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# Mentoring During Adolescence and Adult Resilience

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The University of Southern Mississippi

MENTORING DURING ADOLESCENCE AND ADULT RESILIENCE

by

Pola Christina Jakacki

Abstract of a Dissertation  
Submitted to the Graduate School  
of The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

May 2011

## ABSTRACT

### MENTORING DURING ADOLESCENCE AND ADULT RESILIENCE

by Pola Christina Jakacki

May 2011

The purpose of this study was to determine if there was a significant relationship between mentoring and adult resilience, specifically adults that were mentored as adolescents. The study sample comprised of 657 adults from various locations across the country. For this quantitative study, they completed a two-part questionnaire made up of the Resilience Scale-14 created by Gail M. Wagnild and Heather M. Young (1993) and author created questions regarding demographics and mentor relationships.

The responses were analyzed using frequencies, means, standard deviations, independent samples *t* tests, and a Pearson correlation. Results of the study showed that there was a significant relationship between the reported impact of a mentor and resilience. No relationship was found between resilience and the length of mentorship, resilience and type of mentors, or resilience and the identified presence of a mentor. Based on the results, implications for educational change, further research, and school programming are discussed. The contents of this dissertation further explain the results of this quantitative study.

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by

Pola Christina Jakacki

A Dissertation  
Submitted to the Graduate School  
of The University of Southern Mississippi  
in Partial Fulfillment of the Requirements  
for the Degree of Doctor of Philosophy

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## DEDICATION

Thank you to all my family, friends, students, colleagues, and God for their love, encouragement, and support.

This work is solely dedicated to my precious daughter, Justyna, the light and inspiration of my world. I would like to express gratitude to my love, Dorian, for being there throughout this entire stressful process, and whose serenity, kindness, tolerance, and love were there for me. In addition, I offer a special thank you to my parents, Casey and Roseleen, and my sister, Angela, for their financial support, love, patience, and understanding. Finally, I express appreciation to my aunt, Henryka Jakacka, who encouraged and financially supported my pursuit of a graduate-level degree.

In memory of Tracy Lynn Judd and Deja Renee, their spirits are alive within me.

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Finally, I would like to thank the 657 participants who completed the survey as partners with me in this research.

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## CHAPTER I

### INTRODUCTION

#### Purpose of the Study

The purpose of this research study was to determine if there is a relationship between the experience of having adolescent school mentors and late adolescent resiliency. The type of mentor relationship addressed is school-based and natural, not a formal program-based relationship such as Big Brother/Big Sister. In the Big Brother/Big Sister program, a mentor is a person older than the mentee who mentors a younger, usually school-age protégé (Herrera, Grossman, Kauh, Feldman, McMaken, & Jucovy, 2007). According to DeJong (2004), a mentor is usually an adult over the age of 21 who agrees to mentor a younger, unrelated youth. Research is needed to provide useful information for schools working to prepare children for the future. Mentoring is one construct to be examined via this research study, and resilience is the second construct. The researcher examined the types and levels of mentor relationships and qualifies mentorships during school-age years (Georgiou, Demetriou, & Stavrinides, 2009).

According to Wagnild and Young (1993), resilience is defined as, “a personality characteristic that moderates the negative effects of stress and promotes adaptation” (p. 12). Resilience, “a personality characteristic that moderates the negative effects of stress and promotes adaptation” (Wagnild & Young, 1993, p. 12), is defined. It is identified and examined for purposes of this research as those having had a mentor relationship in their adolescent years in school. This research addressed resilience in adults as a result of having a supportive adult mentor or role model in school during adolescence. Many of the reviewed articles regarding resilience referred to at-risk students (Anda, 2001;

Aronowitz, 2005; Bernard, 2006; Flom & Hansen, 2006; Holt, Bry, & Johnson, 2008; Sonnenblick, 1997; Ungar & Teram, 2000; Woolley & Bowen, 2007), urban dwelling (D'Imperio, Dubow, & Ippolito, 2000; Ewart, Jorgensen, Suchday, Chen, & Matthews, 2002; O'Hearn & Gatz, 2002; Sperandio, 2008; Wyatt, 2009; Zimmerman, Bingenheimer, & Notaro, 2002), or children of substance users (Betty Ford Center, 2004; Johnson & Wiechelt, 2004; Moe, Johnson, & Wade, 2007). The researcher investigated to determine if the presence or role of a mentor affects resilience.

The literature (DeJong, 2004; Spencer, 2006) suggests that there has been a great deal of research done on formal mentoring programs such as Big Brother/Big Sister. Less research has been done on natural school-based mentors (Georgiou et al., 2009; Sonnenblick, 1997) and informal programs (Zimmerman et al., 2002). Most research results show benefits, although the benefits vary with each mentoring program or relationship. The types of benefits studied are academic, emotional, supportive, career (McCormick, 1990), and guidance. Much of the literature reports on at-risk youth in mentoring programs. Few research studies in this area are on the subject of student identified school-based mentors of adolescents.

#### Theoretical Foundation for Mentoring and Resiliency

The theoretical foundation for this study on mentoring and resiliency includes the fields of self-actualization and social cognitive theories, resilience, and mentoring and includes empowerment, relational theory, grounded theory, and self-efficacy. Abraham Maslow's (1970) research and hierarchy of needs theories apply to adolescents and mentoring relationships. Maslow (1970) explained that all humans have basic physiological, safety, love, esteem, and self-actualization needs. In schools and in life,

mentors can help provide safety, love, and esteem for learners leading to self-actualization. In many schools today, children seek the basic physiological needs as well. Many schools provide free breakfast and free or reduced cost lunches to provide the basic core need of food to children. After this necessity has been satisfied, schools, teachers, students, and mentors can strive to ensure that safety, love, esteem, and self-actualization needs are met.

Albert Bandura's social cognitive theory directly relates to Maslow's findings. The social cognitive theory and school-based mentors are discussed in the literature (Holt et al., 2008). Bandura's theory described that different parts of life affect each other. Academic achievement, engagement, and learning have a reciprocal relationship. Personal influences such as cognitive, affective, and biological influences interact with environmental and behavioral beliefs. Social cognitive theory would support a mentors modeling positive behaviors for mentees (Bandura, 1986). A pupil could improve in cognitive learning due to a mentor and then could improve engagement in school and feelings of self-efficacy to make continuous improvement.

Self-efficacy, or the belief in one's own ability to effectively accomplish something, was identified in three forms of self-efficacy beliefs by researchers including Albert Bandura. They are academic, social, and emotional self-efficacy (Lackaye, Margalit, Ziv, & Ziman, 2006). A belief in self, academically, can affect a belief in self, in another area (Nastasi & DeZolt, 1994). In other words, if a student believes he or she is smart in math he or she may believe they can be smart in spelling, or just simply believe in themselves to be able to be successful. Resilience is connected to all aspects of self-

efficacy but is most closely related to emotional and academic self-efficacy (Lackaye et al., 2006).

Zimmerman, Bingenheimer, and Notaro (2002) cited resiliency theory as an explanation to help understand why some at-risk youth do not show problem behaviors when exposed to risks. The resiliency theory has two models: compensatory and protective factor models (Zimmerman et al., 2002). The *compensatory model* advocates that positive factors in an adolescent's life may surmount and counteract negative factors or risks. The positive outweigh the negative. The other model, the *protective factor model*, implies that risks and protective factors need to be measured or considered based on the impact and prevalence of each. Positive factors can foster resilience and relational processes. Social support is a positive or *promotive factor* that can lead to positive outcomes (Hurd & Zimmerman, 2010).

*Relational theories* focus on processes that develop authenticity, empathy, collaboration, and companionship (Spencer, 2006). Mentoring can lead to more authenticity. Georgiou et al. (2009) included information on empathy and mutuality, or collaboration, in their quantitative study of adolescent students and their mentoring relationships. Relational theories promote healthy relationships for better psychological development and well-being of adolescents. Strong relationships with a mentor such as a nonparental adult can provide guidance, support, and encouragement leading to positive outcomes by diminishing risks (Zimmerman et al., 2002).

