

FAMILY AND SCHOOL ECOLOGICAL RISKS, AND
ACADEMIC ACHIEVEMENT AMONG
DISADVANTAGED FEMALES: MODERATING
EFFECTS OF PARENT PROTECTIVE FACTORS

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Abstract: Disadvantaged youth and those who are identified as being at-risk tend to have lower levels of educational attainment and hopes for the future. Risks within the family environment can have an effect on an adolescent's academic achievement. Adolescent females are particularly at a heightened risk for low academic performance. However, there are some disadvantaged female youth who are resilient and are able to overcome challenges. A variety of research identifies the benefits protective factors can have on youths' ability to be resilient despite risks. However, there is a lack of research examining parent protective factors as having moderating effects on the achievement outcomes of youth. Unlike previous research, this study considered both the school and family environments in identifying the risk, protective factors, and achievement of adolescent females. Consistent with previous literature, this study found that those participants who experienced high levels of family risk showed low levels of academic achievement. Likewise, those with high levels of school risk showed low levels of academic achievement. The study did not support hypotheses to indicate that parental monitoring, parental involvement, and the quality of the parent-youth relationship moderated the relationship between ecological risks (family and school) and academic achievement.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.....	1
Resilience.....	2
Family Ecological Risks.....	3
School Ecological Risks.....	5
Protective Factors.....	6
Relationship Quality.....	7
Parent Involvement.....	8
Parent Monitoring.....	9
Disadvantaged Adolescent Females.....	10
Purpose of Study.....	11
Research Questions and Hypotheses.....	14
II. METHODOLOGY.....	16
Participants.....	16
Measures.....	17
Procedure.....	26
III. RESULTS.....	28
Analytic Plan.....	28
Descriptive Statistics and Bivariate Correlations.....	29
Hypothesis 1.....	30
Hypothesis 2.....	31
Hypothesis 3.....	31

IV. DISCUSSION.....	33
Family Ecological Risks	34
School Ecological Risks	35
Protective Factors.....	36
Limitations	39
Future Directions and Conclusions.....	40
REFERENCES	43
APPENDICES	64
Appendix A: Extended Review of the Literature	64
Appendix B: Tables	105
Appendix C: Demographic Questionnaire	111
Appendix D: Family Changes and Adjustment Scale.....	113
Appendix E: Neighborhood Violence Scale	114
Appendix F: Parent-Youth Relationship Quality Scale	116
Appendix G: Parent-Youth Involvement Scale	118
Appendix H: Parent Knowledge Questionnaire.....	120
Appendix I: Youth School Performance Questionnaire	121
Appendix J: IRB Approval	122

LIST OF TABLES

Table	Page
1 Descriptive Statistics for the Components of the Family Ecological Risk Factor	103
2 Descriptive Statistics for the Components of the School Ecological Risk Factor	104
3 Bivariate Correlations and Descriptive Statistics	105
4 Regressions Examining the Links Between Family Ecological Risk and School Ecological Risk with Academic Achievement When Examined Simultaneous.....	106
5 Multiple Regression Examining Moderators in the Links Between Family Ecological Risk and Academic Achievement.....	107
6 Multiple Regression Examining Moderators in the Links Between School Ecological Risk and Academic Achievement.....	108

CHAPTER I

INTRODUCTION

The Trial for Urban District Assessment (2009) indicated that youth in elementary and secondary schools from urban inner city environments have lower levels of educational attainment when compared to other youth. A June 2010 Education Week report indicated the graduation rate of public school students in 2007 dropped to 30 percent (Editorial Projects in Education, 2010; Myint, O'Donnell, & Phillips, 2012). Extensive research shows youth of all ages who live within a low socioeconomic status (SES) are at risk for lower academic performance and future aspirations (Ripple & Luthar, 2000). In Oklahoma alone, there are 47% of children living in urban, inner city, and low-income families (National Center for Children in Poverty, 2011).

At-risk youth experience challenges during their adolescent years as they transition into adulthood (Steinberg, 2011). Adolescent females are at a heightened risk for low educational attainment and other vulnerabilities such as suicide, behavioral problems, gang involvement, and pregnancy (Daniel & Balog, 2009; Killebrew, Smith, Nevels, Weiss, & Gontkovsky, 2014). However, there are disadvantaged youth who excel academically despite vulnerabilities to risks (Benard, 2004; DiRago & Vailant, 2007; Sirin, 2005). Academic success is important because it is the primary means for achievement and status as an adult in the United States (Alston, 2009; Kuh, Kinzie,

Buckley, Bridges, & Hayek, 2006). Academic achievement leads to better occupational attainment in the future (Alston, 2009). Youth who live in inner city neighborhoods are affected by the highest concentration of poverty, highest crime rates, and the fewest resources (Castillo, 2003). Disadvantaged youth experience adversity, and at times, severe developmental disadvantages (Cooper & Crosnoe, 2007; Garmezy, 1991). Disadvantaged youth experience challenges such as lack of adequate adult and peer encouragement, teenage pregnancy, school dropout, and overarching extended family responsibilities. Many times, they also face neighborhood violence and decreased safety within their communities (Campbell & Schwarz, 1996; Edlynn, Hrden, Richards, & Miller, 2008; Schaefer-McDaniel, 2007). Disadvantaged youth usually have parents who may not be as engaged in their children's educational attainment (Cooper & Crosnoe, 2007; Lee & Bowen, 2006). The parents suffer economic stress, emotional distress, heightened levels of marital conflict, and disrupted parenting behavior. They also work long hours, work more physically demanding jobs, and have financial and time restraints that may keep them from supporting their children (Reardon, 2011).

Resilience

Some disadvantaged youth have better outcomes in life than others who have experienced comparable magnitudes of adversity (Rutter, 2012). Resilience involves three major variables: risk factors, protective factors, and resilience (Gonzalas, 2003). Risks are stressful situations that lead to difficulty in successful development (Werner, 1993). Protective factors are variables that can increase the chances of an individual developing in a healthy manner (Garmezy, 1991; Gonzalas, 2003). Resilience is the result of having protective or ameliorative experiences which can buffer the influence of risk

factors and lead to successful development (Garmezy, 1991; Gonzalas, 2003). Multiple researchers have focused on resilience when exploring the lives of disadvantaged youth (Tiet & Huzinga, 2012; Plunkett, Henry, Houlberg, Sands, & Abarca-Mortensen, 2008; Wasonga, Christman, & Kilmer, 2003). Research has been done in this area to understand the protective factors that predict resilience, specifically academic resilience despite living in inner cities and disadvantaged environments (Alston, 2009; Altschul, 2011; Anthony & Robbins, 2013; Castillo, 2003; Gonzalas, 2003; Majoribanks, 1998). Resilience focuses on youths' ability to overcome the risks of not completing school and having vocational plans for their future.

When considering the family and school, cumulative ecological factors should be considered because research shows youth growing up in a disadvantaged or at-risk environment are not in isolation of other risks (Gentile & Harwell, 2010). There is an accumulation of risks that result from a gradual addition of stressors to the environment. Cumulative risk involves assessing a variety of risks that result in a single outcome (Gentile & Harwell, 2010). Cumulative risk models provide representation of the overall adversity that at-risk youth face (Roy & Raver, 2014).

Family Ecological Risks

Living in a single parent home, experiencing family stress, living in poverty, having a parent with low educational attainment, and experiencing neighborhood violence are ecological risks shown to greatly affect disadvantaged youth (Bowen and Chapman, 1996; Campell & Schwarz, 1996; Demb, 1994; Padilla-Walker, Harper, & Bean, 2010; Sharma, 2013; Sirin, 2005). Youth with one parent in the home typically experience a lack of parental involvement and financial struggles. Youths who live in

single parent homes are more likely to have academic difficulties, skip classes, and have overall low educational attainment (Israel, Beaulieu, & Hartless, 2001). Family stressors like divorce, changes in schools, peer pressure, and community violence have lasting effects on school performance (Esmaeili, Yaacob, Juhari, & Mansor, 2011). Family stress can also have an effect on parents, as the experience of stress and strain affects the relationship with their children (Gutman, McLoyd, Tokoyaway, 2005).

At-risk youth may be more influenced by their parents when compared to peers (Cook, Buehler, & Henson, 2009). The link between a parent's education and a child's achievement has maintained stability over the last 50 years (Reardon, 2011). The status attainment model suggests that parents' level of education and status in society can be a determinant of their youth's later educational and future attainment (Alston, 2009; Blau & Duncan, 1967). Parents with an education (whether a college degree or not) will likely provide better resources for their children (Israel et al., 2001; Lee & Bowen, 2006; Reardon, 2011; Sirin, 2005).

There is a direct link between socioeconomic status and educational success among youth (Reardon, 2011). The economic status of the family is particularly important when considering the academic achievement of youth because of its connection to youths' home and school environment (Sirin, 2005). Living in poverty can contribute to a lack of community and school resources available for successful development of disadvantaged youth (Murry, Gaylord-Harden, Berkel, Copeland-Linder, & Nation, 2011; Sirin, 2005). Youth from urban environments have a higher prevalence of experiencing community violence (Campell & Schwarz, 1996). Those youth who experience violence in their everyday lives tends to suffer from not only academic problems, but also

psychological distress (Ceballo, Ramirez, Hearn, & Maltese, 2003). Experiences of fear and anxiety can lead to issues with focusing on and excelling in school (Edlynn et al., 2008). Additionally, living in dangerous communities can play a role in the amount of social support disadvantaged families experience. Experiencing neighborhood dangerousness can significantly affect academic achievement (Smith, 2013). In order for families to create healthy environments for their youth, including providing care and support and being involved, it is important to reside in a safe place (Benard, 1991).

School Ecological Risks

The school environment and risks such as school report grade, reduced lunch percentages, attendance rates, teacher experience, and parent school involvement can play a role in youths' lives. The No Child Left Behind act of 2001 requires each state to provide an annual report card which informs stakeholders about the progress of the students and school (Oklahoma State Department of Education, 2014). Youth who attend schools with low report grades are susceptible to involvement with low achieving peers at low performing schools. Peer relationships can contribute to motivation and academic achievement (Gonzales, Cauce, Friedman, & Mason, 1996). Subsequently, youth who attend schools with low attendance rates are likely skipping school themselves, or interacting with peers who do not attend class regularly. This can have a direct effect on performance in school and academic aspirations they develop over time (Gutman et al., 2002). In addition, youth who attend schools with high rates of reduced lunch are at risk for being enrolled in high poverty schools (U.S. Department of Education, 2013). As previously mentioned, schools that consist of predominantly low SES students usually lack the necessary resources for their youth (Sirin, 2005).

Teachers' level of experience and years instructing can influence the success of their students. Teacher experience has been neglected in research because it can be hard to define, leaving other characteristics like education level, teacher certification, and test scores as the main areas of study (Wanye & Young, 2003). Despite the lack of research on teacher experience, it is shown to have some effect on academic outcomes of students (Wanye & Young, 2003). The collaboration between the teacher and parent is also important in promoting success of the student (Department of Education, 2013). Although involvement in the home is important, parents' participation in school activities can also lead to academic achievement of their children (Alvarez-Valdivia et al., 2012). Attending conferences and volunteering with school activities can convey the message that education is vital for their children's future (Alvarez-Valdivia et al., 2012). Though disadvantaged youth are at risk for a number of reasons, including poverty, community violence, family stress, low achieving schools and lack of resources, research has shown that protective factors can buffer these influences (Benard, 1991; Benard, 2004; Castillo, 2003; Simons-Morton & Chen, 2009; Uddin, 2011; Werner & Smith, 1992).

Protective Factors

Werner and Smith (1992) define protective factors as those supports and opportunities that can buffer the risks associated with adversity and enable development. Environmental experiences can moderate the effects of low-income living and at-risk positions (Knox, 1998). Having a strong parent-youth relationship, parent involvement, and ongoing parental monitoring can lead to healthy development and academic success among disadvantaged adolescents (Castillo, 2003; Simons-Morton & Chen, 2009; Uddin, 2011; Werner & Smith, 1992). These factors are important when examining this

population because the relationship between adolescents and their parents changes tremendously during this time, leading to more challenges (Steinberg, 2011).

Relationship quality. Educational aspirations are higher among youth who receive more nurturance and rewards from their parents than among those who experience rejection from their parents (Jagpreet, 2012). According to Benard (2004), having a caring relationship with a parent who models and supports the youth's healthy development and well-being is significant. This can involve conveying loving support, such as being there, trusting, and showing the youth unconditional love (Benard, 2004). Having support from an opposite sex parent can impact the level of academic motivation the youth has (Plunkett et al., 2008). High school achievement rates, lower delinquency, higher attendance rates, and increased school completion can be the direct result of strong parent-child relationships among disadvantaged youth (Garmezy, 1991; Uddin, 2011; Ziegler, 1987). Even if that "parent" is a grandparent or other caregiver, some form of cohesion and warmth is beneficial (Garmezy, 1991). William and Bryan (2012) found some youth have such a close relationship to their primary caregiver that having a desire to "give back" motivated them to be academically resilient.

Though having a strong relationship is important, some researchers convey a different message. According to Rohner (2010), parental acceptance might not have a direct link to academic achievement. Similarly, others found although some at-risk adolescents have positive relationships with their parents, the relationship does not predict grade point average (Worley, 2007). They indicate that peer relationships can actually be more predictive of at-risk youths' outcomes (Worley, 2007). Despite these findings, Benard (2004) identifies the home as significantly affecting resiliency. Families

can have major influences on their youth's achievement in school and through life (Henderson & Mapp, 2002).

Parent involvement. Parent involvement is important at the critical stages of adolescence because it is the time that, due to a number of reasons, achievement usually tends to decline (Simons-Morton & Chen, 2009). The term *involvement* has been described in a number of ways in the literature, and may include being involved in leisure activities, spending time with homework, attending in-school conferences, having school expectations, and general in-home and in-school involvement (Altchul, 2011; Benard, 2004; Fan & Chen, 2001; Hayes, 2012; Palmer, 2004; William & Sanchez, 2012). Research shows that those who have less involved parents are the least academically successful compared to other youth (Cooper & Crosnoe, 2007).

Though involvement has been explored from different avenues in previous research, it has been shown that whether involvement is in-home, in-school, or time spent together without actually interacting, the results can have lasting impacts on the youth's educational attainment (Blocklin, Crouter, Updegraff, & McHale, 2011; Criss et al., 2015; Hayes, 2012; Padilla-Walker et al., 2010). Spending time with the youth allows for communication and understanding what is going on with the child, while monitoring whereabouts and plans for the future (Blocklin, Crouter, Updegraff, & McHale, 2011; Padilla-Walker et al., 2010). Even when examining different cultures and types of involvement, there is similarity in the impact it can have on the adolescent (Eccles, & Harold, 1993; Williams & Sanchez, 2012). It is shown that at-risk youths are likely to disengage in delinquent activities when they spend quality time with their parents (Milkie, Nomaguchi, & Denni, 2012). Though parent involvement is shown to be

beneficial in academic outcomes of youth, there is insufficient research exploring leisure activity between the parent and the youth and its influence on educational attainment. Parent involvement is important when examining at-risk youth because low family income, parental education, ethnic background, marital status, working status, and overall high-risk environments can create barriers to spending time with children (Eccles, & Harold, 1993).

Parent monitoring. Steinberg (2011) identifies the stage of adolescence as a critical time in which parents need to monitor their youth. Adolescence is usually a time, in which the youth starts to engage in negative behavior, experience emotional problems, and is influenced by and engages in activities with peers (Steinberg, 2011). Monitoring allows for parents to know their children's whereabouts and activities, while giving them a platform for protection (Ceballo et al., 2003). As a result, the child is held accountable and makes better decisions behaviorally and academically (Criss et al., 2015; Davidson & Cardemil, 2009). Youth who experience monitoring in the home are likely to excel academically (Criss et al., 2015; Davidson & Cardemil, 2009; Kristjansson & Sigfusdottir, 2009). Disadvantaged females who experience some level of monitoring from their parent may engage in less delinquent activity and engage in their schoolwork (Sattin & Kerr, 2000).

