop out of school?
2. Could the school staff have stopped you from dropping out of high school?
 - a. If yes, please describe the steps they could have taken to support you to graduate high school.
 - b. If no, please describe why school staff could not have helped you graduate high school.
3. Based on survey responses provided by the participant, the researcher will ask additional probing questions to gain greater insight on the participant's perceptions of specific features of the high school. Examples of follow up questions are:
 - a. You responded that you did not believe the tutoring options offered would have helped you earn a diploma. Can you tell me what type of academic support could have been given to you to help you stay in school?
 - b. You agreed that if you had participated in more extracurricular activities you might have remained in school. Can share your thoughts on the following:
 - i. What types of activities you would have participated in.
 - ii. How could the school staff have helped you become more involved in the options at the school?
 - c. Your response indicated that you did not have close friends at school. Can you share your thoughts on:
 - i. Why you were not able to establish friendships at school?
 - ii. How could the school staff have supported your development of friendships?
 - iii. Do you believe that not having friends made it easier to drop out? If so, why?

Appendix D

Transcript of the Email to Expert Panel

Good Afternoon,

My name is Andrea Farina, and I currently serve as an administrator in the Palisades School District. Educationally, I have been working to obtain my doctoral degree at East Stroudsburg University of Pennsylvania and Indiana University of Pennsylvania.

The purpose of the study is to identify the school organizational factors (e.g. high-stakes testing, graduation requirements, retention, and school size) and social relationship factors (e.g. student-teacher relationships and peer relationships) that have the most impact on high school students. This research is specifically attempting to identify the factors that most significantly influence a student's consideration to drop out of high school.

Prior to conducting this study it is necessary for me to establish content and construct validity for the survey instrument and interview guide that will be utilized in the research study. Following the recommendations of Creswell (2008), I am working to establish an expert panel to review the instruments to enhance the credibility of the research findings. Panel members will be asked to carefully review the instrument development process as well as the instrument content, and to make a judgment about how well the survey and interview questions represent the school organizational and social relationship factors prevalent in the research on school persistence. Additionally experts will review each question and provide recommendations or revisions to ensure alignment with the purpose and intent of this study. When reviewing the survey and interview questions the experts will also be asked to assess the clarity and structure of the questions in an effort to avoid wordiness, jargon, unbalanced response options, and redundancy which all impact the quality and usefulness of an instrument (Creswell, 2008).

Given your experience in the field of secondary education and knowledge of high school persistence I am seeking your participation on the expert panel. If you agree to participate on the panel please let me know via email by February 11, 2013. Upon agreement I will send you an email including links for the surveys, and interview guide for your review. I ask that all revisions and recommendations be returned to me via email by February 18, 2013.

I thank you in advance for your time and appreciate any support you can offer me in the completion of this research study. If you have any questions, please contact me via phone at 267-563-0050 or email at ajfarina7@gmail.com.

Sincerely,

Andrea J. Farina

Primary Researcher/Doctoral Student

East Stroudsburg University/Indiana University of Pennsylvania

Appendix E

Superintendent/District Letter of Approval for Pilot Study

Title: A Mixed Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School.

Primary Investigator: Andrea J. Farina

Dear Dr. Bridget O'Connell:

My name is Andrea Farina and I currently serve as an administrator in the Palisades School District. Educationally, I have been working to obtain my doctoral degree and this study is being done in partial fulfillment of a doctoral degree in Administration and Leadership offered by Indiana University of Pennsylvania in collaboration with East Stroudsburg University. By granting me permission to survey your students, you will be contributing to the body of knowledge on the causes of high school dropout. The findings of this study will be important to educators, policymakers and students. Your agreement to permit your students to participate in the study is completely voluntary.

The purpose of the study is to identify the school organizational factors (e.g. high-stakes testing, graduation requirements, retention, and school size) and social relationship factors (e.g. student-teacher relationships and peer relationships) that have the most impact on high school students. I am specifically looking to identify the factors that most significantly influence a student's decision to drop out of high school.

Prior to conducting this study it is necessary for me to establish content and construct validity for the survey instrument and interview guide that will be utilized by conducting a pilot study. Due to the rural status and high achievement and graduation levels, I am requesting your permission to conduct my pilot study at Palisades High School. The pilot study will include current 12th grade students enrolled in English 12 and two students who have dropped out of Palisades High School in the past 2 years. I am seeking permission to gather data through the use of a 40-question survey of seniors that will be followed by a question and answer session for the purpose of gaining feedback for the students regarding the utility of the survey instrument.

In order for me to move forward in this process, the East Stroudsburg University IRB is requesting receipt of a signed consent form on your school district letterhead. I am providing a detailed explanation of the purpose and procedures that would be implemented during this pilot study. The consent letter should be faxed to 215-631-7098, Attn: Andrea J. Farina and the original letter should be sent to: Andrea J. Farina, 463 School Lane Harleysville, PA 19438.

I thank you in advance for your consideration of my request to conduct a pilot study at your school district. Should you have any questions regarding this request please do not hesitate to contact me by phone at 267-563-0050 or email at ajfarina7@gmail.com.

Sincerely,

Andrea J. Farina

Primary Researcher/Doctoral Student

Appendix F

Pilot Site Superintendent Permission Letter



PALISADES SCHOOL DISTRICT

39 Thomas Free Drive, Kintnersville, PA 18930 ♦ Bucks County ♦ www.palisadessd.org ♦ 610.847.5131

December 28, 2012

Institutional Review Board
East Stroudsburg University
East Stroudsburg, PA 18301

Dear IRB Members,

After reviewing the proposed study, "A Mixed-Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School", I am granting Andrea J. Farina, A doctoral student at Indiana University of Pennsylvania and in collaboration with East Stroudsburg University permission to conduct a research pilot study at Palisades High School.