The *empowerment theory* encourages oppressed people to gain and take control of their lives. Wyatt (2009) addressed how professional school counselors could help empower oppressed students. Wyatt's (2009) study specifically focused on African

American oppressed male students in relation to empowerment. According to Ungar and Teram (2000), the phases to empowerment are finding and adopting an identity and maintaining an identity and power through the acquisition process and social discourse; their study interviewed high-risk adolescent youth. Empowerment is a “psychological and sociological change” (Ungar & Teram, 2000, p. 244) that can lead to self-efficacy and better mental health (Ungar & Teram, 2000). The study on mental health and empowerment completed by Ungar and Teram (2000) was based in grounded theory.

Finally, one way to measure change in a study is through the use of *grounded theory*. The participants in the experience are involved without first being biased or informed about the processes or theories being studied such as health theories and empowerment. Grounded theory explains the process when children engage in risk-taking behaviors and then decide to change their behaviors, and finally what motivated the change in behavior (Aronowitz, 2005). Grounded theory will investigate the motivating event, person, or relationship in the experience that led to the change.

The terms *mentor, mentee, mentoring, and mentoring relationships* were used in the literature review. The types of mentoring programs and mentors are explained. Researchers (Holt et al., 2008; Georgiou et al., 2009; Sonnenblick, 1997; Sperandio, 2008; Wyatt, 2009) have explained school-based mentoring as being a part of or taking place in the school. The adults and adolescents involved in the studies worked at or attended the school together. An exception to this is the O'Hearn and Gatz (2002) study, where the mentors were high school students and the mentees were middle school students. School and district administration in the studies chosen for this research support

the mentor program (Sonnenblick, 1997). The school-based mentoring took place during the school day (Holt et al., 2008) or in an after-school group (Wyatt, 2009).

A *natural mentor* is a significant nonparental adult (Zimmerman et al., 2002). The mentor is school based or community based such as a neighbor or clergy person, or could be a nonparent family member. In Zimmerman et al. (2002), almost 54% of the 770 adolescents in the study reported a natural mentor. Most identified extended family members such as a grandparent, cousin, or uncle as the mentor. Others mentioned were coaches, counselors, ministers, God-parents, friends' parents or siblings, or a boyfriend or girlfriend of a family member serving as a mentor.

Some youth may not have a natural mentor but are fortunate enough find a mentor in a formal mentoring program. The most well-known mentoring program in the United States of America and Canada is the Big Brother/Big Sister Association or program (DeJong, 2004; Spencer, 2006). The program has its own procedures and guidelines and has been in existence since the early 1900s (DeJong, 2004). Big Brother/Big Sister and other alternate mentoring programs are examined in the literature (Anda, 2001; Holt et al., 2008; Sperandio, 2008; Wyatt, 2009).

#### Statement of the Problem

Many young adults are not prepared to succeed in life following high school (Wang, Haertel, & Walberg, 1998). The purpose of this study was to determine if there is a relationship among school-based mentors of adolescents and late adolescent resiliency. The two constructs of resilience and the presence of a mentor relationship were measured with a questionnaire. The mentor questions were author created, and the resilience questions were taken from the 14-Item Resilience Scale (RS-14) developed by Gail



Wagnild and Heather Young (1993). The questionnaire was offered to adults in letters via e-mail and distributed at various higher education institutions. This study investigated resilience in adults.

### Research Questions

This research was directed by the question: Do natural school-based mentor relationships in adolescence impact, or affect, resilience in adults? The researcher investigated if the presence of a school-based mentor during adolescence can influence resilience in adults. The research reviewed for this study supports that mentor relationships help healthy adolescent development academically, socially, and emotionally; however the impact of mentoring on resilience is unknown. For purposes of research, the examination of benefits and gains as a result of mentoring relationships focused on were academic and emotional. Much of the research connected to this study focused on at-risk youth and resilience.

### Research Hypotheses

H1: Adolescents who had the presence of a mentor will have significantly more resilience than adolescents who did not have a mentor.

H2: There will be a statistically significant correlation between the reported impact of a mentor relationship and resilience.

H3: Adolescents who had a school-based mentor will have significantly more resilience than adolescents who did not have a school-based mentor.

H4: Adolescents who had or mentor for 2 or more years will have significantly more resilience than adolescents who had a mentor for less than 2 years.

## Definition of Terms

The following definitions of key concepts were used for this study.

*Adolescent* - a child in school grades 4-10, ages 13-18 (Nastasi & DeZolt, 1994; Hall, 2007).

*At-Risk* - term that refers to students who are low socio-economic status (SES), English as a second language (ESL), minority, and/or learning disabled. “Children and youth living in poverty or in circumstances of abuse and neglect; children and youth who experience discrimination based on race, language, gender, or sexual orientation; and students from all backgrounds who have experienced trauma” (Kitano & Lewis, 2005, p. 200.)

*Educational resilience* - the increased chance of success in school and life regardless of environmental, conditional, and experiential adversities (Morrison & Allen, 2006).

*Equanimity* - “a balanced perspective of life and experiences and might be thought of as ‘sitting loose in the saddle’; and accepting what comes along, thus moderating the extreme responses to adversity. Those with equanimity tend to have a good sense of humor” (Wagnild & Young, 1990, p. 17).

*Existential aloneness* - the “realization that each person is unique and that while some experiences are shared, others that must be faced alone; existential aloneness confers a feeling of freedom and sense of uniqueness” (Wagnild & Young, 1990, p. 17).

*Gifted and Talented* - students who are highly able, academically talented, creative, traditionally having a high Intelligence Quotient (IQ) such as 130 or higher, or have been recognized in a school program as being gifted and talented (Kim, 2008).

*Late Adolescence* - a person aged 18 years of age or older, typically between the ages of 18-23.

*Meaning* - the “realization that life has a purpose and recognition that there is something for which to live; the valuation of one’s contributions” (Wagnild & Young, 1990, p. 17).

*Mentor* - a guide, tutor, teacher, coach, and/or supporter. For purposes of this study, a mentor may be natural or school-based.

*Perseverance* - the “act of persistence despite adversity or discouragement, connoting a willingness to continue the struggle to reconstruct one’s life and to remain involved in the midst of adversity; the ability to keep going despite setbacks” (Wagnild & Young, 1993, p. 17).

*Resilience* – “connotes emotional stamina and has been used to describe persons who display courage and adaptability in the wake of life’s misfortunes” (Wagnild & Young, 1990, p. 12) or a “personality characteristic that moderates the negative effects of stress and promotes adaptation” (Wagnild & Young, 1993, p. 12).

*Self-efficacy* - a belief in one’s ability to accomplish something or complete a task.

*Self-reliance* - a “belief in oneself and knowing and relying on personal strengths, all the while being aware of limitations, but not being stopped by them; survivors” (Wagnild & Young, 1990, p. 17).

*Sexual minority youth* - “gay, lesbian, and bisexual youth,” youth of sexual orientation minority (Gastic & Johnson, 2009, p. 219).

### Delimitations

The following includes a list of delimitations that were imposed by the researcher. These delimitations could impact the generalizability of the results. The following delimitations of this study were identified for purposes of this investigation:

1. The subjects of this study were delimited to those students who are 18 years old or older.
2. The study was limited to those willing to respond to the survey.
3. The researcher limited the participants of the study to adult students; therefore, each subject may automatically have had level of resilience due to the fact that he or she were admitted and entered a higher education institution.

### Assumptions

The following assumptions were made for the purpose of this study:

1. All participants will respond to the questions in an honest and sincere manner.
2. All subjects will interpret the instrument as intended.
3. All respondents are adults.
4. All participants are students.

### Justification of the Study

This study is potentially valuable because it could help educators, teachers, higher education institutions, and administrators. It may enrich the education field in practice and policy and promote further academic pursuit and research. It should add to the growing field of resilience literature. The study will connect resilience to mentoring, at-risk students, and gifted and talented students. A gap in literature for gifted and talented

students and resilience was found so the research will connect previously not connected topics. The intent of the research results are to help mold healthy, resilient adolescents and prepare them for the future in a constantly changing, globally interdependent, technological world of today. Educational resilience is the increased chance of success in school and life regardless of environmental, conditional, and experiential adversities (Morrison & Allen, 2006). Educators are eager to learn how to increase achievement educational resilience; building resilience in students could be a beneficial way to accomplish this (Greene, 2002).

