TEENAGE PARENTING AND HIGH SCHOOL DROPOUTS: UNDERSTANDING STUDENTS' ACADEMIC, SOCIAL, AND PERSONAL INFLUENCES

By

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ABSTRACT

Adolescent mothers are faced with multiple risk factors that may prevent them from graduating from high school. The first goal of this study was to examine adolescent mothers' academic, social, and personal influences related to high school dropout. The second goal was to examine the Resiliency Framework for mothers who dropped out of school and the mothers who continued their education. The third goal was to explore how adolescent mothers perceive their academic, social, and personal influences and to determine whether resilience differ in each group.

This study used the existing database of the National Education Longitudinal Survey (NELS) 88:1992 by the National Center for Educational Statistics (NCES). Subjects for NELS 88 were recruited from both private and public schools. The study conducted a two-stage probability design to select the 8th grade sample. The sample targeted 1,500 secondary schools. By random selection, twenty-three students from each school were selected to participate. The population of interest included teen mothers who dropped out of school and teen mothers who continued. In particular, the study viewed the second follow-up wave of the NELS data. The sample consisted of 572 participants. There were 278 young mothers who were classified as dropouts and 294 young mothers who were currently enrolled in high school.

There were significant predictors of high school dropout for adolescent mothers in the areas of peer academic aspirations, school climate, future involvement, and childcare. This study found that dropouts scored significantly lower on peer academic aspirations. In addition, dropouts perceived their school climate as negative or hostile which further increased the likelihood of dropping out. Dropout students reported less family

involvement and less trust between their parents. Lastly, dropouts were less likely to assume parental responsibility and had less involvement with their child.

Attributes of Resiliency Theory were examined in both groups. Dropout students have a higher likelihood of having fewer protective factors and more risk factors than current students. As supported by this study, adolescent mothers who dropped out of school had fewer positive supportive avenues. The results of this study demonstrated that dropouts are less socially competent with healthy relationship, have fewer problem-solving skills, and increased dependence on others.

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CHAPTER 1

INTRODUTION

Background

The period of life between teenage years, and adulthood brings many transitions. Individuals seek to establish balance personally and socially. Multiple influences can hinder or help teenagers' ability to succeed. Unfortunately, for teenage parents, the balance of these influences tends to be more negative than positive. Some specific areas of concern in the lives of teen parents are both support factors and risk factors. The support factors for teens may involve positive influences that increase the likelihood of high school graduation. For students who are not given the appropriate support, the risk factors such as school dropout may greatly increase. It seems likely that the positive balance of personal, social, and family factors will enable teen parents to succeed despite the huge responsibility of having a child.

This study investigated how resiliency and dropping out of school are related to personal, family, and social involvement. Dropout students have the potential of facing three or more risk factors. Many risk factors increase the likelihood that students will not have the necessary internal and external motivation to stay in school and will thus dropout. This study also predicted that resiliency is positively related to family and peer involvement, extracurricular and social activities, and a high sense of personal abilities. Based on the premise of Resiliency Theory, the collaboration of factors (personal, academic, social, and family) are needed for this specialized female population.

Resiliency was first studied by Werner and Smith (1989) who examined factors

that contributed to the success of youth. A longitudinal study was conducted to analyze children's ability to cope with both internal and external factors. The internal stressors were identified as developmental imbalances, mental health, and attitudes. Identified external stressors were illness, poverty, and family environment. The longitudinal study examined 640 multiracial children in Hawaii from birth to adulthood. Prior to and during the study, risk factors that affected the population were single-parent homes with mother's having little education, low socioeconomic status, physical defects and illnesses, learning problems and behavior disorders, aggression, dependency, and poor coping skills. Despite the common adversities, resilient children had more favorable outcomes than expected. The resilient high-risk boys and girls had fewer illnesses and recovered quickly, higher locus of control, positive self-image, and were more responsible. Key factors that contributed to the success of the students were age of the opposite sex partner, number of children in the family, spacing between children, number and type of caregivers, workload of the mother, amount of attention given to the child during infancy, structure and rules, cohesiveness of the family, network among family and friends, and the number of chronic stressful life events during each transition. Resiliency is related to a student's ability to be proactive and involved in his/her circumstances. When faced with adversity, some students will display signs of resilience rather than depression. For the success of students, the personal and environmental characteristics that promote resiliency during their infant and toddler years will also help predict their future (Gordon, 1999).

Benard (1991, 1995) identified protective factors and resiliency traits for the success of youth. Three external factors for resilient youth are caring relationships, high

expectations, and meaningful participation. Individuals who have meaningful and caring involvement with significant individuals are more likely to feel secure and complete high school. High school completion is a result of the systemic support of family, friends, community and school. Individuals' internal support factors were identified as social competence, autonomy, and a sense of purpose. The inner sense of their personhood and their ability enable them to proceed academically despite their struggles.

Resilient youth share the same perspectives towards their school, neighborhood, self-worth, and family (California Healthy Kids Survey, 2006). Most youth identified school as a place to feel connected to school personnel, to be happy and safe, receive positive feedback from teachers, and as an environment for success. Resilient youth are active in their neighborhoods and communities by participating in clubs, religious activities, and helping other people. Individuals with high self-worth are more likely to have future goals, know where to go for help when there is a problem, have the ability to work out their problems, and understand their emotions. Friendships are regarded as caring and helpful and do not demonstrate problematic behaviors. Within the home environment, parents of resilient youth are more likely to have high and positive expectations, expressed interests, positive beliefs in their children's success, seek their children's input in family decision making, and spend quality time as a family.

Violence and maltreatment have an impact on resilience. Youth living in stressful environments have difficulty seeing their abilities and talents. Many youth are overwhelmed with fear and worry from daily struggles and survival, and are often confined to indoor settings further limiting their options (Wallach, 1994). Students living with fear may compromise their academic, personal, and social abilities for safety.

Such fear may pose difficulty when learning in a school setting and will increase the likelihood of being retained.

Dropout students may later gain internal and external support and further their education. Resilient students who dropped out and later returned reported decreased stress and depression, and increased support from significant others (Leadbeater, 1996). On the other hand, students who decided to stay in school despite problems were more likely to have a supportive family and home environment, involvement with educators and other adults, perseverance and optimism, improved attitude, increased motivation towards school, positive interaction with school staff and peers, satisfaction with the curriculum, and fair discipline standards (Lehr, Johnson, Bremer, Cosio, & Thompson, 2004).

Dropout Risk

Students with multiple risk factors have a higher likelihood of high school dropout. High-risk factors associated with dropout are poor academic performance, repeat of one or more grades, low socioeconomic backgrounds, English as a second language, pregnancy, and frequent absences/truancy (Baker, Sigmon, and Nugent, 2001). This information is particularly important for teen mothers as dropout risk is higher with prenatal complications and infant care. Prior to having a child, many teenage mothers struggle with poor academic achievement. The transition of motherhood may present medical complications that limit the teen's ability to attend school and complete the necessary academic requirements.

Other reasons given from adolescents who dropped out of school were to obtain

their GED, seek employment, to get married and have children, inability to pass the TAAS to meet graduation requirements, or to attend an alternative school. The transition between levels (elementary, middle, and high school) has huge implications for students struggling with identity and academia. A greater percentage of students who dropped out were retained in grades 6-12. Reflective of being retained, students have difficulty achieving academically and socially. As students repeat grades, their social environment changes from the peer setting they know to an unfamiliar setting and possibly a different culture. In regards to gender, ethnicity, and socioeconomic status, many of the students retained were primarily male, black, and were in the lowest income quartile (Institute for Educational Leadership, 1997). Other reported factors for high school dropout are age, region, mobility, disability, and family structure (Rumberger, 1995; Wolman, Bruiniks, & Thurlow, 1989 as cited in Lehr, Johnson, Bremer, Cosio, Thompson, 2004). Students who dropped out were older than the students in their grade-level, more likely to drop out if living in urban areas, and located in the South and West region. The students also reported increased transitions in schools and communities. Students with higher transition and mobility were at a greater likelihood of dropping out. Transition and mobility may increase feelings of marginality for individuals as their environment is constantly changing. Lastly, students living in single-parent homes reported higher numbers of dropout. The need to dropout and to decrease the financial burden caused by parenthood may seem the only solution for teen mothers.

Leadbeater (1996) reported findings for Hispanic and African-American mothers who completed high school. The graduation rate for Hispanics is 37% and 59% for African-American. Students reported dropping out between the ages of 15 and 17, and

during critical transitional points. In addition to identity formation, teen pregnancy and motherhood are considered critical transition points that potentially change their outlook on life. Teen mothers have a different perspective holistically that affect their interactions with their peers, teachers, and within the community. Pregnancy or the birth of a child is a critical moment, perhaps a window of opportunity that allows students to redefine their academic goals and personal aspirations. Students may desire personal improvement and have committed goals for areas of improvement. Given this window of opportunity, teen mothers need the support and encouragement systemically from all levels of interaction. By getting the needed support, young mothers will further decrease or eliminate thoughts of dropout, multiple pregnancies, and stressful life events (Leadbeater, 1996).

The community plays a pivotal role for teenage mothers struggling with identity and the demands of motherhood. There are multiple community risk factors for adolescents such as the availability of drugs and firearms, delinquency, violence, media, and community norms favorable toward drug use and crime. Students at risk of living in communities and being involved in drugs, violence, and high mobility have an increased risk of pregnancy. High-risk communities may limit student's ability to think wisely regarding deviant behaviors and acknowledge the consequences of unprotected sex. Such communities may be unable to provide sex education and unable to offer incentives towards prevention.

The family may present problems for teens struggling with a history of problem behavior, family management problems, family conflict, and favorable attitudes and involvement in the problem behavior (Rumberger, 1983). The risk factors for the family

may affect students via substance abuse, delinquency, teenage pregnancy, school dropout, and violence. A family that has an older sibling to dropout or become pregnant increases the likelihood that younger siblings will adapt the same pattern. Family management may pose a risk factor for parents that disassociate themselves or are characterized as enmeshed.

School factors that contribute towards adolescent pregnancy are early and persistent antisocial behavior, academic failure beginning in elementary school, and lack of commitment to school (Rumberger, 1995; Bruiniks, & Thurlow, 1989 as cited in Lehr, Johnson, Bremer, Cosio, Thompson, 2004). Elementary students with antisocial or problematic behaviors are more likely to continue these patterns well into adolescence; therefore increasing the risk of pregnancy and dropout. Academic failure may be caused by poor test scores and low scores on standardized tests.

Personal factors may decrease student's intrinsic and extrinsic motivation to succeed. School dropout and adolescent pregnancy are linked to friends who engage in problematic behaviors and share favorable attitudes toward the problem behavior. Adolescents who socialize with peers that engage in negative behaviors have an increased likelihood of adapting the same patterns.

Prevention programs have identified risk and protective factors needed for students to successfully complete high school. The National Dropout Prevention Center identified 15 strategies to decrease the dropout rate: systematic renewal, professional development, early childhood education, alternative schooling, instructional technologies, service learning, conflict resolution, out-of school experiences, community collaboration, parental support, reading and writing programs, individualized instruction,

mentoring/tutoring, learning style/multiple intelligences strategies, and career education/workforce readiness.

To decrease the high school dropout rate and comply with the No Child Left Behind Act, prevention programs outlined key components for success. Programs that provide students with personal guidance, academic skills, family outreach, school structure, and occupation skills are more likely to decrease high school dropout (Lehr, Johnson, Bremer, Cosio, Thompson, 2004). The personal/affective process is designed to enhance self-esteem via counseling and teaching interpersonal relations. The academic changes are instilled through special academic courses and individualized learning. Families are given increased feedback on their child's success through parent meetings and home visits. The result of the personal/affective process has demonstrated a change in the teacher's role, reduced class size, and offered solutions by creating alternative schools. To prepare students for survival after graduation, work-related programs were created to provide vocational training and volunteer programs.

Statement of Problem

Teen Pregnancy

The teen pregnancy rate has declined over the past fifteen years. Between 1991 and 2004, the percentage of adolescents aged 15-19 who reported that they were pregnant decreased substantially; from 41.2% to 33.3% (The National Campaign to Prevent Teen Pregnancy, 2006). Despite the consistent decreases, the numbers are still unacceptably high. According to Klein and Committee on Adolescence (2005), 900,000 teens in the

United States become pregnant each year. Among the major/ethnic groups in the United States, African-American teens were found to have the highest teen pregnancy rate (National Campaign to Prevent Teen Pregnancy, 2006). Over 50% African-American females will become pregnant by the age of twenty. In addition, the majority of these mothers are unmarried (96.1%).

Hispanic females are the second largest population for teen pregnancy with a 15% decline (National Campaign to Prevent Teen Pregnancy, 2006). The birth rate for Hispanic females' ages 15-19 in 2000 was 93% compared to 165% in 1996. Seventy-three percent of Hispanic females are not married. The subsequent teen births for this population are 24%.

Teen pregnancy among non-Hispanic Whites has declined considerably with the lowest pregnancy rate among other races (National Campaign to Prevent Teen Pregnancy, 2004). Teen pregnancy for Non-Hispanic whites declined 38.2%; however, more unmarried white teens (76.7%) gave birth. Over 25% of white females will become pregnant by the age of twenty. White teens are more likely to use contraceptives for protection against sexually transmitted diseases and to avoid pregnancy.

The National Campaign to Prevent Teen Pregnancy (2003) reported an increase for males in sexual involvement (49%) and an increase in partners. Differences were found among race/ethnicity, African-American males (69%) had the most sexual frequency. Sexual frequency for Hispanic males was the second largest race by 53% with Whites (41%) last. In contrast, Sum et al., 2003 reported higher numbers of race/ethnic differences among Hispanic males than White or Black males. Despite the increase in male sexual activity and with multiple persons, the use of contraceptive (e.g.,

condoms) increased by 19%. Fatherhood for males ages 15-19 decreased 25 percent; however, more adult males impregnate teen females.

Dropouts

Teen parenthood may present multiple problems for teens struggling academically, personal, and socially**.** For teens that struggle, dropping out of school may have the most detrimental effect. In addition to teen pregnancy, dropping out of school is associated with delinquency, school misbehavior, aggressiveness, impulsiveness (Hawkins, Catalano, & Miller, 1992 as cited in Coker & Borders, 2001) and poverty (Boothroyd, Gomez, Armstrong, Haynes, & Ort, 2005). Statistics for 2001 reported 77% of individuals between the ages of 15-18 who dropout are six times more likely to come from a poverty stricken environment (Kaufman, Alt, & Chapman, 2004). The number of male teens dropping out of school has far exceeded females with a ratio of 131 per 100 females (Sum et al., 2003).

Males are slightly more likely than females to leave school before the 9th grade. More males are being incarcerated and are therefore less likely to be surveyed than females. Examining ethnicity, African-Americans and Hispanics males are at a higher risk of dropping out.

The issue of teen pregnancy and dropout are a problem at the individual, family, and community level. Adolescent mothers and fathers who dropout have limited perceived control and personal power, decreased choices, limited career opportunities, increased risk of unemployment and low wages, and limited cognitive abilities to deal with adversity (Lewis, Ross, & Mirowsky, 1999). Young parents are also at risk for

depression, low academic achievement, and multiple pregnancies (Linares, Leadbeater, Kato, & Jaffe, 1991).

Purpose of the Study

The purpose of this study was to examine and compare personal, social, and academic characteristics among adolescent parents. The study examined how individual characteristics and areas of involvement or the lack thereof were related to dropout or persistence. Although dropping out is often discussed in relation to parental support and social behaviors, less is known about teen parenthood and dropping out. To date, the relationship involving the personal characteristics, social involvement, and academic ability has been less studied for teen mothers. There is a large need to understand the demands of parenting in relation to high school dropout. This study was also unique in its comprehensive scope of the necessary protective factors and risk involvement. This study made new contributions to what we know about these relationships.

The framework Resiliency Theory was applied to the study "Teenage parenthood and high school dropout: understanding students' academic, social, and personal influences" to enhance the knowledge for educators, the community, and the family. The information gathered helped to explain the differences between young parents who continued and graduated from high school and young parents who dropped out. Understanding the protective and risk factors for young parents increased the evaluation of strategies and effective programs for this specialized population.

Importance of the Study

This study benefited individuals, families, and communities by exploring the predictors of successful completion of high school and possible entrance to a community college or university for adolescent parents. Decisions affecting dropout and persistence also benefited policymakers and school administrators as they are continuously developing curricula, increasing prevention strategies, and providing effective intervention programs. Over 80% of young mothers are in poverty and on welfare (Lee & Burkam, 2003). Information is needed to examine the cost/benefit analysis of prevention and intervention programs that address teen pregnancy. There is also a benefit to address federal programs and institutions as males born to young teenage mothers are 2.7 times more likely to end up in prison than males born to adult mothers. Federal programs may benefit by exploring preventative measures. Lastly, children of teenage mothers are more likely to be abused and neglected than children of adult mothers. This information benefited Child Protective and Regulatory Services (CPS) by exploring the prevalence of neglect among teenage mothers and identifying avenues of support for those who struggle (National Campaign to Prevent Teen Pregnancy, 2006).