The purpose of this explanatory mixed methods study will be to determine which of the school organizational and social relationship factors have the most influence on high school attrition. The study will also explore how and why these factors created an insurmountable obstacle to high school graduation. The researcher will conduct this pilot study at Palisades High School for the purposes of establishing content and construct validity for the survey instrument and interview guide. The researcher will be administering a student perception survey to seniors with signed consent and assent forms during one administration period, which should take no longer than 30 minutes. Following survey administration, the students will also be asked to provide the researcher with feedback regarding the clarity of the instrument, which should take no more than 15 minutes. I also understand that 2 former students who have dropped out of Palisades High School will participate in an individual, face-to-face interview following the completion of the student perception survey, which should take no more than one hour to complete. These former students will also be asked to provide feedback regarding the clarity of the survey and interview questions.

Mrs. Farina has agreed to provide my office with a copy of all East Stroudsburg University and Indiana University of Pennsylvania IRB-approved, stamped consent and assent documents before participants are recruited at the high school. I understand that for the purposes of recruiting participants, Mrs. Farina will contact the parents of all seniors enrolled in English during the first semester through a letter sent home with students, an email, and phone message. I understand that participation is voluntary and that Mrs. Farina will receive parent consent and student assent forms for currently enrolled students and informed consent forms for formerly enrolled students.

Mrs. Farina has also indicated that any data collected will be kept confidential and will be stored in a locked file cabinet in her office at her home. I understand that no personally identifiable student information will be associated with the study and there is no compensation for the school or participants in this researcher study.

If the IRB has any concerns about the permission being granted by this letter, please contact me by email bconnell@palisadessd.org or phone at 610-847-5131 ext. 4001.

Sincerely,

Bridget O'Connell

Superintendent, Palisades School District

Palisades High School (PHS)
35 Church Hill Road
Kintnersville, PA 18930
610.847.5131 Press 2

Palisades Middle School (PALMS)
4710 Durham Road
Kintnersville, PA 18930
610.847.5131 Press 1

Durham-Nockamixon Elementary School
41 Thomas Free Drive
Kintnersville, PA 18930
610.847.5131 Press 3

Springfield Elementary School
1950 Route 212
Quakertown, PA 18951
610.847.5131 Press 6

Tinicum Elementary School
162 East Dark Hollow Road
Pipersville, PA 18947
610.847.5131 Press 7

Appendix G

Parent Cover Letter for Pilot Study

Dear Parent or Guardian:

My name is Andrea Farina, and I currently serve as an administrator in the Palisades School District. Educationally, I have been working to obtain my doctoral degree at East Stroudsburg University of Pennsylvania and Indiana University of Pennsylvania. I am conducting a research project on the school organizational and social factors that most significantly influence a student's consideration to drop out of high school. I request permission for your child to participate in a pilot study being conducted at Palisades High School.

The project will be explained in terms that your child can understand, and your child will participate only if he or she is willing to do so. The study requires your son/daughter to complete a 41-question survey regarding their individual experiences in high school. It will take them approximately 30 minutes or less to complete. Following the completion of the survey the students will be asked to provide the researcher feedback on the clarity of the directions and questions enclosed in the survey, this process should take no more than 15 minutes. There will be minimal risk to your child as each participant will complete the survey anonymously and all data will be maintained in a locked file cabinet in the residence of the researcher.

Participation in this study is voluntary. Your decision whether or not to allow your child to participate will not affect the services normally provided to your child by Palisades High School. Your child's participation in this pilot study will not lead to the loss of any benefits to which he or she is otherwise entitled. Even if you give your permission for your child to participate, your child is free to refuse to participate. If your child agrees to participate, he or she is free to withdraw his or her participation at any time without penalty. You and your child are not waiving any legal claims, rights, or remedies because of your child's participation in this pilot study. If you are willing to allow your child to participate, please print, sign, and return the attached PARENT CONSENT form to the high school main office by February 18, 2013.

The East Stroudsburg University of Pennsylvania Institutional Review Board has approved this project for the Protection of Human Subjects. If you have any questions about the study, please contact:

Primary Investigator: Andrea J. Farina at 267.563.0050 or ajfarina7@gmail.com

Dissertation Chairs: Dr. Patricia Smeaton 570.422.3363 psmeaton@po-box.esu.edu

Dr. Crystal Machado 724.357.2400 crystal.machado@iup.edu

If you have any questions about your rights, or are upset in any way about the study, you can contact Dr. Shala Davis, Administrator, Institutional Review Board, and East Stroudsburg University at 570.422.3336, or at sdavis@po-box.esu.edu.

Sincerely,

Andrea J. Farina

Primary Researcher/Doctoral Student

East Stroudsburg University/Indiana University of Pennsylvania

Appendix H

Parent Informed Consent for Pilot Study Involving Human Subjects

Title of Project: A Mixed Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School.

Institution: East Stroudsburg University/Indiana University of Pennsylvania

Primary Investigator: Andrea J. Farina

I. Purpose of this Research/Project

The purpose of the study is to identify the school organizational factors (e.g. high-stakes testing, graduation requirements, retention, and school size) and social relationship factors (e.g. student-teacher relationships and peer relationships) that have the most impact on high school students. This research is specifically attempting to identify the factors that most significantly influence a student's decision to drop out of school and how these factors become insurmountable obstacles to graduating from high school.

Approximately 30 students who are enrolled in senior English at Palisades High School will be surveyed.

II. Procedures

Students will participate in a survey that will take approximately 30 minutes to complete. The survey will require the students to complete both a demographic and school perception section related to their lived school experiences. The demographic section will have the students identify their age and consideration of dropping out of high school. The school perception section of the survey will require students to respond to questions related to the influence of the school organizational and social relationship factors on their consideration of dropping out of school using a Likert or preference scale.

Students are asked to be open and honest about their experiences in school. The following closed-response questions represent examples of an organizational and social relationship question embedded in the survey.

Organizational:

The courses offered at my school are relevant to my future schooling or career.
(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

Social Relationship:

Having strong friendships at school are critical to my academic success.
(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

Following the completion of the survey the researcher will ask students to provide feedback regarding the clarity of the directions and survey questions. They will be asked to identify the elements of the survey that were confusing along with suggestions or ideas that would enhance other students' ability to complete this survey. This portion of the meeting will take no more than 15 minutes to complete.