Some researchers highlight the need for both a positive relationship and behavior monitoring for the youth to excel in school (Lowe & Dotterer, 2013). However, this can be an issue with at-risk families as parents experience distress, possibly leading to avoidance and regression of the monitoring (Lowe & Dotterer, 2013). At-risk youth may also be unresponsive to enforcement of rules and monitoring, thereby exacerbating the

challenges for the parents (Baptiste, 2000). Due to the home, community, and school risks that disadvantaged youth experience, having regular conversations about youths' whereabouts, what they do in their free time, and implementing some sort of disciplinary practices are significant (Alston, 2009; Castillo, 2003; Davidson & Cardemil, 2009).

These protective factors are shown to influence the achievement of the youth when they are faced with risk. However, there is insufficient evidence for moderating roles influencing achievement. Additionally, there seems to be a lack of research exploring risks within the schools youth attends. There is a possibility that just as protective factors can moderate the influence of family risks, they may also moderate the influence of school risks.

Disadvantaged Adolescent Females

Disadvantaged females are at a higher risk for dropping out of school (Daniel & Balog, 2009). When compared to boys, females experience increased risk as a result of puberty and stress (Daniel & Balog, 2009; Killebrew et al., 2014; Mendle, Natsuaki, Leve, Ryzin, & Ge, 2011). The age of puberty for the adolescent female in the United States and Western countries has decreased as a result of environmental and societal changes. This has led to an increase in females entering premature puberty (Daniel & Balog, 2009). Disadvantaged females experience a heightened level of stress due to factors such as growing up without a father and a lack of parental involvement (Bogaert, 2005; Daniel & Balog, 2009; Mendle et al., 2011). Socially, they tend to be involved in gang activity as a result of needing a sense of belonging, identity, guidance, and protection (Harper & Robinson, 1999; Voisin et al., 2014). At-risk females also engage in early sexual activity, violence, substance abuse, and experience interpersonal stress and

suicidality (Castillo, 2003; Harper & Robinson, 1999; Voisin et al., 2014). The risks disadvantaged females experience can lead to a lack of educational attainment (Demb, 1994; Schaefer-McDaniel, 2007).

There are studies that indicate that more advantaged youth and suburban area adolescent females also experience risks. They are also exposed to substance abuse, negative peers, and academic problems (Luthar & Ansary, 2005). When compared to adolescent females from underserved environments, those from other contexts also experience risk (Fauth, Leventhal, & Brooks-Gunn, 2007; Luthar & Ansary, 2005). The underserved context of the family may not be the only reason some disadvantaged females have academic and developmental difficulties (Fauth et al., 2007).

Despite those findings, disadvantaged female youth have fewer family and social resources and are not prepared for later schooling and employment (Correa, 2011; Eaman, 2001). Living in single parent homes and attending less advantaged schools contributes to a lack of resources and opportunities for these youth (Orthner, Jones-Sanpei, & Williamson, 2004; Reardon, 2011). However, some disadvantaged females overcome adversity, achieve academically, develop aspirations, and experience successful lives (Gizir & Aydin, 2009; Gutman, Sameroff, & Eccles, 2002; Morales, 2010; Rutter, 2000). Some of these females tend to be resilient and capable (Orthner, Jones-Sanpei, & Williamson, 2004).

Purpose of Study

Due to the family and school risks that disadvantaged female youth experience, they are at an increased risk for low academic achievement and school adjustment (Benard, 2004; Bowen and Chapman, 1996; Campell & Schwarz, 1996; Demb, 1994;

DiRago & Vailant, 2007; Gutman et al., 2002; Esmaeili et al., 2011; Israel et al., 2000; Luthar & Ansary, 2005; Padilla-Walker, Harper, & Bean, 2010; Ripple & Luthar, 2000; Schaefer-McDaniel, 2007; Sharma, 2013; Sirin, 2005). At risk females also experience vulnerable situations like poverty, community violence, teen pregnancy and substance use, gang involvement, interpersonal stress and suicidality, lack of parental involvement, and school dropout (Bogaert, 2005; Campell & Schwarz, 1996; Castillo, 2003; Cooper & Crosnoe, 2007; Daniel & Balog, 2009; Edlynn et al., 2008; Harper & Robinson, 1999; Killebrew et al., 2014; Lee & Bowen, 2006; Luthar & Ansary, 2005; Mendle et al., 2011; Murry, Gaylord-Harden, Berkel, Copeland-Linder, & Nation, 2011; Schaefer-McDaniel, 2007; Sirin, 2005; Voisin et al., 2014). However, some disadvantaged females overcome adversity, achieve academically, develop aspirations, and experience successful lives (Gizir & Aydin, 2009; Gutman, Sameroff, & Eccles, 2002; Morales, 2010; Rutter, 2000).

Research has explored the buffer that protective factors such as relationship quality, parent involvement, and parent monitoring have on the outcomes of at-risk youth (Altchul, 2011; Benard, 2004; Ceballo et al., 2003; Criss et al., 2015; Davidson & Cardemil, 2009; Fan & Chen, 2001; Garmezy, 1991; Hayes, 2012; Kristjansson & Sigfusdottir, 2009; Palmer, 2004; Plunkett et al., 2008; Uddin, 2011; William & Sanchez, 2012; Ziegler, 1987). Nevertheless, there is not much literature representing the moderating effects of these protective factors, especially examining youth achievement. Likewise the literature that has explored the moderating effects has focused mostly on wellbeing and antisocial behavior (Cawston, 2012; Little-Harrison, 2011; Schofield et al., 2008; Smith, 2013). Despite the risks that disadvantaged youth experience, having parental protective factors can increase the likelihood of academic achievement (Plunkett

et al., 2008; Garnezy, 1991; Jagpreet, 2012; Uddin, 2011; William & Bryan, 2012; Worley, 2007). Little research explores parental involvement that entails spending leisurely time with youth. Most research focuses on spending time with homework, attending in-school conferences, and having school expectations (Altchul, 2011; Benard, 2004; Fan & Chen, 2001; Hayes, 2012; Palmer, 2004; William & Sanchez, 2012).

The purpose of this study was to fill the gaps in the current research by examining risks and protective factors that facilitate academic achievement among disadvantaged female youth. To date, this is the only study that has examined school ecological risks, especially with high-risk families. This study will contribute to the research by utilizing the resilience framework to include a different type of parental involvement protective factor (leisurely time), and the influence of school risks (Benard, 1991; Benard, 2004; Garnezy, 1991; Gonzalas, 2003). Additionally, this study examined school ecological risks, such as teacher experience, which is absent in the literature on the school environment (Wanye & Young, 2003). Though there is extensive research on the importance of a positive relationship with the parent, this study explored observational data of relationship quality, rather than typical self-reports (Benard, 2004; Plunkett et al., 2008; Garnezy, 1991; Uddin, 2011; Ziegler, 1987). A cumulative ecological risks model was utilized to determine the relationship between cumulative risks and academic outcomes (Roy & Raver, 2014; Whipple et al., 2010). The current study also hopes to fill gaps in the literature by examining moderating roles of protective factors when looking specifically at the academic achievement outcome.

Through research in this area, counseling psychologists will have resources pertaining to the academic development of the youth with whom they work. More

specifically, they will have the resources necessary to help underserved adolescent females. Counseling and school psychologists will have the resources and ability to intervene and promote the necessary resilience programming with those who are not succeeding academically. It is important for counseling and school psychologists to advocate for youth education. The role of the counseling psychologist is to advocate for healthy development and resilience, which involves succeeding academically. Youth who are resilient and able to succeed academically will have opportunities for higher education, better jobs, and more financial security. Academic success and economic stability leads to better living conditions and promoting growth in others. Educating youth is important, but understanding what it takes for youth to be successful academically is significant. Underserved female youth are in need of advocacy.

Research Questions

1. Will Ecological Risks (Family and School) predict Academic Achievement in female adolescents?
2. Do Parent Protective Factors (Relationship Quality, Parent Involvement, and Parent Monitoring) moderate the relationship between family ecological risks and academic achievement in adolescent females?
3. Do Parent Protective Factors (Relationship Quality, Parent Involvement, and Parent Monitoring) moderate the relationship between school ecological risks and academic achievement in adolescent females?

Hypotheses

1. Family and school ecological risks would be significantly and negatively related to academic achievement in female adolescents.

2. It was hypothesized that the link between family ecological risks and academic achievement in adolescent females would be attenuated under high levels of parent-adolescent relationship quality, parental knowledge, and parental involvement.
3. It was hypothesized that the link between school ecological risks and academic achievement in adolescent females would be attenuated under high levels of parent-adolescent relationship quality, parental knowledge, and parental involvement.

CHAPTER II

METHODOLOGY

Participants

This study used pre-existing data from the Family and Youth Development Project (FYDP), a study focusing on youth from low-income, high-risk families. The sample consisted of 171 parent-youth dyads recruited from low-income urban and rural neighborhoods in Northern Oklahoma. Data was gathered from adolescent females between the ages of 12 and 16 (M age = 13.57), and their primary caregiver. Participants were 24.6% European American, 45.6% African American, 2.9% Latino American, 15.2% Native Americans, and 11.7% who identified as other. A majority of the primary caregivers of the youth participants were biological mothers (81.3%). The median family income of the families was relatively low (\$27,300), and almost half of the participants were living below the poverty line (47.4%). Some of the participants of this study reported being home schooled or attending private schools that do not report public records. Additionally, there were some participants who did not indicate the school they were attending. Due to this, the researcher was only able to utilize school data from 125 participants. Attrition analyses were conducted to compare the full sample ($N=171$) with the sub sample ($n=46$) that didn't have school data. This was compared on all variables of

the study (family ecological risks, youth and parent reports of parental monitoring, parental involvement, parent-child relationship quality, adolescent grades, and adolescent age) and the researcher did not find any significant differences. Therefore the school data with the 125 participants were analyzed in this study.

The adolescents and their primary caregivers completed separate questionnaires. Families participated in a two and a half hour laboratory assessment that involved questionnaires and videotaped interaction tasks concerning the youth's emotions and parent-adolescent conflicts. Both parent and youth were given a wide range of questionnaires, but only a portion of the data was used in this study.

Measures

The measures used in this study included a Demographic Questionnaire, The Neighborhood Violence Scale, The Family Changes and Adjustment Measure, The Parent-Child Relationship Observational Evaluation, The Parent-Youth Involvement Scale, The Parent Knowledge Scale, and The Youth School Performance Questionnaire.

Demographics. A demographic questionnaire constructed by the Family and Youth Development Project (FYDP) was used to gather data about the adolescent and primary caregiver. It included gender, ethnicity, grade, age, poverty level, single parent status, parent education, and other family questions (Appendix B).

Family Ecological Risks

Family Ecological Risk is a cumulative ecological factor that includes a. primary caregiver education, b. neighborhood violence, c. family changes and adjustment, d. poverty level, and e. single parent status. Separate measures were combined into one cumulative risk variable. The youth was assigned a "1" if at risk (e.g., *single parent*

home) and "0" if not at risk (e.g., *dual parent home*). In poverty level, the family was assigned a "1" if at risk (*below the poverty line*) and "0" if not at risk (*above the poverty line*). Scores range from 0 to 5 with 5 indicating the highest risk and 0 indicating the lowest risk.

a. Primary Caregiver Education. The education level of the primary caregiver was assessed in the demographic questionnaire. The youth was assigned a "1" if at risk (e.g., *high school education or lower*) and "0" if not at risk (e.g., *some college or trade school or higher*).

b. Neighborhood Violence. The Neighborhood Violence Scale (Boxer et al., 2003; Richters & Martinez, 1992) (APPENDIX H) was utilized in the study to contribute to the family cumulative ecological risk factor. *Neighborhood violence* reflects the extent to which the youth witnessed occurrences such as seeing someone get shot, seeing someone get stabbed, or seeing someone being beaten up in their neighborhood. The neighborhood violence items are on a 4-point Likert type scale (0 = "never" to 3 = "many times"). The neighborhood violence scale is a 20-item measure. The reliability from this study is $\alpha=.90$. This measure has been used in previous studies to determine the type of violence one witnesses within a neighborhood. The items on this scale were adapted from the Exposure to Low Level Aggression Scale (Boxer et al., 2003) and the Things I have Seen and Heard Scale (Richters & Martinez, 1992).

According to Richters & Martinez (1992), a scale like this seeks understanding of violence and violence related activities in the home and community. It is important to note when using this measure that one cannot determine whether witnessing one act is more serious to the individual than another act. This is due to a lack of contextual

information added to the measure. However, this measure can reflect the extent to which youths experience violence around them (Richters & Martinez, 1992). The Things I have Seen and Heard Scale was developed to measure the risk and protective factors related to exposure to community violence. Similarly, the Exposure to Low Level Aggression Scale has been utilized in resilience research identifying its relation to future expectations the youth have (Boxer et al., 2003).

A median split was used to determine high and low neighborhood violence. A median split can be used to dichotomize data into two categories. Frequencies in SPSS were used to determine the median score. Those who scored below the median were placed in the low category and those who scored above the median were placed in the high category. Participants were assigned a “1” if at risk (e.g. *high neighborhood violence*) and “0” if not at risk (e.g. *low neighborhood violence*).

c. Family Changes and Adjustment. The Family Changes and Adjustment (Petit, Bates, & Dodge, 2014) Measure (APPENDIX G) was used to identify the stress level of the families in this study. This measure was adapted from the ongoing Child Development Project (Petit et al., 2014). This measure has been used to explore life experiences and how they are related to psychopathology processes, conduct problems in youth, and child development (Petit et al., 2014). It is originally based on family stress interview questions (Criss et al., 2002). The updated measure was developed by Petit et al. (2014), in which researchers developed an 18-item measure identifying the number of family stressors the participants encountered.

The more items participants identify as stressors indicates a higher level of stress experiences in that family. Items on the Family Changes and Adjustment scale are scored

0-1 (*i.e.* *No* or *Yes*). Total scores on the Family Changes and Adjustment scale can range from 0-18 (Petit, Bates, & Dodge, 2014). If the participant has a score over the median he or she is shown to have a high level of family stress (Criss et al., 2002). *No* indicates no change or adjustment for that item, and *yes* indicates that the participant had some form of change or adjustment with that item. Though this measure has not been used in multiple studies, the reliability from this study is $\alpha = .70$.

A median split was used to determine high and low family stress. A median split can be used to dichotomize data into two categories. Frequencies in SPSS were used to determine the median score. Those that scored below the median were placed in the low category and those that scored above the median were placed in the high category. Participants were assigned a “1” if at risk (e.g. *high family stress*) and “0” if not at risk (e.g. *low family stress*).

d. Poverty Level. Poverty level was assessed in the demographic questionnaire. The demographic questionnaire (Appendix B) asked for the income level of the parent. The reported income and household size were considered in calculating an income-to-needs ratio. This was done by dividing the participants’ income by the federal poverty threshold for their family size (El-Sheikh, et al., 2013). The family was assigned a “1” if at risk (*below the poverty line*) and “0” if not at risk (*above the poverty line*).

e. Single Parent Status. Single parent status was assessed in the demographic questionnaire. To measure, the youth was assigned a "1" if at risk (e.g., *single parent home*) and "0" if not at risk (e.g., *dual parent home*).