Research Question and Hypothesis

This study attempted to answer the following question:

Does the linear combination of academic, social, personal, and economic factors influence a student's decision to drop out of school?

The research hypotheses were as followed:

1. The linear combination of academic, social, personal, and economic factors do

not influence a student's decision to drop out of school.

2. There are no differences in the academic, social, and personal characteristics of students who are resilient and those who are not.
3. There are no differences between students who drop out and students who continue their education that can be attributed to resiliency.

This study examined the differences between the students who dropped out and the students that continued their education. The expectation was that the students who continued had higher resilience and a different perception of their support factors (e.g., frequent and positive involvement with family, peers, and school personnel) from students who discontinued their academic pursuits.

Similarities encountered by both groups may have been the desire to finish school at some point. Both groups may have had common struggles with parenthood such as lack of childcare, less time for self, and difficulty juggling between parenthood, academic and social environments. In addition, both groups may have had similarities of events and physical struggles that have happened to them (e.g., pregnancy and fatigue). They may also have had similar things happen to them prior to becoming parents (e.g., family moved to a new home, parent(s) suffer employment, a loved one died, and an older became pregnant).

Age is a significant factor for teen mothers; older teens have higher pregnancy rates than younger teens (Finley, 1994). In 2000, teens age 18 to 19 had pregnancy rates of 129.9 per 1,000 teens compared to younger teens ages 15-17 (53.5 per 1,000) and teens under age 15 (2.1 per 1,000). Younger mothers may have more support from significant family members and the community. They may be more dependent on their support

persons such as their parents or other relatives for help. Older adolescent parents (e.g., 17-19) may be more independent by initiating parental responsibilities (e.g., making an appointment for their baby or themselves, shopping for their baby, planning and preparing for feeding times) without difficulty or much support from others.

The NELS:88 study is a longitudinal study that highlights the perspectives of both younger and older teen parents. There is a potential for significant differences and similarities for adolescent mothers that addressed the risk and protective factors for teen mothers. Younger students who identified themselves as parents (either pregnant or caring for a biological child) attending the 12th grade may have answered differently than older teen parents (either pregnant or caring for a biological child) attending the same grade.

Limitations

Limitations for Generalizability

The NELS 88:1992 study offers valuable data in examining student progress over time from the 8th grade to the completion of high school and beyond college. Students who dropped out were given the opportunity to continue their participation. This study offers possible replication of studies by examining teen parent's persistence or the decision to dropout.

One limitation may be the inability to generalize research findings across settings. Teens that continued their education may have the necessary support systems that encouraged them to succeed. Yet, this information may only apply to a certain

subset of the population and not its entirety. In addition, generalizability may be hindered by trends or changes over time (Gall, Gall, & Borg, 2003). To date, teen parents may have unique circumstances that differ from the population studied from 1988 to 1992. There may be more support and acceptance of teen pregnancy from the community, school personnel, and family members. Prevention and intervention programs have also increased to work effectively with at-risk populations and teen mothers/fathers in the form of case management, problem ID and referral. Another change over time has been increased legislation and educational mandates on school attendance. Teen parents are mandated to attend school (despite circumstances) and are prosecuted/fined when unexcused absences become problematic. To help with the daily lives of struggling parents, alternative schools are offering students the opportunity to attend school for less time (four hours daily) and the ability to learn at a comfortable rate through self-pace. An additional feature offered by some independent schools and many alternative schools is on-site daycare to decrease childcare barriers, decrease school absenteeism, and prevent academic failure. Infants and toddlers are invited to attend school with their parent(s) to increase bonding and maintain parental supervision.

Sample Size

The sample size might affect data analysis in multiple ways, (a) incomplete or missing data for dropout and continuing students, (b) higher rates of either dropouts or current students, and (d) low reliability/validity. Cooper (2006) discussed sample size affected by individuals who lack the skill to complete a requested questionnaire. This information may be particularly important for the dropout students, whether they

completed the questionnaire independently or if an administrator read the information to them and was available to clarify any information needed. Lack of skill may also be the result of the student's inability to comprehend language, an example may be a student given a survey in English version when he/she speaks predominant Spanish. Invasion of privacy may also affect the sample size (Cooper 2006). Students who dropout may be sensitive and may not feel comfortable about discussing the events that led to school dropout. Perhaps when reflecting on painful things that affected them, they may feel further victimized by re-living such dissatisfaction despite the cause.

In addition, Cooper (2006) reported the importance of nonresponse data. Small numbers of nonresponse will have a small effect on the conclusions of the study; however, larger percentages of nonresponse will affect estimates of sample error. Missing data caused by nonresponse bias can cause misleading estimates (Huang, Salvucci, Peng, & Owings, 1996).

Internal and external validity may pose a problem with the sample size. Threats to internal validity for studying teen parents might be selection, history, maturation, attrition, and additive/interactive effects of threats to internal validity.

Definition of terms

Dropout: An individual who is currently not enrolled in school and have not graduated from high school or completed a state or district approved education program (Kaufman, Alt, & Chapman, 2004).

Adolescent Parent: Pregnancy or a born child occurring in young women between the ages of 13 and 19 (Jossi, 2005).

NELS:88: The National Education Longitudinal Study of 1988 sponsored by National Center for Educational Statistics (NCES). The study began with sampling the 8th grade class and thereafter collecting data in 1990, 1992, 1994, and 2000. The 1988 and 1992 study examined data on student's school experiences and personal background information. The sample consisted of students, parents or caregivers, teachers, and school administrators (Huang, Salvucci, Peng, & Owings, 1996). This study will examine respondents in the second follow-up in 1992.

Resiliency: The ability to cope with adversity (Chavkin & Gonzales, 2000).

Stopout: An individual who returns to school after dropping out (Huang, Salvucci, Peng, & Owings, 1996).

Social Competence: The ability to establish and maintain positive, caring relationships (Benard, 1991). The ability to find an environment that supports one's own development, such as church, school, or peers.

Problem-solving Skills: The ability to make decisions, gathers advice from others, and recognizes ways to resolve conflict (Benard, 1991).

Autonomy: The ability to act independently and exercise some control over one's environment. This also includes a sense of identity and purpose and the ability to isolate from risky or dysfunctional environments (Benard, 1991).

Belief in Future: The ability to see a bright future for oneself, to be positive and to set educational and personal goals (Benard, 1991).

Risk Factor: Factors associated with poor outcomes for an individual, family, or community (Benard, 1991).

Protective Factor: Factors associated with positive outcomes. They eliminate or decrease the impact of stress (Benard, 1991).

CHAPTER II

LITERATURE REVIEW

Developmental Frameworks

Identity Exploration

Adolescence is defined by three categories (Steinberg, 2005 as cited in Walter & Burnaford, 2006); early adolescence (10-13 years of age), middle adolescence (14-17) and late adolescence (18-22). Many social influences will shape youth behavior such as teenage pregnancy and high school dropout. Erik Erikson's psychoanalytic theory identified important social influences on development across the life span (Miller, 2002). The social influences differ with each stage of development and physical maturation. Erikson identified eight developmental stages and suggested that students will encounter a developmental crisis at each stage. For adolescence, the stage of development is identity. Individuals struggle between their uniqueness and society's demands and influences.

Adolescent mothers may either establish their identity and maturation or suffer identity diffusion. Physical maturation has personal and social responsibilities for each individual and involves new skills and the ability to meet society's increasing demands at each point of development (Miller, 2002). Various levels of maturation identified were parental care, schools, social organizations, and occupations. As individuals' maturational level increases, their ability to adapt to the environment and establish identity also increases. Interaction with support persons such as parents, siblings, the

academic staff, and members of the church will further form and re-establish identity. Success of this stage may lead to maturation; however, identity diffusion may form when individuals struggle with moral decisions. Identity diffusion may result in an inability to make important decisions, improper moral and ethical judgments, and easy influence by the opinions or demands of others. Teen motherhood may be the result of identity diffusion as most pregnancies are unplanned and considered accidental. Pregnancy may have stemmed from poor choices in relation to alcohol and drug usage, and the influence of peers who are socially engaged in sexual activity.

Erikson identified the family as the most important component for establishing identity. According to Newman (1989), effective parents display the following qualities: interest and availability, listening and understanding difficulties, effectively expressing love, showing approval, accepting adolescent's strengths and weaknesses, and supportive guidance. Adolescents who have conflicting communication with their parents may have difficulty establishing independence and difficulty maintaining close connection with their family of origin. Teen parents may find it difficult discussing sexual issues with parents such as seeking birth control to prevent pregnancy. Teens that become pregnant may further have difficulty communicating their new role to their parents because the trust and respect between them may have been damaged.

There are several strengths and weaknesses identified with psychosocial theory (Miller, 2002). Strengths of the model include (a) expansion of Freud's Psychoanalytic theory by adding and explaining the life-span developmental approach, and (b) providing enlightenment of a child's behavior influenced by culture and society. The weaknesses of Erikson's model are (a) inability to test the model or practicality, and (b) inability to

provide clear and concise information for resolving a crisis within a particular stage.

Kidwell, Dunham, Bacho, Pastorino, and Portes (1995) examined Erikson's theory with adolescents. The study examined 82 high school students ages 14 through 17. Students completed the Minnesota Multiphasic Personality Inventory (MMPI) and the Ego-Identity scale. Students who participated had completed their junior year, received percentile rank of 90 or higher on standardized achievement exams, and had a high GPA. Identity exploration was negatively associated with ego strength; as individuals progressed in the exploration stage, their ego strength and defenses declined. Individuals who were actively involved in this stage experienced inner confusion, agitation, dissatisfaction, depression, and unhappiness. Given the fact that this study examined top students academically, the study suggests that all students in this stage may reveal certain symptoms or patterns regardless of their "healthy" status. The conclusion established that students in transition need the supportive relationships from parents or significant others.

Social Involvement

Bandura studied the period of adolescence and the life span into adulthood related to behavior modeling. Bandura believed that youth do not inherit tendencies but learn and imitate the behavior of others. The Social learning Theory gives insight of youth behavior and the significance of social involvement. Individuals learn by observational learning, the connection between environment-person-behavior, understanding acquired behavior as complex, and through self-efficacy (Miller, 2002). Observation and reinforcement allows youth to learn aggressive play, sharing, peer interaction, sex-typed

behaviors, and independence. Three types of environments that influence behavior are imposed environments such as schools that mandate attendance but leave flexibility for acceptance; selected environments such academic courses or peer groups that students actually experience; and created environments such as sharing or hostility that students construct through positive or negative behavior (Miller, 2002).

Self-efficacy is defined as a student's perception of his/her competence to deal with his/her environment that ultimately may shape his/her behavior and situational outcomes. Through self-efficacy, youth identify their intellectual, social abilities, and successes/failures (Pascarella & Terenzini, 2005). Self-efficacy is positively related to academic performance. Students with positive self-efficacy participate more readily on tasks, persist longer when they encounter difficulties, and achieve at a greater level (Schunk & Pajares, n.d.).

Alfassi (2003) examined Bandura's model on academic achievement with students at risk in a remedial high school. Thirty-seven students were selected for participation and shared the commonality of having little academic desire and ability. The study evaluated role practices in self-efficacy beliefs to increase students' academic achievements and confidence. The measures used were ability tests (math, language, and standardized reading), Academic Self-Efficacy scale, and Intrinsic vs. Extrinsic Orientation scale. Results revealed that students who participated in conventional remedial instruction programs suffered more with poor performance on achievement tests than students who participated in a structured academic program. Increased self-efficacy and intrinsic motivation in language arts and math was found beneficial for participating students. The conclusion of the study suggested that students benefit more when

educational efforts are focused on raising students' confidence levels.

Miller (2002) identified strengths and weaknesses of Social Learning Theory. This theory addresses the power of situational influences for youth behavior. Examples of situational influences are sexual and racial stereotypes, transcultural modeling, pornography, and influences related to crime. Another strength provided is the testability and applicability to various groups. Social Learning Theory has been applied to various cultures and has provided similar results with each study. Weaknesses identified were the inability to discuss cognitive development and processes, and an inadequate description of parental support in natural settings (e.g., two-parent settings, diversified families, urbanization, changing sex roles, race, and socioeconomic status). There has also been a reported need to make use of the practical application of self-efficacy to aid in educational settings (Alfassi, 2003).

Bradshaw (1995) examined self-efficacy in relation to high school dropout and completion. Through an interactive, multimedia career program 275 students were selected for participation. Students were given two scenarios about at-risk populations and were instructed to select an outcome. Students also completed the Career Decision-Making Self-Efficacy scale and Career Beliefs inventory. Results indicated that students who participated had favorable outcomes; increased problem solving skills, positive reasons to finish high school, assurance in career occupation, and increased understanding of employment opportunities. Students also learned ways to independently increase their self-esteem and self-confidence. It is interesting to note that Resiliency (as defined in Chapter I) was increased as students had a greater willingness to try harder despite their current limitations.

Dropout Research

Research has also examined the factors relating to college dropout. Tinto's Theory of Student Departure discussed the student withdrawal process. Tinto stated that almost one-half of students entering junior colleges and more than one-fourth students attending four-year institutions will leave at the end of their first year (Tinto, 1975; Tinto, 1993).

Students enter college with different personal and family experiences and with various levels of academic characteristics and skills (Pascarella & Terenzini, 2005). Student characteristics prior to attending college will affect the level of commitment and involvement to the institution. Prior characteristics include family background, individual attributes, and adolescent experiences. Family background addresses socioeconomic status and parental educational level. Individual characteristics include academic ability, race, and gender. Adolescent pre-college experiences identified high school academic achievement. Students likely to continue and succeed in school have positive encounters within their academic and social environment. The academic and social success of youth comes from the ability to share ideas with peers and the faculty, and to feel a sense of connection between their academic pursuit and the institution. Negative experiences may increase feelings of disconnection and marginalization; therefore, students may distance themselves from the academic and social campus life. Tinto discussed ineffective measures in studying dropout as the failure of past research to examine the multiple influences of college dropout.

Tinto's model has been successfully used to study college adjustment and to

provide insight to administrators on effective social and academic programs. (Pascarella & Terenzini, 2005). Although the model works well with college students, it is not targeted to study adolescent change and the successful completion of high school graduation. However, studies examining college dropouts using Tinto's or similar models do bring meaningful insight to the general issue of leaving an educational setting.

Braxton, Milem, and Sullivan (2000) conducted a study analyzing the components of Tinto's theory on College Student Departure. The study's purpose was to examine the influence of active learning through class discussion, examinations, group involvement, social activities and institutional involvement, and the decision to dropout. Prior research suggests students who are involved in active learning perceive themselves as having increased knowledge and understanding from their course work. Students with increased knowledge and understanding may judge their classes as rewarding and will further invest psychological energy in social environments (Milem & Berger, 1997 as cited in Braxton, Milem, and Sullivan, 2000). The longitudinal study included 718 participants classified as first-year, full-time students. Participants were given three surveys at the beginning, middle and end of their first year. The surveys measured student background characteristics (race, gender, parental income and educational level, and high school GPA), institutional commitment, active learning, social integration, subsequent institutional commitment, and departure decisions. Results revealed faculty classroom behaviors are related to a student's decision to prematurely leave school. Faculty can encourage student's institutional commitment through encouraged cooperation among students, faculty-student communication, active learning, prompt feedback, communicating high standards, and respect for diversity in talent and knowledge

(Chickering and Gamson, 1987 as cited by Braxton, Milem, and Sullivan, 2000).

Nordquist (1993) examined Tinto's model of student departure on students who had recently dropped out. The study examined eighteen participants that had dropped out and were not currently obtaining their degrees. The participants were asked questions regarding family background, personal goals, college experience, social interaction, faculty interaction, academic advising, decision to leave, and plans to return. Students believed the lack of or negative interaction with faculty and advisors supported their decision to dropout. Student's personal goals were found conflicting to the goals of the institution, and others suggested the goals of the institution were unclear. The school setting was also described as not being diversified and unable to accommodate students that worked or had childcare issues. For resilient students, the presence of a relationship with the professor was found to reduce the likelihood of dropping out.