III. Risks

There are minimal risks associated with this study. Students may suffer some emotional distress by having to recall experiences at school or with peers that were not pleasant for them. Counseling will be available through the guidance staff at the high school should it be desired or if requested.

IV. Benefits

Society and schools specifically will benefit from hearing high school students' experiences. The information gathered may lead to the development of programs designed to better meet the needs of students who are at risk of dropping out of school.

Parent Initials _____

Page 1 of 2

V. Extent of Anonymity and Confidentiality

For the purpose of the pilot study all participants' identities are confidential and no information related to the study will be shared with school personnel. All data collected from the pilot study will be kept in a locked file cabinet at the researcher's home with access available only to the researcher.

VI. Compensation

There will be no money given to students for participating in this pilot study.

VII. Freedom to Withdraw

Students are free to end their participation in this pilot study at any time without penalty. Students are also free to not answer any questions that are asked. If there are circumstances that arise during the completion of the survey and it is determined that the student should not continue as a participant, the survey session will end immediately.

VIII. Subject's Responsibilities

Students who voluntarily agree to participate in this study will have following responsibilities:

- The participant agrees to complete the survey as described in the directions
- The participant agrees to discuss any confusion or concerns with the researcher following the completion of the survey.

IX. Contact Information

The East Stroudsburg University of Pennsylvania Institutional Review Board has approved this project for the Protection of Human Subjects. If you have any questions about the study, please contact:

Primary Investigator: Andrea J. Farina at 267.563.0050 or ajfarina7@gmail.com

Dissertation Chairs:

Dr. Patricia Smeaton 570.422.3363 psmeaton@po-box.esu.edu

Dr. Crystal Machado 724.357.2400 crystal.machado@iup.edu

If you have any questions about your rights, or are upset in any way about the study, you can contact Dr. Shala Davis, Administrator, Institutional Review Board, and East Stroudsburg University at 570.422.3336, or at sdavis@po-box.esu.edu.

X. Parent Permission

I have read the Parent Informed Consent Form and conditions of this project. As a parent I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for my child to participate in this pilot research study. I acknowledge that a copy of the signed consent form will be sent to me for my records.

Printed Name of Child

Date

Signature of Parent/Guardian

Printed Parent/Guardian Name

Parent Initials _____

Page 2 of 2

Appendix I

Transcript for Email Request for Participation in Pilot Study

Good Afternoon,

My name is Andrea J. Farina and I am a doctoral student at East Stroudsburg University and Indiana University of Pennsylvania and an administrator in the Palisades School District in Bucks County Pennsylvania. I need the help of your child. I am currently working on a study that explores the experiences of high school students and their perceptions of how school organizational features and social relationship experiences impact students' decisions to graduate from high school. The first phase of this study requires the validation of the survey instrument by the means of a pilot study. During the pilot study I am testing a survey instrument and interview questions. Because Palisades School District reflects a similar rural profile and has similar student demographic and achievement levels as the site selected for my study, I am asking parents of all seniors for consent to having their children surveyed for the purpose of validating the survey instrument.

The project will be explained in terms that your child can understand, and your child will participate only if he or she is willing to do so. The pilot study requires your son/daughter to complete a 40-question survey about their individual experiences in high school. It will take them approximately 30 minutes or less to complete. Following the completion of the survey the students will be asked to provide the researcher with feedback about the clarity of the directions and questions enclosed in the survey, this should take no more than 15 minutes. There will be minimal risk to your child as each participant will complete the survey anonymously and all data will be maintained in a locked file cabinet in the residence of the researcher. The sole intent of the pilot study is to gain feedback from those being surveyed to ensure clarity of procedures and questions, and eliminate any confusion prior to use at the primary study site.

Coming home with your child today is a copy of the informed consent necessary for your child's inclusion in this pilot study. I ask that you review this document, identify whether you consent to your child's participation or not and return the documents with your child by February 18, 2013. If you have questions or concerns regarding the pilot study that must be addressed prior to deciding on participation, I can be contacted by email at ajfarina7@gmail.com or by phone at 267-563-0050. Thank you for your time and consideration.

Sincerely,
Andrea J. Farina

Primary Researcher/Doctoral Student
East Stroudsburg University/Indiana University of Pennsylvania
Attachments:
Parent Informed Consent Forms
Student Assent Form

Appendix J

Student Assent Form for Pilot Study Involving Human Subjects

Title of Project: A Mixed Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School.

Institution: East Stroudsburg University/Indiana University of Pennsylvania

Primary Investigator: Andrea J. Farina

I. Purpose of this Research/Project

The purpose of the study is to identify the reasons that high school students might drop out of high school and what school personnel could do to support all students in earning a high school diploma.

Approximately 30 students enrolled at Palisades High School will be surveyed.

II. Procedures

The survey will take you approximately 30 minutes to complete. The survey will ask you to complete both a demographic and school perception section related to your lived school experiences. The demographic section will have you identify your age and your consideration of dropping out of high school. The school perception section of the survey will require you to respond, using a Likert-scale, to questions related to the influence of the school organizational and social relationship factors on your ability to graduate.

You will be asked to be open and honest about your experiences in school. The following closed-response questions represent examples of an organizational and relationship question embedded in the survey.

Organizational:

The courses offered at my school are relevant to my future schooling or career.

(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

Social Relationship:

Having strong friendships at school are critical to my academic success.

(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

Following the completion of the survey the researcher will ask you to provide feedback regarding the clarity of the directions and survey questions. You will be asked to identify the elements of the survey that are confusing along with suggestions or ideas that would enhance other students' abilities to complete this survey. This portion of the meeting should take no more than 15 minutes to complete.

III. Risks

There are minimal risks associated with this study. You may be upset by having to recall experiences at school or with peers that were not pleasant for you. If you are upset while taking the survey or afterwards, you can talk with the school guidance counselor about those feelings.

IV. Benefits

School staff may better understand what students need by hearing about your experiences. The results of the study may lead to the development of programs that can better meet the needs of students who are at risk of dropping out of school.