School Ecological Risks

The School Ecological Risk is a factor that includes public record of a. school letter report card grade, b. reduced lunch status, c. teacher experience, d. parent school involvement, and e. attendance rates. The school factor data that were collected identify the participant as “*at risk*” or “*not at risk*” based on the presented information on the school. The participants can score in the range of 0-5 with 5 indicating the highest risk and 0 indicating the lowest risk.

a. School letter grades are a national effort to show how successfully schools are meeting and advancing toward grade-level academic standards. These grades were developed to provide information on how schools in each district and state are doing. Each school is given a grade of A-F, based on a numerical score. The numerical score was used in this study was as follows: A- 90-100, B-80-89, C-70-79, D-60-69, and F-Below 60. Frequencies in SPSS were used to determine high and low grades. Those that scored a D or F were placed in the low category, and those who scored an A, B, or C were placed in the high group. The participants were assigned a "1" if at risk (e.g. *school grade of D-F*) and "0" if not at risk (e.g., *school grade of A-C*).

b. Reduced lunch is a percentage of students receiving reduced lunch that is provided by the schools. A median split was used to determine high and low reduced lunch percentages. Frequencies in SPSS were used to determine the median percentage. Those that scored below the median were placed in the low category and those that scored above the median were placed in the high category. Participants were assigned a "1" if at risk (e.g., *high percentages of free lunches*) and "0" if not at risk (e.g., *low percentage of free lunches*).

c. Teacher experience is a measure of the average years of experience of the current school faculty. A median split was used to determine high and low average years of experience. Frequencies in SPSS were used to determine the median number of years. Those that scored below the median were in the low category and those that scored above the median were placed in the high category. A median split was used to determine high and low averages of years of experience. Participants were assigned a "1" if at risk (e.g., *low number of years*) and "0" if not at risk (e.g., *high number of years*).

d. Parent school involvement is measured by the percentage of parents who attend school conferences and are involved in their children's school efforts. A median split was used to determine high and low percentages of involvement. Frequencies in SPSS were used to determine the median percentage. Those that scored below the median were placed in the low category and those that scored above the median were placed in the high category. The participants will be assigned a "1" if at risk (e.g., *low percentages of involvement*) and "0" if not at risk (e.g., *high percentages of involvement*).

e. Attendance rates are percentages of total school days that students in the prospective schools are present in school. A median split was used to determine high and low percentages of attendance. Frequencies in SPSS were used to determine the median percentage. Those that scored below the median were placed in the low category and those that scored above the median were placed in the high category. The participants were assigned a "1" if at risk (e.g., *low percentages of attendance*) and "0" if not at risk (e.g., *high percentages of attendance*).

Parent Protective Factors

Parent-Child Relationship Quality. The Parent-Child Relationship

Observational Evaluation (Melby et al., 1998) (APPENDIX C) was utilized in this study to determine the quality of the dyad relationship between the primary caregiver and adolescent. *Parent-child relationship quality* refers to the extent to which the parent and youth have a positive, warm, and supportive relationship. This factor is based on observer ratings of the parent-youth conflict discussion task using a scale adapted from Melby et al. (1998). Specifically, each family is coded separately using a 9-point Likert type scale. Low scores reflect an *emotionally unsatisfying, unhappy, or weak* relationship. Middle range scores signify families that demonstrate *fairly equal amounts of positive and negative relationship evidence*. High scores on this measure indicate a parent-adolescent that exhibit *emotionally satisfying, open, warm, and happy* interactions.

The parent-child relationship quality observational measure was adapted from the Iowa Family Interaction Rating Scale (IFIRS), which is designed to code interactions using a macrolevel coding system, at both the individual and dyadic level (Melby et al., 1998; Watson et al., 2014). In the development of this form of measurement, scenarios were developed to help participants in studies display a certain level of communication. Most recently, this form of observational measurement has been utilized with low-income families, and has been shown to be effective (Williamson et al., 2011). This scale is shown to be useful, as the interrater reliability from this study has an intraclass correlation: $\rho = .86$. Undergraduate and graduate research students conducted the observational coding. Each student was trained on how to effectively code the parent-youth interactions.

Parent-Youth Involvement Scale. The Parent-Youth Involvement Scale (Criss et al., 2015) (APPENDIX D) was utilized in this study to determine the level of involvement the parent had in the adolescent's daily life. *Parental involvement* refers to how often the parent and child spend time together. The involvement scale identifies the frequency with which the primary caregiver and the child engage in active and leisure activities together. This measure was a subscale of a monitoring scale that was created in the FYDP lab. This measure was used by Criss et al. (2015) in previous parenting studies. This measurement is similar to other instruments in the literature (Sattin & Kerr, 2000). The unique aspect of the monitoring measure developed for the FYDP lab is that it assesses different domains of the adolescent's life, such as friends, school, and most importantly free time. This measure is similar to other measures, yet was built with a reinterpretation of monitoring as including spending free or leisure time with each other (Criss et al., 2015). It is similar to Sattin and Kerr's (2000) measure of monitoring as a construct that explores whether parents were aware of their child's whereabouts.

Researchers from the FYDP lab created two self-report measures for the primary caregiver and the adolescent. The parent and adolescent version were utilized in this study. Both versions of the scale have 10 items. The items on this scale were rated using a 5-point Likert type scale (1=*never*, 2=*hardly ever*, 3=*Sometimes*, 4=*frequently*, 5=*very often*). The scores can range from 1-50. The higher the score, the more often the primary caregiver spends quality time with their youth. The reliability from this study is $\alpha = .79$ (Criss et al., 2015). Due to the high correlation ($r = .46$, $p = .000$) between the parent and youth reports, the scale was combined for this study.

Parent Knowledge Scale. The Parent Knowledge Scale (Kerr & Stattin, 2000) (APPENDIX E) from the FYDP lab was utilized in this study to measure the level of parent monitoring. *Parental knowledge* reflects the degree to which parents are knowledgeable or aware of their adolescent's daily activities. This scale was created for the FYDP, but the items in this measure are comparable to those used in the field (Brown, Mounts, Lamborn, & Steinberg, 1993; Dishion, Stoolmiller, & Skinner, 1991; Kerr & Stattin, 2000). Youth and parents rate the six items using a 5-point Likert type scale (1 = "never" to 5 = "very often"). This scale has been used regularly to examine the construct of parent monitoring and adolescent development, adjustment, and academic outcomes (Kerr & Stattin, 2000). Averaging the youth and parent factors creates the final parental knowledge factor. The reliability of the youth version from this study is $\alpha = .90$, and the parent version from this study is $\alpha = .85$. The parent and youth reports of the Parent Knowledge Scale were analyzed to determine correlation, and because the correlation between parent and youth reports of parental knowledge was not particularly strong in magnitude ($r = .19, p < .05$), these two factors were not combined. Separate analyses were computed with each factor, the parent reports and youth reports of parent knowledge.

Youth School Performance Questionnaire. The Youth School Performance Questionnaire from the FYDP lab (APPENDIX F) was used in this study to measure academic achievement of adolescents. This measure was developed for the Center for Resilience FYDP. It reflects the student's grade point average ($A=4, B=3, C=2, D=1, F=0$) in four subjects: English, Math, Science, and History. The adolescent reports were

created by averaging the four items. This measure has also been utilized in research in the FYDP lab as a means for identifying the academic outcomes of low-income youth.

Procedure

The Institutional Review Board (IRB) at a local public university approved this study. This study used pre-existing data. The researcher only collected data on the schools the participants reported attending. A portion of data from the Family and Youth Development Project (FYDP) was utilized in this study. Parent-youth dyads from the FYDP were previously recruited from low-income urban and rural neighborhoods in Northern Oklahoma. In efforts to recruit high-risk, low-income families, flyers describing the project were distributed to various clubs and organizations. Families were monetarily compensated, and given \$50 for their participation. Parent-youth dyads participated in a lab-based visit in a public university setting. Initially, parents and youth provided written consent and assent. Next, parents and youth separately completed questionnaires assessing demographics, parent characteristics and child characteristics. Advanced undergraduate and graduate students gave questionnaires to the families.

Participants came from 36 different schools in a metropolitan area. The researcher gathered data on school report card grade, reduced lunch percentages, teacher experience, parent school involvement, and attendance rates from the reported schools from the participants of the FYDP. These factors were provided through each school's public record. The researcher utilized this data in the analysis of School Ecological Risks. Data collection was concluded during the spring of 2015, with a total of 171 participants used in the study. Prior to data collection, an *a priori* sample size calculator for regression analyses was used to determine the proposed study's required sample size. The sample

size was determined for a statistical power level of .8, with an alpha level of .05, and the use of two predictor variables and three moderator variables. This analysis indicated the need for a sample size of at least 92 participants. 171 participants are sufficient to meet the sample size requirements as indicated by the power analysis and thus data collection was determined to be complete (Faul et al., 2007).

CHAPTER III

RESULTS

Analytic Plan

Descriptive statistics and bivariate correlations were computed. Next, to examine Hypothesis 1, a series of correlations were computed examining whether ecological risk (family or school) was correlated with academic achievement. Additionally, a regression was computed to examine whether family ecological risk and school ecological risk were uniquely related to school grades. To address Hypothesis 2 and 3, a series of regressions were computed where academic achievement was predicted by adolescent age (Step 1), ecological risk (family ecological risk or school ecological risk) and the moderator variable (parent reports of parental knowledge, youth reports of parental knowledge, parental involvement, or relationship quality) (Step 2), and the ecological risk factor X moderator interaction factor (Step 3). Following the recommendations of Baron & Kenny (1986), the main effects were centered before the creation of the two-way interaction factors and computing the regressions. Evidence for moderation would be found if the two-way interaction was significant. To decipher significant two-way interactions, the association between ecological risk (family ecological risk or school ecological risk) and academic achievement were examined at high (+1 *SD*) and low (-1 *SD*) levels of the

moderator. Separate regressions were computed for each ecological risk factor and moderator.

Descriptive Statistics and Bivariate Correlations

Descriptive statistics and bivariate correlations for all of the study variables are listed in Table 3. In addition, the descriptive statistics of the five components of the family ecological risk factor are in Table 1. The descriptive statistics of the five components of the school ecological risk factor are in Table 2. Within-domain correlations were consistent with expectations. Family ecological risk was significantly and positively related to school ecological risk, $r(125) = .43, p < .001$. Bivariate correlations between the risk factors and moderator variable were also consistent with expectations. Family ecological risk was significantly and negatively related to parent reports of parental knowledge, $r(171) = -.20, p < .01$, youth reports of parental knowledge, $r(171) = -.20, p < .01$, parental involvement, $r(171) = -.30, p < .001$, and relationship quality, $r(159) = -.19, p < .05$. Additionally, school ecological risk was significantly and negatively related to youth reports of parental knowledge, $r(125) = -.29, p = .001$, and parental involvement, $r(125) = -.31, p < .001$. In considering the moderator variables, parent reports of parental knowledge, was significantly and positively related to youth reports of parental knowledge, $r(171) = .19, p < .01$, and parental involvement, $r(171) = .37, p < .001$. Additionally, youth reports of parental knowledge were significantly and positively related to parental involvement, $r(171) = .26, p = .001$.

Though it was not included in the hypotheses, bivariate correlations indicate that parent involvement was significantly and negatively related to adolescent age, $r(171) = -.23, p < .01$. Looking further at between-domain correlations, as expected, both family ($r(171) = -.29, p = .000$) and school risks ($r(123) = -.33, p = .000$) are significantly and negatively related to academic achievement. Moreover, parent reports of parental knowledge, $r(171) = .20, p < .01$, youth reports of parental knowledge, $r(171) = .25, p = .001$, and parental involvement, $r(171) = .22, p < .01$, were significantly and positively related to academic achievement.

Hypothesis 1: *It is expected that risks (family and school) will be significantly and negatively related to academic achievement in female adolescents.*

To address this, a series of correlations between both family and school ecological and academic achievement were computed. As indicated in Table 3, high levels of family ecological risk were significantly related to low levels of academic achievement. Moreover, high levels of school ecological risk were significantly related to low levels of academic achievement. To investigate whether family risk and school risk was a significant predictor of academic achievement after controlling for age, a series of regressions were computed. As indicated in Table 5, family ecological risk significantly predicted academic achievement. It was shown that high levels of family ecological risk were significantly related to low academic achievement. As indicated in Table 6, school ecological risk significantly predicted academic achievement. It was shown that high levels of school ecological risk were significantly related to low academic achievement.

In sum, the results overall indicate that both family and school risk were significantly related to academic achievement after controlling for youth age. This indicates that hypothesis 1 was supported. Additionally, the predictor variables, family and school ecological risks, were examined simultaneously (Table 4). Results indicated that even when examined simultaneously, both family and school ecological risks were uniquely related to academic achievement $\Delta R^2 = .18$, $F(3, 119) = 9.707$, $p < .001$. This indicated that the model accounted for some of the variance in academic achievement.

Hypothesis 2: *It is expected that parent protective factors (relationship quality, parent involvement, and parent monitoring) will moderate the relationship between family ecological risks and academic achievement in adolescent females.*

To address this, a series of regressions were computed to examine each component of the proposed moderator model. As indicated in Table 5, results show that the moderator variables, parent reports of parental knowledge, youth reports of parental knowledge, parental involvement, and relationship quality did not significantly moderate the relationship between family ecological risks and academic achievement.

Hypothesis 3: *It is expected that parent protective factors (relationship quality, parent involvement, and parent monitoring) will moderate the relationship between school ecological risks and academic achievement in adolescent females.*

To address this, a series of regressions were computed to examine each component of the proposed moderator model. As indicated in Table 6, results show that the moderator variables, parent reports of parental knowledge, youth reports of parental

knowledge, parental involvement, and relationship quality did not significantly moderate the relationship between school ecological risks and academic achievement.

CHAPTER IV

DISCUSSION

There were three research goals in the current investigation. The first goal was to examine the predictive link between ecological risks (family and school) and academic achievement among adolescent females. This is the first study to examine a cumulative school ecological risk factor. The second aim was to determine whether parent protective factors (Relationship Quality, Parent Involvement, and Parent Monitoring) moderated the association between family ecological risks and academic achievement. The third research goal was to determine whether parent protective factors (Relationship Quality, Parent Involvement, and Parent Monitoring) served as moderators to the link between school ecological risks and academic achievement. This study is among the first few studies to examine these moderators when investigating adolescent academic achievement, although many studies have utilized these moderators when exploring antisocial behavior, well-being, and other adjustment factors (Cawston, 2012; Little-Harrison, 2011; Pettit, et al., 1999; Schofield et al., 2008; Smith, 2013). Additionally, this study adds to the literature on risk factors by including cumulative school factors that have not been evaluated in previous literature. This study ultimately shows the continued need for an understanding of the buffers against risk factors female adolescents

experience. Additionally, it is imperative that education leaders, psychologists, and advocates utilize this information to further champion for the youth they work with.

Family Ecological Risks

As expected, the results of the current study indicate that high levels of family ecological risk were significantly related to low academic achievement in adolescent females. These findings are consistent with previous studies, and suggest relationship between exposure to family risks and adolescent females' low academic achievement (Bowen and Chapman, 1996; Campell & Schwarz, 1996; Esmaeili et al., 2011; Gutman et al., 2002; Israel et al., 2000; Padilla-Walker, et al., 2010; Sharma, 2013; Sirin, 2005). More specifically, those female adolescents who tended to be exposed to neighborhood violence, family stress, living below the poverty level, having a parent with low educational attainment, and living in a single parent home were more likely to show lower levels of school academic achievement. These family risk factors may contribute to other variables like antisocial behavior, depression, and lower levels of wellbeing, that have been shown to possibly lead to low achievement (Cawston, 2012, Little-Harrison, 2011; Smith, 2013). Family ecological risks had a strong relationship with the achievement of the participants, indicating the great need for protective factors that will promote better adjustment. This is significant because understanding this link will help advocates understand why some at-risk female adolescents have difficulty achieving to their potential. Furthermore, when psychologists work with these youth it will be important for them to tackle helping these adolescents effectively cope with the risks that are placed on them. It will also be advantageous for the counseling or school psychologist work with the family as a whole, as this study shows the risks of the family can play a

role in their youths' outcomes. Things like helping the family manage living in poverty, being exposed to violence, and family stress may be helpful. It will also be helpful to work with these female youth who are living in single-family homes get the mentorship that they may need, which may take specific program planning from advocates.