Increasing academic achievement is the priority in schools today, and this research is another way schools could work to improve school grades, learning, and, ultimately, achievement (Henderson & Milstein, 1996). The information obtained during the study may provide useful information to schools to include more mentor programs to increase academic achievement. Previous research articles by Anda (2001), Holt et al. (2008) and Zimmerman et al. (2002) confirmed that mentor relationships will increase student achievement.

The potential benefits for schools include more teaming, mentoring, advising, and the addition of mentorships to improve achievement. Counselors can use the results of this study to better assist and counsel the students they serve. Administrators and school leaders can increase protective factors to combat risks or negative factors that impact the learners. The ultimate beneficiary of the research will be the student.

As an educator and aspiring future administrator, it is this researcher's desire that this study will contribute to research in the education field. The author hopes to use knowledge gained to improve classrooms, schools, and student development and

achievement. A large body of research exists on formal mentoring programs, but few are on natural mentor relationships (Zimmerman et al., 2002). This study focused its examination on the effects of natural mentors.

## CHAPTER II

### LITERATURE REVIEW

#### Introduction

This research examined whether there is a relationship between the two constructs of mentors and resiliency. The two constructs are used in regard to the ability of mentor relationship to create success, resilience, and the feeling of self-efficacy. The purpose was to determine if natural school-based mentors during adolescence build resilience in late adolescence and adulthood. Adolescents, for the purpose of the study, are children between the ages of 10-15 (Hall, 2007). During the years of puberty, there are many of cognitive, physical, psychological changes taking place. This age span covers late elementary, middle school, and junior high years.

Woolley and Bowen (2007) defined the middle school adolescent years as most critical from the resilience perspective. It is a period of transition and changes in the level of school activities, and participation can affect student achievement (Osterling & Hines, 2006). A decrease of student participation could lead a pupil down the path toward school failure (Woolley & Bowen, 2007). It is imperative to recognize the factors that best support and encourage school engagement in middle school years to help promote achievement in school settings.

#### Mentors

A mentor can be a guide, tutor, teacher, coach, supporter, or someone who offers encouragement. Often times in school settings, the mentor acts as a surrogate parent (Georgiou et al., 2009). Several researchers described a mentor or a mentoring relationship but did not use the term mentor specifically (Aronowitz, 2005; Flom &

Hansen, 2006; Ungar & Teram, 2000; Woolley & Bowen, 2007). Instead, they referred to connected caring (Aronowitz, 2005), warm personal (Flom & Hansen, 2006), supportive and attentive (Woolley & Bowen, 2007), and meaningful (Ungar & Teram, 2000) relationships between an adult and child or adolescent. Most researchers referred to the adult as a professional, counselor, or teacher. Aronowitz (2005) used the terms modeling and monitoring, but not mentor. The articles and research clearly described a mentor relationship between a more experienced grown-up and less experienced youth. Typically, mentors in the school-based mentoring programs are teachers (Bernard, 2006; McCormick, 1990), coaches (Aronowitz, 2005; Zimmerman et al., 2002), administrators (Morrison & Allen, 2006), staff members (Aronowitz, 2005), and guidance or school counselors (Bruce & Cockreham, 2004; Flom & Hansen, 2006). The components of the relationship between the grown-up and youth are important to understanding the close relationship.

Georgiou et al., (2009) identified the three basic ingredients of a mentoring relationship as mutuality, trust, and empathy. Spencer (2006) identified empathy and mutuality, or collaboration, as key components to a close relationship. Authenticity and companionship are two other processes that Spencer (2006) recognized as promoting successful relationships and psychological well-being. Formal and informal mentors promote successful relationships through various processes.

#### *Formal Mentor*

The qualities of a mentor were described by Holt et al. (2008) in a study concerning school-based adult mentoring intervention. The quantitative study had 40 ninth grade participants who had been identified as at-risk academically and in danger of



failing after the first semester of high school. Pretests and posttests were administered; and student attendance, discipline, report card, and academic data were collected. For the control group, 20 students were matched with a teacher or school counselor mentor who used the mentoring program Achievement Mentoring Program (AMP), and 20 were not matched with a mentor. Mentors met with each mentee, while the mentees' school teachers practiced successful behaviors and monitored grades and attendance on a weekly basis. Some mentors met with parents and discussed long-term career goals and life aspirations of the mentee. Finally, it was suggested that each mentor meet with his or her mentee at least once the following school year as a follow-up (Holt et al., 2008). The adult school-based mentoring produced applicable results for youth.

The overall results found that the mentoring aided in prevention of the characteristic decline in school engagement for urban minority youth (Holt et al., 2008). The most noteworthy and affirmative effects of the mentoring relationships were "in the areas of perceived teacher support, school belonging, decision-making, and whether a student entered into the discipline system" (Holt et al., 2008, p. 311). The findings suggested that when at-risk students spend enough time with a mentor, they feel more connected to school and have a greater sense of teacher support. All of the participants who were mentored displayed less decline in decision making and were better able to problem solve (Holt et al., 2008).

No mentees entered the discipline system during the 5-month period (Holt et al., 2008). Nonetheless, five participants in the study, including three who were mentored, did enter the discipline system after the study. This suggested that a mentor-mentee relationship for a longer length of time and more extensive interventions may be

necessary for the prevention of students entering or engaging in behaviors that resulted in disciplinary actions. The quality of the mentoring relationships affected the behaviors and thinking of the mentees (Holt et al., 2008). Along with quality, the type of relationship between the mentee and mentor was examined.

Mentors of adolescents or young adults become an advisor to the protégé (Georgiou et al., 2009). There are four types of mentors as described by Georgiou et al., (2009). The first-level mentor is a person who is an *expert* on a topic and is willing to teach the topic to a young student; this lacks a personal relationship. The second-level mentor uses his or her knowledge to stir interest and promote the learning process in learners and teachers. This type of mentor is similar to a typical *teacher role*. The third-level mentor builds on the second level by developing a *personal relationship* with an individual and promotes academic and professional development. The fourth-level mentor is a relationship between a mentor and mentee; and personal, social, professional, and educational issues are included (Georgiou et al., 2009). The fourth-level mentorship is a *relationship between two adults* whereas a third-level mentoring relationship is typically between adult and adolescent. Although this quantitative study provided useful information related to the mentoring relationship, its design was limited as it has the potential to be culture specific since the study took place in Cyprus, a remote island of the southeastern European country of Greece (Georgiou et al., 2009).

Like Georgiou et al., (2009), Gray (as cited in DeJong, 2004) described and divided mentor/mentee relationships into five stages or levels. The level one mentor is knowledgeable and able to be a prospective mentor. The level two mentor has entered into a mentor/mentee relationship and acts as the expert authority. The mentee's skills

are not developed. The third stage is marked by a mutual or equal status between the two participants. The protégé developed the behaviors and skills taught or modeled. At level four, the role of the mentor fades because the mentee has been nurtured and has acquired the necessary talents to have successful relationships. This level four relationship includes two adult relationships (Georgiou et al., 2009). Upon completion of the final, or fifth stage, the mentee is self-sufficient, competent, and can work independently. The roles of the mentor and mentee can continuously change in this model.

A common example of a level three mentor relationship is The Big Brother/Big Sister program, the most effective, well-known formal mentoring program in the United States and Canada (Spencer, 2006). Today, there are more than 500 Big Brother/Big Sister chapters or agencies in the United States (Karcher, Kuperminc, Portwood, Sipe, & Taylor, 2006). Initially, it was started as a program to help juvenile delinquents and has developed into a one-on-one mentoring program (DeJong, 2004). The DeJong (2004) study investigated the strengths and weaknesses of Big Brother/Big Sister Program of Victoria, Canada. DeJong's (2004) study was study and used a questionnaire and interviews to provide qualitative anecdotal details. Many of the mentees were from single-parent and/or at-risk backgrounds. A caring relationship between the adult mentor and youth mentee was promoted to help influence children and teens. The program was known for its thorough training of mentors and for building long-term (one year or longer) mentoring relationships. Everyone involved in the study concluded that talk and conversations were advantageous to the relationship between the mentor and mentee (DeJong, 2004). The study further promoted mentor training to develop stronger relationships with mentees.