No promises or guarantees of benefits have been made to encourage you to participate.

Participant Initials _____

Page 1 of 2

V. Extent of Anonymity and Confidentiality

For the purpose of the pilot study all participants' identities are confidential and no information related to the study will be shared with school personnel. All data collected from you will be kept in a locked file cabinet at the researcher's home with access available only to the researcher.

VI. Compensation

There will be no money given to you for participating in this study.

VII. Freedom to Withdraw

You are free to end your participation in this study at any time. You are also free to not answer any questions that are asked. If there are circumstances that arise during the completion of the survey and it is determined that you should not continue as a participant, the survey session will end immediately.

VIII. Subject's Responsibilities

Students who voluntarily agree to participate in this study will have following responsibilities:

- I agree to complete the survey as described in the directions. _____ (Initials)
- I agree to discuss any confusion or concerns with the researcher following the completion of the survey. ____ (Initials)

IX. Contact Information

The East Stroudsburg University of Pennsylvania Institutional Review Board has approved this project for the Protection of Human Subjects. If you have any questions about the study, please contact:

Primary Investigator: Andrea J. Farina at 267.563.0050 or ajfarina7@gmail.com

Dissertation Chairs: Dr. Patricia Smeaton 570.422.3363 psmeaton@po-box.esu.edu

Dr. Crystal Machado 724.357.2400 crystal.machado@iup.edu

If you have any questions about your rights, or are upset in any way about the study, you can contact Dr. Shala Davis, Administrator, Institutional Review Board, and East Stroudsburg University at 570.422.3336, or at sdavis@po-box.esu.edu.

X. Student Assent

I have read the Student Assent Form and conditions of this pilot study. I have had all my questions answered. I hereby acknowledge the above and give my voluntary assent to participate in this research pilot study. I acknowledge that a copy of the signed assent form will be sent to me for my records.

Signature of Student

Date

Printed Student Name

Date

The undersigned investigator hereby certifies that she has discussed the research project and pilot study with the student participant and has explained the information contained in this document, including the reason for the research, the risks, and the benefits or potential benefits. The undersigned investigator further certifies that the participant was encouraged to ask questions and that all questions were answered.

Signature _____ Date: _____

Participant Initials _____

Page 2 of 2

Appendix K

Phone Call Transcript to Request Participation of Formerly Enrolled Students

Hello (Student's name). My name is Andrea Farina. I am a graduate student at East Stroudsburg University and Indiana University of Pennsylvania and I am pursuing my doctoral degree in Educational Administration and Leadership. I need your help. I am currently working on a study in which I am gathering student perspectives on high school and telling the stories of students who have dropped out of school. I am hoping that you will allow me to include your experiences and story.

I am trying to learn why so many students leave school before they graduate. Your story may help others who are in a similar situation and could assist school personnel design programs to meet the needs of students who are in a similar situation. Your story is very important to me and it could help other individuals in similar situations.

Before I continue, do you think you would be willing to participate in the research study? (If the student says no, the individual will be thanked for his or her time. If the former student says yes, I will continue with the remainder of the script.)

Thank you for your willingness to participate. But before you agree completely, I must share the details of your participation.

The purpose of the study is to identify the school organizational factors (e.g. high-stakes testing, graduation requirements, retention, and school size) and social relationship factors (e.g. student-teacher relationships and peer relationships) that have the most impact on high school students. I am specifically looking to identify the factors that most significantly influence a student's decision to drop out of school and how these factors became insurmountable obstacles to graduating from high school. Approximately 9 of your fellow students, who were formerly enrolled at Rockwood High School, will be surveyed and interviewed.

To begin the process, I will set up a time with you when you are available to be surveyed and interviewed for about 60-90 minutes. We will agree on a time and place for the interview. I would suggest the local library or a coffee shop that allows for some quiet and privacy. If you are not comfortable meeting there, then we can find some other place. If you need transportation, I would be glad to pick you up and take you to the interview site. Once we get to the site, I will explain the study to you again and ask you to sign the informed consent form.

Once the consent is signed, you will be asked to complete a 39-question survey about your perceptions and experiences related to the organizational and social features of Rockwood High

School. You will then be asked to participate in an interview that will be audiotaped. The questions are designed for you to tell me about yourself and the high school experiences that led to you dropping out of school. I will also ask you to share what, if anything, school staff could have done to prevent you from dropping out of school.

Everything you say will be completely confidential. You will not be identified in the study in any way. If at any time you are uncomfortable with the questions or the situation, you may stop the interview.

Following the explanation of the data collection procedures, the possible participant will be asked the following questions:

- Do you have any questions?
- Would you be willing to participate?
- Is there any particular day or time that would be best for you for the interview?
- Are you comfortable with meeting at the local library or coffee shop for the interview or is there some other place you would prefer?
- Do you need transportation?

Thank you so much! I truly appreciate your participation and I look forward to meeting with you and hearing your personal story.

Appendix L

Informed Consent for Participants (Formerly Enrolled) in Research Projects Involving Human Subjects

Title of Project: A Mixed Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School.

Institution: East Stroudsburg University/Indiana University of Pennsylvania

Primary Investigator: Andrea J. Farina

I. Purpose of this Research/Project

The purpose of the study is to identify the school organizational factors (e.g. high-stakes testing, graduation requirements, retention, and school size) and social relationship factors (e.g. student-teacher relationships and peer relationships) that have the most impact on high school students. This research is specifically attempting to identify the factors that most significantly influence a student's decision to drop out of school and how these factors become insurmountable obstacles to graduating from high school.

Approximately 10 students who have dropped out of school will be interviewed.

II. Procedures

During the first phase of our meeting you will be asked to respond to 39 Likert-scale survey questions regarding your high school experience. The completion of this portion of our meeting should take no more than 30 minutes to complete.

During the second phase of our meeting you will be interviewed for about 30 minutes about your experiences in high school. The interview will be recorded and the interview will be transcribed. You will only be asked to sit for one meeting with the researcher. The interview will take place at the location of your choice. Transportation will be provided to and from the meeting site, if necessary.