Pascarella's General Model for Assessing Change examined the structural environment of campus life and student characteristics (Pascarella & Terenzini, 2005). A student's success is related to the following: structural/organizational characteristics of the institution, student background, institutional environment, student effort, learning and cognitive development, and interactions with agents of socialization. Growth occurs as student's background (e.g., aptitude, achievement, personality, aspiration, and ethnicity) and the organizational features of the institution (e.g., enrollment, faculty-student ratio, and selectivity) shape the college's environment. These variables together influence student's quality and quantity of peer and teacher interaction. Lastly, effort is shaped by the accumulation of a student's history, the college environment, and the interaction with peers and faculty.

Studies examining Pascarella's model have confirmed an association between college student dropout and attending community colleges (Schrof, 1995). Students who attend community colleges are more likely to dropout due to lack of motivation. Dropping out may be associated with many reasons such as off campus employment, family life, and multiple responsibilities. Resilient students that receive their education from community colleges receive academic experiences that will prepare them beyond the associate level. Students that transfer from community colleges to universities report higher grades from students who attend universities at the freshmen level. This success is due largely to taking basic-required classes and having a close relationship with the faculty and staff. The success of this model has been geared towards student outcome and change for college students; yet, lack information regarding the adolescent and transition stage from pre-adolescence to adolescence.

Liegler (1997) examined both Tinto's model and Pascarella's causal model for predicting satisfaction among college students. The study examined 195 female students in a nursing program. Results revealed the best predictors of overall satisfaction for students were student development, satisfaction with facilities and services, satisfaction with the faculty, and social interaction with peers. Students who felt satisfied in their development academically, physically, and emotionally were less likely to be dissatisfied with their goals. Clean and safe facilities and positive interaction with the faculty increased student satisfaction. Social involvement has been proven significant for young adults as they learn to development and maintain nurturing relationships with peers.

Studies of high school students are similar to the studies of college dropouts, examining factors that lead to dropout. In a study by Lan and Lanthier (2003), personal

factors were examined in the developmental patterns of high school students. Using the National Educational Longitudinal Study (NELS), the study examined students' involvement in the 8th grade to their senior year. The personal factors included academic performance, motivation, student effort and participation, relationship with significant others, self esteem, and locus of control. The study found significant results at the 10th grade measurement when student's input and output decreased. Student's became less involved academically and continued this lag during their 12th grade involvement; consequently, into a dropout status. To help explain identifying factors and the contributions towards student's decline, three factors (transition to high school, academic intervention, and the psychological construction of dropout students) were discussed in detail. The school environment is important for students transitioning to new schools. Dropout likelihood is higher for students who feel no support in the academic environment. They concluded that to help decrease dropout likelihood, teachers and school faculty can create and maintain a friendly and supportive environment that is sensitive to the needs of the student. Academic intervention may decrease student dropout by honing in on student's strengths and weaknesses and providing unique individualized service plans. Students with higher locus of control and higher esteem may feel less hopeless over their circumstances and enable them to problem solve when faced with difficulties. Rumberger (2001) examined factors relating to dropout. Rumberger examined the individual and institutional perspective towards high school dropout. Engagement was found to be significantly linked to high school dropout. Academic success is defined by both academic and social engagement. Adolescents with positive attitudes and pro-social behaviors are more resilient and apt to finish high school.

Both types of engagement work together because students who perform poorly on school assignments and are not able to get along with their peers and teachers may be influenced to dropout of school. Student's who discontinue their education by changing schools or dropping out are less likely to complete their education. This may explain why students will drop out of high school to later receive a General Education Degree (GED) to compensate for missed academic opportunities. Another possible explanation reflects students that transfer and complete alternative schools that are more self-paced and flexible. Student's background has also been identified as an influence to drop out (Rumberger, 2001). Individuals with problematic backgrounds, high-risk environments, and non-supportive family members may influence individual's educational aspirations and former achievements. As students succeed, their reciprocal relationships change through engagement, stability, social involvement, and school experiences.

Environmental factors relate to families, schools, peers, and communities. Family factors that contribute towards dropout are socioeconomic status, family structure, parental education, and income. Family patterns and structure may continue thus becoming generational. For example, teen mothers may identify and adopt family patterns and beliefs across generations such as seeking similar employment as their parents or particular key members in the community. Inadequate income may limit students' potential to further their education and decrease their lifestyle ability.

Schools have the ability to increase a student's educational level and future aspirations. Schools can increase student performance by school composition, resources, structural characteristics, and through policy and procedures. Schools can learn about various cultures and individualize academic plans. By individualizing plans, schools will

be less likely to discharge students due to problem behaviors and more apt to identify needed resources and efficient preventive practices for identified high-risk students (Institute for Educational Sciences, 2006).

Lastly, communities and peers may influence the decision to dropout. Community downturns such as unemployment rates may gain the favor of student withdrawal. Teen mothers who are eligible to work may find it difficult to maintain both their personal responsibility to their home environment and their academic progress.

Theoretical Model

Resiliency Theory

Many reasons have been evaluated to explain the contributing factors related to high school dropout. A developmental framework that can be used to explain factors related to dropout is Resiliency Theory. Resiliency Theory is a developmental psychological perspective for viewing adversity and success (Gonzales, 2003; Brindis, Sattley, & Mamo, 2005). Benard (2004) defined resilience as the capacity all youth have for healthy development and successful learning. Individuals that are resilient are developmentally healthy and successful learners. Scott-Fisher and Campbell-Forrester (2000) state the existence of resilient children as a long-term developmental process that involves a systemic change in the family, school, and community. There are three major variables; risk factors, protective factors, and the resilient youth (Gonzales, 2003). The formula proposed by West & Verhaagen (n.d.) asserts that protective factors increase the likelihood of positive outcomes for youth, and the involvement of three or more risk factors may present a negative outcome. By focusing on resiliency, we can work with

strengths and assets in students and focus on what does work, instead of getting stuck on what doesn't (Woodall, 2002).

Risk factors are identified as stressful situations and adversity such as teenage pregnancy, chronic poverty, child abuse, neglect, marginality, divorce, violent environments, and perinatal stress. Risk factors can have potential external and internal barriers to student development and academic learning (West & Verhaagen, n.d.). External factors serve as the primary causes for most learning, behavior, and emotional problems involving the neighborhood, family, school and peers.

The second variable, protective factors are defined as the variables that reduce the chances of abnormal development (Mash & Wolfe, 2002 as cited in Gonzales 2003). Protective factors are characterized as the support from family, community, mentors, and within self. Protective factors that contribute to resiliency after a crisis occurs have been identified as (a) connections that provide a sense of belonging, (b) high expectations that focus on strengths and assets, (c) caring relationships that incorporate understanding, respect, and trust, (d) participation in meaningful activities to increase self-esteem, and (e) stabilizing routines to help re-establish normalcy (Busch, 2002).

The third variable is the resilient youth (Benard, 1991; Benard, 1995). Resilient youth show strong and positive characteristics of social competence, problem solving, independence, sense of purpose, motivation, and high realistic goals (Ormrod, 2006). Resilient youth also have identified support persons as family, peers, and teachers they trust and can discuss difficulties when needed**.** Chavkin and Gonzales (2000) identified five major protective factors for teens from peers, families, schools, and the community: (a) supportive relationships from adults and school personnel, (b) student characteristics

such as self-esteem, motivation, and assumed parental responsibility, (c) family factors such as parental support and school involvement, (d) community involvement, and (e) academic success and social skills training.

Common attributes in resilient youth for personal success are social competence, problem-solving skills, autonomy, and a sense of purpose (Benard, 1995). Students will have different degrees and levels of each attribute; yet, success will be determined by their protective factors. Students with more protective factors have an increased ability to overcome difficult situations. Adolescent parents with greater support factors are more likely to remain in school despite problems with parenting, academia, and social environments. Resilient individuals have strong systemic support (e.g., family, school, and community) and positive internal factors (e.g., level of motivation and comfort). The positive internal factors of resilient youth are characterized as responsive, flexible, empathetic, and communicable. Other protective factors acquired by resilient students are positive expectations, goals, motivation, educational aspirations, and the belief in a brighter future. Educational aspirations are the product and ability of abstract and flexible thought. Students can also demonstrate alternative solutions for cognitive and social problems. Despite the fact that adolescents are faced with issues (illness, deviance, alcoholism, and criminality), a higher percentage of teens become healthy, competent young adults (Benard, 1995).

Werner (1989) examined high-risk children in young adulthood. The longitudinal study examined 545 participants for a 30-year follow-up. The follow-up studied locus of control, temperament, perception of major stressors, and support in school, work, and relationships. Twenty-four teenage mothers participated in the study; the majority of

teenage mothers struggled with divorce, separation, and financial difficulty. The mothers who struggled reported increased levels of anxiety, dependence, and perceived life circumstances beyond their control. Despite the majority of the study, a small number of individuals proved to have significant results in resiliency. Ten mothers successfully established stable families with a significant other and reported less anxiety. Many of the mothers during adolescence reported secure family relationships and modeled themselves after their parent into adulthood. In addition, the individuals received further education and sought employment positions in skilled, semiprofessional, or managerial areas. Childcare was also a significant factor between both groups; teenage mothers who did not seek post graduate education took unskilled entry-level employment positions. The protective factors identified by the successful population were balanced personal aspirations, social support, and a small amount of stressful life events.

Rutter, M. (1987) reviewed research on stress-resistant children and identified four main protective factors: reduction of risk impact, reduction of negative chain reactions, establishment and maintenance of self-esteem and self-efficacy, and window of opportunities. Rutter believed resiliency is not a fixed attribute; any individual has the potential of overcoming a situation and that throughout time resiliency may alter for individuals given their situation. Rutter identified interaction effect crucial to determining protective factors. The interaction effects identified were sex, temperament, parent-child relationships, marital support, planning, school experiences, early parental loss, and life turning points. Family dysfunction affected males more negatively than females, placing males more at risk and overburdened in the household. Individuals who displayed negative temperament (negative mood) faced increased parental hostility and

criticism. Parent-child involvement and a parent in a healthy marriage reduced the likelihood of risk. Individuals who planned or calculated significant events were less likely to endure teenage pregnancy or make hasty decisions. Positive school experiences stemmed from academic planning, self-esteem, and self-efficacy. Academic planning by developing an academic time-line mentally and physically enables students to prepare for deadlines and reduces their perception of having negative school experiences. In addition, individuals with higher self-esteem and self-efficacy may feel more determined and apt to succeed and thus create an environment conducive towards having a positive school experience. Students faced with the harsh reality of a death of a parent are more likely to experience psychological and financial limitations such as depression and financial hardships. Students who returned to dysfunctional families had a higher likelihood of teenage pregnancy, marital breakdown, and poor parenting.

Blum, Beuhring, and Rinehart (2000) examined the risk and protective factors of adolescent health behaviors. Students were given self-reported surveys on health, peer involvement, self-esteem, and future aspirations. The National Longitudinal Study of Health was utilized using 11,000 randomly selected students. The factors examined were race, ethnicity, income, and family structure. The relationship between factors revealed risk behaviors associated with tobacco and alcohol use, suicide risk, violence, and sexual intercourse. Ethnicity was a proven factor for high-risk students. For example, white teens reported more alcohol and tobacco usage while African-American and Hispanic teens reported more weapon-involved crimes. Mobility proved a significant risk as tobacco and alcohol usage increased when students transitioned from middle school to high school. Results from socioeconomic and family size revealed wealthier families

smoke less tobacco, yet drink more alcoholic beverages. Individuals from single-parent families reported an increase in tobacco and alcohol usage. Suicide involved all aspects of life (personal, community, and family). The youth who reported higher numbers of suicidal thoughts and attempts were classified as White, Hispanic, female, and living in single-parent homes. Individuals from wealthier families reported fewer numbers of suicidal ideation and involvement. Also, Blum, Beuhring, and Rinehart (2000) identified school failure as a public health issue. Furthermore, students' having problems academically were at a higher risk of deviant behaviors and having negative peer association. Peer association was related to negative involvement, as students spend more time with friends they are more at-risk of adopting similar patterns with association. Parental support was the most significant protective factor for resilience. Individuals who reported close emotional involvement with their parents displayed fewer risk factors.

Hawkins, Catalano**,** and Miller (1992) examined other aspects of resiliency in youth. The study examined resiliency on gender, temperament, personality, and intelligence. Adolescent females were less likely than males to develop problematic behaviors. Individuals having difficulty adjusting to change and recovering from crises had an increased likelihood of risk (pregnancy, dropout). Personality was related to resiliency; individuals who enjoy the social involvement of others and can engage easily in foreign environments decrease the risk of deviant behavior. Intelligence was significantly related to resiliency in that individuals with higher intelligence are protected more from risk. Students who scored higher in intelligence were able to weigh the outcomes of their choices and were less inclined to make spontaneous decisions.

Finley (1994) discussed cultivating resilience in youth for rural educators and

parents. Protective factors in family, school and the community can have a positive outcome for students at risk. In agreement with Benard (1991), protective factors are formed through personal and social involvement. In addition, Finley examined resiliency in culture and ethnicity. Differences were discussed among rural communities and schools with various cultures (African-Americans, Mexican-Americans, American Indians, Alaska Natives, and Appalachians). Rural communities have more cohesion than urban or suburban communities through supportive and strong kinship. Through kinship, protective factors are increased by minimizing student risk and setting priorities to use existing services. Protective factors are also increased through mentoring, support, and celebration from significant individuals at school, family centers, and local agencies.

Resilience theory has addressed conditions associated with poverty and the success of disadvantaged children. Gonzales (2003) addressed resiliency in children transitioning into adulthood by examining key historical figures like Cesar Chavez. The risks factors that challenged Cesar Chavez were extreme poverty, homelessness, anxiety, food deprivation, maltreatment, and racism. Despite the risk factors, his protective factors centered on the support network of his parent, grandparent, and the Catholic Church. Cesar's support system provided him the ability to overcome adversity when faced with challenges. Gonzales (2003) further stated that ultimately success is measured by all of a student's experiences whether positive or negative. Given this fact, students who become parents are able to overcome their adversity with the support of significant others. In addition, teen parents may also have the opportunity to discover their strengths and personal resiliency.

Garmezy (1991) discussed resiliency and vulnerability factors associated with

poverty. Garmezy discussed poverty as having a significant effect on African American children. Disadvantaged children are affected with low birth weight stemming from poor health of the mother, increased stress, preclamsia and toxicity, and delivery complications. Poverty was negatively related to infant care; low SES provided multiple risk factors for children and High SES served as a protective factor. The protective factors for disadvantaged students were discussed as frequent school contact and supportive school staff, parent's expectation of child's academic role, clear and concise roles, less conflict in the family environment, parental nurture and support, and achievement-training activities. Student variation in student behavior and performance was identified as increasing resiliency. Schools with increased variation are more likely to promote positive and goal-driven students and decrease any emotional or behavioral outbreaks. Cognitive ability and social competence are enhanced through classroom structure, use of incentives, take home activities, increase of library usage, and addressing student responsibility. Significant support areas that foster resiliency for children of poverty are family, schools, and the church.

Rickwood, Roberts, Batten, Marshall, and Massie (2004) discussed the benefits of using resiliency theory for a career framework with high-risk clients from poverty stricken and abusive environments. Resiliency is needed to empower workers affected by fluid and dynamic changes in the work environment. Successful individuals are able to maximize their strengths, abilities, and stay current on needed employment skills; thus, becoming effective team players. Personal experience was identified as having a powerful influence on career opportunities and employment identity. In agreement with Werner (1993), the authors identified the following as successful characteristics of

students: internal locus of control, assuming responsibility, helping others, and taking advantage of opportunities during transitions. Rickwood, Roberts, Batten, Marshall, and Massie (2004) reported the importance of using career resiliency framework to explore client's self-understanding and empowerment. Individuals can increase their decision-making skills and career opportunities by enhancing their intrinsic motivation by exploring opportunities that accommodate their goals and desires. Individuals should also be encouraged to develop and maintain hobbies and activities in addition to being employed. Resiliency will also be instilled as individuals are encouraged to network with others seeking employment, and discouraged from blaming themselves in economic difficulty. Resilient students are guided by the five principles of career resiliency; independence, motivation through core values, competition and further education, collaboration within the community, and flexibility to changing society (Byster, 1998).

Levy & Wall (2000) discussed resilience in youth who witnessed a community homicide. According to the authors, homicide from community violence affects youth by challenging their coping abilities and social systems. Experiencing community homicide can cause withdrawal, irritability, rudeness, anxiety, and argumentativeness. Risk factors identified were personal characteristics, family structure, and social environments. Narrative therapy was found beneficial for working with victims of community homicide through verbal expression. Narrative therapy via verbal expression allows individuals the opportunity to re-create their circumstances and identity unique outcomes from unpleasant events. Individuals that participate in narrative therapy develop safe approaches to explore their risk and protective factors.