Other studies (Anda, 2001; Holt et al., 2008; Sperandio, 2008; Wyatt, 2009) have investigated school-based or community-based mentoring programs. The Achievement Mentoring Program (AMP), (Holt et al., 2008) is a school-based mentoring intervention program for at-risk minority youth in a mid-Atlantic city. The Brotherhood is a school-based male mentoring program for African-American urban high school students (Wyatt, 2009). Project R.E.S.C.U.E. (Reaching Each Student's Capacity Utilizing Education) is a community-based, not school-based, mentoring program for at-risk youth in the Los Angeles, California area (Anda, 2001). As part of Project R.E.S.C.U.E, a community agency paired high school youth with firefighters as mentors. The firefighters encouraged the youth in areas of social and emotional development, school, career, achievement, motivation, and self-esteem (Anda, 2001). The mentee and mentors were both impacted by the experience. This study was qualitative, and results showed positive impacts of a mentoring relationship.

#### *Natural or Informal Mentor*

An informal or *natural mentor* is a nonparental adult such as a teacher, coach, neighbor, or counselor who guides and assists youth. Informal mentoring relationships can help adolescents through the chaotic, confusing, and turbulent years of adolescence. The mentor has not been assigned through a formal mentoring program; frequently, the youth selects the mentor from adults already present and in the youth's lives (Gastic & Johnson, 2009; Hurd & Zimmerman, 2010; Zimmerman et al., 2002).

Gastic and Johnson (2009) examined the mentors for youth of the sexual orientation minority, such as gay, lesbian, and bisexual youth. They, like many youth, have teacher-mentors for natural mentors if they do not have a family member or relative

acting as the informal mentor (Gastic & Johnson, 2009). Gastic and Johnson's (2009) study on teacher-mentors, resilience, and sexual minority youth concluded that mentoring led to an increased likelihood of completing the first year of college. Mentors helped mentees build educational resilience and realize their full potential. The study examined sexual minority youth and sexual minority youth of color and their relationships with mentors. Gastic and Johnson (2009) found that mentoring benefited both sexual minority males and females. Finally, the group that showed the most significant impact was female sexual minority youth of color, such as lesbian African American females. Their mentors made the greatest difference in their educational resilience and participation in post-secondary education (Gastic & Johnson, 2009).

Results of studies of natural and school-based mentor relationships have been reviewed. Hurd and Zimmerman (2010) found that natural mentors helped protect youth from the risks they face. In their study, Hurd and Zimmerman (2010) found that the majority of 615 participants identified a natural mentor from their family. Their focus related to sexual behaviors, depression, and mental health, but the implications of the study highlighted the potential of natural mentors to add to youth resilience. The natural mentor relationship helped the youth with coping strategies, building self-esteem, and involving mentees in problem-solving and decision-making (Hurd & Zimmerman, 2010). Only 37% of the participants in the study reported the lack of a natural mentor. The study found that natural mentoring relationships added to the development of resilience among African American adolescents evolving into adults. The presence of a mentor was connected to less depressive symptoms and a decrease in sexual risk behavior over time among the participants (Hurd & Zimmerman, 2010). Philip and Hendry (2000)

conducted a qualitative study that found that mentoring can help adolescents transition into adulthood. Mentoring as an intervention and a prevention strategy was promoted and suggested to parents, extended family members, and communities to benefit the youth.

### Benefits

While research supports the positive influence of mentoring relationships, specific benefits vary. Natural mentoring relationships tend to last longer than formal mentoring programs and can lead to more successful youth outcomes (Zimmerman et al., 2005). A study completed by Woolley and Bowen (2007) discovered mentors, in general, helped healthy adolescent development. More positive school attitudes and school achievement among at-risk youth can result from a supportive relationship with a non-parental adult mentor (Hurd & Zimmerman, 2010).

An alternative mentoring program found benefits of a supportive relationship after a mentoring program was implemented in a school in Bangladesh (Sperandio, 2008). The nontraditional mentoring described in Sperandio's, (2008) *Alternative Mentoring of the Street Girls in Bangladesh: New Identities and Non-traditional Opportunities* suggested that the mentoring experience can have a strong impact. This qualitative study consisted of nine adolescent girls of low socioeconomic status attending a private girls' school in impoverished Dhaka, Bangladesh. The author investigated if mentoring and same sex role models can improve perceptions of self-worth and career goals for these young girls. The participants spent time with mentors who were often times themselves graduates of the program. They completed daily journal entries and took part in frequent discussions. Upon conclusion of the project, the girls completed an exit survey to evaluate and further

improve the program. The data collected were compared with data of nine girls of high socioeconomic status who attended the same school.

The Sperandio (2008) study data analysis suggested that the mentor and mentee relationship in this nontraditional setting promoted a mutual sharing of experiences and self-reflections that impacted the adolescent girls in the study. The participants were enriched, empowered, and motivated by the mentoring relationship. The analysis of Sperandio (2008) reflected an “increased awareness of social justice issues” (p. 219) for all participants. The focus of the Sperandio (2008) research was on the benefits for the mentee, but it should be recognized that the mentor had secondary gains and benefits as a result of the mentoring relationship, as well.

The mentoring relationship experienced by the girls in Bangladesh had positive results, such as becoming more resilient and confident. Whether in Dhaka or Atlanta, children have a basic need for a sense of belonging and acceptance and the mentoring relationship provided this for these nine girls in Bangladesh (Maslow, 1974). The study supported that same sex role models could influence and improve career aspirations and self-esteem of the adolescent girls (Sperandio, 2008). The mentor helped the girls feel cared for and involved in the school and, therefore, they were more motivated.

School involvement and a sense of belonging in schools were the subjects in the Holt et al. (2008) study. During this investigation, school personnel mentored ninth grade at-risk urban minority students over a 5-month period. The intervention produced significant, positive effects. The Psychological Sense of School Membership Scale (PSSM) was used to assess the sense of school belonging (Holt et al., 2008). The PSSM measured teacher support, academic self-efficacy, and decision making as a cognitive

outcome. This research observed that the students who spent time with a mentor felt more connected to their school and teachers and had a decline of entrance into the discipline system. These mentees also improved their decision making. The most significant variable in this study was the relationship quality and the increased sense of belonging that the students felt as a result of participation. When the mentors were available to support the mentees and have close relationships, there was positive change in their sense of school belonging (Holt et al., 2008). The study did not show significant changes in students' absences and grades but additional long-term studies could determine these and other secondary effects of the mentoring relationships.

The results are relevant because they provided evidence of the effects of school-based mentoring relationships. Other studies, such as those completed by Sonnenblick (1997) and Sperandio (2008), stated that the stronger the sense of belonging a learner feels, the greater the self-efficacy he or she will maintain. The Sonnenblick (1997) study focused on school-based mentoring. The author, Sonnenblick (1997), believed their study could be used to increase school engagement and the healthy development of adolescents. The mentors were formally assigned to a student and willingly committed to the mentee. The evaluation of the Girls Acquiring Leadership through Service (GALSS) Club reinforced the importance of mentor to a student's sense of belonging (Sonnenblick, 1997). The GALSS Club consisted of nearly 80 at-risk adolescent girls, two teachers, a counselor, and other school-based adults. The original goal was to help prevent the girls from dropping out of high school and joining youth gangs. Meetings, recreational activities, and community service activities were held bi-monthly. The gains for the



participants were an enhanced feeling of belonging and increased maturity, self-assurance, and accountability in school.

Themes of emotional resilience, social-emotional competence, acceptance, and self-efficacy were found in numerous studies (Bernard, 2006; Friborg, Barlaug, Martinussen, Rosenvinge, & Hjemdal, 2005; Lackaye et al., 2006; Morrison & Allen, 2006; Ungar & Teram, 2000). Generalizations of research found an increase in academic achievement as an end result of successful mentoring. Bernard (2006) found these themes are interconnected and at times indistinguishable. Student achievement can be improved when they are taught social-emotional competencies (Bernard, 2006). The theme of most importance is determined by the mentors and mentees and the trends of the times.