You are asked to be open and honest about your experiences in school. The following open-ended questions will be asked to you:

1. Was there a specific event that led you to drop out of high school?
 - a. If yes, can you describe what it was?
 - b. If no, then were there any school factors or social experiences that led to your decision to drop out of school?
2. Could the school staff have done anything to prevent you from dropping out of high school?
 - a. If yes, please describe the steps they could have taken to support you to graduate high school.
 - b. If no, please describe why school staff could not have helped you graduate high school.

The researcher will also ask additional questions that will be based on your responses to the survey questions asked during phase one.

After the interview, the researcher will type a transcript of the interview. At least three attempts will be made to contact you. You will be invited to read the transcript and make comments. A time and place to read the transcript will be selected. You may read the transcript in the presence of the researcher. If necessary, the researcher will read the transcript to you.

III. Risks

There are minimal risks associated with this study. You may suffer some emotional distress by having to recall experiences at school or with peers that were not pleasant for you. You are allowed to state that you do not wish to answer a question that is asked of you at any time. You will be provided with information related to counseling services should you believe it is necessary.

Participant Initials _____

Page 1 of 3

IV. Benefits

Society and schools specifically will benefit from hearing about your experiences and your suggestions may lead to the development of programs designed to better meet the needs of students who are at risk of dropping out of school. No promises or guarantees of benefits have been made to encourage you to participate.

V. Extent of Anonymity and Confidentiality

Every effort will be made to hide your identity in any written work resulting from this study. Your interview and survey will be given a numerical code and there will be no mention of your actual name. Within the transcripts a number will identify you and fake names will be utilized to represent other individuals you may mention.

Any data collected from the digital recordings of the interview will be stored in a locked file cabinet at the researcher's home. The researcher is the only individual who will have access to the recordings; however, the researcher or other members of her dissertation committee may view copies of the transcripts. In addition the Institutional Review Board (IRB) of the researcher's university may view this study's collected data for auditing purposes. The IRB is responsible for the oversight of the protection of human subjects involved in research. All data collected for this study will be destroyed after the dissertation defense.

VI. Compensation

There will be no money given to you for participating in this study.

VII. Freedom to Withdraw

You are free to end your participation in this study at any time. You are also free to not answer any questions that are asked. If there are circumstances that arise and it is determined that you should not continue as a participant, the interview will end immediately.

VIII. Subject's Responsibilities

I voluntarily agree to participate in this study. I have the following responsibilities:

- I agree to answer questions honestly. _____ (Initials)
- I agree to allow the researcher to record the interview on tape. _____ (Initials)
- I agree to allow the researcher to use a non-identifying direct quote. _____ (Initials)
- I agree to complete the survey questions honestly. _____ (Initials)
- I agree to complete the survey following the directions provided by the researcher. _____ (Initials)

IX. Contact Information

The East Stroudsburg University of Pennsylvania Institutional Review Board has approved this project for the Protection of Human Subjects. If you have any questions about the study, please contact:

Primary Investigator: Andrea J. Farina at 267.563.0050 or ajfarina7@gmail.com

Dissertation Chairs:

Dr. Patricia Smeaton 570.422.3363 psmeaton@po-box.esu.edu

Dr. Crystal Machado 724.357.2400 crystal.machado@iup.edu

If you have any questions about your rights, or are upset in any way about the study, you can contact Dr. Shala Davis, Administrator, Institutional Review Board, and East Stroudsburg University at 570.422.3336, or at sdavis@po-box.esu.edu.

Participant Initials _____

Page 2 of 3

X. Subject's Permission

I have read the Consent Form and conditions of this project. I have had all my questions answered. I also acknowledge that a copy this signed consent will be provided to me for my records. I hereby acknowledge the above and give my voluntary consent:

Subject signature _____ Date _____

Witness Signature: _____ Date: _____

Participant Initials _____

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Appendix M

Superintendent/District Request for Approval

Title: A Mixed Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School.

Institution: East Stroudsburg University of Pennsylvania/Indiana University of Pennsylvania

Dear Mr. Bower:

My name is Andrea Farina and I currently serve as an administrator in the Palisades School District. Educationally, I have been working to obtain my doctoral degree and this study is being done in partial fulfillment of a doctoral degree in Administration and Leadership offered by Indiana University of Pennsylvania in collaboration with East Stroudsburg University. By granting me permission to survey your students, you will be contributing to the body of knowledge on the causes of high school dropout. The findings of this study will be important to educators, policymakers, and students. Your agreement to permit your students to participate in the study is completely voluntary. There is no compensation for your district's participation in this study.

The purpose of the study is to identify the school organizational factors (e.g. high-stakes testing, graduation requirements, retention, and school size) and social relationship factors (e.g. student-teacher relationships and peer relationships) that have the most impact on high school students. I am specifically looking to identify the factors that most significantly influence a student's decision to drop out of high school.

The study aims to include both currently enrolled students at Rockwood High School and former students who have dropped out over the past 4 years as participants. With your permission, the initial phase of the study will include eleventh and twelfth grade students who will be asked to take a 40-question survey that should take no more than 30 minutes to complete. There is minimal risk for these student participants, as the surveys will be completed anonymously and all data will be reported as a group with no individually identifiable student information attached.

The second phase of the study incorporates recent high school dropouts who will be asked to complete a similar survey, but will also be interviewed about their school experiences and their

decisions to leave high school prior to graduation. All data gathered will be coded to maintain the confidentiality of all participants and results written in summary form to protect the identity of the participants of the study. The identity of the former students participating in this research study will be confidential and there will be no individually identifiable information linked to the data produced by the participants.

In order for me to move forward in this process, the East Stroudsburg University IRB is requesting receipt of a signed consent letter on your school district letterhead. I am providing a detailed explanation of the purpose and procedures that would be implemented during this research study. The consent letter should be faxed to 215-631-7098, Attn: Andrea J. Farina and the original letter should be sent to: Andrea J. Farina, 463 School Lane Harleysville, PA 19438.