Brock, Lazarus, and Jimerson (2002) examined youth at risk for psychological

trauma. Personal resiliency and risk factors included both external and internal factors. The external factors identified for at-risk youth were family, social involvement, and financial resources. Student's internal factors were coping style, mental health, developmental level, trauma experience, self-esteem, locus of control, and religious beliefs. Students at-risk were identified as having fewer protective factors and needing more extensive services. Teens learned their coping ability from the support of significant others. Familial factors used to promote resiliency for at-risk populations were the following: involvement with a nuclear family member, extended family relations and guidance, and their caregiver's ability to cope well with trauma. The familial risk factors identified were living outside the nuclear family, family dysfunction (e.g., addiction, violence), parental Post Traumatic Stress Disorder, and child abuse/neglect. Students with poor family and peer involvement can seek support through other avenues such as close peer friendships, adult role models, and connection with social institutions. The lack of social and financial resources may further strain existing protective factors and prevent a student from achieving their goals and aspirations.

Bell (2001) discussed the various components of resiliency in youth. In addition to family and community involvement, physical health is needed for overcoming adversity and challenges. Resiliency is promoted through the access to healthcare. Healthcare offers the ability to screen for neuropsychological risks and delays that can hinder intellect and curiosity. Health screenings have also provided diagnoses and treatment for depression and traumatic stress. Young adults with poor health are more apt to make inappropriate and hasty decisions such as teen pregnancy and dropout. Poor

health also affects academic output, as students are not physically or mentally prepared to learn and retain concepts.

Scott-Fisher & Campbell-Forrester (2000) addressed resilient factors in international adolescents. They viewed three categories of protective factors: caring and supportive relationships, high expectations, and the opportunity for adolescents to participate. Protective factors were identified as having more power than risk factors for students regardless of ethnicity, social class, and geographic environments. Results revealed parent/child involvement is important; teens that discussed problems with their parents reported less sexual intercourse, fewer fights with weapons, and less extreme behavior. Teacher/student interaction proved beneficial, a student who communicates well with his/her teacher are less likely to report fights with weapons, alcohol use, extreme anger, sexual intercourse, and attempted suicide. Adolescents involved in religious activities and spiritual relationship were less likely to report sexual involvement and had better health.

Pike (1999) examined sexually resilient youth and the protective factors used to prevent the peer pressure of sexual advances. The study examined 1,112 students, who were given the Reasons for Abstinence Scale. Student declared the following reasons for abstinence: not feeling ready, waiting for the right person, and fears of pregnancy and STD. Alcohol was reported a significant factor towards risk, individuals who used alcohol reported early sexual activity. Youth who are under the influence of alcohol have inhibited thoughts and actions regarding consequences. Other factors significant when abstaining from sex were culture, gender, father's education, urban environment, and family structure. Individuals that strongly identified with their culture and religion

abstained from sex in accordance to the principles learned. Females were more likely than males to identify the consequences of pregnancy and sex against their parent's expectations. Urban environments held more liberal values than non-urban residents. Individuals in rural areas reported obedience to the morals, values, and norms of their community.

Personal characteristics

The second protective factor is student personal characteristics (e.g., motivation, self-esteem, accepted responsibility). Students with lower self-esteem have a higher likelihood of dropout (Ormrod, 2006). A protective factor that may affect youth is developmental confidence. According to Pittman and Chase-Lansdale (2001), the lack of developmental confidence may increase the likelihood of teenage pregnancy, school dropout, depression, and antisocial involvement. Students who drop out have higher levels of displayed aggression and lower self-esteem (Jimerson, Ferguson, Whippler, Anderson, & Dalton, 2002). Dropouts are also likely to have more counseling and special education referrals.

Kaplan, Peck, and Kaplan (1997) examined the significance of academia on self-esteem and dropout. Poor academic performance was found related to high school dropout. Quality of grades is an influential factor that affects student's return to pursue academic aspirations. The study examined 1,195 seventh graders from 36 junior high schools. The factors examined were negative academic experiences, perceived rejection by teachers and peers, resistance toward school, motivation, and peer involvement. Negative academic experiences are positively related to self-esteem. As students

experience a higher percentage of negative ordeals, their self-esteem is likely to suffer and become problematic. Students with negative academic experiences will likely feel rejected in the school environment and internalize these experiences by labeling themselves as "dysfunctional" or "abnormal". Student's who drop out are more likely to report feeling marginalized and alienated from their peers than students who persist.

Researchers have studied the cognitive levels of students in relation to resiliency (Gordon, 1996 as cited in Chavkin & Gonzales, 2000). Her findings suggested that resilient students had more faith in their cognitive abilities and excelled academically compared to their counterparts. The advantages for teens completing high school are increased personal power, further academic involvement, successful employment, and adequate income (Lewis, Ross, & Mirowsky, 1999). There have been numerous promising programs to build resiliency that have helped youth, programs such as Advancement Via Individual Determination (AVID), Project GRAD (Graduation Really Achieves Dreams), and Project AVANCE ("to advance"). These projects have resulted in higher college enrollment, increased support and academic scholarships, increased attendance rates, reduced teenage pregnancies, better test scores, and fewer disciplinary problems.

Parental support

Slicker and Kim (1996) examined parenting styles and family types for adolescent individuals. The study discussed four parenting styles - authoritative, authoritarian, neglectful, and indulgent. Authoritative parents support resiliency by providing their children with cohesive and adaptable environments.

Heaven and Newbury (2004) examined the relationship between parental characteristics and adolescents' school attitude. The study examined 347 high school students and 236 parents. The participants attended high school grades ninth and tenth. Students' emotional and academic success was largely related to their perception of their home environment. Students that scored high on "tough-mindedness" were found to have negative attitudes towards learning and academic performance. Students with positive attitudes towards schools and with a high GPA expressed higher levels of warmth, affection, organization, and efficiency. Parental characteristics were the primary predictor of student's academic success. Students' with strong academic performance reported their mothers as having higher levels of warmth and affection. Resiliency primarily came from the family of origin designated as well adjusted, cohesive, and with open communication. Parent-child communication may be explained by learned behavior and imitation. As parents display acts of persistence and accomplishment, their children will adopt these traits and utilize them.

Through encouragement, students are more likely to excel as high achievers (Cohen & Rice, 1997 as cited in Heaven & Newbury, 2004). This is of particular interest for adolescent parents when overwhelmed with stressors and having fewer assets; thus, increasing the likelihood of school dropout. Pittman and Chase-Lansdale (2001) examined parenting styles on the outcome of African-American youth. The sample consisted of 281 participants including parents and teenagers. Questions examined residence, neighborhood environment, social support, understanding of the welfare system, relationship involvement, family composition, family and peer involvement, educational and work history, and financial hardships. Maternal measures used were the

adolescent's mothers current emotional functioning and parenting style. The youth in particular were measured on delinquency, psychological functioning, academic success, and sexual involvement. Parenting styles were significantly related to adolescent outcomes. Adolescents having warm and encouraging parents were emotionally healthy with high academic potential. Emotionally healthy students had higher resiliency in problem solving when faced with overwhelming stressors. The students with the least protective factors were identified as having neglectful parents. Adolescents with neglectful or disengaged mothers were more likely to have increased delinquent problems, higher depression, and increased sexual involvement with their first sexual experience at a younger age. There were mixed results with students reporting indulgent and authoritarian parenting environments. Students with authoritarian parents were more likely to misbehave in school and engage in drug use.

High-risk youth are affected by both family and environmental circumstances. The majority of high-risk youth live in neighborhoods with high incidents of crime, teen pregnancy, dropout, and welfare (Blechman, 1992). Youth who are subjected to high-risk circumstances have less coping skills and opportunities. Resiliency can be instilled through mentoring. Mentoring is positively related to youth behavior and decision-making. The more frequent involvement with mentors, the greater the likelihood that adolescents will display effective communication and positive behaviors. Coping skills are also positively related to mentoring, as increased guidance and support enable them to identify their feelings and needs, and effectively manage their challenges.

Bicultural competent mentors can be detrimental in the growth of multifamily and high-risk neighborhoods. Students can benefit from a bicultural mentor relationship by

learning the skills to effective communication for both minority and majority settings. Given the difficulty for minority students transitioning to foreign environments and different lifestyles, a mentor relationship would have great potential. Families and the community will gain practical information as communication is shared and enhanced; therefore, building a bridge of trust to adopt new practices through family skills training.

According to the American opinion on teen pregnancy and sexual issues, parents had the most influence on youth than peers, media, religion, and teachers (National Campaign to Prevent Teen Pregnancy, 2004). Students with open communication between parents reported decreased sexual activity. Examples of open communication involved shared activities among members, and the presence of a parent in the home showing care and concern. Parents in the study underestimated their significant role and influence on their teen. Findings revealed that youth imitated and modeled their parent's language and behavior, which further supported or damaged the decision to increase, decrease, or stop sexual activity. A great majority of teens reported reserving or postponing sexual relations for marriage. Of the students that reported having sexual activity, two-thirds identified regret for not waiting longer.

Lloyd (2004) conducted a qualitative study on the communication with family on adolescent decision making. Seven themes were identified in the communication between parents and adolescents. Some of the themes were lack of communication between their mothers and fathers, unstable family relationships, and poor relationships between other members in the family. Pregnancy improved the relationship and communication with parents for some individuals. For young mothers with poor communication between parents, the support came from other individuals. Lastly,

students were more likely to make short-term goals as long-term goals seemed ambivalent.

Other family characteristics related to school dropout are SES and education (Rumberger & Larson, 1998; Rumberger, 1983). Students from low SES backgrounds were more likely to not finish high school. In a study by Jimerson, Ferguson, Whippler, Anderson and Dalton (2002), mother's educational status was significantly related to dropout. Youth having mothers with lower levels of educational attainment had a higher disadvantage of being retained and dropping out. In addition, mother's who placed a low value on education also contributed to the student's decision to leave school prematurely.

Peers

Zeijl, Poel, du Bois-Reymond, Ravesloot, & Muelman (2000) examined the role of parents and peers for youth. The study examined three groups (a) preadolescents ages 10-12, (b) youth transitioning to secondary education, ages 13, and (c) youth ages 14-15. The participants were asked questions relating to the educational level and employment status of both parents. Groups were assigned based on the parent with the highest credentials and occupational level. Four groups were formed by social class - lower, middle, middle-high, and higher. Students in the lower social class came from family occupational backgrounds with little or no professional training such as mechanics, road workers, and postmen. Parents in the middle social class group had secondary professional skills such as foremen, policemen, and small business associates. Parents in the middle-high social class group had higher professional education and occupational backgrounds as teachers, managers, and higher level employees. The higher social class

groups had parents with a university education with occupations as doctors, psychologists, and executive directors. The findings revealed that younger students (10-12 years of age) spend more time with family than peers. As students neared the age of 13, they begin the process of distancing themselves from their parents and interact more with their peers. Individuals aged 15 spend a considerable amount of time with their peers. Same-sex friendships or dating may enhance peer involvement in identity formation. Individuals from higher socioeconomic status were more likely to interact with their peers than students from a lower social class.

Kortering and Braziel (1999) found over 50 percent of the students in their study reported interaction with friends as the best part of school. Given the fact that interaction is largely important to teens, it is suggested that programs prepare them with social skills training to effectively interact with others. Students that are unable to communicate will experience alienation, lack of motivation, and will disengage from social activities.

Academic Aspirations

Dropout rates were higher in schools reported to have poor teaching quality (Rumberger & Thomas, 2000). In addition to the interaction with teachers and school related personnel, the curriculum offered may also instill resilience in youth by incorporating a broad range of learning styles, interests, and strengths. Higher education may contribute to increased involvement in school activities. Students become more involved in school activities during their junior and senior years (Boothroyd, Gomez, Armstrong, Haynes, & Ort, 2005).

School engagement was found significantly related to academic performance

(Sirin & Rogers-Sirin, 2005). School success was largely determined by youth's level of participation and expectations. Youth participation was characterized as class involvement, getting along with teachers, and expectation to continue school after receiving their high school diplomas (Sirin & Rogers- Sirin, 2005; Lee & Burkam, 2003). School involvement is negatively related to teen birth rates and sexual risk taking (Kirby, 2002). School involvement can increase attachment to school, academic performance, and educational/career aspirations. Adversely, the size of the school was found negatively related to school involvement and positively related to teenage pregnancy (Bickel, Weaver, Williams, & Lange, 1997; Rumberger & Palardy, 2005; Rumberger & Thomas, 2000).

Students attending larger schools with increased numbers had less school involvement and a higher likelihood of pregnancy (Bickel, Weaver, Williams, & Lange, 1997). The school characteristics explored in their study were the appropriated revenues for funding, average number of students, available counselors, student-teacher ratio, college preparatory courses, and completion rates. Results revealed teen pregnancy stems from an absence of opportunity and lack or decline of traditional community values. There was a negative relationship between birthrate and wage. As wages increased, birthrates among the community decreased. Wage earnings can provide means of incentives to prevent teenage pregnancy; communities receiving higher wages have less pregnancy rates. Results also included for every 100% student increase in school size, teen pregnancy increased by 8%.

Kortering and Braziel (1999) examined the satisfaction of academics for adolescents. This study examined students' perspectives in remedial and special

education in hopes of gaining insight and decreasing the dropout rate. The participants consisted of 52 students characterized as having learning disabilities, behavior disorders, and mild mental retardation. Students were asked questions relating to the best and worst part of school, advantages and disadvantages of school, changes to help them succeed and stay in school, and recommendations for reducing dropout likelihood. Students identified the participation of a particular class as the best part of school. Enjoyable classes reported were physical education, electives, and most content areas. Students reported the worst part of school as the attitudes of the teachers and/or administrators, the schoolwork, and waking early. Students expressed a desire for teachers to have more support, better attitude, and increased respect. The necessary changes needed for staying in school were receiving more help with schoolwork, offering a variety in courses and activities, providing instructional support, and selecting textbooks providing current information. Personal changes needed to increase motivation were increasing attendance, striving for better grades, and improving students' efforts in all school endeavors.

Student Mobility

Rumberger and Larson (1998) addressed past research on the effects of student mobility. Many high school students reported high mobility by transferring to various schools and/or moving to different communities. Mobility was higher for students from the lower social class. In terms of academics, mobility was negatively related to school performance. The more schools a student attended the higher the likelihood of not finishing high school. Students in this predicament not only suffer academically; but also are more likely to either dropout of school or enroll in an alternative school.

Community Involvement

Community involvement and after-school activities were negatively related to teen pregnancy (Bickel, Weaver, Williams, & Lange, 1997). As community involvement and after-school activity decreased, the pregnancy rates increased. School dropout may be a result of negative or the lack of community involvement. Individuals who feel disconnected from their community have fewer outlets to discuss their emotions and dilemmas. Community involvement may serve as a protective factor for adolescents. Individuals involved in the community are less likely to engage in problematic behaviors and dropping out of high school. Community involvement can increase family unity and individuals educational/career aspirations (Kirby, 2002).

Research on Adolescent Mothers

Valaitis and Sword (2005) conducted a qualitative study for adolescent parents. Students were recruited through group homes, medical clinics, alternative schools, and community centers. Adolescent mothers who participated acknowledged a desire to connect with other parents similar to their ages for comfort and support. Through an online discussion board, participants could communicate frequently on various topics. The benefits reported by the participants were decreased isolation, ability to share personal experience, and meeting other mothers. The perceived limitations and inability to participate were fatigue, lack of time, lack of computer access, technical computer complications, and lack of interest on the predetermined topic. It seems likely that young mothers may feel more apt to share their stories and meet new similar individuals through

an on-line discussion board. Young mothers may feel less judged or have decreased anxiety as they interact in their comforting and safe environments. Given the benefits of an on-line discussion board, many mothers may increase the amount and frequency of support contact. In addition, other mothers may have difficulty communicating via computer technology. Young mothers in particular who find pleasure interacting face-to-face may have difficulty expressing their feelings and staying excited through internet communication. Lastly, the authors noted the importance of the need for more resources for teenage mothers to decrease feeling overwhelmed and exhausted.

Davis (2002) conducted a study on the relationships of African-American adolescent mothers that specifically examined the interaction between mothers and peers. One hundred seventy-one participants were selected. Students were recruited from an alternative school and a public school located in a large Midwestern city. Participants were divided into two groups classified as younger and older adolescents. The students in the younger group varied in ages from 14-16. Older students in the second group were between the ages of 17-19 years old. The measures used were maternal and peer support, maternal problems, psychological functioning, and economic strain. Analyses were conducted to examine between-group and within-group differences. Contrary to past findings, differences were not found for both groups in maternal support, which past studies have shown maternal support significant for younger parents. Younger mothers significantly received more maternal support than older teens. However, significant findings for this study revealed that older adolescents received more childcare assistance, cognitive guidance, and positive feedback from their mothers than their peers. Maternal and peer support were negatively associated with depression. Younger teens who

received low maternal and peer support had higher levels of depression. Individuals with more depression may socialize with other teens and receive unhelpful advice when suffering a crisis. In addition, younger mothers may desire the need for more affection and communication from their parents. They may value their parent's suggestions and further understand their parent's significant role. The lack of a parental relationship may increase psychological estrangement and depression. Older adults who received low maternal support and increased peer comfort reported less depression. As students become older they may be more influenced and encouraged by their peers and social groups. They may also have increased problem solving ability to seek positive interaction with others if the parental relationship is limited or hindering.