School and student accountability, achievement, and self-efficacy are arguably the most important benefits of a mentoring relationship to the education field today. The current trend in education is outcome-based. Achievement, mastery, proficiency, and knowledge are frequently measured in standards-based standardized tests and assessments. Some researchers (Aronowitz, 2005; Bernard, 2006; Morrison & Allen, 2006) compared the impact of a mentoring program on the Grade Point Average (GPA) of underachieving and achieving students. Although the academic achievement of already achieving middle school students was not impacted, the underachieving pupils' GPA increased and benefitted from the mentoring program employed.

The *You Can Do It!* Education program emphasizing teaching socio-emotional-motivational capabilities was used (Bernard, 2006). This research directly connected the social-cognitive theory of Albert Bandura to mentoring and ultimately increased

achievement in schools. Pupil motivation and success is linked to the social-emotional capabilities of the students (Bernard, 2006). Adolescents with natural mentors retained a positive attitude towards school (Zimmerman et al., 2002). Positive attitudes toward school are connected to school achievement (Henderson & Milstein, 1996). Numerous studies (Anda, 2001; Flom & Hansen, 2006; Holt et al., 2008; McCormick, 1990; Sperandio, 2008; Wyatt, 2009) have noted career guidance as an additional educational benefit of a mentoring relationship.

### *Intervention*

Researchers have concluded that mentoring is “a promising form of intervention for children and youth” (Karcher et al., 2006, p. 710) and at-risk youth (Anda, 2001; Holt et al., 2008; O'Hearn & Gatz, 2002). O'Hearn and Gatz (2002) evaluated a school-based intervention mentoring program, *Going for the Goal* (GOAL). As cited in O'Hearn & Gatz (2002), GOAL was created by Steven Danish and colleagues. GOAL used high school students rather than adults to mentor middle school students. Scales, questionnaires, and measurement indexes were used to test the hypotheses. The middle school students' gains in comprehension of goal-setting skills were found to be significant. The high school leaders or mentors of the middle school students also exhibited significant gains in knowledge after participating in the GOAL program. This is a preventative intervention. The mentor programs provided an affordable method of reaching more at-risk individual students with supportive interventions (Anda, 2001). The blending of prevention and intervention was frequently observed in much of the research connecting mentoring to resilience.

## Resilience

Resilience, a topic that surfaced in the mental health field (Moe, Johnson, & Wade, 2007), is an emergent topic in education research with various definitions. D'Imperio et al. (2000) quoted the definition of resilience as “the process of, the capacity for, or outcome of successful adaptation despite challenging or threatening circumstances” (p. 129). Woolley and Bowen (2007) explained resilience in children as a demonstration of “positive developmental outcomes” (p. 93) in spite of continuous risk exposure. Resilience is a term used to describe one who has overcome obstacles such as poverty (Johnson & Wiechelt, 2004), growing up with a drug-addicted parent (Betty Ford Center, 2004), living in a crime ridden neighborhood (D'Imperio et al., 2000), having a learning disability (Lackaye et al., 2006), or being a victim of domestic abuse (Flom & Hansen, 2006).

Much of the literature reviewed on the two constructs of mentoring and resilience had connections in at-risk or urban youth or children of substance-abusing parents populations. The Betty Ford Center (2004) described resilience as “the extent to which young people are able to successfully cope with the presence of alcohol and drug addicted adults in their lives” (p. 1). Johnson and Wiechelt (2004) provided detailed definitions of resilience and a brief history of the research theory and practice related to it. Families, individuals, or groups displaying resilience “draw on inner strengths, skills, and supports to keep adversity from derailing their lives” (Johnson & Wiechelt, 2004, p. 659). Their research focused on resilient children of substance-abusing parents.

There are three types of resilient individuals. The first group includes the people who are high-risk and overcome obstacles and achieve more than ever predicted (Johnson

& Wiechelt, 2004). An example is the gang member high school drop-out who turns his or her life around and turns away from crime, gets an education, and starts a successful business. The second group adapts to stressful events or experiences that continue over a period of time. An example of this type of individual is one who has lived a childhood with a mentally ill, alcoholic father. The third and final group consists of persons who surmount a traumatic event such as sexual abuse, an earthquake or hurricane, child neglect and malnutrition, or as victims of a crime (Johnson & Wiechelt, 2004). All three types have components of risk and protective factors.

#### *Risk and Protective Factors*

Risk and protective factors have arisen as two key components in resilience research (Johnson & Wiechelt, 2004). D'Imperio et al. (2000) referred to protective factors as protective resources and risk factors as stressor exposure. Both terms are used interchangeably. A risk factor is an event or stressor that leads to distress and undesirable restrictive results; the factors can compound or multiply. Some risk factors include, but are not limited to, poverty, trauma, family dysfunction, history of family member substance abuse, and child abuse.

Protective factors lead to healthy outcomes, competence, and feelings of self-worth (D'Imperio et al., 2000; Johnson & Wiechelt, 2004; Moe et al., 2007; Morrison & Allen, 2006). Protective factors help people overcome life stressors, adversity, and obstacles (Zunz, Turner, & Norman, 1993). A relationship with a positive adult mentor or role model is an example of a protective factor. Friberg, Barlaug, Martinussen, Rosenvinge, and Hjemdal (2005) broke down and measured resilience on the Resilience Scale for Adults (RSA) based on five personality traits, or factors, of resilience. The five

factors are “personal competence, social competence, personal structure, family coherence, and social support” (Friborg et al., 2005, p. 30). Protective resources and risk factors themselves and their outcomes can vary individually (Johnson & Wiechelt, 2004).

Many protective factors have been identified in prior research (D'Imperio et al., 2000; Johnson & Wiechelt, 2004; Lackaye et al., 2006; Moe et al., 2007; Morrison & Allen, 2006; Reis, Colbert, & Hebert, 2005). A gentle, warm, loving, and good natured temperament, high language and reasoning skills, high intelligence scores, and participation in an active social life are all protective factors. The development of one important healthy relationship with a role model or close attachment to a caregiver is potentially a protective resource or factor (Reis et al., 2005). Adolescents are able to overcome stereotypes with a supportive relationship with an adult (Aronowitz, 2005). This relationship could be shared with a parent or teacher (Johnson & Wiechelt, 2004). D'Imperio et al. (2000) regarded extra familial support of a school counselor, teacher, or principal as a potential protective factor.

### *Adaptation*

Another potential protective factor is adaptation. The concept and process of resilience can be an adaptation (Lackaye et al., 2006; Moe et al., 2007; Schilling, 2008). When risk and protective factors interact, humans adapt. The resilient person has become successful despite hardships and can adapt and maintain hope within self. Ungar and Teram (2000) provided a unique perspective about empowerment and adaptation in at-risk children. One behavior that is deemed deviant by one individual can be empowering to another person. There is a certain coexistence of aspects of health and empowerment and conditions of disorder and deviance (Ungar & Teram, 2000).

Educators Flom and Hansen (2006) viewed resilience from an alternate perspective. Resilience is observed in those who are not traditionally thought of as resilient and may actually be an adaptation. Educators (Aronowitz, 2005; Flom & Hansen, 2006; Ungar & Teram, 2000) explain what general society may view as deviance or a deficit are often times assets in the form of self-resilience, adaptation, and identity or health searching. These can lead to feelings of empowerment (Ungar & Teram, 2000; Wyatt, 2009).

### *Educational Resilience*

Promoting and fostering educational resilience (Morrison & Allen, 2006) should become a key priority in schools today and in the future. Educators are looking to address how to help the many at-risk children and build educational resilience in all learners. Many have faced risk factors or stressors such as living with a parent or parents who abused alcohol or drugs and the vast majority do not have the opportunity to attend an intervention prevention program at the Betty Ford Center. Teachers, administrators, parents, and counselors may be able to help build resilience as a protective factor in adolescents and equip them with the tools to successfully meet their goals in life after school and overcome risk factors (Johnson & Wiechelt, 2004).