I thank you in advance for your consideration of my request to conduct a research study at your school district. Should you have any questions regarding this request please do not hesitate to contact me by phone at 267-563-0050 or email at ajfarina7@gmail.com.

Sincerely,
Andrea J. Farina
Primary Researcher/Doctoral Student

Appendix N

Primary Site Superintendent Permission Letter

ROCKWOOD AREA SCHOOL DISTRICT

OFFICE OF THE SUPERINTENDENT

December 28, 2012

Institutional Review Board
East Stroudsburg University
East Stroudsburg, PA 18301

439 SOMERSET AVENUE
ROCKWOOD, PENNSYLVANIA 15557

TELEPHONE (814) 926-4688

Dear IRB Members,

After reviewing the proposed study, "A Mixed-Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School", I am granting Andrea J. Farina, a doctoral student at Indiana University of Pennsylvania and in collaboration with East Stroudsburg University permission to conduct research at Rockwood High School.

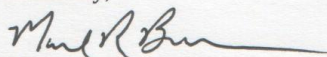
The purpose of this explanatory mixed methods study will be to determine which of the school organizational and social relationship factors have the most influence on high school attrition. The study will also explore how and why these factors created an insurmountable obstacle to high school graduation. The researcher will be administering a student perception survey to juniors and seniors with signed consent and assent forms during one administration period, which should take no longer than 30 minutes. I also understand that 10 former students who have dropped out of Rockwood High School will participate in an individual, face-to-face interview following the completion of the student perception survey, which should take no more than one hour to complete.

Mrs. Farina has agreed to provide my office with a copy of all East Stroudsburg University and Indiana University of Pennsylvania IRB-approved, stamped consent and assent documents before participants are surveyed at the high school. I understand that for the purposes of recruiting participants, Mrs. Farina will contact parents and students through an informational evening meeting, letter, email, and phone communication. I understand that participation is voluntary and that Mrs. Farina will receive parent consent and student assent forms for all currently enrolled students and informed consent forms for formerly enrolled students.

Mrs. Farina has also indicated that any data collected will be kept confidential and will be stored in a locked file cabinet in her office at her home. I understand that by granting the researcher permission to conduct research in the Rockwood School District that the findings may be published, but all participant information is unidentifiable. I further understand that there is no compensation for the school or participants in this researcher study.

If the IRB has any concerns about the permission being granted by this letter, please contact me by email mbower@rockwoodschooldistrict.org.

Sincerely,



Mark Bower
Superintendent, Rockwood School District

WE ARE AN EQUAL RIGHTS AND OPPORTUNITY SCHOOL

Appendix O

Transcript of Study Introductory Email to Parents

Good Afternoon, my name is Andrea J. Farina. I am a graduate student at East Stroudsburg University and Indiana University of Pennsylvania and an administrator in the Palisades School District in Bucks County Pennsylvania. I need your son or daughter's help. I am currently working on a study in which I am exploring the experiences of high school students and their perceptions of how school organizational features and social experiences impact students' decisions to drop out of high school. I am hoping that you will allow me to include your child's perceptions and experiences. I am trying to learn why so many students leave school before they graduate. Your son or daughter's story may help others who are considering dropping out of high school. It may also help school personnel design programs to meet the needs of all students. Each child's perceptions of his or her high school experience are very important to me, and I am hoping to have the opportunity to include each of them in this study.

The study will take place at Rockwood High School where students will be asked to take a 40-question survey that should only take approximately 30 minutes. This survey is designed to elicit student perceptions on what school organizational features, such as high-stakes testing, retention, and school size and social features, such as student teacher and peer relationships, have the most impact on them as students. The survey data and results will be kept completely confidential and your child's name will not be used in any portion of the study.

On February 26, 2013 two meetings related to the administration of this study will be conducted. The first meeting will occur with all juniors and seniors during their first period. At this introductory meeting the researcher and building administration will share the purpose and intent of this study along with the necessary consent and assent forms that will be utilized to gain their permission for participation. The second meeting, intended for parents, will be held at 7:00 pm in the high school auditorium. During this meeting the researcher, along with the superintendent and high school guidance staff, will share in detail the procedures that will be utilized in this study and the consent forms that were shared with your son or daughter earlier that day. The meeting will be scheduled for an hour during which questions or concerns related to your son or

daughter's participation will be addressed, and informed consent and student assent procedures will be reviewed.

I hope that you are able to attend the parent meeting; however, if your schedule does not permit your attendance and you have questions regarding your son or daughter's participation, please feel free to contact me by phone at 267-563-0050 or by email at ajfarina7@gmail.com.

I look forward to meeting the parents of the Rockwood community and hope each of you will grant permission for your son or daughter to participate in this exploration of why so many students leave high school early and what school staff can do to support all students graduating from high school.

Sincerely,
Andrea J. Farina
Primary Researcher/Doctoral Student
East Stroudsburg University/Indiana University of Pennsylvania

Appendix P

Parent Informed Consent for Research Projects Involving Human Subjects

Title of Project: A Mixed Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School.

Institution: East Stroudsburg University/Indiana University of Pennsylvania

Primary Investigator: Andrea J. Farina

I. Purpose of this Research/Project

The purpose of the study is to identify the school organizational factors (e.g. high-stakes testing, graduation requirements, retention, and school size) and social relationship factors (e.g. student-teacher relationships and peer relationships) that have the most impact on high school students. This research is specifically attempting to identify the factors that most significantly influence a student's decision to drop out of school and how these factors became insurmountable obstacles to graduating from high school.

Approximately 75 students who are enrolled at Rockwood High School will be surveyed. Approximately 10 high school dropouts will also be surveyed to gain an additional perspective on the school factors.

II. Procedures

Students will participate in a survey that will take approximately 30 minutes to complete. The survey will require the students to complete both a demographic and school perception section related to their lived school experiences. The demographic section will require the students to identify their age and their consideration of dropping out of high school. The school perception section of the survey will require students to respond, using a Likert-scale, to questions related to the influence of the school organizational and social factors on their ability to graduate.

Students are asked to be open and honest about their experiences in school. The following closed-response questions represent examples of an organizational and relationship question embedded in the survey.