Nitz, Kettlinus, and Brandt (1995) conducted a study on the role of stress, social support, and family environment for young teenage mothers. Stress, social support, and the environment were significant predictors for parenting behaviors. Seventy-five African-American students participated in the study. Participants were recruited through parenting classes from four high schools. Selection was based on the following characteristics: The participants ranged in ages from 14 to 19, were first-time parents, and had a healthy child aged six months or more. The measures used were the Arizona Social Support Interview Schedule, the Parenting Stress Index, and the Family Environment Scale. The results indicated the age of the child as a significant predictor in parenting. Children from adolescent mothers had more negative maternal behaviors than children with adult mothers. The parents of adolescents held a significant role as the major source of support. Friends were identified as the second major factor in providing support and were positively related to well-being and adjustment for young mothers. The majority of

students (89%) identified their mothers as a source of support; however, other students (36%) reported their mothers as a source of conflict. Students who reported having a conflicting relationship with a significant parent provided reasons for disengagement as disagreement on child rearing, identity formation, and the process of individuation. Young mothers who experienced conflict with their mothers and peers displayed less favorable maternal behaviors towards their infants.

McKenry, Kotch, and Browne (1991) conducted a study of parenting attitudes among low-income adolescent mothers. One hundred fifty-seven adolescent mothers were chosen to participate. Individuals were selected from various criteria such as having a child with biomedical (low birth weight) and social conditions (mother younger than 14 or drug use). The mothers were selected for participation through county hospitals or public health departments. Measures assessed maternal rejection, depression, self-esteem, and coping skills. The study also measured the child's temperament, infant's developmental status, and the mother's perspective of her child's developmental status. Results revealed significance of psychological resources for the parent when decreasing stress. Young mothers who are knowledgeable of community resources (counseling) and avenues of self nurture (relaxation techniques) have more ability to decrease stress. Many older adolescents had higher levels of education and less disruption by pregnancy as their younger counterparts. Individuals displaying negative involvement with their children also had greater emotional needs and were considered passive in character. These individuals also displayed lower self-esteem and had less enthusiasm and energy towards parenting. As past research has reflected, social support was significant for teen mothers. Greater family support decreased the likelihood of child abuse. For the

younger mothers, social support was found more important than having an intimate relationship.

CHAPTER III

METHODS

Research Design

This study used the existing database of the National Education Longitudinal Survey (NELS) 88:1992 by the National Center for Educational Statistics (NCES). Subjects for NELS 88 were recruited from both private (237) and public schools (815). The study conducted a two-stage probability design to select the 8th grade sample. The sample targeted 1,500 secondary schools. By random selection, twenty-three students from each school were selected to participate.

This study investigated the following question: Does the linear combination of academic, social, personal, and economic factors influence a student's decision to drop out of school.

The research hypotheses are as follows:

1. Prediction of membership of academic, social, personal factors do not influence a student's decision to drop out of school.
2. There are no differences in the academic, social, and personal profiles of students who are resilient and those who are not.
3. There are no differences between students who drop out and students who continue their education that can be attributed to resiliency.

The 1992 study included the participants from 1988 and 1990. Participation in

this study was confidential for identifiable information (social security number, mailing address, contact information, etc). The purpose of the NELS survey was to examine students' educational, vocational and personal development at different levels, and to provide information on the transition to postsecondary education or employment.

The population of interest included teen mothers who dropped out of school and teen mothers who continued. In particular, the study viewed the second follow-up wave of the NELS data. The sample consisted of 572 participants. There were 278 (48.6%) students classified as dropouts, 294 (51.4%) were currently enrolled. The majority of the students were White (51%); 23% Hispanic; 22% African-American; 2.5% American Indian; and 1.6% Asian Pacific Islander. The majority of students (39.3%) lived in rural areas; 30.9% lived in urban areas, and 29.8% students reported living within suburban areas. Over 50% of the students reported their socioeconomic quartile as low; 29.4% students reported their socioeconomic quartile in the second quartile; 15.3% students identified their income in the third quartile; and 5.2% students reported their income as high.

The second follow-up study was conducted during the second semester of the student's senior year (Huang, Salvucci, Peng, Owings, 1996). The questionnaires were distributed to both students in school as well as to students who dropped out. The sample size for the second follow-up consisted of 16,842 students from 247 participating schools. Academic tests were given and completed by 13,267 students. The academic tests measured cognitive ability, reading comprehension, mathematics, science, and history/geography.

There were 2,378 students that completed the dropout survey. Dropout tests were

given and completed by 959 students. There were 295 (2.4%) teen mothers/fathers that completed the survey. In addition, 151 students (1.2%) reported being pregnant. Students (187) assumed primary responsibility and care for their child.

Sixty-One students dropped, yet later returned. Alternative school became an option with 506 dropouts attending. Sadly, 939 students dropped out and did not return. Prior to the 1992 survey, seventy-one students from the first follow-up dropped out of school but returned to further their education. Sixty female students reported leaving school due to pregnancy and 61 individuals reported leaving school due to being a parent. On the other hand, 245 current students reported already having a child.

For selected sub-samples, information from school administrators, transcripts, parent questionnaires, and teacher questionnaires were collected. There were 15,409 completed surveys from school administrators. The high school transcripts collected (17,285) viewed information on the following: number of absences per semester, class rank, completion date, dropout information, transfer status, participation in academic or special programs, GPA, and standardized test scores. Parent questionnaires consisted of 16,395. There were 9,853 completed teacher questionnaires.

The questionnaire for the dropout sample consisted of information regarding reasons for leaving school, school experiences, loss of school time, short-term plans, employment, attitudes, self-concept, and home life. Other pertinent information assessed the last school attended, school climate, likelihood of returning back to school and graduating, current involvement, employment, and future goals.

The student questionnaire assessed academic achievement in the areas of mathematics, science, reading, and social studies. Other questions examined school

involvement, family (structure, environment, and the decision making process), social life, goals, attitudes, and values. Questionnaires for early graduates assessed circumstances for early graduation. In general the questionnaire data included seven content categories: equity, access, choice; cognitive growth; ability grouping and tracking; dropout and persistence; postsecondary transitions; and school, teacher, parent involvement.

A few cases were excluded from the study. Students who reported the following responses were omitted: multiple responses, missing data, and legitimate skip/not in wave.

Sample: Status Risk Students

The eighth-grade NELS:88 identified students who were at risk for dropout by characteristics such as socioeconomic status and type of school attended. Status risk students came from families and schools having the following disadvantages: lower SES, minority, and not living with biological parent. Students were placed in three academic risk groups according to test scores, grades, and graduation status. Students were identified as successful completers, marginal completers, and noncompleters. Successful completers received acceptable grades, attained reasonable scores on standardized reading and math exams, graduated from high school, and had fewer or one risk factor. Twenty-one percent students were classified as at-risk students who completed high school. Student's high school completion status was also related to family background. Graduation was successful for students having high-SES families, parents having a graduate degree, parent's expectation for child to receive college degree, and having less

risk factor for dropping out. High mathematics achievement was identified for students studied algebra or advanced math, attended private school, or participated in extracurricular activities.

Students identified as marginal completers made up 52 percent of the at-risk population. These students suffered academically by receiving low grade point averages and failing test scores. Despite their disadvantages, marginal completers graduated from high school. Marginal completers reported having no more than two risk factors.

High-risk students that dropped out were classified as non-completers and made up 27% of the population. Students as non-completers primarily came from low SES backgrounds, had no familial expectation to graduate or receive a college degree, and parents did not attend college. Non-completers reported having three or more risk factors such as the presence of a single-parent family, older sibling dropped out of school, changed schools two or more times, repeated grades of C's or lower for three consecutive years, and repeated a grade level. These students also lacked the high involvement of mathematics achievement.

Sample: Persistent Students

The 1992 high school graduates identified various risk factors endured. Over half of the students (58%) reported having at least one risk factor, 16 percent students reported two risk factors and 9 percent students reported three or more (Huang, Salvucci, Peng, & Owings, 1996). Given the number of students that faced more than two risk factors that threatened their academic success, more students reported lower dropout risk. Students may have changed schools fewer times than high-risk students, less financially

hindered by low SES or perhaps the family incomes is toward the high or medium quartile, living with both parents or have constant involvement with both biological parents even if divorced or separated, and had older siblings that graduated from high school.

Procedure

Questionnaires were distributed to all participants and data was collected through self-reported questionnaires. Participants involved students, parents, and school administrators during the spring term of 1992. Students who completed the first follow-up in 1990 were selected for the second follow-up study. The project staff administered the student questionnaires to the individuals who participated in the first follow-up study. Questionnaires were given to continued students and students who dropped out. Early graduates who had received their GED (General Educational Development) tests or other alternative means also participated in the survey.

The self-administered survey took approximately 60 minutes to complete. Both students and dropouts completed an 85-minute cognitive test battery in addition to the self-administered survey. The questionnaire assessed topics such as student background, primary language, home environment, self-perceptions, educational plans either occupational or postsecondary, employment, school experiences and activities, and social involvement (NELS: 88/1992). Surveys were given in the English and Spanish version. Surveys were conducted individually and in-group format. An interviewer was available during the survey. Sample members were given the option to complete the survey in school or off campus. Telephone interviews were also made available for student

dropouts.

The researchers augmented the student sample through freshening to provide a representative sample of the students enrolled in the 12th grade. With freshening, 279 eligible 12th grade students were added.

Instruments

The study provided several instruments for each population, students and dropouts were given both questionnaires and tests; school administrator questionnaire, transcript data, parent questionnaire, and teacher questionnaire. The 1992 longitudinal study measured the following: second follow-up student questionnaire, assessment, and transcript data; second follow-up dropout questionnaire, assessment, and transcript data; second follow-up school administrator data; second follow-up parent data; and second follow-up teacher data.

Dependent/Independent Variables

Participants in the study included students and dropouts that identified themselves as either pregnant or a parent of a child. Dropout students were assessed by examining the reason for dropout, respondents selected items (F2D9AF) "I became pregnant" and (F2D9AG) "I became a parent." Students were also asked whether they had any children of their own (F2S76).

The dependent variables examined dropout and persistence in school. The study examined the risk and protective factors of teenage parents. Independent variables included students' personal characteristics, family and peer involvement, and

academic/social environments. Personal characteristics measured self-esteem, self-concept, and aspirations. Family and peer involvement measured by parent(s) academic expectations, family crises, and friend's level of academic involvement and aspirations. Social involvement in school measured the involvement in extracurricular activities, school climate, and attendance. Community involvement included religious activities, community service, and participation of groups outside of school involvement.

Personal Characteristics

Student engagement was measured by 10 items that included self-esteem and educational aspirations. The self-esteem category was measured by 13 items (F2S66A, (F2D57A). Responses were given on a four-point scale, ranging from strongly agree (1) to strongly disagree (4). Sample items for self-esteem include: "I feel good about myself", "I don't have enough control over the direction my life is taking" and "I do not have very much to be proud of". Students and dropouts were asked to complete the self-esteem scale. Educational aspirations measured student's level of commitment (F2S43). Students were asked, "how far in school respondent thinks he/she will get". On the 12 item scale, example of the responses were does not apply, less than high school, two years in school, and more than two years college. Dropout students were asked a similar question (F2D38) with the same responses, "How far in school respondent thinks he/she will go."

Table (3.1). Items for Determining Eligibility

Student Status	Item Description (Item Code)
Current students	Do you have any children of your own/expecting any? (F2S76)
Dropout Students	I was pregnant (F2D9AF)
	I became the mother/father of a baby (F2D9AG)

Table (3.2). Items for Personal Variable: Locus of Control

Student Status	Item Description (Item Code)
Current Students	I feel good about myself (F2S66A)
	I don't have enough control over the direction my life taking (F2S66B)
	I feel I am a person of worth, the equal of other people (F2S66D)
	I feel I do not have much to be proud of (F2S66L)
Dropout Students	I feel good about myself (F2D57A)
	I don't have enough control over the direction my life is taking (F2D57B)
	I feel I am a person of worth, the equal of other people (F2D57D)
	I feel I do not have much to be proud of (F2D57L)

Table (3.3). Items for Personal Variable: Thoughts on own Future

Student Status	Item Description (Item Code)
Current Students	You will have graduated from high school (F2S67A)
	You will go to college (F2S67B)
	You will have a happy family life (F2S67F)
	Your children will have a better life than you had (F2S67L)
Dropout Students	You will graduate from high school? (F2D58A)
	You will go to college? (F2D58B)
	You will have a happy family life? (F2D58F)
	Your children will have a better life than you had? (F2D58L)

Parental Support

Parent involvement and peer association were examined by the risk and likelihood of graduating from high school. Students were asked to respond to questions asking their parents' involvement in their schooling, their expectations for their future, frequency parent(s) discussed the selection of academic courses, and school activities of interest to the adolescent and future involvement. Parental aspirations were measured by the questions (F2S42A and F2S42B): "How far in school father wants respondent to go" and "How far in school mother wants respondent to go". There were 12 possible responses to the items with examples including does not apply, less than high school, 2 years in school, and more than 2 years college. Dropout students were given similar questions with the same responses (F2D37A and F2D37B).

Parental support also assessed risk and protective factors. Respondents (students and dropouts) were asked if any of the listed events had happened during the past two years (F2D80A, F2S96A). This scale consisted of 17 items with sample items including moved to new home, parents divorced, parents re/married, student became ill, relative died, sister became pregnant, brother dropped out, family on welfare, and relative died. Responses were rated yes (1), no (2), and refused (7).

Table (3.4). Items for Family Variable: Perception of Relationship with Parents

Student Status	Item Description (Item Code)
Current Students	How true are the following statements for you and your parent(s)/guardian(s) – (F2S100)
	My parent(s)/guardian(s) trust me to do what they expect without checking up on me (F2S100A)
	I often do not know WHY I am supposed to do what my parent(s)/guardian(s) tell me to do (F2S100B)
	I often count on my parent(s)/guardian(s) to solve many of my problems for me (F2S100C)
	I think that I will be a source of pride to my parent(s)/guardian(s) in the future (F2S100D)
Dropout Students	My parent(s)/guardian(s) trust me to do what they expect without checking up on me (F2D82A)
	I often do not know WHY I am supposed to do what my parent(s)/guardian(s) tell me to do (F2D82B)
	I often count on my parent(s)/guardian(s) to solve many of my problems for me (F2D82C)
	I think that I will be a source of pride to my parent(s)/guardian(s) in the future (F2D82D)

Table (3.5). Items for Family Variable: Childcare

Student Status	Item Description (Item Code)
Current Students	How often do the following people take care of your youngest child during the school year? (F2S78)
	You (F2S78A)
	The child's other parent/step-parent (F2S78B)
	The child's grandparent (F2S78C)
Dropout Student	How often do the following people help care for your youngest child? (F2D68)
	You (F2D68A)
	The child's other parent/step-parent (F2D68B)
	The child's grandparent (F2D68C)

Peer Involvement

Students were asked questions to determine their friend's level of involvement in school. Students responded to the importance of their friends graduating and going to college. The students also responded to questions regarding their friend's involvement in attending classes, getting good grades, finishing high school, and plans for postsecondary education. Items were presented twice, once with students, and then with reference to dropouts regarding the importance of peer group activities (F2D60A, F2S68A). Sample items to the peer group activities included "Important that friends attend classes regularly", "Important that friends get good grades", and "Important to get together with friends". Responses were given on a three-point scale from not important (1) to very important (3).

A similar question asked respondents to determine their friend's level of involvement regarding dropout and persistence (F2S69, F2D59). Five sample items were given to students and dropouts that included, "Respondent's friends who dropped out of high school", "Respondent's friends with no plans for college", and "Respondent friends to attend four-year school". Responses were measured on a five-item scale rated none of them (1), a few of them (2), some of them (3), most of them (4), and all of them (5).

Family/Peer involvement consisted of eight questions asking how often child is cared for by a support person (F2S78A, F2D68A). Examples of support persons given were the other parent, grandparent, other relative, friend, neighbor, daycare, or babysitter. Responses were rated never (1), sometimes (2), and most of the time (3).