School Ecological Risks

As expected, the results of the current study indicate that high levels of school ecological risk were significantly related to low academic achievement. This finding contributes to the resilience literature, as it has not been examined when exploring female adolescent outcomes. Our results indicated that family ecological risk was significantly and positively related to school ecological risk. This means that those adolescents who tend to experience family risk may also experience school risks, or attend schools that display more risk factors. Though this study examines school factors cumulatively, it may be useful to identify the individual contributions of school risk factors, as previous literature shows their link with family risk factors. These findings support previous literature showing that attending a low poverty school that lacks the necessary resources for its students (Sirin, 2005) relates to the youth's achievement. These results are also similar to other findings in the literature showing that youth who tend to live below the poverty level are likely to attend schools with higher levels of reduced lunch and with lower achievement status (Sirin, 2005). Additionally, one school factor that was included, parent school involvement, is related to the parent maintaining the home alone, working long hours, financial and time restraints, and overall having a hard time meeting the demands of being involved in the school (Reardon, 2011). This supports the findings of the link between school and family risks, because those who work long hours tend to

have difficulty attending school conferences and functions. School report card grade was a variable that was included in the cumulative risk factor that is substantially new to the literature. The school's report card grade was developed to inform the public of the status of the school, also indicating the overall achievement of their students. This is the first study that examines this factor, especially when looking at academic achievement. This furthers the understanding that risks go beyond the home, and are also shown to be in the schools. Additionally, this indicates that there is a relationship between the risks these youth experience in the school and their academic outcomes.

It is important for education leaders to recognize and work with youth who may be struggling academically in their schools. School counselors and mental health professionals will need to address areas like school attendance and parent involvement that have the potential for adjustment. For example, some parents may have difficulty making it to conferences or volunteering at school. Finding other ways for them to get involved, whether through virtual meetings or individual meetings that fit the schedule of the parent may be helpful. It is clear that some youth who are experiencing risks within the school may also be dealing with risk in the home. Helping youth cope with risks experienced in the home may benefit their ability to attend school regularly. Given the predictive relationship found with school risk and youth achievement, further research is warranted, as it will increase our understanding of ways to help youth.

Protective Factors

This study aimed to determine whether protective factors moderated the relationship between family and school risk factors and academic achievement. The hypotheses were not supported, as parent monitoring, parent involvement, and

relationship quality did not show significant moderation. There are a number of potential reasons for these results. First, the current sample tended to be high risk, indicating that the protective factors may not have been strong enough to moderate the relationship between risks and youth achievement. This supports some previous studies that have shown that parent factors did not relate to youth outcomes (Alston, 2009; Gizir & Aydin, 2009; Plunkett et al., 2008). Second, the current study only examined three family-related protective factors, parent monitoring, parent involvement, and relationship quality. There are other family-related protective factors that were not examined in this study, such as high expectations from the parent, allowing the youth meaningful participation in family activities, parent openness, family cohesion, and parent behavior, among others not addressed (Benard, 1991; 2004; Garmezy, 1985). Third, the current study did not examine other external support systems, such as the peer relationship, mentors, teachers, or community members (Benard, 1991; 2004; Garmezy, 1985; Gutman, Sameroff, & Eccles, 2002; Smith, 2013; Worley, 2007). Lastly, previous literature identifies the youths' internal assets as being helpful in buffering risks (Benard,; DiRago & Vaillant, 2007; Garmezy, 1985; Smokowski et al., 2000), which was not included in this study. Despite, it should be acknowledged that it is difficult to find significant two-way interactions in non-experimental analyses (McClelland & Judd, 1993). Overall, the current study did not examine all possible moderator variables, rendering the need for inclusion of other protective factors in future studies. Additionally, the moderator variables examined in this study have primarily been shown in the literature to moderate the relationship between risks and factors like well-being, antisocial behavior and other

adjustment factors (Cawston, 2012; Little-Harrison, 2011; Pettit, et al., 1999; Schofield et al., 2008; Smith, 2013). Further research examining academic achievement is needed.

Given the possible influence of this high-risk sample on the results, it is very important to find ways to help these youth. It may take more than parent protective factors to help these youth, which highlights the positive impact involvement of education leaders, mental health professionals, and advocates can have. For example, educators should make sure all of the youths served in these schools get their needs met, whether through the school counselor, psychologist, or social worker. Having the resources to meet with counselors when dealing with stress at home, and having someone for mentorship may be beneficial for these youth. To provide these resources, leaders can provide families with programs that promote healthy development and relationship building. Additionally, for these female youth, it may be important to have events or programs that encourage strength, resiliency, and esteem building.

Consistent with previous studies, we found that parental monitoring and parental involvement were significantly and positively related to academic achievement. This is important because this shows that despite the lack of moderation, these protective factors still played a role in achievement. So, it is vital for psychologists and others working with families to promote the importance of monitoring their youths' whereabouts and spending leisurely time with them. Developing programs that directly involve both the parent and youth can lead to more time they spend together. It is essential to note that there were no relationships between the parent and youth's relationship quality and academic achievement, which is inconsistent with previous research (Benard, 2004; Plunkett et al., 2008; Garnezy, 1991; Smith, 2013; Uddin, 2011; Ziegler, 1987).

Interestingly, the current study found that family ecological risk was significantly and negatively related to parent reports of parental knowledge, youth reports of parental knowledge, parental involvement, and relationship quality. This supports previous research that shows a relationship between the levels of family risk and the involvement of the parent (Reardon, 2011). Additionally, this study found that parent involvement was significantly and negatively related to adolescent age. This finding was shown to be consistent with the literature that suggests environmental factors become less prominent the older the individual becomes (DiRago & Vaillant, 2007). The sooner advocates can help these youth and their families, the better. Developing the necessary programming for families as early as elementary school may alleviate later problems and prepare the families for better coping early on.

Limitations

This study only looked at female adolescents, but males are shown to be at heightened risk for behavioral problems when compared to their female counterparts, also leading to problems in school. According to Benard (2004), resilience work should consider the contexts of the home, school, and community. As mentioned previously, this study only examined three main family-related protective factors. In this study, parent involvement included leisure time, but it is possible that other types of parent involvement are more influential. Additionally, this study did not take into account the possible internal assets the youth may possess, which could serve as protective factors (Benard, 2004; DiRago & Vaillant, 2007; Garmezy, 1985; Smokowski et al., 2000).

Because students self-reported academic achievement, it is possible that they may have under- or over-estimated their actual grades. Additionally, school grades are only

one aspect of achievement, as future aspirations can also represent ability and attainment. This study did not account for other outcome variables such as antisocial behavior and well-being. The school risk factor utilized in this study only included a sub-sample of the larger group of participants. This was due to participants who did not report their current school, were enrolled in a private school that did not provide school records, or were currently identified as home-schooled. Attrition analyses were computed and compared on all variables, and found no significant differences between the original and sub sample. However, this was missing data. Additionally, this study utilized a purposive sampling technique, which may have influenced the individuals who participated. This study examined relationships, but the results do not infer causality. To gain a better understanding of the relationship between the variables explored, it is recommended that later studies consider these limitations.

Future Directions and Conclusions

This study's main aim was to aid in understanding the risks that underserved youth experience. Academic achievement was emphasized in the current study because there is a need for preparing at-risk youth for higher education, which may increase their chances of better jobs and financial security in the future. This study supported the hypotheses that both family and school ecological risk would predict the achievement of adolescent females. The moderating role of parental monitoring, parental involvement, and relationship quality was not found to be significant. Though these parent factors did not show a moderating relationship, as indicated previously, there were some relationships. For example, parental knowledge and parental involvement were significantly and positively related to academic achievement. This means that the more

the parent knows their child's whereabouts, and the more leisurely time they spend with them, the more likely their child will do well in school.

This indicates that parent protective factors are still essential for at-risk female youth.

There are a number of directions that are encouraged for future studies.

First, it may be beneficial to examine other influential family factors and variables that consider peer relationships, mentors in the community, and the role the teacher may have on the youths' outcomes. Given the current results, future studies should further explore the role of school ecological risks. It may be beneficial for studies to consider both family and school risk factors. Second, continued research with adolescents may be beneficial. Many studies examine the college student, but examining youth at an early age will lead to better preventive programs early on. Third, there is a need for more research with females, as there is a clear need for understanding factors that will influence their achievement.

Lastly, it will be beneficial for studies to examine the influence of culture on risk factors and achievement. Though this study was based on a sample of high-risk adolescents, there were a high percentage of African American participants. It will be beneficial for future studies to examine the African American female, and protective factors for the Black family. There are a number of cultural factors that were not considered, which should be addressed in later studies. For example, Black females are at an even heightened risk for racial discrimination, interpersonal stress, risky sexual behavior, teen pregnancy, and substance use (Hutchinson, Jemmott, Sweet Jemmott, Braverman, & Fong, 2003; Myers, 2013; Cooper, Brown, Metzger, Clinton, Y., & Guthrie, 2013). Black females exposed to these risks tend to experience more negative

outcomes when compared to their white counterparts and other minority groups (Myers, 2013). Exploring significant protective factors for the Black female, like involved fathers, religious practices, and positive mentorship may be beneficial (Cooper, Brown, Metzger, Clinton, Y., & Guthrie, 2013). Additionally, researchers are encouraged to include cultural factors for the African American family such as the significance of kinship and extended family involvement that may play a role in the relationship between risks and outcomes (Taylor, Casten, & Flickinger, 1993).

Overall, it will be important for further studies to emphasize continued preventive and intervention work, and creating resiliency programming to help at-risk adolescent females. There is a need for preventative work with females that addresses teen pregnancy, drug use, delinquency, suicide, depression, and other outcomes. To live in high-risk environments, experience stress in the home, and attend high-risk schools can intensify their level of risk pertaining to positive outcomes. By working with families and their female adolescents, advocates, leaders, and psychologists will help them engage in less risky behavior and build the esteem needed to believe in their ability to be successful. Educational and prevention programs, along with involving and working with the family, can inspire female adolescents to achieve academically.

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APPENDICES

Appendix A

Extended Review of the Literature

The Trial for Urban District Assessment (2009) indicated that youth in elementary and secondary schools from urban inner city environments have lower levels of educational attainment when compared to other youth. A June 2010 Education Week report indicated that the graduation rate of public school students in 2007 dropped to 30 percent (Editorial Projects in Education, 2010; Myint, O'Donnell, & Phillips, 2012). Extensive research shows that youth of all ages who live within a low socioeconomic status (SES) are at risk for lower academic performance and future aspirations (Ripple & Luthar, 2000). In Oklahoma alone, there are 47% of children living in urban, inner city, and low-income families (National Center for Children in Poverty, 2011). Adolescent females are at a heightened risk for low educational attainment and other vulnerabilities such as, suicide, behavioral problems, gang involvement, and pregnancy (Daniel & Balog, 2009; Killebrew, Smith, Nevels, Weiss, & Gontkovsky, 2014). Adolescence is a time in which an individual is growing into adulthood, while preparing for the future. This period also includes biological, psychological, social, and economic transitions (Steinberg, 2011). According to The National Center for Education Statistics, former students of urban public high schools are shown to more likely be unemployed and living in poverty later in life than those who attend either rural or suburban high schools

(Lippman, Burns, & McArthur, 1996). However, there are resilient youth who are excelling academically despite their living conditions and primarily low SES, showing a need for more research exploring resiliency and protective factors that enable success among youth.

Academic Success

Academic success can be identified as the primary means for achievement as an adult in the United States (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006). No matter the social class of the youth, academic problems limit their opportunities (Kuh et al., 2006). Aspirations can have a lasting impact on the academic outcomes of youth (Sirin, Diemer, Jackson, Gonsalves, & Howell, 2004). Academic success contributes to not only educational, but also future occupational attainment (Alston, 2009). Later life experiences can be greatly influenced by aspirations, specifically in areas of career, education, and family. Future aspirations can be identified as the dreams people have for their educational and/or vocational future (Sirin et al., 2004). Youth who tend to have some sort of aspirations for their future, tend to do well in school, and tend to plan for and eventually attend college (Sirin et al., 2004).

According to Alston (2009), in reference to the popular Status Attainment Model, education, careers, and income are all aspects that people use to obtain some form of status within society. Inner city and economically disadvantaged youth are among those who are at the ultimate risk for academic problems, in that they have fewer resources for attending college or securing some sort of employment after high school (Cooper & Crosnoe, 2007; Jargowsky, 1994).

It is imperative that we understand what protective factors are likely to predict academic resilience despite living in inner cities and disadvantaged environments. Gonzalas (2003) noted that many researchers on resilience have probed this and report that schools can and should help their students beat the odds. It is also important to determine the effects the family has on the adolescent's chances for academic resilience (Castillo, 2003). The home is primarily the central aspect of the youth's daily activities (Benard, 2004). Outside of the school, the home is the context that can either amplify or diminish the effect that school learning has on the adolescent (Majoribanks, 1998). It has been shown that the characteristics of the parent, such as educational attainment, can have a mediating role in the link between risk and resilience (Lee & Bowen, 2006). Although protective factors within the home and with the primary caregiver have been shown to be effective in the academic success of youth at risk, little research has indicated important characteristics of the parent and their roles. Research has shown that the characteristics of peers, such as prosocial and antisocial behaviors, can affect the youth outcomes (Wentzel, Barry, & Caldwell, 2004). Although the parent is a vital individual to most youths' lives, parent characteristics such as pro-social and anti-social behavior have not been examined.

Disadvantaged Youth

Youth who live in inner city neighborhoods are affected by the highest concentration of poverty, highest crime rates, and have the fewest resources (Castillo, 2003). There is an overwhelming pattern of risks associated with those living in low-income environments (Garmezy, 1991; Tiet, Huizinga, & Byrnes, 2010). Those who are disadvantaged and live in underserved areas usually experience adversity and at times,

severe developmental disadvantages (Cooper & Crosnoe, 2007; Garmezy, 1991). The relationship between adolescents and their parents changes tremendously during this time, which can lead to more challenges (Steinberg, 2011).

Youth living in disadvantaged areas are subjected to multiple challenges, such as lack of adequate adult and peer encouragement, teenage pregnancy, school dropout, and overarching extended family responsibilities. When compared to other peers, at-risk youth also have higher levels of behavior problems (Roy & Raver, 2014). Experiencing neighborhood violence and decreased safety within the community is common in low-income areas (Edlynn, Hrden, Richards, & Miller, 2008). Inner-city communities tend to display more community violence, especially when compared to other communities, such as suburban neighborhoods (Edlynn et al., 2008). Turner (2007) called for youth in schools to have counselors working with parents to prepare them as early as middle school for the transition to high school and beyond. Services needed within these communities involve academic support, career development, and specific support in problem areas. Underserved youth are especially in need of these services because they tend to have parents who may not be as engaged in educational attainment and school activities, leading to low educational results (Lee & Bowen, 2006). Lee and Bowen (2006) also identified that although lack of parental school involvement plays a role in low educational attainment, poverty has a higher effect on youth academic achievement.

Correa (2011) identified parent's social class or poverty level as being a direct result of low educational attainment, thereby affecting their children. Parents are affected by poverty in that they suffer economic stress, emotional distress, heightened levels of marital conflict, and disrupted parenting behavior. Although schools in the United States

are required through the No Child Left Behind Act to find ways to involve parents in their youths' education, it is not always easy for parents in inner cities (Department of Education, 2013; Cooper & Crosnoe, 2007). The economically disadvantaged parent may work long hours, work more physically demanding jobs, and have financial and time restraints that may keep them from supporting their children. These parents are also less involved in their child's academic endeavors (Reardon, 2011). In contrast, parents from high-income homes tend to be more involved, leading to higher achievement in their children (Reardon, 2011).

Overall, inner city youth receive fewer family and social resources and are not prepared for later schooling and employment (Correa, 2011; Eaman, 2001). In a study conducted to explore the lives and strengths of low-income families, it was found that these homes typically lack resources and are often run by a single parent who is receiving public assistance (Orthner et al., 2004). Disadvantaged youth are also segregated from the schools that children from higher income homes attend. Schools in impoverished areas tend to be different from those in higher income areas (Reardon, 2011).

Though youth from disadvantaged homes tend to have more risks when compared to other youth, suburban youth also experience risk. When looking at academic resilience, youth from suburban areas who are exposed to risks such as substance abuse and negative peers tend to also experience academic problems (Luthar & Ansary, 2005). In a study that placed high-poverty families in low-poverty neighborhoods, no changes were seen over time (Fauth et al., 2007). This indicates that problems may be caused by more than just living in high risk areas. This study found that parents were less involved and changed their levels of monitoring as a result of the changes in their environment.