Gastic and Johnson (2009) studied educational resilience in minority youth that were also in a sexual orientation minority category, as a result of teacher-mentors. According to their study, teachers are the most common mentors after relatives. The researchers found that both male and female sexual minority youth tend to have informal mentors. Fewer lesbian and bisexual females of color are mentored than White females. There was no difference found between the number of White males sexual minority

youth or males of color sexual minority youth. The males mentored showed an 85% increase in participation in postsecondary education (Gastic & Johnson, 2009). The results showed that teacher-mentors made the most significance on informal mentors for sexual minority youth. Studies have shown to increase postsecondary participation, then school districts and, specifically, high schools could be working to build strong mentor relationships between teachers and students.

#### At-Risk

At-risk students may be identified according to risk factors such as poverty, child abuse, neglect, or trauma in their lives (Aronowitz, 2005; Johnson & Wiechelt, 2004). Schools are concerned about children at risk of academic failure and potential high school drop-outs. At one time, a high school diploma was enough to get a solid, well-paying job, but today the minimum education is often a college diploma. Society is concerned about the economic and social costs that result from the lack of acquiring a high school diploma. Risk factors are typically school-level, or individual/family level (Land & Legters, 2002). Race and limited English proficiency are two individual/family level risk factors. School poverty, violence, size, and urbanicity may be additional risk factors for students (Anda, 2001; Holt, Bry, & Johnson, 2008; Johnson & Wiechelt, 2004).

Hurd and Zimmerman (2010), from The University of Michigan, have published two articles related to mentors, resilience, at-risk, and urban African-American youth. They reported in the African American community, the youth have more natural mentoring relationships than formal ones (Hurd & Zimmerman, 2010). They are usually family members or relatives who have played a key role in the youths' lives. These

relationships were found to increase resilience in African American teens transitioning to adulthood (Hurd & Zimmerman, 2010).

Hurd, Zimmerman, and Xue (2009) studied the role of role models, not mentors, on urban adolescent resilience. Negative adult nonparental behavior and its influence was the specific focus of their study. Parent and same gender role models were also explored in their study. The sample included more than 600 African-American youth who had to identify if they had no, one, or two role models. The outcome of the study revealed that the indication of a role model was connected with more positive adolescent outcomes, but negative nonparental adult behavior was also associated with negative youth outcomes (Hurd et al., 2009). Negative influences can have negative effects (Hurd et al., 2009). Positive adult role models and strategies for improving, developing, and understanding positive relationships were suggested for positive youth outcomes.

#### *Children of Substance-Abusing Parents (COSAP)*

A pattern was discovered in articles on the subject of resilience related to at-risk children and children of substance-abusing parents (COSAPs). The three articles (Betty Ford Center, 2004; Johnson & Wiechelt, 2004; Moe et al., 2007) related to children of substance-abusing parents were analyzed. The first of the three articles was published in the Betty Ford Center newsletter *Findings* (Betty Ford Center, 2004).

The Betty Ford Center, a leading research and treatment center of addictive diseases, recently pioneered a study in resilience in children of alcohol or drug-addicted parents (Betty Ford Center, 2004). Johnson, a researcher from the University of Buffalo/SUNY, created and conducted a study of 149 7-12-year-old boys and girls participating in the Children's Program at the Betty Ford Clinic (Betty Ford Center,



2004). A standard assessment was given before and after the 4-day program. The questionnaire inquired about the children's understanding of addiction and their feelings of loneliness, guilt, remorse, shame, helplessness, and responsibility. The study measured and examined the concept of resilience. For the purposes of the Ford Center study, resilience was defined as the "extent to which young people are able to successfully cope with the presence of alcohol and drug-addicted adults in their lives" (p. 1). Three months after completion of the program, children were found to be more trusting, open, accepting, and felt less anger and loneliness (Betty Ford Center, 2004).

Johnson (2007) furthered her resilience research with Moe and Wade in 2007. They concluded that children of alcoholics and substance abusers were more "'at-risk' for behavioral, cognitive, and physical problems" (Moe et al., 2007, p. 382). Thus, these children were considered to be at-risk. According to the 2001 National Household Survey on Drug Abuse (as cited in Moe et al., 2007), there were over 6 million children who lived with a parent who had abused alcohol or drugs in the last year. Dealing with these children is a reality for educators today.

Unlike most studies, Moe et al. (2007) focused their research on the strengths and resilience of the children, not the risks. The participants were children who took part in the prevention program that was in place to educate children about addiction. A preassessment test, postassessment test, and qualitative interviews were used as methods of measurement. The children were asked "what it would mean to be resilient" (p. 386), while not using the word resilient in the description or examples. Three themes emerged from the resilience related questions – (a) substance use behavior, (b) perception of substance use behavior, and (c) internal resources (Moe et al., 2007). The overall

conclusions regarding resilient children became apparent. They believed that both they and their parents had to be drug free. Parent role models, whether negative or positive, influenced their resilience building process. And finally the study found that knowledge and awareness of their feelings and life choices built internal resources, or resilience.

Reliable support, other than the alcoholic parent, can help the children of substance abusing parents and at-risk youth (Sonnenblick, 1997) to cope effectively with stressors or risks they encounter in life. Numerous studies (Aronowitz, 2005; Flom & Hansen, 2006; Morrison & Allen, 2006; Woolley & Bowen, 2007) found that developing a caring, encouraging, strong, supportive and personal relationship with an adult can build resilience in youth. The protective factor, or support influencing a new trajectory in life, can be a strong personal or mentor relationship (Johnson & Wiechelt, 2004).

Child-centered intervention and prevention programs are beneficial and suggest a mentor relationship as a component of an intervention program (Johnson & Wiechelt, 2004). Aronowitz (2005) suggested that the way to create and implement better intervention programs for youth is to study the youth who are resilient and avoid risk-taking behaviors. D'Imperio, Dubow, and Ippolito (2000) pointed out that even with the presence of protective factors, multiple risk factors, over time, can cause continuous internal stress. The chronic stress may manifest itself at a later time and cause larger problems. Interventions addressed mutually by family, school, and community systems can help reduce effects of stressors in the lives of at-risk urban adolescents (D'Imperio et al., 2000).

“Adolescents who felt connected with a caring, competent, responsible adult were able to envision a positive future for themselves” (Aronowitz, 2005, p. 202). Youth want

to know that an adult is supportive and believes in them (Maslow, 1970). The Aronowitz (2005) article best connects all the research themes of resilience, at-risk youth, mentoring relationships, and intervention. An adult role model can advocate and promote competence by coaching, monitoring, modeling, and caring for an at-risk youth. According to Aronowitz (2005) and Zimmerman et al. (2002), a connected relationship with a responsible mentor fosters resilience and decreases risky behaviors in adolescents. Much of the literature found an important connection between resilience in at-risk youth and a connected relationship with an adult. Zimmerman et al. (2002) reported that a natural mentor has a vital part in adolescents' lives.

#### *Gifted and Talented Underachievers*

Another group of at-risk youth affected by resilience are gifted and talented underachievers. Some characteristics of gifted and talented children are similar to resilience characteristics (Bland & Sowa, 1994; Dole, 2000). These characteristics are creativity, curiosity, intelligence, academic achievement, and self-efficacy (Reis et al., 2005). Reis et al. (2005) qualitatively studied 35 at-risk academically talented high school students in a 3-year study. Academically talented students were defined as those achieving scores higher than the 90<sup>th</sup> percentile on standardized tests (Reis et al., 2005). Those who were underachieving were those highly capable students not performing to their full potential or full ability. Most of the students in their study who were underachievers did not develop resilience and began underachieving in high school. Those who were high achieving identified protective factors in their lives such as supportive teachers, family members, peers, or other adults. The study found that the most necessary factor for resilience to develop and achievement to happen was the

presence of at least one supportive adult (Reis et al., 2005). This was the most important protective factor. Their study suggested that guidance, support, and counseling for gifted children should work to strengthen factors that increase positive outcomes and decrease the risk factors. Resilience has potential to be developed to overcome risks and negative events. Mentoring can greatly increase productivity of gifted underachievers and decrease school failure and drop-out rates (Kim, 2008). Schatz (2000) suggested that a mentorship match can help prevent loss of natural abilities and encourage improvement, opportunities, and success.