Table (3.6). Items for Social Variable: Importance of Peer Group Activities

Student Status	Item Description (Item Code)
Current Students	Attend classes regularly? (F2S68A)
	Study? (F2S68B)
	Get good grades? (F2S68D)
	Finish high school? (F2S68F)
	Continue their education past high school? (F2S68H)
Dropout Students	Attend classes regularly? (F2D60A)
	Study? (F2D60B)
	Get good grades? (F2D60D)
	Finish high school? (F2D60F)
	Continue their education past high school? (F2D60H)

Table (3.7). Items for Social Variable: Friendships

Student Status	Item Description	(Item Code)
Current Students	How many of your friends….(F2S69)	
	Dropped out of school without graduating? (F2S69A)	
	Have no plans to go to college? (F2S69B)	
Dropout Students	Dropped out of school without graduating? (F2D59A)	
	Have no plans to go to college? (F2D59B)	

Academic/Social Environments

School climate was measured by 13 items. Students were given the original scale (F2S7A), however; five items on the dropout scale (F2D18A) were deleted to reflect the experience of students. The items were measured on a four-point scale, ranging from strongly agree (1) to strongly disagree (4). Sample items of the school climate scale are "There is real school spirit", "Teachers are interested in students'", and "Students are graded fairly in school".

Dropout students were asked reasons for leaving school (F2D9A). The scale was measured by 21 items with "yes" or "no" answers. Sample items of the reasons for dropout are "I couldn't keep up with the schoolwork" and "I was getting poor grades/failing school". Dropout students were also asked what grade they last attended and if they passed to the next level (F2D7, F2D8).

Attendance, absence and suspension were measured by nine items (F2S9, F2D19). Both current students and dropouts were asked whether they had experienced any of the following in the first semester or current school year: late for school, cut or skipped classes, missed a day of school, in trouble for not following rules, put on in-school suspension, suspended or put on probation, transferred for disciplinary problems, arrested, or sent to juvenile home or detention center. Responses were examined on a five-point scale ranging from never (0) to over 15 times (5). Students (current and dropout) were asked similar questions to describe their last school attended (F2S12A, F2D20). The measure included 16 items with sample response including special education program, general high school program, college prep, and industrial/tech education.

Table (3.8). Items for Academic Variable: School Attendance and Absences

Student Status	Item Description (Item Code)
Current Student	How many times did the following things happen to you in the first semester or current term of the current year? (F2S9)
	I was late for school (F2S9A)
	I cut or skipped classes (F2S9B)
Dropout Student	How many times did the following things happen to you during the last semester or tem you completed school? (F2D19)
	I was late for school (F2D19A)
	I cut or skipped classes (F2D19B)

Table (3.9). Items for Academic Variable: School Climate

Student Status	Item Description (Item Code)
Current Student	How much do you agree with each of the following statements about your current school and teachers? (F2S7)
	There is real school spirit (F2S7A)
	The teaching is good (F2S7C)
	Teachers are interested in students (F2S7D)
Dropout Student	How much do you agree with the following statements about the school you left? (F2D18)
	There was real school spirit (F2D18A)
	The teaching was good (F2D18C)
	Teachers were interested in students (F2D18D)

Social Involvement

Social involvement was assessed by 12 items asking students involved in various activities (F2D35, F2S33). Responses on a four-point scale were rated never (1), less than once a week (2), once or twice a week (3), and everyday or almost every day (4). Items were presented twice, once with reference to students, and then with reference to dropouts. Sample items for social involvement are "participating in religious activities", "participating in youth groups or recreational programs", "participating in sports", and "doing volunteer or community service".

Involvement in extracurricular activities was measured by three items asking the type of interscholastic sport/activity involved. Current students were asked to complete the survey (F2S30). Sample items included participation on a team sport (baseball, basketball, football, soccer, etc.), an individual sport (cross-country, gymnastics, golf, tennis, etc.), and drill team/cheerleading. Responses were rated as: schools does not have (1), did not participate (2), participated on a junior varsity team (3), participated on a varsity team (4), and participated as a captain/co-captain on any team (5).

Table (3.10). Items for Social Variable: Community Involvement

Student Status	Item Description (Item Code)
Current Students	How often do you spend time on the following activities not sponsored by your school? (F2S33)
	Participating in religious activities (F2S33C)
	Participating in youth groups or recreational sports programs (F2S33D)
	Doing volunteer or community service (F2S33E)
	Participating in sports - not sponsored by your school (F2S33L)
Dropout Students	Participating in religious activities (F2D35C)
	Participating in youth groups or recreational programs (F2D35D)
	Doing volunteer or community service (F2D35E)
	Participating in sports (F2D35L)

Demographic and Background Variables

Demographic and background variables included age, type of school district, school region, SES, and race. Age questions asked birth year of sample member. For the question of age (F2BIRTHY), the four-category responses were 1972 or before (1), 1973 (2), 1974 (3), or 1975 or after (4). Questions that examined the type of school district asked students to identify their school among the four US Census regions (G12URBN3). The four districts were listed by a four-category response as Northeast (1), Midwest (2), South (3), and West (4). Questions that examined SES asked students to identify the family annual income (F2SES1Q). Responses were given on a four-point scale as quartile one – low (1), quartile two (2), quartile three (3), and quartile four – high (4). Students were asked to identify their race on a five-point scale (F2RACE1): Asian/Pacific Islander (1), Hispanic (2), Black (3), White (4), and American Indian (5).

Data Analyses

Once coding was competed, a series of statistical analyses were performed to determine which of the coded study and sample characteristics were related to teen dropout and resilience. Most of these analyses addressed substantive questions such as whether dropout effect is more important at the personal, academic, or social level.

The NELS 1992 study allows researchers to analyze data through cross wave (longitudinal), cross-sectional at a single point, and cross-cohort by comparing the data to other selected databases (Huang, Salvucci, Peng, & Owings, 1996). Plans were made to examine the data through descriptive and relational analyses to identify the relationship between the protective factors and risk factors in relation to dropout.

Both groups were matched to identify similarities and differences. The data were adjusted for missing non-normal distributions and outliers. These items were analyzed to determine how well they held together. Items were examined to have good face validity and content validity for measuring the given variables. Items were also reversed scored to match low values reflecting risk factors and high values reflecting resilient feelings/behaviors. Items were equally weighed and combined through standardized z scores with a mean of 0 and standard deviation of 1. Descriptive statistics included the mean and standard deviations of the dependent variables. Internal consistency was assessed by Cronbach alpha.

Hypothesis 1 focused on classifying groups based on linear combinations of measures was tested via discriminant function analysis. Hypothesis 2 was tested by descriptive statistics. Hypothesis 3 was tested via a MANOVA. A one-way MANOVA will be used to determine the effect size of the nine variables on the two groups.

CHAPTER IV

RESULTS

Pre-Analysis Data Screening

Sixty-two items were selected as having face validity for personal, academic, and social factors. As suggested by Mertler & Vannatta (2001), the data were screened for the accurate population, missing data, and outliers. An adequacy of fit between the data and assumptions of normality, linearity, and homoscedasticity were also screened.

Reduction of Items

Items were eliminated that did not represent individuals' personal, social, and academic interests in relation to student's continuation in school. The original data set contained 62 items. The following number of items were deleted from the data set: Six items from the Locus of Control Scale; four items from Thoughts on Future; the scale of family crises; four items from childcare; four items from Peer-Group Activities, six items from Friendships, seven items from School Attendance and Absence, six items from School Climate, and four items from Community Involvement.

Procedure for Handling Missing Values

Items with missing values were coded. Answers to items varied with responses as "missing," "legitimate skip/not in wave," "multiple response," and "refused". The values assigned to represent the missing data varied as 6,7,8,9,96,98,or 99.

Recodes

Items were recoded to align the variables in the same way. Items were recoded to reflect high to low frequency. Individuals with high scores were considered as having positive feelings and positive personal, academic, and social involvement and individuals with low scores were considered to have low esteem and low personal, academic, and social involvement. Forty-four items in the data set were recoded to accurately represent the data.

Collapsed Categories

Similar items given to both populations (continued and dropout) were combined to create new variables for analyses. This procedure allowed viewing of differences and similarities between the students. Three categories were created to identify specific populations; teen mothers registered in school were coded as "newparent F2S," teen mothers who dropped out were coded as "newparent F2D," and a category was created with both populations combined to reflect "dropout = 0," and "current students = 1". The category containing both groups was named "newnewpar".

Distributions of Normality and Data Transformations

Distributions of normality were checked through frequencies in addition to kurtosis, skewness, histograms, mean, median, mode, and standard deviation. Stem and leaf plots were analyzed for skewed items. Items that had skeweness coefficients over 1.00 were transformed.

To eliminate the skewed items, square root transformations were performed for normality. Area Transformations were conducted for four items that were negatively skewed (cut/skip, youth, community, and sport).

Mahalanobois Distance was performed for multivariate normality. All items in the data set were explored for analyses and a new variable was created called "Mah1" for Mahalanobis distance. Outliers were indicated using chi square values that are significant at $p<.001$ with respective degrees of freedom. Cases with a Mahalanobis distance exceeding 61.098 for the 31 items were considered outliers. The table of extreme values generated a list identifying the five highest and five lowest values of "Mah1". One case was identified (case #320) as an outlier as it exceeded the Chi-square value $X^2(30) = 61.1$ at $p=.001$ and was most appropriately deleted.

Exploratory Factor Analysis

Exploratory Factor Analysis was used to analyze shared variability on the following variables: (feels good), (control), (worth), (proud), (chances graduate), (chances college), (chances_happy_life), (chances_children), (parents_trust), (parents_solve_problems), (source_pride), (R_care), (other_parent_care), (grandparent_care), (attend_classes), (study), (good_grades), (finish_high_school), (college), (friendsDO), (no_plansC), (late), (spirit), (teaching), (teachers_interested), (Normal cut_skip), (Normal religious_activities), (Normal youth_groups), (Normal community_service), and (Normal sports). The criteria used to explore factors were eigenvalue, communalities, variance, scree plot, factor matrix, pattern matrix, structure matrix, factor correlation matrix, and reliabilities of all scales. Commonalities for each

variable were explored using the Extraction method in the Principal Axis Factoring.

The first three components accounted for 14.23% of cumulative variance. The nine factors totaled 58.42% cumulative variance. The Pattern Matrix using the Extraction Method: Principal Axis Factoring was examined. Rotation converged in 7 iterations. The nine factors identified evidence representing Resilience Theory. The first factor identified five pattern coefficients included study, good grades, attend classes, college, and finish high school. These variables had positive loadings and addressed *Peer Academic Aspirations.* Items with the highest loadings were study and good grades. The second component identified three positive loadings to include teachers interested, teaching, and spirit. Teachers interested had the highest loadings. These variables addressed *Climate.* The third component identified four positive loadings to include feels good, control, worth, and proud. Items with the highest loadings were feels good and control. These variables were labeled *Personal Involvement.* The fourth factors with positive loadings were chances graduate, chances happy life, chances college, and chances children. Items with the highest loadings were chances graduate and chances happy life. These variables were given the name *Future Involvement*.

The fifth factor identified four positive loadings to include youth_groups, sports, community_service, and religious_activities and was labeled *Community Involvement.* The highest loading for the fifth factor was youth groups. The sixth factor identified two factors identified as *Childcare* with positive loadings to include student care as the highest loading and grandparent care. The seventh factor labeled *School Attendance* identified two positive loadings to include late and cut/skip. The eighth factor was

labeled *Negative Social Support* and addressed peer interaction and identified two loadings, one factor as negative. The positive loading was friends who drop out, and the negative and highest loading was friends with no plans for college. The last factor labeled *Parental support* identified four loadings with two as negative. The positive loadings were parents solve problems and obey parents. The negative loadings were source of pride to parents and parents trust. Parents solve problems had the highest loading. (see Table 4.1). The items were equally weighted and combined through standardized z scores with a mean of 0 and standard deviation of 1.

Table 4.1 Component Loadings
Pattern Matrix: Principal Axis Factoring

	Loading
Component 1: Peer Academic Aspirations	
Study	.863
Good grades	.845
Attend classes	.810
College	.693
Finish high school	.640
Component 2: Climate	
Teachers interested	.827
Teaching	.742
Spirit	.553
Component 3: Personal Involvement	
Feels good	.775
Control	.631
Worth	.536
Proud	.312
Component 4: Future Involvement	
Chances graduate	.632
Chances happy life	.601
Chances college	.536
Chances children	.312
Component 5: Community Involvement	
Youth groups	.713
Sports	.552
Community service	.406
Religious activities	.378

Table 4.1. Component Loadings (Cont.)

	Loading
Component 6: Childcare	
R Care	.607
Grandparent Care	.464
Component 7: School Attendance	
Late	.690
Cut/Skip	.610
Component 8: Negative Social Support	
No plans college	-.694
Friends drop out	.634
Component 9: Parental Support	
Parents solve problems	.558
Obey parents	.485
Source pride	-.432
Parents trust	-.331

Cronbach's Alpha

Reliabilities were examined for the nine scales. *Personal Involvement* contained four items with a Cronbach's Alpha of .594 (mean = 7.14, SD= 2.051). *Future Involvement* had four items and an alpha of .596 (mean=12.00, SD=4.148). *Parental support* contained four items with an alpha of -.101 (mean=12.66, SD=3.924). *Childcare* contained three items with an alpha of .249 (mean=5.713, SD=1.60). *Peer Academic Aspirations* contained five items with an alpha of .908 (mean=10.16, SD=3.32). *Negative Social Support* contained two items with an alpha of -.1.123 (mean = 5.68, SD=1.173). *School Attendance* contained two items with an alpha of .534 (mean=2.06, SD=1.98). *Climate* contained three items with an alpha of .716 (mean=6.33, SD=1.74). *Community Involvement* contained four items with an alpha of .560 (mean= -.2411, SD=1.722). See Table (4.2).

According to George and Mallery (2003 as cited in Gliem & Gliem, 2003), Cronbach's alpha are classified as having the following values, (9) excellent, (8) good, (7) acceptable, (6) questionable, (5) poor, and (<5) unacceptable. Scales with poor values are personal involvement, future involvement, parental support, childcare, negative social support, school attendance, and community involvement. The scales with poor values had face validity based on the factors associated with Resiliency Theory. Peer academic aspirations had an excellent alpha value and climate was considered acceptable. Despite the scales with low internal consistency, the items were found to have content validity.

Table: 4.2
Reliability Statistics

Scale	Cronbach's Alpha	Mean	SD
Personal Involvement	.594	7.14	2.051
Future Involvement	.596	12.00	4.148
Parental support	-.101	12.66	3.924
Childcare	.249	5.71	1.60
Peer Academic Aspirations	.908	10.16	3.32
Negative Social Support	-1.12	5.68	1.17
School Attendance	.543	2.06	1.98
Climate	.716	6.33	1.74
Community Involvement	.560	-.241	1.72

Research Hypotheses One

The first hypotheses examined academic, social, and personal factors in relation to high school dropout. A discriminant analysis was conducted to determine whether nine factors could predict the likelihood of dropout. The nine factors were peer academic aspirations, climate, personal involvement, future involvement, community involvement, school attendance, negative social support, parental support, and childcare. A discriminant method was conducted using the independent variables together. Because the groups were unequal, the function to compute from group size was utilized in classify with combined groups. When examining group statistics and test of equality of group means, group differences were significant ($p<.05$) for the variables academic inspiration, climate, future involvement, and childcare (see Table 4.3). The Box M Test indicated heterogeneity of covariances (see Table 4.4). The discrimant function had an eigenvalue of .92 and a canonical correlation of .69. The canonical correlation for the discriminant analyses ($.69^2 = .48$) was used to obtain the eta squared. Accordingly, 48% ($\eta 2=.6932=.480$) of the variability of the scores accounted for differences among the two groups.

The output for significance tests and strength of the relationship statistics for the discriminant analyses is shown in Table 4.5. The Wilks Lambda indicated a series of chi-square significance tests. These tests assessed significant differences among groups across the predictor variables (Green & Salkind, 2005). The Wilks Lamda indicated significance, $\Lambda=.520$, $X^2(9, N=572)=188.78$, $p<.001$ (see Table 4.6). This test is

significant at the .05 level and indicates there are differences among groups across the nine predictors in the population. The coefficients for the discriminant function were examined. The strength of the relationship was assessed by examining the standardized coefficients for the nine predictor variables in the function and the coefficients in the structure matrix. The standardized and correlation coefficients indicated that peer academic aspirations had a high positive relationship between both coefficients. Childcare also revealed a large negative relationship between both coefficients. Future involvement also revealed a large positive relationship between both coefficients. Predictor variables with a low negative relationship for both coefficients were community involvement, school attendance, negative social support, and parental support. Personal involvement indicated a small negative correlation coefficient yet a small positive correlation coefficient (Table 4.7). The output for the group centroids revealed students who dropped out had a function mean of -1.518 and current students had a mean of .604. These results suggest that students who assume primary parental responsibility, have high peer academic inspirations and achievement, and have positive future goals are more likely to continue school (see Table 4.8).