Organizational:

The courses offered at my school are relevant to my future schooling or career.

(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

Social Relationship:

Having strong friendships at school are critical to my academic success.

(a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

III. Risks

There are minimal risks associated with this study. Students may suffer emotional distress by having to recall experiences at school or with peers that were not pleasant for them. Counseling will be available through the guidance staff at the high school should it be desired or if requested.

IV. Benefits

Society and schools specifically will benefit from learning about high school students experiences. This may lead to the development of programs designed to better meet the needs of students who are at risk of dropping out of school. No promises or guarantees of benefits have been made to encourage students to participate.

V. Extent of Anonymity and Confidentiality

Every effort will be made to conceal students' identity in any written work resulting from this study. Students will complete the survey anonymously and there will be no mention of students' actual names. For reporting purposes all data will be grouped and reported as a whole, and no individually identifiable information will be shared.

Parent Initials _____

Page 1 of 2

All data collected from the surveys will be stored in a locked file cabinet at the researcher's home. The researcher is the only individual who will have access to the data; however, the researcher or other members of her dissertation committee may view copies of the surveys. In addition the Institutional Review Board (IRB) of the researcher's university may view this study's collected data for auditing purposes. The IRB is responsible for the oversight of the protection of human subjects involved in research. All data collected for this study will be destroyed after the dissertation defense.

VI. Compensation

There will be no money given to students for participating in this study.

VII. Freedom to Withdraw

Students are free to end their participation in this study at any time. Students are also free to not answer any questions that are asked. If there are circumstances that arise during the completion of the survey and it is determined that the student should not continue as a participant, the survey session will end immediately.

VIII. Subject's Responsibilities

Students who voluntarily agree to participate in this study will have following responsibilities:

- The participant agrees to answer questions honestly.
- The participant agrees to allow the researcher to use a non-identifying direct quote.

IX. Contact Information

The East Stroudsburg University of Pennsylvania Institutional Review Board has approved this project for the Protection of Human Subjects. If you have any questions about the study, please contact:

Primary Investigator: Andrea J. Farina at 267.563.0050 or ajfarina7@gmail.com
Dissertation Chairs: Dr. Patricia Smeaton 570.422.3363 psmeaton@po-box.esu.edu
Dr. Crystal Machado 724.357.2400 crystal.machado@iup.edu.

If you have any questions about your rights, or are upset in any way about the study, you can contact Dr. Shala Davis, Administrator, Institutional Review Board, and East Stroudsburg University at 570.422.3336, or at sdavis@po-box.esu.edu.

XI. Parent Permission

I have read the Parent Informed Consent Form and conditions of this project. As a parent I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for my child to participate in this research study. I also acknowledge that a copy of this signed consent will be provided to me for my records.

Printed Name of Child

Date

Signature of Parent/Guardian

Printed Parent/Guardian Name

Parent Initials _____

Page 2 of 2

Appendix Q

Student Assent for Research Projects Involving Human Subjects

Title of Project: A Mixed Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School.

Institution: East Stroudsburg University/Indiana University of Pennsylvania

Primary Investigator: Andrea J. Farina

I. Purpose of this Research/Project

The purpose of the study is to identify the reasons that high school students might drop out of high school and what school personnel could do to support all students in earning a high school diploma.

Approximately 75 students who are enrolled at Rockwood High School will be surveyed. In addition 10 dropouts from Rockwood High School will also be surveyed to gain additional perspectives on the impact of these school factors.

II. Procedures

The survey will take you approximately 30 minutes to complete. The survey will require you to complete both a demographic and school perception section related to your lived school experiences. The demographic section will require you to identify your age and consideration of dropping out of high school. The school perception section of the survey will require you to respond, using a Likert-scale, to questions related to the influence of the school organizational and social relationship factors on your ability to graduate.

Please be open and honest about your experiences in school. The following closed-response questions represent examples of an organizational and relationship question from the survey.

Organizational:

The courses offered at my school are relevant to my future schooling or career.

- (a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

Social Relationship:

Having strong friendships at school are critical to my academic success.

- (a) Strongly Disagree (b) Disagree (c) Agree (d) Strongly Agree

III. Risks

There are minimal associated with this study. You may be upset by having to recall experiences at school or with peers that were not pleasant for you. If you are upset while taking the survey or afterwards, you can talk with the school counselor about those feelings.

IV. Benefits

School staff may better understand what students need by hearing about your experiences. The results of the study may lead to the development of programs that can better meet the needs of students who are at risk of dropping out of school.

No promises or guarantees of benefits have been made to encourage you to participate.

IV. Extent of Anonymity and Confidentiality

Every effort will be made to conceal your identity in any written work resulting from this study. Students will complete the survey anonymously and there will be no mention of students' actual names. For reporting purposes all data will be grouped and reported as a whole, resulting in no individually identifiable information being shared.

Participant Initials _____

Page 1 of 2

All data collected from the surveys will be stored in a locked file cabinet at the researcher's home. The researcher is the only individual who will have access to the data; however, the researcher or other members of her dissertation committee may view copies of the surveys. In addition the Institutional Review Board (IRB) of the researcher's university may view this study's collected data for auditing purposes. The IRB is responsible for the oversight of the protection of human subjects involved in research. All data collected for this study will be destroyed after the dissertation defense.

VI. Compensation

There will be no money given to students for participating in this study.

VII. Freedom to Withdraw

You are free to end your participation in this study at any time. You are also free to not answer any questions that are asked. If there are circumstances that arise during the completion of the survey and it is determined that you should not continue as a participant, the survey session will end immediately.

VIII. Subject's Responsibilities

Students who voluntarily agree to participate in this study will have following responsibilities:

- I agree to answer questions honestly. _____ (Initials)
- I agree to allow the researcher to use a non-identifying direct quote. _____ (Initials)

IX. Contact Information

The East Stroudsburg University of Pennsylvania Institutional Review Board has approved this project for the Protection of Human Subjects. If you have any questions about the study, please contact:

Primary Investigator: Andrea J. Farina at 267.563.0050 or ajfarina7@gmail.com

Dissertation Chairs: Dr. Patricia Smeaton 570.422.3363 psmeaton@po-box.esu.edu

Dr. Crystal Machado 724.357.2400 crystal.machado@iup.edu

If you have any questions about your rights, or are upset in any way about the study, you can contact Dr. Shala Davis, Administrator, Institutional Review Board, and East Stroudsburg University at 570.422.3336, or at sdavis@po-box.esu.edu.