Bland and Sowa (1994) reported an overview of resilience in gifted children. The parents of resilient and gifted and talented children encouraged academic achievement, communication, support, positive relationships, and cultural activities while modeling adaptability, goal-setting, task commitment, and ability to dream (Bland & Sowa, 1994). The researchers identified the lack of research connecting the two constructs of resilience and giftedness. Fifteen years later, there is more research connecting the two but little research completed about gifted students having adjustment difficulties or lacking resilience to adversities in life and in adolescence.

#### *Gifted and Talented and Learning Disabled*

On average, every classroom has one gifted learning-disabled (G/LD) student (Shevitz, Weinfield, Jeweler, & Barnes-Robinson, 2003). Dole (2000) suggested recommendations for developing resilience in gifted students with learning disabilities. It is an examination of a specific population of gifted learners. They are sometimes referred to as twice or dually exceptional. This includes students who are identified as gifted and talented and learning disabled, disabled, deaf, blind, ADHD, or having any

other disability recognized in special education. Little research relating to resilience was found on any other twice exceptional populations other than learning disabled. This population is sometimes considered at-risk because of the unique combination (Dole, 2000).

### Summary

The future of resilience and mentoring research is vast but investigators should be prepared to devote lengths of time to understanding their findings. One of the limitations of studying mentoring programs is that most are not long term programs. The programs typically end with a sports season or end of school year. The most beneficial mentoring programs are more than a year in length (Spencer, 2006). Much of the resilience work focuses on individuals, but there is potential to study group, familial, community, religious, or cultural resiliency and then relate it to individual resilience. Interventions including adults and youth should enhance and promote development and healthy outcomes.

The literature explored was of varying themes. The students in the studies typically were urban, at-risk, minority, African American, learning disabled, gifted and talented, underachieving, or children of substance abusing parents. The mentors were natural or formal and, in general, were parents, relatives, parents, friends, or supportive adults. Overall, positive outcomes and the development of resilience were related to the presence of mentors. The resilience articles usually referred to the protective or compensatory models and risks and protective factors. Educational resilience emerged as the ultimate goal for educators to pursue. Although resilience literature dated as far back as the early 1970s and mentor literature dated further back, the researcher focused the

literature search on current publications from the 2000s. The literature was not restricted to this time period. The literature review contained two published articles dated back to 1990.

The literature gap identified related to resilience and mentors and underachieving gifted and talented students. Much of the literature related to gifted and resilience or gifted and mentors but not all three. Research also identified a large percentage of underachieving gifted students. Do gifted children have increased vulnerability to stress and, therefore, less resilience? Could resilience be a trait that achieving gifted and talented students have that underachieving should try to develop through supportive mentor relationships? Could resilience be a trait that achieving gifted students have developed as a result of having a mentor, thus, preventing failure?

## CHAPTER III

### METHODOLOGY

Chapter III presents and describes the methods and procedures that were used to collect and analyze the data of the study. It includes information about the research question, participants, instrumentation, data collection procedures, and data analysis. Permission to conduct this research study was sought and granted from the Human Subjects Protection Review Committee and Institutional Review Board Approval was given, see Appendix A.

For the purpose of this study, mentoring is defined as a person who guides or leads another in a certain aspect of life. In the case of this research, the mentor guides an adolescent in a positive manner. A mentor is usually school (Morrison & Allen, 2006), community (Aronowitz, 2005), or familial-based (D'Imperio, Dubow, & Ippolito, 2000). The mentor is typically a teacher (McCormick, 1990; Morrison & Allen, 2006) or school counselor (Flom & Hansen, 2006; McCormick, 1990), but can also be a counselor, coach, clergy person, advisor, administrator, or staff member. Although first-level and second-level mentors are important, the researcher is referring primarily to the third-level mentor when the term mentor is used.

The intent of this study was to determine if there is a relationship between adolescent mentor relationships and late adolescent resiliency. The quantitative study sought to investigate if the presence or lack of a mentor during adolescent years is related to resilience as an adult. Resilience was measured by the 14-Item Resilience Scale (RS-14) developed by Wagnild and Young (1993). The proposed outcome of this measurement was to determine if resilience creates ability for success in adult life.

Many young adults are not prepared to succeed in college or are not resilient enough to overcome obstacles in life.

This study investigated resilience in adults, mostly adult students. The students were enrolled in a college, community college, technical college, vocational college, university, or other higher education institution. The question directing the research was: Do natural school-based mentor relationships in adolescence affect resilience in adults? The two constructs of resilience and the presence of a mentor relationship were measured with a two-part questionnaire (see Appendixes B and C). The mentor questions were author-created and the resilience questions were taken from the 14-Item Resilience Scale (RS-14) developed by Wagnild and Young (1993). The investigator was granted permission to use the instrument (see Appendix D). The questionnaire was offered to adults and college students across the country via e-mail, social networks, and professional colleagues. It was also distributed to higher education students on a campus that gave approval for distribution (see Appendix E).

### Research Questions

The two research questions that were investigated are the following: Is there a relationship among late adolescent resiliency and natural school-based mentor relationships? Do natural school-based mentor relationships in adolescence affect resilience in adults? The variables examined were presence of a mentor, gender of mentor, gender of mentee, resilience score, racial identity of mentor, racial identity of mentee, role of mentor, grade(s) mentor was present, type of help mentor provided (school-related or personal), and traditional or nontraditional-aged college students. All



of the data regarding the variables were collected only once and there was no pre- or post-measure.

### Hypotheses

Based on the literature reviewed, the following research hypotheses were proposed:

H1: Adolescents who had the presence of a mentor will have significantly more resilience than adolescents who did not have a mentor.

H2: There will be a statistically significant correlation between the reported impact of a mentor relationship and resilience.

H3: Adolescents who had a school-based mentor will have significantly more resilience than adolescents who did not have a school-based mentor.

H4: Adolescents who had or mentor for 2 or more years will have significantly more resilience than adolescents who had a mentor for less than 2 years.

### Variables

This study included one dependent variable and multiple independent variables. The dependent variable is the Resilience Scale score. The independent variables are gender of mentee, gender of mentor, presence of a mentor, racial identity of mentor, racial identity of mentee, role of mentor, grade(s) mentor was present, help mentor provided, and traditional versus non-traditional aged students.

### Participants

The participants in the study were adults and convenience sampling was used. The majority were students over the age of 18 at The University of Southern Mississippi. Other universities that were represented are Arizona State University, Florida Gulf Coast

University, Florida State University, Miami University, The University of Minnesota, Princeton, Columbia, The University of Wisconsin, and Pearl River Community College. Other participants were enrolled at various higher education institutions in the United States and were former students, classmates, or colleagues of the researcher and who were also over the age of 18. The students could be undergraduate or graduate level. There was no distinction of level of education. The size of the sample sought was between 400 and 500 for a high power sample of 75% or higher power. The total sample was 657 participants. A diverse representative sample was sought to represent the larger population of the country. This sample was selected by convenience. The researcher completed a Web-based training course through The National Institutes of Health (NIH) Office of Extramural Research. The course, *Protecting Human Research Participants*, was successfully completed (see Appendix F). Institutional Review Board approval was obtained prior to the collection of any data to ensure the safety of human subjects (see Appendix A). There was no financial cost incurred by study participants and participation was voluntary.

#### Instrumentation

The researcher created questionnaire on mentoring and an existing scale of measurement on resilience were used for purposes of this study. The instruments were distributed in two phases with two slightly different instruments, see Appendices B and C. The questionnaire was made into an online format using an online survey distribution website, Survey Monkey. The 14-Item Resilience Scale (RS-14) developed by Wagnild and Young (1993) was the scale of measurement used to measure the dependent variable, resilience. The 14 items were related to the resilience characteristics of self-reliance,

meaning, equanimity, perseverance, and existential aloneness (Young, 2009). For each of the 14 statements on the RS-14, the participant marked a number indicating his or her feelings about each statement. The numbers ranged from 1-7; with 1 being *strongly disagree* and 7 being *strongly agree*.