The output for group classification is shown in Table (4.9). Group membership was predicted by examining the classification function. There were 84 students in the dropout group with 64 (76%) cases predicted correctly. In the current student group, 211 (90%) cases were classified correctly. Of the total sample of 295 cases, the overall number of cases classified correctly was 86% of the sample. The cross-validation function revealed 61 dropout students and 191 current students were correctly classified.

Table 4.3

Test of Equality of Group Means

	Wilks' Lambda	F	df1	df2	Sig.
Peer Academic Aspirations	.712	118.468	1	293	.000
Climate	.978	6.709	1	293	.010
Personal Involvement	.999	.155	1	293	.694
Future Involvement	.896	33.942	1	293	.000
Community Involvement	.993	1.936	1	293	.165
School Attendance	.992	2.268	1	293	.133
Negative Social Support	.998	.519	1	293	.472
Parental support	.999	.225	1	293	.636
Childcare	.703	123.628	1	293	.000

Table 4.4

Box's Test of Equality of Covariance Matrices

Log Determinants

Newnewpar	Rank	Log Determinant
.00	9	-9.378
.01	9	-7.483
Pooled within-groups	9	-7.640

Test Results

Box's M		111.375
F	Approx.	2.370
	df1	45
	df2	88912.744
	Sig.	.000

Table 4.5

Eigenvalues for Canonical Discriminant Functions

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation
1	.924[a]	100.0	100.0	.693

Table 4.6

Wilks' Lambda

Test of Function (2)	Wilks' Lambda	Chi-square	Df	Sig.
1	.520	188.776	9	.000

Table: 4.7
Standardized Coefficients and Correlations of Predictor Variables with the Discriminant Functions

	Correlation coefficients with discriminant functions	Standardized coefficients for discriminant functions
Predictors	Function 1	Function 1
Peer Academic Aspirations	.66	.66
Climate	.16	.15
Personal Involvement	-.02	.12
Future Involvement	.35	.28
Community Involvement	-.09	-.07
School Attendance	-.09	-.03
Negative Social Support	-.04	-.11
Parental support	-.03	-.10
Childcare	-.68	-.63

Table 4.8

Functions at Group Centroids

Newnewpar	Function
	1
.00	-1.518
1.00	.604

Table 4.9

Group Classifications

		Predicted Group Membership		
Newnewpar		Dropouts	Current	Total
Original				
	(.00)	64	20	84
	(1.00)	20	191	211
(%)	(.00)	76.2	23.8	100.0
	(1.00)	9.5	90.5	100.0
Cross-validated				
	(.00)	61	23	84
	(1.00)	20	191	211
(%)	(.00)	72.6	27.4	100.0
	(1.00)	9.5	90.5	100.0

a. 86.4% of original grouped cases correctly classified.
b. 85.4% of cross-validated grouped cases correctly classified.

Resesarch Hypotheses Two

The second hypotheses examined the differences between students who drop out of high school and the current students (Table 4.10). Descriptive and frequency analyses were conducted to view similarities and differences between the two groups.

Personal_Involvement

Descriptives for personal involvement were conducted and results were not significant between the groups. Dropout students reported increased feelings of self control (M = -.02) than current students (M = -.05). The within group main effect was non significant F (1, 293) = .155.

Frequencies revealed 37% dropouts reported feeling good about themselves; 37% believed they had control over their lives; 32% dropouts reported feeling a sense of worth; and 32% reported their parents were proud of them despite their decisions to drop out.

Current students reported similar results: 42% reported feeling good about themselves; 23% believed they were in control of their circumstances; 35% had positive feelings of self-worth; and 35% believed their significant support persons were proud of their progress.

Future Involvement

Descriptives for future involvement were conducted and results were significant between the groups. Current students had a significantly higher mean in internal assets (M = .29) than dropout students (M = -.23). The within group effect was significant F (1,

293) = 33.94. The partial eta squared accounted for 10% variance. Current students held more positive beliefs in graduating from high school and attending college. Dropout students, on the other hand, had increased feelings that they would have a happy life and that their children would have more success than they had.

Twenty-seven percent mothers who dropped out reported a low likelihood of graduating from high school. Seven percent dropouts reported chances of attending college. Despite their academic decline, thirty-seven percent students reported a positive chance of having a happy life. Forty-eight percent mothers reported the belief of their children having more success than they.

For current students, 61% reported a positive chance they would graduate, 18% reported the chance of attending college, 30% students believed the chance of having a happy life, and 25% students reported the belief of their children having more success than they.

Parental Support

Descriptives for external assets such as parental support were conducted and results revealed non significant between the two groups F (1, 293) = .23. Dropout students reported lower external assets (M = .02). Current students who had higher external assets perceived the parental relationship as positive, reciprocal and trusting (M = -.00).

Dropout adolescents reported lower numbers of having a trusting relationship (12%). Eighteen percent students reported obeying their parents and listening to instruction. Sixty percent dropouts reported seeking their parents help in solving

problems. Forty-nine percent students believed that they did not bring pride to their parents.

Larger numbers of current students (18%) reported a trusting relationship with their parents. Thirty-four percent students understood the importance of obeying and listening to their parent's instruction. Thirty-five percent individuals reported seeking their parents help in solving problems. Sixteen percent individuals believed that they brought pride to their parents despite their teenage pregnancy.

Childcare

Descriptives for childcare were conducted and results revealed significance between the two groups F (1, 293) = 123.62. Dropout students reported higher levels of external assets and involvement. Dropout students less maternal involvement with their child (M = .50) than current students (M = -.42). The partial eta squared accounted for 29% variance.

Dropouts (2%) reported caring for their child most of the time. Sixty percent dropouts reported childcare from the other parent and fifty-three percent received primary support from a grandparent.

Current mothers (64%) reported caring for their child most of the time. Thirty-five percent students reported the other parent caring for their child and fifty-eight percent acknowledged some childcare support from the grandparent.

Peer Academic Aspirations

Descriptives for peer academic aspirations were conducted and resulted in

significant between-subjects effects. The mean for current students was significant and higher (M=.47) than dropout students (M = -.48). The within group main effect was significant F (1,293) = 118. The strength of association as measured by partial eta squared accounted for 28% variance. Current students interacted more with peers having higher academic aspirations than the dropout students (see Table 4.11). Current students associated with students who were more motivated to get better grades, study, attend classes, and prepare for post secondary education.

Frequencies for current students reported the importance of positive peer associations in academia: 40% reported the importance of their friends attending classes, 14% students reported some importance of studying, 45% students reported the importance of their friends making good grades, 69% wanted their friends to graduate from high school, and 42% desired their friends to further their education past high school.

Dropout students reported a vast difference in perception: 33% students reported the importance of attending classes, 10% students reported the importance of studying, 6% students reported the importance of receiving good grades, 7% believed the importance of finishing high school, and 12% reported the desire for postsecondary education.

Negative Social Support

Descriptives for negative social support were conducted and results revealed non significant between the two groups F (1, 293) = .52. Dropout students reported higher involvement with peers who had no plans to attend college (M = -.01). Current students

were more likely to report positive social support and interaction with like-minded individuals (M = -.06).

Sixty-nine percent mothers who dropped out reported socializing among friends with no plans to attend college. The lowest number (13%) of students reported the likelihood of their friends staying in school. The highest number of students (87%) believed their friends would eventually dropout.

Current students (51%) reported similar results that their friends had no plans to attend college. However, there was less likelihood (24%) that their friends would drop out of school.

School Attendance

Descriptives for school attendance were conducted and results were non significant. Dropout students reported higher incidents of lateness and truancy (M = .05) than current students (M = -.10). The within group effect was non significant F (1, 293) = 2.268.

Frequencies reported higher incidents of dropout students skipping school; 5% students reported skipping 7-9 times, 6% mothers reported skipping 10-15 times, and 10% reported skipping over 15 times. Thirty percent mothers reported tardiness 7-9 times, 12% mothers were tardy 10-15 times, and 10% mothers reported tardiness over 15 times.

Three percent current students reported tardiness 7-9 times and six percent students reported tardiness 10-15 times. The lowest percentage of students (3%) reported skipping 10-15 times, and 7% students reported skipping school over 15 times.

Climate

Descriptives for climate were conducted and resulted in significant between-subjects effects. Current students had a significantly higher mean (M = .02) than dropout students (M = -.23). The within group main effect was significant F (1, 293) = 6.71. The strength of association as measured by partial eta squared accounted for 2% variance (see Table 4.11). Current students held more positive beliefs in their teacher's interests of the students, having effective teaching instruction and guidance, and feeling a part of the school climate.

Over half the mothers in school (55%) experienced a sense of school spirit, 66% students reported good teaching, and 57% students perceived genuine interest from their teachers.

Dropout mothers (52%) reported feeling a sense of spirit when attending school, 59% mothers reported good teaching, and 54% mothers perceived genuine interest from their teachers.

Community Involvement

Descriptives for community involvement were conducted and results were non significance. Dropout students reported more community involvement (M = .04) than current students (M = -.07). The within group effect was non significant F (1, 293) = 1.93.

Dropout students reported community involvement in the following activities: 8% mothers involved in community activities, 21% engaged in sports, 10% engaged in

youth groups, and 14% engaged in religious activities.

Current mothers similarly reported 6% mothers involved in community activities, 13% engaged in sports, 12% engaged in youth groups, and 19% engaged in religious activities.

Table 4.10

Means and Standard Deviations for High School Dropouts and Current Students

	Current Students		Dropouts	
	M	*SD*	*M*	*SD*
Peer Academic Aspirations	.47	.68	-.48	.69
Climate	.03	.79	-.24	.79
Personal Involvement	-.05	.69	-.02	.63
Future Involvement	.29	.74	-.23	.50
Community Involvement	-.07	.72	.05	.52
School Attendance	-.11	.81	.06	.89
Negative Social Support	-.07	.55	-.02	.53
Parental Support	-.00	.48	.03	.53
Childcare	-.42	.68	.51	.56

Research Hypotheses Three

The third hypotheses examined differences between students who drop out and students who continue their education that can be attributed to resiliency. Tests of equality of group means were conducted by a multivariate analysis of variance to determine the effect size of the nine variables on the two groups. The Box's test revealed significance, the homogeneity hypothesis was rejected to conclude that there are differences between the matrices, $F(45, 88912.744)=.2.30$, $p < .01$. The Pillai's Trace of .48 is significant, $F(9, 285) = 29.26$, $p < .01$, indicating the rejection of the hypothesis that the population means on the two groups are the same for academic, personal, and social involvement. The multivariate $\eta 2=48$ indicates 48% of multivariate variance of the dependent variables is associated with the group factor.

MANOVA results were interpreted using an alpha level (.05). Results reveal that peer academic aspirations, climate, future involvement, and childcare as significant. Peer academic aspirations revealed significance ($F(1, 293)=118$, $p<.001$, partial $\eta^2=29$ (Table 4.11). Climate revealed significance ($F(1, 293)=6$, $p<.05$, partial $\eta^2=02$. Future involvement revealed significance ($F(1, 293)=33$, $p<.001$, partial $\eta^2=10$. Childcare revealed significance ($F(1, 293)=124$, $p<.001$, partial $\eta^2=30$. The categories that did not reveal significance were personal involvement ($F(1, 293)=.155$, $p=.694$, partial $\eta^2=00$), community involvement ($F(1, 293)=1.936$, $p=.165$, partial $\eta^2=01$), school attendance ($F(1, 293)=2.268$, $p=.133$, partial $\eta^2=01$), negative social support ($F(1, 293)=.519$, $p=.472$, partial $\eta^2=00$), and parental support ($F(1, 293)=.225$, $p=.363$, partial $\eta^2=00$).

Table 4.11

Variables and Partial Eta Squared

Variables	Partial Eta Squared
Peer Academic Aspirations	.29
Climate	.02
Personal Involvement	.00
Future Involvement	.10
Community Involvement	.01
School Attendance	.01
Negative Social Support	.00
Parental Support	.00
Childcare	.30

CHAPTER V

DISCUSSION

This study explored the process of change for adolescent parents through personal, social, and academic characteristics related to dropping out of high school. It compared personal, social, and academic characteristics using a sample of adolescent mothers who dropped out and a sample of adolescent mothers currently attending school. The current students were examined with the dropouts by variables associated with Resiliency Theory. The personal variables examined with both groups were personal involvement and future involvement. Studies have consistently shown that low self-esteem and low personal aspirations are factors significantly related to dropping out of high school (Miller, 2003). The social related variables by which the two groups were examined were peer academic aspirations, negative social support, parental support, childcare, and community involvement. Literature on high school dropouts that has looked at interpersonal characteristics has shown that dropouts are more likely to lack healthy social involvement with peers and parents (Benard, 1995; Kaplan, Peck, & Kaplan, 1997; Rumberger & Palardy, 2005). The academic variables by which the two groups were examined were school climate and school attendance. Past researchers have studied the relation of school climate and academic success and have identified significant results relating to high school dropout (Benard, 1995). In addition, excessive absences and frequent truancy were also significant findings leading to high school dropout.

Readdressing Psychoanalytic Theory

The findings confirm the importance of Erik Erikson's psychoanalytic theory by addressing the importance of social influences on adolescent mothers. Current students were more likely to establish identity and maturation than their counterparts. The results suggest adolescent mothers who continued their education were more likely pleased by their progress and their social relationships. These individuals were more likely to adapt to their maternal roles; thus, increasing their identity. In addition, current students also perceived more support from their parents and within their school climate. Alternately, dropout students had a higher likelihood of experiencing identity diffusion. Results revealed that adolescent mothers who discontinued their education were more likely to make improper decisions (e.g., dropout) and were more influenced by their peers (e.g., spending less time taking care of their baby).

Readdressing Social Learning Theory

Bandura's Social Learning Theory has played an instrumental role in understanding adolescent development. Miller (2002) stated that adolescents are influenced by imposed environments (e.g., school), selected environments (e.g., academic courses, peer groups) and created environments (e.g., sharing, hostility). The current study highlights the credibility of the model on the social influences of dropout. Self-efficacy was positively related to academic performance. Current students had increased self-efficacy and motivation to graduate from high school and attend college. In addition, current students participated in academic groups, had better problem-solving ability, and

achieved academically at a greater level than dropouts (Schunk & Pajares, n.d.). Dropouts displayed less self-efficacy as they prematurely left school and had less desire to further their education.

Research Hypotheses One

The first research hypotheses concerned the influence of academic, social, and personal factors on high school dropout. There were significant predictors of high school dropout for peer academic aspirations, school climate, future involvement, and childcare. These findings are highly consistent with past researchers examining differences between students who persisted in school and those who prematurely dropped out (Benard, 1995; Baker, Sigmon, & Nugent, 2001; Bickel, Weaver, Williams, & Lange, 1997; Rumberger & Palardy, 2005; Rumberger & Thomas, 2000).

This study found that dropouts scored significantly lower on peer academic aspirations. Studies have consistently found that peer association is related to adolescent success. Dropouts are more likely to associate themselves with peers having lower academic aspirations (Lehr, Johnson, Bremer, Cosio, & Thompson, 2004). Many dropouts associate themselves with other students who also have dropped out of school. This study confirms that adolescent mothers who dropped out were more likely to involve in social networks who did not desire to finish high school and receive post secondary education.

Another finding in this study suggested the presence of a negative or hostile school climate increased the likelihood of dropping out. Studies have been consistent of this finding (Benard, 1995; Kaplan, Peck, & Kaplan, 1997; Rumberger & Palardy, 2005).

The authors explained the absence of a positive and welcoming environment increases the likelihood of high school dropout. Students were more likely to succeed if they perceived the school atmosphere conducive towards learning, believed the teachers were interested in their pursuits, and felt valuable in the learning atmosphere.
This study established that school climate remains an academic factor that should be considered when attempting to identify adolescent mothers at risk of dropping out of high school.

The present study showed adolescent mothers who dropped out of high school had optimistic plans for their future. Dropout students were more likely to believe that a better future was possible for them and their child. This finding is not reflective of past research (Benard, 1995). At-risk individuals who have fewer assets and protective factors have a higher likelihood of high school dropout. Despite their decision to dropout, individuals may increase their optimism by seeking employment or other survival avenues as they experience decreased personal power and inadequate income associated with not having a high school degree (Lewis, Ross, & Mirowsky, 1999).