X. Student Assent

I have read the Student Assent Form and conditions of this research project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary assent to participate in this research study. I also acknowledge that I will be provided a copy of this signed assent for my records.

Signature of Student

Date

Printed Student Name

The undersigned investigator hereby certifies that she has discussed the research project and pilot study with the child participant and has explained the information contained in this document, including the reason for the research, the risks, and the benefits or potential benefits. The undersigned investigator further certifies that the participant was encouraged to ask questions and that all questions were answered.

Signature _____ Date _____

Participant Initials _____

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Appendix R

Research Study Cover Letter for Parents

Title: A Mixed Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School.

Dear Parent or Guardian:

I am a student in the Professional and Secondary Education Department at East Stroudsburg University and Indiana University of Pennsylvania. I am conducting a research project on the school organizational and social factors that most significantly influence a student's decision to drop out of high school. I request permission for your son or daughter to participate.

The project will be explained to your son or daughter in terms that he or she can understand, and your son or daughter will participate only if he or she is willing to do so. The study requires your son or daughter to complete a 41-question survey about their individual experiences in high school. It will take them approximately 30 minutes or less to complete. There will be minimal risk as the data collected will be anonymous and only the primary researcher will have access to the information from your child. At the conclusion of the study, students' responses will be reported as group results only; therefore, individual student responses will not be identifiable.

Participation in this study is voluntary. Your decision whether or not to allow your son or daughter to participate will not affect the services normally provided to your son or daughter by Rockwood High School. Your son or daughter's participation in this study will not lead to the loss of any benefits to which he or she is otherwise entitled. In appreciation for the time and effort spent taking the survey, all participants will be entered into a raffle for a \$25 Visa gift card that will be distributed at the conclusion of the survey administration meeting. Even if you give your permission for your son or daughter to participate, your child is free to refuse to participate. If your child agrees to participate, he or she is free to withdraw participation at any time without penalty. You and your son or daughter is not waiving any legal claims, rights, or remedies because of your son or daughter's participation in this research study.

The East Stroudsburg University of Pennsylvania Institutional Review Board has approved this project for the Protection of Human Subjects. If you have any questions about the study, please contact:

Primary Investigator: Andrea J. Farina at 267.563.0050 or ajfarina7@gmail.com

Dissertation Chairs:

Dr. Patricia Smeaton 570.422.3363 psmeaton@po-box.esu.edu

Dr. Crystal Machado 724.357.2400 crystal.machado@iup.edu

If you have any questions about your rights, or are upset in any way about the study, you can contact Dr. Shala Davis, Administrator, Institutional Review Board, and East Stroudsburg University at 570.422.3336, or at sdavis@po-box.esu.edu.

Keep this letter after completing the signature portion of the informed consent; please seal the enclosed envelope and return it to the main office at Rockwood Area High School. A copy of the signed parent consent form will be sent to you for your records.

Sincerely,
Andrea J. Farina
Primary Researcher/Doctoral Student
East Stroudsburg University/Indiana University of Pennsylvania

Appendix S

Cover Letter/Email to Formerly Enrolled Students

Title: A Mixed Method Exploration of the School Organizational and Social Relationship Factors that Influence Dropout Decision-Making in a Rural High School.

Dear Former Rockwood Student:

Hello, my name is Andrea Farina. I am a graduate student at East Stroudsburg University and Indiana University of Pennsylvania and I am pursuing my doctoral degree in Educational Administration and Leadership. I need your help. I am currently working on a study in which I am gathering student perspectives on high school and telling the stories of students who have dropped out of school. I am hoping that you will allow me to include your story and experiences.

I am trying to learn why so many students leave school before they graduate. Your story may help others who are in similar situations and could assist school personnel design programs to meet the needs of students who are at risk of dropping out of high school. Your story is very important to me and it could help other individuals in similar situations.

The study will look to identify the specific school organizational factors (e.g. high-stakes testing, graduation requirements, retention, and school size) and social relationship factors (e.g. student-teacher relationships and peer relationships) that have the most impact on high school students. I am particularly interested in identifying which of these factors most significantly influences a student's decision to drop out and how the factors became insurmountable obstacles to graduating from high school. Approximately 9 of your fellow students, who were formerly enrolled at Rockwood High School, will be surveyed and interviewed.

To begin the process, I will set up a time with you when you are available to be interviewed for about 60-90 minutes. We will agree on a time and place for the interview. I would suggest the local library or a coffee shop that allows for some quiet and privacy. If you are not comfortable meeting there, then we can find some other place. If you need transportation, I would be glad to pick you up and take you to the interview site. Once we get to the site, I will describe the details of the study and ask you to sign the informed consent form.

Once the consent is signed, you will be asked to complete a 39-question survey regarding your perceptions and experiences related to the organizational and social features of Rockwood High School. You will then be asked to participate in an interview that will be audiotaped. The questions are designed for you to tell me about yourself and the high school experiences that led to you dropping out of school. I will also ask you to share what, if anything, school staff could have done to prevent you from dropping out of school.

Everything you say will be completely confidential. You will not be identified in the study in any way. If at any time you are uncomfortable with the questions or the situation, you may stop the interview.

Your participation in the research study would be greatly appreciated and would add important insights to why students drop out and what school personnel can do to support all students earning a high school diploma. If you are interested in sharing your perceptions and experiences I can be reached by phone at 267-563-0050 or email at ajfarina7@gmail.com. I look forward to hearing from you and if you have any questions, feel free to call at any time.

Sincerely,

Andrea J. Farina

Primary Researcher/Doctoral Student

East Stroudsburg University/Indiana University of Pennsylvania