Changing their monitoring practices played a role in the continued behavioral and academic problems that their children experienced (Fauth et al., 2007). Despite their change in context, the families, including the youth, experienced problems because they still suffered economically and felt discriminated against when compared to their new white, middle-class peers. Although expected to have more resources, they experienced problems with transportation due to no public transportation in their new context, and the youth still experienced academic difficulty (Fauth et al., 2007). The youth were placed in a different context at an early age, indicating that they spent the majority of their life in a suburban neighborhood (Fauth et al., 2007). Therefore it may not necessarily just be the context that plays a role in academic achievement and development (Fauth et al., 2007).

Although disadvantaged youth experience multiple and persistent risks, even in the worst cases, many overcome adversity and somehow achieve positive developmental outcomes (Rutter, 2000). It is important to note that although African American youth are viewed as the most prominent in inner-city areas, when compared to Caucasian peers, they tend to engage in less risky behavior and are more successful in school (Bolland et al., 2007). These families may struggle to meet their needs, but they tend to be resilient and capable (Orthner et al., 2004). Orthner et al. (2004) explored the strengths of low-income families and found that despite economic hardships and family problems, family members had confidence in their ability to pull together and work together during their hardest times. This cohesion led to the ability to be successful and to the success of the youth in the home (Orthner et al., 2004).

Being academically successful has been viewed in resilience research as adjusting positively (Castillo, 2003). Academic resiliency can be defined as “the process and

results that are part of the life story of an individual who has been academically successful, despite obstacles that prevent the majority of others with the same background from succeeding” (Morales, 2010, p. 164). Despite living in homes and environments with various risks, there are adolescents who are able to overcome difficulties, develop aspirations, and experience successful lives (Gutman, Sameroff, & Eccles, 2002). Academic resilience involves internal and external protective factors, or outlets that can contribute to adjustment and academic success (Gizir & Aydin, 2009). Academic resilience or achievement in this study will include looking at both future aspirations of youth and their academic achievement in school.

Resilience Theory

There are individuals who have better outcomes in life than others who have experienced comparable magnitudes of adversity. Much of the research on resilience highlights the notion that individuals experience situations that cannot be changed, such as poverty, trauma experiences, and socioeconomic risks. There is a need to better understand the ways people can cope with situations they cannot control (Rutter, 2012). The question in resilience research is, what can be done to help people overcome these situations? Why are some individuals able to respond differently to given stressors?

Resilience can be defined as a reduced level of vulnerability to risk experiences and the overcoming of adversity (Rutter, 2012). According to Luthar, Cicchetti, and Becker (2000), resiliency is defined as “a dynamic process encompassing positive adaptation within the context of significant adversity” (p. 154). According to Wang, Haertel, and Walberg (1994), resilience is defined as “The capacity of individuals to overcome personal vulnerabilities and environmental adversities effectively or the ability

to thrive physically and psychologically despite adverse circumstances” (as cited in Wasonga, Christman, & Kilmer, 2003, p. 63). Resilience theory involves three major variables: risk factors, protective factors, and resilience (Gonzalas, 2003). Risk factors can be stressful situations or adversity, whether chronic or not, that put successful development at risk. Those who are at high risk are then identified as being vulnerable to different negative outcomes, whether developmental, social, or academic. Being vulnerable means being more susceptible to negative outcomes after exposure to a high level of risk (Werner, 1993). Youth who are considered to be at risk can be vulnerable to negative outcomes as a result of different relational, psychological, and environmental factors (Glover, 2004). Protective factors are variables that can increase the chances of an individual developing in a healthy manner. Resilience, or the resilient child, includes characteristics or qualities that are a result of the relationship between the risk and protective factors (Garmezy, 1991; Gonzalas, 2003). Benard (1995) identified resilience as an innate ability to develop social competence, problem-solving skills, critical consciousness, autonomy, and a sense of purpose. According to this theory, we all have the innate ability to be responsive, elicit positive responses from others, have empathy, and have communication skills. We have the ability to be resourceful when seeking help from others, and have a reflective awareness of the structures of oppression, while developing strategies to overcome (Benard, 1995). These things, along with having a sense of identity, belief in a bright future, academic achievement, and hopefulness, are all manifested within resilience (Benard, 1995). The next question, then, is what protective factors allow for these things to flourish?

One youth development model emphasizes human development and the success of youth (Dietsch et al., n.d.). This theory is based on research on school effectiveness, competent communities, healthy family environments, and successful youth-serving programs. Resilience is referred to as positive development when facing environmental threats, stress, and risk. Youth who are identified as resilient are those who are able to rebound from adversity and achieve not only healthy development, but also successful learning in any circumstance (Dietsch et.al, n.d.).

One individual could have a negative experience that leads to worsening effects, while another person could have the same negative experience with an enriching outcome (Rutter, 2012). Tiet and Huzinga (2002) classified four risk and outcome groups to consider when conceptualizing resilience. The first group involves an individual with low risks and unfavorable outcomes. The second group involves an individual with high risk and unfavorable outcomes. The third group involves someone having low risks and favorable outcomes. The last group includes having high risks and favorable outcomes, which can be identified as resilience. Therefore no matter the type of resilience, favorable outcomes and their maintenance despite the risks or adversity are important (Tiet & Huzinga, 2012).

Overall, resilience theory is a movement away from risks and towards prevention and positive psychology. Research has identified the risks associated with youth growing up in poverty, which comes from the notion that risk factors predict later problems and psychopathology. Risk factors research predicts favorable outcomes for those with low risk and unfavorable outcomes for those with high risk (Tiet & Huzinga, 2002). In

contrast, resilience can be used as a term to describe qualities that foster a process of success, adaptation, or overcoming, despite risk and adversity (Benard, 1995).

Those who focus on resiliency and are a part of the movement towards positive psychology identify risks, but emphasize that many who are high risk actually have favorable outcomes. Resilience can include both the favorable outcome, which may include success, positive adjustment, and healthy mental status, and its maintenance despite adversity (Tiet & Huzinga, 2002). Resilience studies explore the possibility of healthy development rather than labeling youth as helpless, vulnerable, or a product of their environment and family (Glover, 2004). This concept has been explored in research on mentally ill parents, parental loss, parent alcoholism, absence of the father, institutional upbringing, childhood maltreatment, low socioeconomic status, familial discord, and growing up in homes in which higher education is lacking (Tiet & Huzinga, 2002).

Resilience studies have found that protective factors are needed to buffer the risks for youth. Risks may include being exposed to perinatal stress, chronic poverty, parental psychopathology, and chronic familial discord (Benard, 1991). The range of outcomes for adolescents is dependent on the balance between their risk factors, stressful life events, and protective factors. Problems occur when risks and stressful life events outweigh the youth's protective factors (Benard, 1991).

It is important to consider the context in which adolescent females live. According to Brofenbrenner (1979), in resilience work, especially when looking at at-risk youth, attention should be placed on the context (as cited by Knox, 1998). The interaction

between the individual and the environment should be considered when exploring risks and protective factors in resilience work (Nebbitt et al., 2014).

When considering the family and school, cumulative ecological factors should be considered because research shows that youth growing up in a disadvantaged or at-risk environment are not in isolation of other risks. This is an accumulation of risks that result from a gradual addition of stressors to the environment. It involves assessing a variety of risks that result in a single outcome (Gentile & Harwell, 2010). In other words, risks occur with other risks, leading to a cumulative affect (Roy & Raver, 2014). It is not necessarily the type of risk, but rather the accumulation of ecological risks that determine the development and success of the youth.

Cumulative risk factors contribute to the problem of later intervention development. If individual risks are not considered independent of other factors, there is a risk of losing valuable information. This can lead to problems developing targeted intervention strategies (Roy & Raver, 2014). However, cumulative risk factors have still been shown to be predictive of youth outcomes (Roy & Raver, 2014). Cumulative risk models seem to provide a better representation of the overall adversity that at-risk children face (Roy & Raver, 2014) than considering individual risks out of context.

Family Ecological Risks

Single parent home. A number of studies have shown that living in a single parent home can result in risks and negative outcomes (Padilla-Walker, Harper, & Bean, 2010). Youth in single parent homes tend to have problems with grades, staying in school, and attending school regularly when compared to youth from families with different structures (Israel, Beaulieu, & Hartless, 2001). Adolescents from single parent

homes do not perform as well in regards to grades in school, staying in school, or attending class when compared to other family structures (Israel et al., 2001).

Demb (1994) found that living in a single parent home, especially one with a parent who is engaging in risky behavior to survive, could lead to increased problems for the youth. When there is only one parent in the home, there may be a lack of parent availability (Demb, 1994). This can lead to a lack of involvement and encouragement for the youth to succeed academically (Murry et al., 2011). Youth who live in a single parent home perform no differently than peers of different family structures (Israel et al., 2001) when there are no financial issues within the family. This brings up the question of whether previous research that identified the single parent structure as playing a role in low educational attainment was actually a result of the family's financial status. Garg et.al (2007) found that future aspirations of youth are greatly affected by the number of parents in the home. Garg et al. (2007) found that educational aspirations may have something to do with divorce within the family.

Family stress. Youth who are identified as disadvantaged tend to experience higher levels of family stress. Further, they tend to live within lower SES (Sharma, 2013). Disadvantaged youth also experience family divorce, changes in schools, peer pressure, and community violence (Sharma, 2013). Adolescent stress can lead to poor academic performance (Sharma, 2013). Family stress can also have lasting effects on school performance. The economic hardships of at-risk youth also significantly affect their academic achievement (Esmaeili et al., 2011).

Youth growing up in impoverished areas may have parental figures who struggle to be involved, rendering more stress in the home. Although many may view the parents

as having a lack of interest in their child's education, other factors such as lack of institutional resources, trust in the teachers, and lack of confidence in the school system play a role in their level of involvement (Lee & Bowen, 2006). Higher academic achievement is usually observed among those youth who are not living in poverty, with parents who have higher educational backgrounds, such as those from the dominant culture. Beyond the effects of not having parental involvement, Lee and Bowen (2006) stated that poverty and ethnicity play a more significant role in predicting academic achievement.

Low SES can affect parents' mental health, as it can cause them significant strain and stress. Gutman et al. (2005) identified the relationship between financial strain, neighborhood stress, and parenting behavior on adolescent adjustment. It was found that the experience of this stress and strain affected the relationship with the youth, causing other risks (Gutman et al., 2005). It was also shown that stress within the home could mediate effective parenting. Other stressful situations may include loss of a job and inability to pay household bills, which also can have an effect on the youth.

Poverty effects. According to Reardon (2011) the link between family income and academic achievement of the youth is strong. The economic status of the family is particularly important when considering the academic achievement of the youth because of its connection to the youth's home and school environment (Sirin, 2005). For example, receiving public assistance will likely influence the school and classroom environment that youth will experience. These factors have a direct influence on the youth's success in school (Reardon, 2011; Sirin, 2005).

Birch and Gussow (1970) highlighted a trans-generational model that links poverty with risks such as malnutrition, illness, absence of medical care, social deprivation and environmental inadequacy, later leading to risk of school failure, and eventually resulting in unemployment and underemployment (as cited in Garnezy, 1991). Even though there is trans-generational research indicating that youth who have parents in poverty will experience poverty in their adult lives, half of youth do not (Garnezy, 1991). This indicates that some youth who are vulnerable are able to overcome risks.

Although some studies indicate a direct link between low socioeconomic status and academic achievement among youth, it may not be as direct as some believe. White (1982) and Sirin (2005) indicated that there are other factors that contribute to the link between SES and academic achievement. Although there is some positive correlation, it is actually very weak. In a meta-analysis that looked at approximately 200 studies, it was found that several factors were missing (White, 1982). What other factors contribute to the link between SES and academic success in school? The problem in many studies is the actual measure of SES that has caused confusion. In recent meta-analysis, it was found that factors such as minority status, school location, and grade level of the student play a role in the link between SES and academic success in youth (Sirin, 2005). Regardless, structural factors such as poverty can impact the family system and youth by limiting opportunities and resources. Low-income areas are linked to violence (Anthony & Robbins, 2013). Poverty stricken areas can have both direct and indirect effects on present and later academic achievement. There are usually high unemployment rates,

residential instability, and a high percentage of community members who are also of low-income status (Murry et al., 2011).

Neighborhood violence. According to Aisenberg and Herrenkohl (2008), community violence is a major issue in the United States. According to Campell and Schwarz (1996), youth from urban environments have a higher prevalence of experiencing community violence. When compared to suburban communities, low-income communities tend to experience more community violence (Edlynn et al., 2008). Youth who are exposed to such trauma are at an increased risk for further issues, often leading to dropping out of school. Some traumatized youth also experience impaired cognitive and academic function, lower intellectual ability scores, and decreased reading ability (Purcell, 2006). From a young age, youth growing up in inner cities and poverty stricken communities are exposed to high levels of community violence (Edlynn et al., 2008).

Neighborhood violence, another ecological risk, consists of acts by either a person or group that involve an individual planning to harm another individual or group (Chan, 2008; Smith, 2013). It also consists of continual exposure to knives, guns, drugs, and other forms of violence (Chan, 2008). Adolescents tend to be most affected by and at a higher risk for exposure to community violence compared to other generations (Edlynn et al., 2008; Steinberg, 2011). Youth who are raised and attend school in underserved environments, such as urban inner cities, experience levels of trauma that are different from peers who are not in these areas (Alston, 2009; Ceballo, Ramirez, Hearn, & Maltese, 2003). Disadvantaged youth report not only being used to such exposure, but also knowing exactly where, within their neighborhood, they can easily view ongoing

robberies and shootings. Within these types of environments, neighborhood violence is quite usual (Schaefer-McDaniel, 2007). When youth view their neighborhood as dangerous, they tend to experience levels of feeling unsafe and fearful (Schaefer-McDaniel, 2007). Exposure to violence within the neighborhood and community can have a direct effect on educational and future aspirations (Alston, 2009; Smith, 2013).

Those youth who experience violence in their everyday life tend to suffer from not only academic problems, but also psychological distress. They may experience depression and hopelessness (Ceballo et al., 2003). Indirectly, community violence exposure leads to feelings of fear and anxiety among youth, leading to other risks if adaptive coping is not practiced (Edlynn et al., 2008). These are factors that can lead to issues with focusing on and excelling in school. The protective factor of parent monitoring, or parents having knowledge of their child's whereabouts and keeping up with their activity, can have a moderating effect on the youth. Children who experience parental monitoring are less likely to suffer from hopelessness, leading to better outcomes in school (Ceballo et al., 2003). Having support within the community, rather than exposure to violence, can also be a buffer and contribute to academic resilience among at-risk youth. Benard (2004) identified the need for high expectations, a caring relationship, and meaningful participation from those within the community.

However, researchers have also found that when measuring all external factors, community factors did not contribute to or predict academic resilience, indicating that it is not the most important protective factor (Gizir & Aydin, 2009). Ironically, the dangerousness of the neighborhood can decrease the social support within the family, leading to possible problems. Dupere et al. (2009), states that as a protection, some

families avoid public areas within their environment, leading to an increase in isolation and decrease in social support. This is important because some indicate that youth with mentors report more positive attitudes toward school, stronger beliefs in the importance of doing well in school, and greater school attachments (Southwick et al., 2006). On the other hand, neighborhood violence is regularly associated with negative peer association. Disadvantaged youth who live in conditions of risk have community peers that present both positive and negative effects on academic success (Smokowski, Reynolds, & Bezruczko, 2000). Despite this, experiencing and participating in community violence is a risk that they face (Smokowski et al., 2000).

In order for families to create healthy environments for their youth, including providing care and support and being involved, it is important to reside in a safe place. A safe place may also mean safer peers and community members. At-risk youth are in need of communities that provide support and opportunities (Benard, 1991).