Childcare was found significant among the groups. Adolescent mothers who dropped out were less likely to assume parental responsibility. Many dropouts reported their parents or the child's other parent assuming primary responsibility for their child. This is consistent with the findings of Ellenbogen and Chamberland (1997) that found adolescent mothers who dropped out of high school were more likely to socialize with peers who dropped out of school and that these individuals pursued full-time employment. Full-time employment for adolescent mothers may limit their involvement with their child.

Research Hypotheses Two

Research hypotheses examined differences in the personal, social, and academic factors among the two groups.

Differences in Personal Factors

The personal factors for adolescent mothers are pertinent to academic success. Kaplan, Peck, and Kaplan (1997) found self-esteem related to academic experiences. Students who feel rejected in their school environment have a higher likelihood of dropout. Findings for this study revealed non significance for adolescents in personal involvement. There was however partial support that current students had higher personal involvement than dropout students. Current students were more likely to feel good about themselves, feel worthy of who they are and equal to others, and were proud of their progress. Dropout students reported increased feelings of having control over their life. Despite the control, they had decreased feelings of self worth and were not proud of their progress. Given the struggles of parenting, young mothers who dropped out of high school with a low self-esteem may have difficulty increasing intrinsic and extrinsic motivations to continue their academic pursuits. Dropouts may also have difficulty understanding the dual role of being a parent and exploring their individual uniqueness. Teen parents are thrust into a role of decision-making that is different than students who are not parents.

Differences in Family Factors

Parental support was non significant. Adolescent mothers who dropped out evidenced greater distance in their involvement with their parents. In agreement with Lehr (2004), the presence and accumulation of family stressors were associated with increased rates of dropout. Dropout student were more likely to report less trust and independence in the home, vague understanding of parental expectations, inability to receive parental involvement, and disbelief that their parent(s) are proud of them despite their pregnancy. In accordance with past research (Slicker & Kim, 1996; Heaven & Newbury, 2004), students living within a permissive environment have a higher likelihood of dropout. In addition, adolescent mothers perceived less emotional warmth and involvement from their fathers and mothers (Pereira, Canavarro, Cardoso, & Mendonca, 2005). Adolescent mothers who struggle between family matters and parenting may lack personal and physical power to overcome these struggles. In addition, students who are bombarded by family problems may have a greater need to case management, problem ID, and referral.

Resilient mothers who continued their schooling identified themselves having a different perspective in parental involvement. Current students evidenced less family turmoil and increased support that may have encouraged their academic efforts. This information is supported by Lloyd, 2004 that state teenagers who perceive their parents interested in their activities are more likely to continue school. Young mothers with a supportive parent may be more likely to avoid harming the parental relationship through lying, skipping school, cheating, and drug use. Those students who identified with a sense of connection with their parents were more likely to experience warmth, kindness,

love, and stability. Furthermore, students with intact relationships have a higher ability to respond to others positively and are more self-confident in their abilities. In addition, students with higher levels of personal involvement such as self-esteem and positive locus of control may be more optimistic despite any family ordeals. Such individuals may be able to self nurture and provide adequate reinforcement for learning and success, based on the longing for a better future for their children and themselves.

Differences in Childcare Support

There were significant findings between the groups for childcare. Dropouts reported higher levels of external support of childcare than current students. This finding was contrary to past studies that suggest the lack of childcare for adolescent mothers contribute towards high school dropout (Blechman, 1992). Students with adequate childcare may feel less overwhelmed and more likely to continue their academic pursuits. Given the free time of not attending school, dropout students may have more time with their child than their counterparts. One explanation for increased childcare may be reasons associated with employment. Ellenbogen and Chamberland (1997) found that peer relationships were significantly important as most dropout students associate with peers who dropped out and work full-time. Adolescent mothers who drop out may be more likely to imitate their friend's behavior and seek full-time employment further decreasing the frequency of childcare involvement. Another explanation may be a direct result of dropping out of school; the more dissatisfied dropouts are the less likely of assuming primary maternal responsibility. Davis (2002) reported older adolescents receive more childcare assistance, cognitive guidance, and positive feedback from their

mothers than their peers. Paternal fathers of the children may offer additional assistance in hopes of the teen returning to school. In addition, communities and governmental agencies may also provide childcare relief to encourage mothers to seek employment and further their education.

Current students reported less external assets for childcare and reported being the main provider for their child. Current students reported spending a great deal of time taking care of their infants than utilizing the support of the child's other parent or their parents. Adolescent mothers in school may feel satisfied in their academic endeavors and receive pleasure when taking care of their child. As research has supported the claim, motherhood can motivate and maintain the desire to succeed (Zachry, 2005). In Zachry's study adolescents who had a child and assumed primary responsibility reported feeling mature, in control of their life, and had improved decision-making skills. They had less desire to socialize and "hang out" with their friends.

Current students did receive other avenues of support as needed that may also prevent or decrease irritability and depression as supported by Nitz, Kettlinus, and Brandt, 1995. In addition, individuals who seek childcare support through non-relatives are more likely considered high achievers and having optimistic beliefs (Hellenga, Aber, & Rhodes, 2002). These students may utilize services at daycare facilities or group homes that provide childcare for fewer children. Current students may have alternative childcare support that was not included in the answers on the questionnaire. Given the importance of external assets and support, relatives and non-relative childcare providers enable students to further their academic pursuits.

Differences in Peer Involvement

Negative social support that measured peer associations proved non significant between the two groups but was partially supported by students who dropped out. Dropout students were more likely to report their friends dropping out of school without plans to obtain their high school diploma or attend college. Dropouts may be more likely to be influenced or persuaded by their friend's involvement (Aloise-Young, Patricia, & Chavez, 2002). Young mothers who dropout are more likely to socialize with other teen mothers who dropped out of school (Ellenbogen & Chamberland, 1997). Dropout associations have grouped similarities such as poor grades, lack of academic motivation, and poor community involvement.

Current students reported higher levels of external assets and characterized their peer involvement as positive. Current students were more likely to socialize with other students who are academically driven. This finding is similar to Valaitis and Sword (2005) that found adolescent mothers increase communication with individuals who have similar beliefs and goals. Individuals may form a bond or support group with other adolescent mothers or possibly continue healthy relationships with peers who are not mothers.

Differences in Academic Involvement

School climate predicted significant results between the two groups**.** Students were more likely to succeed if they perceived the school atmosphere conducive towards learning, believed the teachers were interested in their pursuits, had valuable and practical teaching, and felt valuable and included in the learning atmosphere. Current students

were less likely to feel threatened within their school climate and more likely to problem solve when faced with undesirable issues. This finding is complementary to Benard (1994) who asserts the most powerful success for students is at the academic level. The more frequent teachers and school staff highlight student's strengths and provide hope, the higher the likelihood of academic completion.

Students who perceived their school climate as negative or unfavorable had a higher likelihood of dropping out. A percentage of students perceived the school climate as an unsafe barrier that contributed to the decision to leave school prematurely. Individuals who perceived their school climate as negative and the classroom of poor teaching quality were more likely to drop out as supported by researchers (Kaplan, Peck, & Kaplan, 1997; Rumberger & Thomas, 2000). One explanation may be that students who perceive themselves as isolated may have decreased academic participation and less incentives to stay in school. Many adolescent mothers may struggle with the school climate as their maternal status characterizes them as a minority among students who are not parents. Feeling alienated by the majority climate may increase the lack of belonging and decrease academic motivation**.** Another explanation that affects student's academic involvement is medical problems with the pregnancy or developmental delays of the child that may further limit their output. As students get further behind on their class work, they may feel overwhelmed and pessimistic about completing assignments. The further behind students become academically, the increased likelihood of repeating a grade and possibly dropping out (Baker, Sigmon**,** & Nugent, 2001).

Differences in Community and Social Involvement

Dropout students reported more social involvement than current students. Dropouts reported increased participation in sports and community service than current students. This finding is contrary to research that identified the absence of community or social involvement related to academic failure. Students who disengage from social involvement are more likely to feel disconnected from their school and community and further increasing the possibility of school dropout (Lehr, Johnson, Bremer, Cosio, & Thompson, 2004; Benard, 1991). The lack of social involvement may further enhance student's feeling of social isolation. Without the involvement of healthy peer groups, sports, community service, or religious activities, students are more likely to adapt a pessimistic attitude towards parenting and their personal goals. To help explain the differences in community and social involvement for dropouts may be that community involvement and sports are an attempt by friends and family to help dropouts further their education. Intervention programs that specifically target at-risk populations may service adolescent mothers who dropout out through case management, problem identification, and referrals. As a result, adolescent mothers may be more apt to identify and utilize resources within their community; thus increasing their involvement. Miller (2003) agreed that the participation of school and community programs provide personal attention from adults that is highly needed, positive peer interaction, and increased self-esteem to youth.

Current students may feel satisfied with themselves academically and socially without the involvement of sports and community service. Current students reported increased participation in youth groups and religious activities. The healthy involvement

of youth groups and religious activities may further increase resilience and decrease feelings of academic and social defeat. In addition to the involvement of youth groups and religious activities, their close relationship with their child may provide new insight and academic affirmation for success. Current students reported being the primary caregiver for their child utilizing their support system less than dropout students. Given the fact that they spend a considerable amount of time caring for their child, less time may be available to play sports and be involved in community service. These individuals may live in families and communities characterized as nonjudgmental and supportive and are more likely to continue their academic efforts without much community involvement. This finding is supportive of Zachry (2005) that found adolescent mothers were more motivated and interested in pursuing their education. Some of the mothers in Zachry's study had returned to high school from dropping out in hopes of providing a better future for their children. Returning mothers may wish to focus their attention solely on academics and parenting leaving less opportunity for external involvement.

Research Hypotheses Three

Research hypotheses three examined attributes of Resiliency Theory for adolescent mothers who dropped out of high school and adolescent mothers who continued their education. Similar to findings for hypotheses one, four factors had significant differences between the two groups related to high school dropout. Findings from the MANOVA suggested significant results among the groups in peer academic aspirations, school climate, community involvement, and childcare.

These significant factors are associated with the resilient model and address the

importance of adolescent mothers having increased protective factors and decreased risk factors. Resilience research suggests that risk factors may predict only a small percentage (20-48%) of student outcome (Benard, 1995). Most importantly, protective factors are the strengths to overcoming high-risk situations (50-80%). The more protective factors adolescent mothers have, the higher the likelihood of academic, personal, and social success. In addition, the presence of two or more risk factors may increase student risk. Such is the case for adolescent mothers who have more risk factors than protective factors. Risk factors for adolescent mothers may stem from the lack of support persons in the home, school, and community. Dropout students have a higher likelihood of having fewer protective factors and more risk factors than current students. As supported by this study, adolescent mothers who dropped out of school had fewer positive supportive avenues.

Resilient youth have the following attributes: social competence, problem-solving skills, and independence. Resilient youth have the ability to establish healthy relationships with family and peers. Individuals who lack problem-solving skills experience psychosocial problems (Benard, 1995). The results of this study demonstrated that dropouts are less socially competent with healthy relationship, have fewer problem-solving skills, and increased dependence on others. Dropout students were more likely to depend on their parents to solve their problems than independently seek answers and alternative solutions.

Resiliency theory stated the most significant predictor of student outcome is having a sense of purpose and future (Benard, 1995). Successful students have healthy expectations, higher educational aspirations, and persistence. Consistent with the

Resilient Model, adolescent mothers who continued their education reported the healthy expectation of high school graduation and possible plans for postsecondary education. Current students were also persistent in their maternal responsibility by assuming primary care of their child unlike adolescent dropouts.

Protective factors within the family, at school, and within the community provided caring support, high expectations, and opportunities for participation (Hawkins, Catalano, & Miller, 1992). Resilient youth have a close bond with at least one person. Although both groups reported a lack of trust and pride within the parent-adolescent relationship, current students were more likely to identify having a close bond with an adult. Current students reported experiencing a positive school climate unlike dropout students. In addition to receiving beneficial academic knowledge, current students were more likely to establish and continue positive relationships with school personnel. Youth who successfully stay in school identify high parental and school personnel expectations. Environments that provide meaningful involvement and various opportunities enable youth participation at home, school, and within the community. Current students reported less community and extracurricular activity involvement than dropout students. However, current students reported meaningful academic involvement via youth groups and through the participation of religious activities.

Conclusion

Research on resiliency theory suggests the needed collaborative support from families, communities, and schools. Benard (1991, 1995) stated that all youth have enormous strength; such is the case for adolescent mothers who continued their

education. As further suggested by Benard, these individuals have certain personal strengths that are associated with healthy development and successful learning. As adolescent mothers experience home, school, community, and peer environments as supportive, they develop and maintain individual characteristics such as social competence, problem-solving ability, autonomy and identity, and a sense of purpose. The individual characteristics protect against risk factors that may hinder students and their children's development such as alcohol, drugs, and violence. To support this evidence, young resilient mothers scored higher on future involvement. Current students believed more in their abilities and competence. Adolescent mothers who continued their education displayed personal strengths identified by resilience such as cooperation, problem-solving, self-efficacy, self-awareness, and goals and aspirations. Current students had higher beliefs they would graduate and receive post secondary education. Most importantly they believed their children would have greater success than they had. As individuals accept their maternal responsibility and personal growth, they demonstrate and maintain an independent sense of identity. Students may establish their identity through the strength of resistance (refusing to accept negative self-related messages) and detachment from negative behaving peers (Bonner, 1995).

The likelihood of individual success deemed high for current students given the positive involvement with a significant adult at school, home, and within the community. This is particularly important for teen mothers as they learn to imitate adult behavior on making wise and independent choices. Many teenagers learn and improve their parenting skills as they interact with older individuals of the same sex. Teenagers also receive instrumental skills when interacting with the opposite sex; mothers learn how to

communicate and understand potential barriers faced by their child's father.

Adolescent's high expectations may develop personally and through the interaction of others. Positive individuals may engage young mothers and encourage them through their strengths and identified problem areas. Frequent and positive engagement increases academic success and team cooperation. As students interact with other students, they learn to effectively communicate, nurture, and maintain relationships despite conflict. Conflict solution is particularly needed for teen mothers as they learn to diffuse their anger and redirect negative behavior.

There are numerous opportunities at the personal, social, and family level to improve and promote resilience. Schools can promote resilience among adolescent mothers by making personal contacts with these students, paying attention and actively listen, being available to students by having an open-door policy, and making one-on-one time with adolescent mothers. This is particularly important as young mothers have unique developmental and social needs that are different from non mothers. Caring relationships provide adolescent mothers the opportunity to experience positive relationships and the ability to model the behavior to their child. Young mothers who lack the involvement of caring relationships may find external support in unhealthy behaviors further increasing the potential danger of neglect to their child.

Schools can partnership with families by offering child and youth development courses for the family, actively listening to parents regarding the home situation, making personal contact with parents, and offering in-school support groups through mentoring or student assistance program. There is a huge need for schools to collaborate with the community and the family. As services are offered to family members through the

school free of charge, young mothers who lack the needed involvement of their parents may improve their relationship and rebuild trust.

Lastly, the community can partner with schools to promote resilience by inviting community agencies to create on-site services, connect students to community-based programs through referral, and encourage teachers to use community service learning in their classrooms. There is often a lag of information to parents on neighborhood community agencies and available services. As families increase their knowledge of the benefits of their community, their empowerment will increase. Adolescent mothers and families will increase their problem-solving ability and decrease prideful feelings. Individuals and families who are unaware of services or agencies may be mistrustful or uncomfortable in asking. The schools and the family most often have a trusting relationship that carries mutual respect and a friendly understanding when making referrals to an agency thus further eliminating any uneasy feelings.

Limitations of the Study

There are benefits and limitations of using the NELS:88, 1992 database. The benefits of using the NELS:88, 1992 study were the representation from a national sample, and providing a large sample of population that included a diversified population. The limitations of the study were low alpha reliabilities and sample size. There was low alpha reliability for some scales. Despite the low reliability values, variables were included as having face validity with factors related to Resiliency Theory. In addition, sample size affected the study as cases dropped out due to missing values and non response items.

Future Directions

The information learned from previous and current research on teenage pregnancy is that adolescent mothers who accept their maternal responsibility have an increased motivation to change their circumstances academically, personally, and socially. With the necessary support factors in place, teenage mothers have the potential to correct their grades and improve interpersonal relationships that may have been hindered by deviant behaviors or becoming pregnant.

There is a need to further research adolescent mothers' needs in personal, academic, and social involvement. As suggested by Resiliency Theory, collaboration is needed among schools, family, and the communities for student success. These studies could maximize the effectiveness of prevention and intervention programs that service adolescent mothers through education, case management, and referral. In addition, studies could help alleviate stressors and increase support for teenage mothers that may decrease the likelihood of high school dropout.

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