Parent education. Over the last 50 years, the link between a parent's education and the youth's achievement has maintained stability (Reardon, 2011). Academic achievement is usually among those youth who are not living in poverty and who have parents with higher educational backgrounds, such as those from the dominant culture (Lee & Bowen, 2006). Alston (2009) identified the importance of the parent's education in reference to the Status Attainment Model. This model is characteristic of showing how a parent's level of education and status in society can be a determinant of their youth's later educational and future attainment. The parent's socioeconomic status, which in part can be related to their educational attainment, plays a major role in their adolescent's educational performance (Israel, et al., 2001). In a study done in 2001, it was found that

family characteristics were highly correlational to educational achievement. Those participants in the study who had parents who attended college, whether mother or father, scored higher on measures of educational achievement (Israel, et al., 2001). Correa (2011) discussed the cycle of the parents living in poverty, likely because of their educational attainment being low, leading to putting their youth at more risk for the same low level of educational attainment.

According to Sirin (2005), there is a great relationship between education and socioeconomic status in the United States. This leads to the understanding that some parents with a lack of education may also be living with low economic means (Sirin, 2005). Socioeconomic status has been measured in many different ways, but one common way is through the consideration of not only the parent's income, but their educational attainment (Reardon, 2011). As mentioned earlier, living in certain conditions, especially poverty, or low socioeconomic means, the youth is risks for a number of factors. A parent with an education, whether a college degree or not, will likely provide better resources for their child (Reardon, 2011).

Although Blau & Duncan (1968) showed this in earlier research, it was later shown that other factors could influence the relationship between the parent's education and the youth's education, such as parent relationship and other external factors (Alston, 2009).

School Ecological Risks

Gizir and Aydin (2009) found that having caring relationships and high expectations from individuals within the school environment have a positive impact on academic resilience, specifically for youth coming from poverty-stricken environments.

Banatao (2011) emphasized that meaningful school participation is the most consistent predictor of academic success and achievement. Teachers may provide the motivation and information that parents may not have (Smokowski et al., 2000). Despite some school environmental risks, some research shows that as long as there is at least one caring adult within the school, youth are more likely to overcome academic adversity (William & Bryan, 2012). However, there tends to be a lack of research on how the ecological factors within the school can have an effect on youth and their academic outcomes. Outside of the relationship with a teacher, there is a lack of research on the ecological factors within the school system. There are aspects of the school that may lead to an environment that puts the student at risk. Bowen and Bowen (1999) found that violence is just as important in the school as it is in the home. Although their study showed that academic outcomes were more affected by violence in the home and neighborhood, violence in the school greatly affected the academic outcomes of their participants (Bowen & Bowen, 1999). Similarly, there are other aspects of the school environment that can be a risk for disadvantaged youth.

School report grade. The school's annual report grade is a clear example of a school ecological risk that can have an effect on youth. The No Child Left Behind act of 2001 requires each state to provide an annual report card that informs stakeholders about the progress of the students and school (Oklahoma State Department of Education, 2014). It is designed to inform parents and general public about the schools. Each public school is measured yearly based on a number of factors (Oklahoma State Department of Education, 2014). These factors can include the enrolled students' level of meeting grade-level academic standards. It also includes whether the school as a whole is exceeding

expectations in areas of school attendance and graduation rates (Oklahoma State Department of Education, 2014). The academic endeavors of peers can have an effect on a youth's achievement. Attending schools with report grades shows the possibility of also having low achieving peers. Peer relationships can contribute to motivation and academic achievement (Gonzales, Cauce, Friedman, & Mason, 1996). There are a number of studies that present the correlation between peer relationships and academic achievement among adolescents. If close peers are not achieving academically, youth are likely at risk (Gonzales et al., 1996; Gutman et al., 2002).

This is important because the report card grade of the school is partially determined by the performance of peers. For example, when peers do not excel academically, this is reflected on the report card grade of the school. If the school is identified as being at a low grade, the students are then at risk for being less successful. School grades can range anywhere between A and F. Schools with students who are not excelling will likely have a score anywhere between C and F (Oklahoma State Department of Education, 2014).

Reduced lunch and attendance. In addition, a school with a high number of children who qualify for reduced lunch can also be a risk factor. According to the U.S. Department of Education (2013), a school can be identified as either low or high poverty based on the percentage of reduced lunch their students qualify for. When there are fewer than 25 percent of students who qualify for free lunch, the school is considered low-poverty. A high-poverty school is defined as having 75 percent or more of students who qualify for reduced lunch (U.S. Department of Education, 2013). Depending on the

percentage of reduced lunch qualification among students, a school can also be identified as mid-low or mid-high poverty (U.S. Department of Education, 2013).

This can be important because high-poverty schools have been shown to have low achieving students. There have been consistent gaps between low-income and academic outcomes (Southern Education Foundation, 2013). High reduced lunch rates, indicating a high level of poverty in students, may play a role in the low academic achievement in the student. As previously mentioned, schools that are of predominantly low SES students usually lack the necessary resources for their youth (Sirin, 2005). Schools with low attendance rates may have students who are not excelling as a result of missing classwork. This can in turn have an effect on their peers as well. Whether youth attend school regularly has a direct effect on their performance in school and the academic aspirations that they develop over time (Gutman et al., 2002).

Teacher experience. The type of school environment has a lot to do with the type of teachers and classroom experience the student will likely encounter. Plunkett et al. (2008) found that teacher support significantly contributes to academic success. Researchers found that teachers also play a role in student academic satisfaction. In a study of Mexican origin youth, it was found that the teacher's support had a greater impact on academic success than parental support (Plunkett, Henry, Houlberg, Sands, & Abarca-Mortensen, 2008). According to Wayne and Young (2003), the achievement of youth highly depends on their teachers. Of the many teacher characteristics that have been measured in relation to student academic outcomes, the experience level of the teacher remains largely unexamined. Teacher experience can be hard to track and analyze appropriately (Wayne & Young, 2003). There are a number of factors that play a role in

accurately measuring years of experience, such as time taken off and years not actually assessed by the teachers (Wanye & Young, 2003). Despite these difficulties researchers have identified experience level as a teacher characteristic that can play a role in academic outcomes (Wanye & Young, 2003). The education level, teacher certification, and test scores on teacher examination all affect teachers' abilities. This shows that there is a possible effect and risk when less experienced teachers are in the classroom.

Parent school involvement. There are studies that indicate the importance of parents involving themselves in their child's school endeavors. Many schools keep track of the percentage of parents who actually volunteer at the school, attend provided conferences, and engage in similar activities. Hill et al. (2004) explored the relationship between the parent's academic involvement and the child's resulting academic achievement and academic aspirations. It was found that the amount of involvement that parents have in their children's school activities was related to future aspirations but not to actual school achievement. However, for African American families, it was shown that parent involvement does affect children's achievement when compared to their Caucasian counterparts (Hill et al., 2004). The researchers concluded that African American families may reside more so in contexts that lack resources, rendering the importance of the parent's school involvement to affect achievement. Whereas, Caucasian youth may have more resources, leading to a less influential role of their parents school involvement on their achievement (Hill et al., 2004). Altschul (2011) found that only in-home involvement mattered when assessing the importance of parent involvement of Mexican American youth. The Mexican American youth in this study were at high risk for academic failure and were greatly affected by the financial resources and involvement

provided by parents in the home. It was shown that parental attendance at school activities did not matter as much with this sample (Altschul, 2011).

It has been shown although involvement in the home is important, parents' participation in school activities can be helpful for some (Alvarez-Valdivia et al., 2012). This can include conferences, volunteering activities, and overall involvement with the teacher (Alvarez-Valdivia et al., 2012). Schools that have more parental involvement tend to convey messages to the student that education is important to their future (Alvarez-Valdivia et al., 2012). Alvarez-Valdivia et al. (2012) showed that of a sample of Cuban youth who faced differing challenges, those who had academic problems, were also those whose parents were not as involved in their school activities. Similarly, those youth who had parents who were involved in school activities had better academic outcomes (Alvarez-Valdivia, 2012). This can be important because a school with high parental involvement will likely have more youth who excel academically. Indirectly, one student's success can play a role in peers' achievements (Alvarez-Valdivia et al., 2012). Just as parent involvement in school activities is positive, the lack of parental involvement may lead to risks (Hill et al., 2004).

There appears to be insufficient research really examining the predictive role of school risk factors. It is clear that family risk factors may greatly influence youth outcomes, but I question the same influence from the school environment. Though disadvantaged youth are at risk for a number of reasons, including poverty, community violence, family stress, low achieving schools and lack of resources, research has shown that protective factors play a positive role in outcomes, specifically academic achievement (Benard, 2004; DiRago & Vaillant, 2007).

Protective Factors

Werner and Smith (1992) define protective factors as those supports and opportunities that can buffer the risks associated with adversity and enable development. Protective factors can be defined as attributes in families, individuals, communities, or society, that when present, will eliminate risk (Department of Human Services, 2012). Protective factors can increase the health and wellbeing of children and families (Department of Human Services, 2012). According to Garmezy (1985), there are three forms of protective factors: family cohesion and absence of familial discord, availability of external support systems, and personality features such as self-esteem (as cited by Rutter, 1987). Protective factors are effective when experienced in different systems that the youth is a part of, such as the home, community, school, and peers. According to Knox (1998), the ecology is not only identified when exploring risks, but also when looking at protection from the risks. The context and environmental experiences can moderate the effects of low-income living and at-risk positions (Knox, 1998). According to Bandura (1999), environmental factors may not directly affect the behavior and decisions of youth, but they do indirectly influence their aspirations (as cited in Alston, 2009).

Although much research supports a focus on environmental protective factors that boost resilience, some research highlights the importance of individual internal traits or assets that a youth possesses. DiRago and Vaillant (2007) collected longitudinal data and looked beyond inner city youths' early years to determine protective factors that resulted in later occupational status. These researchers found that it was only in young adulthood that environmental factors were stronger predictors of occupational status than individual

attributes were. Later in life, environmental factors became less significant and the individual factors then became stronger predictors of occupational status (DiRago & Vaillant, 2007). According to Smokowski et al. (2000), within disadvantaged environments, internal characteristics are what differentiate resilient youth from non-resilient youth. Gizir and Aydin (2009) identified a positive self-perception about one's abilities, empathetic understanding, an internal locus of control, and high educational aspirations as significant predictors of academic resilience. Ten years later, the researchers found that having optimistic future expectations, realistic appraisals of one's strengths, being optimistic, motivated, and having aspirations were contributors to academic resilience over time (Gizir & Aydin, 2009).

It is possible that in order for individuals to possess individual traits of resilience, there is a need for strong environmental protective factors at an early age. Benard (1991) identified the need for protective factors within the family for a youth to be resilient despite adversity. For youth to be resilient, they need care and support from their primary caregiver (Benard, 2004). The form of parenting and parenting characteristics can possibly be extremely important in the development and academic growth of youth living in disadvantaged means. Protective factors specifically related to the parent and family contributes to the adolescent stages of a youth's life (Benard, 2004). Adolescence is one of the most challenging stages for both the parent and the youth. This is heightened for disadvantaged families (Steinberg, 2011).

Parent-child relationship. There are a number of characteristics that lead to high achieving youth from poor environments (Garmezy, 1991). High-achieving youth have parents, who are present in the school, expect the child to do well in school, and engage

in frequent achievement oriented activities. Parents of high-achieving youth also provide ongoing support, challenge their children, and engage in less frequent conflict (Garmezy, 1991). The immediate caregiving environment is considered a powerful predictor of the outcomes of youth (Benard, 1991). Despite living in poverty, inner cities, or other disadvantaged means, establishing a close bond with at least one individual is beneficial to a child's development (Benard, 1991). Whether a biological parent or not, having that caring and supportive relationship is critical throughout childhood and adolescence (Benard, 1991). It is important for youth to experience care and support and high expectations from parents and meaningful participation in the family (Benard, 2004). Having this in the home can have a positive effect on youth and contribute to not only academic success, but also overall well-being (Benard, 2004). A caring relationship can be defined as the youth's supportive connections to others who model and support their healthy development and well-being. Caring relationships are also characterized by conveying loving support, such as being there, trusting, and showing the youth unconditional love (Benard, 2004).

Ziegler (1987) emphasized the strong parent-child relationship and its relationship to higher school achievement rates, lower delinquency and dropout rates, higher attendance rates, and increased school completion. The Parental Acceptance-Rejection theory supports this, attributing academic success to parental warmth, love, and affection towards the youth (Uddin, 2011). Other research highlights the importance of receiving parental support in relation to adolescent's academic achievement (Uddin, 2011). According to Rohner (2010), the Parental Acceptance-Rejection Theory includes a warmth dimension, with acceptance on one continuum and rejection on the opposite

continuum. Affection, care, comfort, nurturance, love, and support are included on the acceptance continuum (Rohner, 2010). Rejection, absence, physical and verbal abuse, and significant withdrawal are included on the rejection continuum (Rohner, 2010). It is likely that those youth experiencing more support from the warmth end of the continuum adjust successfully. Even in troubled environments, a good relationship with one parent provides a protective role on the child (Benard, 1991). Even if that parent is a grandparent, in the case of nonresponsive parents or familial discord, some form of cohesion and warmth is beneficial (Garnezy, 1991). Jagpreet (2012) found that educational aspirations are higher among youth who receive more nurturance and rewards from their parents, than those who experience rejection from the parent. In general, having such family processes as warmth within the relationship and the overall presence of a caring adult promotes resilience (Castillo, 2003). Uddin (2011) found that both maternal and paternal warmth were positively related to academic achievement. In another study exploring aspects of teen pregnancy among at-risk females, having a close relationship with a caregiver was found to mitigate risky behaviors (Killebrew et al., 2014).

In considering other aspects of the relationship, families that have established high expectations for their youth's behavior from an early age contribute to developing resiliency. High expectations can come with structure, discipline, clear rules, and regulations that also lead to better outcomes (Benard, 1991). Expectations provide validation that adolescents are worthwhile human beings. It is vital for parents to communicate to their children that they are worthy and capable of being contributing members of their family through giving them responsibilities and involving them. This

allows for youth to recognize their value in the life and work of their family and within their family relationship (Benard, 1991). When youth experience these qualities within their relationship with their mother, father, or other primary caregiver, they are provided positive aspects that lead to their belief in themselves and later success in different areas of their lives (Benard, 1991; Benard, 2004).

Despite findings, a study in Turkey, communicating high expectations from figures in the home were more predictive of academic success compared to having a warm, caring relationship, and meaningful participation in the home (Gizir & Aydin, 2009). Other researchers found that support from an opposite sex parent contributed more to academic motivation than to actual academic success (Plunkett et al., 2008). Alston (2009) found that whether the parent provided some sort of care and encouragement was not significant in determining future aspirations and educational strengths. Additionally, Rohner (2010) found that parental acceptance might not have a direct link to academic achievement. Adolescents from different cultures were examined in relation to their perceived parental and teacher acceptance and whether either contributed to academic achievement. Rohner (2010) found that parental acceptance had no significant correlation with academic achievement for African American students. Worley (2007) found that although some at-risk adolescents had positive relationships with their parents, that relationship did not predict grade point average (Worley, 2007).

Overall, the home is a context that Benard (2004) identifies as significantly affecting resiliency. William and Bryan (2012) found that some youth have such a close relationship to their primary caregiver that having a desire to “give back” motivated them to be academically resilient. However, in another study, researchers found that a youth

who did not receive support from her father or mother did not think she would amount to much in life. The lack of relational ties led to the youth seeking emotional connections from peers through increased sexual activity, leading to other problems (Demb, 1994). Families can have a major influence on their youths' achievement in school and through life (Henderson & Mapp, 2002). Parental figures can influence their children both directly and indirectly. They can directly influence academic achievement through family interactions, and indirectly through interactions with other contexts in which their youth are involved, such as school (Gutman, Sameroff, & Eccles, 2002). In a study involving undocumented immigrants, it was found that Latino students who have high levels of personal and environmental protective factors such as supportive parents were more likely to be academically successful despite experiencing stressors (Perez, Espinoza, Ramos, Coronado, & Cortes, 2009). Similar results were found in another study with Mexican-origin youth who were at educational risk due to their acculturation and institutional barriers (Plunkett, Henry, Houlberg, & Abarca-Mortensen, 2008).

The parent-child relationship has been examined as a moderator between risks, and wellbeing, antisocial behavior, and adjustment (Cawston, 2012; Little-Harrison, 2011; Schofield et al., 2008; Smith, 2013). When examining acculturation stressors for minority youth, research shows that the parent-child relationship can moderate its interaction with adjustment (Schofield et al, 2008). This protective factor was also examined and found to moderate the relationship between risks and parent anxiety and the internalizing behavior of the youth, (Cawston, 2012). This factor is relatively important when examining at-risk youth, specifically those of a lower SES status. It is

shown that receiving the support of the parent can moderate the relationship between their poverty experience and academic achievement (Little-Harrison, 2011).

This conflicting research raises questions about whether having a caring relationship with parents truly promotes academic resilience. Additionally, researchers have previously examined different aspects of a positive relationship, like expectations and parental acceptance. It is shown that despite those things, there may still be a positive relationship between the youth and their parent, which may influence their outcomes. Furthermore, there is insufficient research examining the moderating role of the parent-child relationship. Many studies previously mentioned consider correlational and predictive influences, while only some examine moderating roles with other outcomes like well-being and adjustment. It is likely that the relationship might also moderate the relationship between discussed risks and academic achievement.

Parent involvement. According to the Department of Education (2013), the No Child Left Behind Act of 2001 indicates that family and parental involvement is necessary in helping youth from disadvantaged environments. Involvement can include expectations and expressing to adolescents that they have the potential to be successful (Gutman et al., 2002). Parental involvement is a critical factor in school achievement at all grade levels (Gutman et al., 2002). There are positive associations between parental involvement and school achievement, specifically for poor urban youth, or those from disadvantaged means (Gutman et al., 2002). Parent involvement is also important at the critical stages of adolescence because this is the time that due to a number of reasons, achievement usually tends to decline (Simons-Morton & Chen, 2009). Research indicates that after youth finish middle school, some parents do not engage in as many activities

with their youth. This can contribute to the decline in academic achievement for some disadvantaged youth (Simons-Morton & Chen, 2009).

The term *involvement* has been described in a number of ways in the literature, and may include being involved in leisure activities, spending time with homework, attending in-school conferences, having school expectations, and general in-home and in-school involvement (Altchul, 2011; Benard, 2004; Fan & Chen, 2001; Hayes, 2012; Palmer, 2004; William & Sanchez, 2012). Other forms of involvement include knowing the youth's friends, emotional involvement, and cognitive activities, like talking about current events (Davidson, & Cardemil, 2009). Parent involvement is a complex term that has not been clearly defined (William & Sanchez, 2012). There appears to be a lack of research on the relationship between parents' leisure involvement with their child and the child's actual academic outcomes. Parental involvement might also be described as watching television with the youth, having dinner, or driving to places together. It can also include attending different activities together, or parents simply spending time with their child. This form of involvement allows parents to be aware of their child's lives and activities (Criss et al., 2015).

Research shows that those who have less involved parents are the least academically successful compared to other youth (Cooper & Crosnoe, 2007). It is important for the primary caregiver to involve themselves in their children's friendships (Isreal et al., 2001). This can include being in direct contact with the friend's parents, which can lead to higher achievement in school (Isreal et al., 2001). Hayes (2012) discovered that for low-income African American youth, in-home involvement of the parent is more effective compared to spending time at school activities. Hayes used in-

home involvement to include parents spending time with their youth on homework activities and having conversations about school. The time spent with youth at home is highly important for better academic outcomes (Hayes, 2012). Parent involvement may influence the type of engagement in school, academic achievement, and educational aspirations of their youth (Simons-Morton & Chen, 2009). Some studies show that there is an increase in children's overall adjustment when their parents actually spend time with them. Youth may perceive their parents as being concerned, which encourages the youth to excel academically (Criss et al., 2015). Spending time together is critical for the parent-child relationship, as it allows for communication and understanding what is going on with the child, while monitoring children's whereabouts and plans for the future (Blocklin, Crouter, Updegraff, & McHale, 2011; Padilla-Walker et al., 2010).

Parental involvement in leisure activities has an overall impact on the well-being of youth (Blocklin et al., 2011). Females have more successful outcomes than males when there is involvement of the parent (Wenk, Hardesty, Morgan, & Blair, 1994). Parental involvement from both the mother and father is important (Wenk et al., 1994). Behavioral involvement of the parent aids in the academic achievement of the youth. Milkie, Nomaguchi, and Denni (2012) found that accessible time, when children and parents are around each other but not necessarily interacting, was the type of involvement that matters the most for children's academic achievement. Actual time spent interacting in activities only mattered in this study when looking at risky behavior. However Palmer (2004) found that spending time with youth was an important way to teach youth the importance of academic achievement. When assessing youth who were at risk for low

academic achievement, researchers found that involvement that includes providing academic encouragement was helpful (Chen & Gregory, 2010).

There is a wealth of research on the link between behavioral parental involvement and risky behavior (Milkie et al., 2012). The more time a parent engages in activities with their youth, the less likely the youth will engage in negative behavior (Milkie et al., 2012). However there is a clear lack of research on how this involvement can help youth stay focused and increase their educational attainment and plans for the future. It seems that involvement can also moderate the relationship between risk and academic outcomes. A study done by Kingston, Huang, Calzada, Dawson-McClure, & Brotman (2013) found moderating effects of parent involvement between both the youths' family structure and SES, and externalizing behavior and adaptive skills. Research shows a link between delinquent behavior and academic failure (McEvoy & Welker, 2000; Milkie et al., 2012). Conversely, if youths are able to abstain from delinquent behavior, they are also likely to experience academic success (McEvoy & Welker, 2000).

Reardon (2011) found that there has been a recent increase in the relationship between low-income homes and low academic achievement. Reardon attributed this increase to the involvement of the parent. High-income parents tended to spend more time with their children and their academic endeavors, leading to higher academic achievement for those youth (Reardon, 2011). Although Eccles and Harold (1993) found that there are a number of reasons parents are not as involved as they may want to be or as others think they should be. Cooper & Crosnoe (2007) actually found that the level of academic disadvantage can moderate the relationship between parent involvement and their youth's academic orientation, or beliefs about school. Low family income, parental

education, ethnic background, marital status, working status, beliefs and assumptions, and an overall high-risk environment can create barriers to spending time with children (Eccles & Harold, 1993). Parents' ethnicity can play a role in their beliefs about the importance of school and how they spend time with their youth. Marital and working status can also contribute to the time parents have to actually be involved with their youth (Eccles, & Harold, 1993). Money, time, and energy can determine the level of involvement parents can have with their children as well (Williams & Sanchez, 2012). Despite these findings, Lee & Bowen (2006) found that the involvement of the parent can actually mediate the relationship between their educational status, and their youth's academic achievement. This indicates the importance of the parents' involvement, despite educational, ethnic, economic, or stress related risks.

Lee and Bowen (2006) found that although parental involvement played a role in low educational attainment, poverty had a higher effect on whether children achieved academically. Altschul (2011) found that actually spending time with youth was not as important as financial stability in helping them maintain academic achievement. Behavioral involvement from both the mother and father is more important for economically disadvantaged youth (Wenk et al., 1994). For all children, behavioral involvement from the parent increases academic outcomes (Blocklin et al., 2011; Wenk et al., 1994). Spending time with children allows parents to show concern for their children, which can lead to better adjustment and outcomes (Blocklin et al., 2011). There is clear evidence of the role involvement of the parent plays in the youths outcomes. However, there is limited research on the influence of the moderating role spending leisurely time plays in the academic achievement of at-risk youth.

Parental monitoring. Steinberg (2011) identifies the stage of adolescence as a critical time in which the parent needs to monitor their youth. Adolescence is usually a time, in which the youth starts to engage in negative behavior, experience emotional problems, and is influenced by and engages in activities with peers (Steinberg, 2011). Research indicates the importance of parental monitoring in inner city environments with high levels of community violence. This allows for parents to know their children's whereabouts and activities, while giving the children a platform for protection (Ceballo et al., 2003). When examining moderating role of monitoring from the parent, it is shown to buffer against externalizing behavior in the youth when living in unsafe environments (Pettit, Bates, Dodge, & Meece, 1999). Resilient youth usually have parents who monitor their behavior and implement some sort of discipline in their practices (Castillo, 2003). Despite risks, adolescents' who have parents that provide consistent discipline, tend to do better in school (Gutman et al, 2002). When parents are aware of what is going on with their youth, there is generally control in the household. This can lead to the child being held accountable and making better decisions behaviorally and in school (Criss et al., 2015; Davidson & Cardemil, 2009).

Monitoring can be defined in a number of different ways, such as through communication of the youth's location (Criss et al., 2015; Davidson & Cardemil, 2009). This can involve parents actually asking children where they are going, their plans, and who their friends are. Parental control is another form of monitoring that usually involves how the parent places responsibility on the child and holds him or her accountable. So for example, children may have to ask for permission before they leave the home. Or, they may have consequences if they are out past curfew time. Parents can also monitor how

youth are spending their money and their daily whereabouts. These are all forms of monitoring that lead to less delinquent activity among youth and more engagement in their schoolwork (Sattin & Kerr, 2000). Both male and female youth highly benefit from parental monitoring (Kristjansson & Sigfusdottir, 2009). Caballo et al (2003) actually found that parental monitoring moderates the relationship between violence exposure, a risk factor, and the psychological wellbeing of the youth. This is important as the psychological wellbeing of the youth can influence their achievement in school (Frojd, et al., 2008). The type of monitoring for boys and girls can be different, as girls tend to be monitored more in the home. Monitoring that leads to more effort in school endeavors is an important aspect to being academically successful (Kristjansson & Sigfusdottir, 2009).

Although monitoring adolescents' daily activities has been shown to be effective in achievement, a study with African American females showed that parental monitoring was not related to actual academic aspirations (Alston, 2009). However, another study with high-risk, urban youth found that parental knowledge and monitoring was highly correlated with academic motivation and school engagement (Lowe & Dotterer, 2013). Lowe and Dotterer (2013) highlighted the need for monitoring to come with parental warmth. Parental warmth combined with monitoring is especially important for disadvantaged youth. This is because the level of parental warmth was found to moderate the relationship between parent monitoring and their youths' academic outcomes (Lowe & Dotterer, 2013). For disadvantaged youth, parental support, youth responsiveness, and the youth's gender also play a role in whether parental monitoring determines youth's academic outcomes. If youth are not responsive to enforcement of rules and monitoring, parents might experience distress leading to avoidance and regression of the monitoring

(Baptiste, 2000). A study of African American youth living in low-income public housing found that parents, especially of younger adolescents and females, tended to monitor their child's whereabouts more. (Nebbitt et al., 2014).

Alston (2009) found that parental knowledge of their children's whereabouts, such as where they went after school, where they were at night, and what they did during their free time, was higher in mothers than fathers. Resilient youth usually have parents that monitor their behavior and implement some sort of discipline in their practices (Castillo, 2003). This is particularly important for youth coming from environments that are characterized by violence and dangerous activity (Castillo, 2003). Davidson and Cardemil (2009) found that having regular conversations with youth about their whereabouts and involvements could have an impact on their achievement. This can be especially true for low-income Latino youth who experience challenges (Davidson & Cardemil, 2009).

It is shown that overall parent protective factors tend to influence the achievement of the youth. However, there seems to be a lack of resilience research examining the moderating effects of these protective factors, especially when considering academic outcomes. Previous studies focus on the well-being and risky behavior of the adolescent, but their achievement in school may also be important. There are a number of ways that protective factors such as, a positive relationship, parent involvement, and parent monitoring, can influence the success of the youth. Yet, studies show that moderating interaction effects are a beneficial representation of the actual buffer these protective factors can have on risks in resilience work (Cawston, 2012; Fairchild & McKinnon, 2009; Masten, 2001). It is expected that just as these protective factors play moderating

roles with other outcomes, it may also moderate the relationship between risks and academic achievement of disadvantaged youth.

Adolescent Females

When looking at resiliency, there are a number of indications that girls tend to experience increased risk compared to boys (Daniel & Balog, 2009; Killebrew et al., 2014). Due to a number of environmental and societal changes, the age of puberty for the adolescent female in the United States and Western countries has decreased. This has led to an increase in females entering premature puberty (Daniel & Balog, 2009).

While girls may mature at a faster rate than boys, some are at an increased risk for early maturity as a result of stressors and environmental factors (Mendle, Natsuaki, Leve, Ryzin, & Ge, 2011). Youth from disadvantaged areas are susceptible to premature puberty development as a result of a number of environmental stressors (Bogaert, 2005; Daniel & Balog, 2009; Mendle et al., 2011). Mendle et al. (2011) indicated that experiences of environmental risks early on in development could also lead to early maturation. A common stressor is growing up without a father (Bogaert, 2005). The age of menarche and experience of an earlier pubertal range can be a result of not having the father in the youth's life (Bogaert, 2005; Daniel & Balog, 2009). Having a lack of parental involvement and care is an environmental risk that is also related to youth, specifically girls maturing earlier than their counterparts (Cavanagh, Riegle-Crumb, & Crosnoe, 2007).

Further risks for adolescent females include stress, teen pregnancy, eating disorders, substance abuse, other health issues, and poor school performance (Daniel & Balog, 2009). Those who reach puberty at an even earlier age, such as under the age of

ten, are at a heightened risk for low self-esteem, early sexual initiation, violent behavior, and low educational achievement. It has been hypothesized that due to earlier puberty, females tend to socialize with older peers and start engaging in negative behavior, later leading to a lack of success in school (Daniel & Balog, 2009). Problems in school may be due to truancy and absenteeism, as some girls report a lack of interest in academics and plans for college (Daniel & Balog, 2009).

Socially, it has been shown that adolescent females, especially those growing up in inner city areas, tend to be involved in gang activity (Harper & Robinson, 1999). Being a member in a gang can lead to low school success, early sexual activity, violence, and substance abuse (Harper & Robinson, 1999; Voisin, King, Diclemente, & Carry, 2014). Unfortunately, gang involvement is seen by youth as being resourceful in the face of extreme poverty and inner-city living (Harper & Robinson, 1999). The gang tends to provide a sense of belonging, identity, guidance, and protection for female youth. Although males are usually linked to gang involvement, female's involvement has been increasing for a number of years (Harper & Robinson, 1999; Voisin et al., 2014). One study of adolescent females found that those who were members of gangs tended to have earlier sexual experience, more sexual partners, and a lack of condom use (Voisin et al., 2014) These females also used more marijuana and drank alcohol more and showed more violent behavior (Harper & Robinson, 1999). It is important to note that disadvantaged youth are exposed to more drugs because they are easily accessible. Delinquent activity is also more prevalent (Dupere et al., 2009). Peer relationships, including those with older peers, can have detrimental effects for girls. Some adolescent girls date older boys and engage in early sexual activity, which can lead to unwanted and early pregnancy (Daniel

& Balog, 2009). These girls may also experience unwanted sexual advances that lead to sexual abuse (Daniel & Balog, 2009).

The risky behavior in which female adolescents may engage can lead to a lack of educational attainment (Demb, 1994; Schaefer-McDaniel, 2007). These risks, especially teen pregnancy, can lead to the adolescent female dropping out of school (Killebrew et al., 2014). At risk adolescent females also tend to have lower expectations for their future (Killebrew et al., 2014). Whether male or female, youth who tend to mature earlier than their peers are at an increased risk for behavior and academic problems, while also being less likely to attend college (Mendle, Turkheimer, & Emery, 2007). It is important to note that when looking at African American and Latino youth, although females are at an increased risk, they also tend to present as being more resilient than males. Research indicates that they are able to overcome their adversities when provided the right resources (Farris-Fisher, 2003).

When considering emotional risks, girls tend to experience more interpersonal stress. This can be related to girls' increased expectations for success, self-esteem problems, and increased hopelessness when compared to males (Castillo, 2003). Along with emotional issues, adolescent females experience a high level of suicidality (Castillo, 2003). Research shows that youth in poor neighborhoods reported suicidal thoughts twice as much when compared to those from non-poor neighborhoods. Those from poor areas were four times as likely to attempt when compared to their non-poor peers (Dupere et al., 2009). Although suicide is high among girls, protective factors, both internal and external, have been shown to be moderators of these effects (Everall et al., 2006). Research shows that despite community risks such as violence, which can lead to

emotional problems, adaptive coping plays a role in better psychological functioning and adjustment, leading to better academic outcomes (Edlynn et al., 2008).

Bolland (2003) indicated that although females experience emotional risks, males from inner city areas tend to show more signs of hopelessness, are more violent, and use more substances. Though there are studies indicating similarities between risks of female and male youth, females still tend to outweigh males in risks such as early pregnancy, sexual activity, and emotional problems, all of which contribute to low academic performance in school. If high school is reached, these girls tend to experience academic problems throughout the high school years (Cavanagh et al., 2007). There is insufficient research examining risk and protective factors of disadvantaged females. It is hoped that further research will provide an understanding of what is needed for at-risk females to succeed in school.

Appendix B

Tables

Table 1

Descriptive statistics for the components of the family ecological risk factor

	<i>M</i>	<i>SD</i>
Family Stress	3.84	2.84
Neighborhood Violence	1.78	.45
Marital Status	57.9 % married/cohabitating 42.1 % single	
Family Living Below Poverty Line	47.4 % yes 52.6 % no	
Primary Caregiver Education	.6 % grades 7-9 2.9 % grades 10-11 21.1 % high school graduate or GED 42.7 % some college or trade school 20.5 % completed four years of college 11.7 % completed graduate or professional school	

Table 2

Descriptive statistics for the components of the school ecological risk factor

	<i>M</i>	<i>SD</i>
Report Card	75.78	20.52
Reduced Lunch	.65	.22
Attendance	.93	.04
Teaching Experience	11.67	3.62
Parent Involvement	2.83	13.94

Table 3

Bivariate correlations and descriptive statistics

	1	2	3	4	5	6	7	8	
1. Family Ecological Risk		.43***	-.20**	-.20**	-.30***	-.19*	-.29***	-.01	
2. School Ecological Risk			-.17	-.29***	-.31***	-.12	-.33***	.08	
3. Parental Knowledge (P)				.19**	.37***	.07	.20**	-.06	
4. Parental Knowledge (Y)					.26***	.08	.25***	.12	
5. Parent Involvement						.13	.22**	-.23**	
6. Parent-Youth Relationship Quality							.11	-.02	
7. Academic Achievement								-.12	
8. Adolescent Age									
	<i>N</i>	171	125	171	171	171	159	167	171
	<i>M</i>	2.12	2.36	4.15	3.52	3.46	4.89	3.07	14.00
	<i>SD</i>	1.24	1.91	.76	1.04	.60	1.83	.74	1.25

Note: *** $p < .001$, ** $p < .01$, * $p < .05$.

Table 4

Regression examining the links between family ecological risk and school ecological risk with academic achievement when examined simultaneous

Step	Predictors	Academic Achievement	
		Std. β	ΔR^2
1	Adolescent Age	-.14	.02
2	Family Ecological Risk	-.30***	.18***
	School Ecological Risk	-.20*	

Note: *** $p < .001$, * $p < .05$

Table 5

Multiple regressions examining moderators in the links between family ecological risk and academic achievement

Step	Predictors	Academic Achievement	
		Std. β	ΔR^2
1	Adolescent Age	-.11	.01
2	Family Ecological Risk	-.27***	.11***
	Parental Knowledge (P)	.14	
3	Family Ecological Risk X Parental Knowledge (P)	.02	.00
1	Adolescent Age	-.11	.01
2	Family Ecological Risk	-.26***	.13***
	Parental Knowledge (Y)	.21**	
3	Family Ecological Risk X Parental Knowledge (Y)	-.04	.00
1	Adolescent Age	-.11	.01
2	Family Ecological Risk	-.26***	.10***
	Parental Involvement	.12	
3	Family Ecological Risk X Parental Involvement	.06	.00
1	Adolescent Age	-.13	.02
2	Family Ecological Risk	-.26***	.08**
	Parent-Youth Relationship Quality	.06	
3	Family Ecological Risk X Relationship Quality	-.12	.01

Note: *** $p < .001$, ** $p < .01$. P = Parent Reports, Y = Youth Reports

Table 6

Multiple regressions examining moderators in the links between school ecological risk and academic achievement

Step	Predictors	Academic Achievement	
		Std. β	ΔR^2
1	Adolescent Age	-.14	.02
2	School Ecological Risk	-.30***	.13***
	Parental Knowledge (P)	.15	
3	School Ecological Risk X Parental Knowledge (P)	-.00	.00
1	Adolescent Age	-.14	.02
2	School Ecological Risk	-.28**	.12***
	Parental Knowledge (Y)	.13	
3	School Ecological Risk X Parental Knowledge (Y)	-.08	.01
1	Adolescent Age	-.14	.02
2	School Ecological Risk	-.26**	.14***
	Parental Involvement	.21*	
3	School Ecological Risk X Parental Involvement	.06	.00
1	Adolescent Age	-.16	.03
2	School Ecological Risk	-.30***	.12***
	Parent-Youth Relationship Quality	.13	
3	School Ecological Risk X Relationship Quality	-.10	.01

Note: *** $p < .001$, ** $p < .01$, * $p < .05$. P = Parent Reports, Y = Youth Reports

Appendix C

Demographic Questionnaire

Youth:

1. Gender: Female Male
2. Ethnicity: Caucasian African American Hispanic/Latino Asian
 Native American Other
3. Date of birth: _____ (month) _____ (year)
4. Year in school: 4th grade 5th grade 6th grade 7th grade 8th grade 9th grade
 10th grade 11th grade 12th grade

Parent:

1. Gender:
 Female
 Male
2. Ethnicity:
 Caucasian
 African American
 Hispanic/Latino
 Asian
 Native American
 Other
3. Date of birth: _____ (month) _____ (year)
4. Name of your child's school: _____
5. Relationship to Target Youth (use one of the following codes): _____

01 Biological Mother	04 Adoptive Father	07 Foster Mother	10 Father's Girlfriend	13 Grandparent	16 Sibling
02 Biological Father	05 Step Mother	08 Foster Father	11 Mother's Partner	14 Aunt	17 Cousin
03 Adoptive Mother	06 Step Father	Boyfriend	12 Father's Partner	15 Uncle	18 Other
6. Current marital status:
 Married
 Living together
 Single
 Separated
 Divorced
 Widowed
7. Are you currently married or living with the adolescent's biological father/mother?

- Yes
 - No
8. Gender of partner:
- Female
 - Male
 - I am single.
9. Age of partner (years): _____ (leave blank if single)
10. How long have you been in a relationship with your partner? _____ years _____ months (leave blank if single)
11. During the past year, did your family go without meals at least once?
- No
 - Yes
12. During the past year, did you live outdoors, or in a shelter, or in a transitional housing facility?
- No
 - Yes
13. Family income *per month* (not including public assistance): \$ _____
14. Have you received public assistance (e.g., welfare) in the past year? No Yes If yes, how much *per year*? \$ _____
15. Family income *per year* (not including public assistance): \$ _____ *per month*? \$ _____

Family Education History:	Don't Know	Grade 7-9	Grade 10-11	HS grad or GED	Some college or trade school	Completed four years of college	Completed graduate or professional school
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16. Your Education

17. Spouse/Partner's Education

18. How many adults are living in your home? _____

19. How many children/adolescents are living in your home? _____

20. How many times have you moved *during the past two years*? _____

Appendix D

Family Changes and Adjustment Scale

Directions: What kind of changes and adjustments has your family had in the past year?

	No	Yes
1. moved	<input type="radio"/>	<input type="radio"/>
2. major repairs/remodeling to home or apartment	<input type="radio"/>	<input type="radio"/>
3. severe and/or frequent illness for your daughter	<input type="radio"/>	<input type="radio"/>
4. accidents and/or injuries for your daughter	<input type="radio"/>	<input type="radio"/>
5. other medical problems for your daughter	<input type="radio"/>	<input type="radio"/>
6. medical problems for you or other family members	<input type="radio"/>	<input type="radio"/>
7. death of close family member	<input type="radio"/>	<input type="radio"/>
8. death of other important person	<input type="radio"/>	<input type="radio"/>
9. divorce and/or separation for you and your spouse/partner	<input type="radio"/>	<input type="radio"/>
10. parent and child were separated (due to illness, divorce, work, etc.)	<input type="radio"/>	<input type="radio"/>
11. money problems	<input type="radio"/>	<input type="radio"/>
12. legal problems	<input type="radio"/>	<input type="radio"/>
13. problems and conflicts with relatives	<input type="radio"/>	<input type="radio"/>
14. birth of a baby	<input type="radio"/>	<input type="radio"/>
15. problems at school for your daughter	<input type="radio"/>	<input type="radio"/>
16. problems at work for you and/or your spouse/partner	<input type="radio"/>	<input type="radio"/>
17. loss of a job	<input type="radio"/>	<input type="radio"/>
18. remarriage or marital reconciliation	<input type="radio"/>	<input type="radio"/>

Appendix E

Neighborhood Violence Scale

Neighborhood Violence (Youth Reports):

Directions: These items ask about things you have seen or heard in the last year around your home, neighborhood, or school. Do not count things that you might have seen or heard on TV, in movies, or in videogames.

	0	1	2	3		
	Never	Once or twice	A few times	Many times		
			0	1	2	3
1. I have heard guns being shot.			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I have seen drug deals.			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I have seen someone being beaten up.			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I have seen somebody get stabbed.			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I have seen somebody get shot.			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I have seen gangs in my neighborhood.			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I have seen somebody pull a gun on another person.			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I have heard other kids talk about bringing weapons to school with them.			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I have seen other kids with guns or knives at school or in my neighborhood.			<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. I have heard other kids threatening to beat someone up or hurt someone
11. I have seen other kids get hit or pushed.
12. I have been hit or pushed by someone.
13. I have heard kids saying bad things about others behind their back.
14. Other kids have said mean things to me.
15. Other kids have kept me from joining in what they're doing.
16. Other kids have stopped talking to me for a while.
17. Other kids have spread rumors about me.
18. Other kids have threatened to hurt me.
19. I have seen people break windows on cars or buildings on purpose.
20. I have seen people tag or spray paint words or pictures on buildings or other places.

Appendix F

Parent-Youth Relationship Quality Scale

RELATIONSHIP QUALITY RATING:

1 2 3 4 5 6 7 8 9

The observer's evaluation of the quality of the dyad's relationship. A low score indicates an unhappy, emotionally unsatisfying, or brittle relationship. A high score indicates the observer's impression that the relationship is warm, open, happy, and emotionally satisfying. Code '5' if there is no evidence concerning the quality of the relationship or if there is equal amounts of negative and positive evidence.

1 = Negative:

- The dyad's relationship is characterized as unhappy, conflicted, and brittle, or the dyad is uninvolved (emotionally divorced). This type of relationship may be characterized by high conflict, lack of interest in the other, or few indications of warmth.

2 =

3 = Somewhat negative:

- The dyad's relationship is characterized as somewhat unhappy and conflicted. The relationship is more negative than neutral or positive.

4 =

5 = Between the two extremes:

- The dyad members are involved with each other, but the relationship is neither excessively negative nor excessively positive. This relationship would be described as an "okay" relationship, but the relationship could use improvement in some areas to increase its quality. Code as '5' if there is no evidence concerning the quality of the relationship or if the amounts of positive and negative evidence are fairly equal.

6 =

7 = Somewhat positive:

- The dyad's relationship is characterized as generally positive and warm. The quality of the relationship is more positive than neutral or negative, although there may be some indications of low level negative behavior.

8 =

9 = Positive:

- The dyad's relationship is characterized as open, satisfying, pleasing, warm, and/or communicative. The individuals have a positive outlook on their relationship. There are few, if any, incidents of negative behaviors.

Appendix G

Parent-Youth Involvement Scale

Parent:

	1	2	3	4	5
	Never	Hardly Ever	Sometimes	Frequently	Very Often

	1	2	3	4	5
<i>During the past year, how often did you and your daughter:</i>					
1. eat a meal together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. go shopping together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. go to the movies together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. go to a sporting event together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. go to church together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. do something fun together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. watch TV or a video together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. do household chores together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. play a board game or cards together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. drive in the car together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Youth:

	1	2	3	4	5
	Never	Hardly Ever	Sometimes	Frequently	Very Often

	1	2	3	4	5
<i>During the past year, how often did you and your parent:</i>					
1. eat a meal together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. go shopping together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. go to the movies together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. go to a sporting event together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. go to church together?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. do something fun together?
7. watch TV or a video together?
8. do household chores together?
9. play a board game or cards together?
10. drive in the car together?

Appendix H

Parent Knowledge Questionnaire

Parent:

1	2	3	4	5
Never	Hardly Ever	Sometimes	Frequently	Very Often

During the past year, how often did you really know:

	1	2	3	4	5
1. what your daughter did with friends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. what your daughter did during free time?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. what your daughter did after school, at night, or on weekends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. your daughter's performance in school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. your daughter's use of the computer and Internet?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. what your daughter watched on TV or saw at the movies?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Youth:

1	2	3	4	5
Never	Hardly Ever	Sometimes	Frequently	Very Often

During the past year, how often did your parent really know:

	1	2	3	4	5
1. what you did with friends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. what you did during free time?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. what you did after school, at night, or on weekends?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. your performance in school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. your use of the computer and Internet?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. what you watched on TV or saw at the movies?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix I

Youth School Performance Questionnaire

<i>During the past year, what was your grade for...</i>	A	B	C	D	F	N/A
1. English	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Math	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Science (biology, chemistry, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Appendix J

IRB Approval

Oklahoma State University Institutional Review Board

Date: Friday, February 20, 2015
IRB Application No ED1520
Proposal Title: Family and School Ecological Risks and Academic Achievement among Disadvantaged Females
Reviewed and Exempt
Processed as:

Status Recommended by Reviewer(s): Approved Protocol Expires: 2/19/2018

Principal Investigator(s):

LaTrice Ponton Loche	Julie Koch
3398 E 6th Apt #405	418 Willard
Stillwater, OK 74074	Stillwater, OK 74078

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval. Protocol modifications requiring approval may include changes to the title, PI advisor, funding status or sponsor, subject population composition or size, recruitment, inclusion/exclusion criteria, research site, research procedures and consent/assent process or forms
2. Submit a request for continuation if the study extends beyond the approval period. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of the research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Dawnett Watkins 219 Cordell North (phone: 405-744-5700, dawnett.watkins@okstate.edu).

Sincerely,


Hugh Crethar, Chair
Institutional Review Board

VITA

LaTrice M. Loche

Candidate for the Degree of

Doctor of Philosophy

Dissertation: FAMILY AND SCHOOL ECOLOGICAL RISKS AND ACADEMIC ACHIEVMENT AMONG DISADVANTAGED FEMALES: MODERATING EFFECTS OF PARENT PROTECTIVE FACTORS

Major Field: Counseling Psychology

Biographical:

Education:

Completed the requirements for the Doctor of Philosophy in Educational Psychology (option: Counseling Psychology) at Oklahoma State University, Stillwater, Oklahoma in July 2016.

Completed the requirements for the Master of Science in Clinical Psychology at Northwestern State University, Natchitoches, Louisiana in May 2012.

Completed the requirements for the Bachelor of Science in Psychology at Texas Christian University, Fort Worth, Texas in May 2009.

Experience:

- Carl Albert Fellow (Psychological Clinician), Oklahoma Office of Juvenile Affairs, Oklahoma City, Oklahoma, 2014 – Present
- Doctoral Supervisor, Oklahoma State University, Stillwater, Oklahoma, 2014 – Present
- Psychological Clinician, Central Oklahoma Juvenile Center, Tecumseh, Oklahoma, 2013 - 2014
- Psychological Clinician, Counseling and Recovery Services, Tulsa, Oklahoma, 2012-2013.
- Masters Practicum Counselor, Veteran Affairs Hospital, Pineville, Louisiana, Spring 2012.

Professional Memberships:

- American Psychological Association (APA)
- American Psychological Association for Graduate Students (APAGS)
- Association of Black Psychologists (ABPsi)
- Southwest Psychological Association