The second part of the survey instrument began with a demographic section that included questions about the current age, gender, and racial identity of the participants. For the mentoring part of the instrument (created by the researcher), the participant identified if there was a significant mentor present between fourth and tenth grades. If a mentor was identified, then the person completing the questionnaire identified the gender, race, and job or role of the mentor. The sample member identified what grade or grades the mentor was present in his or her lives and how the person helped. A Likert-type scale was used to determine if a mentor helped to improve school performance, school attitude, school behavior, or self-esteem, set career goals, deal with life stressors, and deal with relationships. Participants used a 5-point scale (1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, and 5 = *strongly agree*) to determine if the mentor helped him or her in each area. Following the mentor questions, a comment box was provided for students to provide any information about mentors in their lives that they would like to disclose for qualitative data. Participants who did confirm the presence a mentor and those who did not identify the presence of a mentor completed the 14-Item Resilience Scale.

#### Reliability and Validity

The Resilience Scale has strong internal consistency (reliability) and demonstrates excellent validity. The RS-14 has high reliability. The Cronbach's alpha coefficient for the Resilience Scale ranges from .85-.94. This scale has been tested and found to have

content validity, convergent and discriminant validity, known groups' validity, and concurrent validity. The validity for RS-14 is concurrent. The Cronbach alpha for the resilience questions was found to be .942. The mentor impact questions on the questionnaire were tested for reliability, and the Cronbach alpha was .909.

#### Data Collection Procedures

Following Institutional Review Board approval, the questionnaire was distributed by two methods during two phases. Data was collected through non-probability methods. Questionnaires were e-mailed to adult college students, former students of the researcher who were 18 years old or older, and instructors known to the researcher through social networks such as Facebook. A message requesting participation preceded the link to the Web address. Participation in the study was voluntary, and the participants' responses were anonymous. All participants, including the instructors, were provided with the website address where each participant could complete the questionnaire. Once the participant went to the Web address, he or she began the questionnaire. The two-part questionnaire was self-reported and was available via the online service of Survey Monkey. At the beginning of every questionnaire, each participant was instructed to indicate his or her consent for being a participant in the study (see Appendix G).

The second method of distribution was personally handing out questionnaires to college students in a public location. Informed consent forms were provided to the participants (see Appendix G). The participants answered the mentor questions and completed the 14-Item Resilience Scale. The amount of time needed to complete the questionnaire was estimated to be between 5 and 15 minutes. The qualitative comments were recorded and are provided in the results section.

### Methods of Data Analysis

The data were collected and analyzed in *SPSS Version 17*. A descriptive analysis of the data was conducted for each variable and demographic grouping (age, gender, racial identity, and resilience level groups). The RS-14 score was calculated by adding the numbers of the answers of the 14 questions. Scores ranged from 14-98 and were categorized by high, moderate, and low resilience levels. The items were positively worded and the higher the score indicated more resilience. Scores greater than 90 indicated high resilience, scores between 61-89 indicated moderately low to moderate resilience, and scores of 60 and below indicated low resilience in the participants. Each hypothesis tested used quantitative analysis to determine the results. The research questions were analyzed using correlations and independent samples *t* tests. The significance levels were set at the level of .05 ( $p \leq .05$ ) for all hypotheses. The results were examined and published in the discussion and results section of this research study.

This chapter provided the methodological framework that was used for this research study. The items covered in the chapter were introduction, research question, hypotheses, variables, participants, instrumentation, reliability and validity, data collection procedures, and methods of data analysis.

## CHAPTER IV

### RESULTS

The purpose of this study was to determine if there was a relationship between the experience of having adolescent school mentors and late adolescent resiliency. This chapter reports the processes through which the study was conducted and the analyses through which the research questions and related hypotheses were examined. Descriptive statistics and a summary of the data analysis results and findings are provided.

#### Descriptive Statistics

Questionnaires were distributed by two collection methods during two phases of collection. The data was collected through non-probability methods. Phase one data collection was through an online software program (Survey Monkey) link and in person. The researcher asked for student volunteers on a southern university campus hub and distributed questionnaires to be completed. Phase Two data collection was fully online again through an online software program (Survey Monkey) link. The link was sent to individuals known to the researcher. During Phase One, there were 346 participants, as reported in Table 1, and during Phase Two, 311 individuals completed the questionnaire, as reported in Table 2. The in-person method of collection yielded 279 participants, and the online distribution method gathered 378 participants of the sample. There were 658 people in the sample but one person was under 18 years of age so that case was discarded. The total number of people in the sample was 657.

Table 1

*Phase of Collection*

	Frequency	Percent
Phase 1	346	52.7
Phase 2	311	47.3
Total	657	100.0

Table 2

*Format of Collection*

	Frequency	Percent
Online	378	57.5
In Person	279	42.5
Total	657	100.0

The researcher ran several descriptive analyses in *SPSS 17*. Gender frequencies are reported in Table 3. Four hundred female participants accounted for 61.5% of the sample that identified his or her gender. Males were a smaller part of the sample, including 250 males, making up 38.5% of the sample. The average age of the sample population was 27.91 years. The youngest participant was 18 years old and the oldest was 81 years old. All members of the sample completed the 14-question RS-14, resilience scale. The average, or mean, score was 83.08, a score that falls into the moderate resilience category. The standard deviation score was 14.19. These descriptive statistics are reported in Table 4. The lowest score possible was 14, and the maximum score was 98. A score of 90 or above indicated high resilience. A moderately low to

moderate resilience score fell between 60 and 89. Any score lower than 60 was considered low resilience.

Table 3

*Gender of Participants*

Gender	Frequency	Percent
Male	250	38.1
Female	400	60.9
No Response	7	1.1
Total	657	100.0

Table 4

*Total RS-14 Score (Scale 14-98)*

Responses	644
No Response	13
Mean	83.08
Std. Deviation	14.19
Minimum	14
Maximum	98

The racial identity of the contributors was divided into six groups as displayed in Table 5. The majority of the sample identified themselves as White, accounting for 54% of the population. The next largest group was Black/African American with 240 people making up 36.5%. These two groups combined were 90.5% of the sample. The



remaining participants were American Indian or Alaska Native (1.2%), Asian (1.7%), Hispanic or Latino (3.8%), or Mixed Race/Two or more races (2.7%).

Table 5

*Racial Identity*

	Frequency	Percent
American Indian or Alaska Native	8	1.2
Asian	11	1.7
Black/African-American	240	36.5
Hispanic or Latino	25	3.8
Mixed Race/Two or more races	18	2.7
White	355	54.0
Total	657	100.0

Three hundred fourteen respondents identified a significant mentor between fourth and tenth grades, and 341 did not identify a mentor, as shown in Table 6. Participants also described the racial identity, gender, and role or job of the mentor. The majority of the mentors were White, female, and teachers. Teachers accounted for 37.3% of the mentors identified. The mentors were regrouped into school-based and non-school-based. One hundred seventy-seven (63.9%) of those identifying a mentor identified a school-based mentor.

Table 6

*Did You Have a Significant Mentor Between Fourth and Tenth Grades?*

	Frequency	Percent
Yes	314	47.8
No	341	51.9
Total	655	99.7
No Response	2	.3
Total	657	100.0

During Phase Two of data collection, two additional questions were added regarding family structure and gifted and talented identification. Of the Phase Two sample, 122, or 39.2%, of that sample were identified as academically gifted and talented by the school, as conveyed in Table 7. This number accounts for 18.6% of the total sample population.

Table 7

*Phase Two Question: Were You Identified as Academically Gifted and Talented by the School?*

	Frequency	Percent	
Phase Two Sample Total	346	52.7	
Yes	122	18.6	
No	189	28.8	
Phase One Sample Total	No Response	311	47.3
Total	657	100.0	

Participants also identified their primary family structure they were raised in between fourth and tenth grades. Almost 72% of those in this Phase identified a two parent home family structure. This is not reflective of society. This reported percentage is higher than the general population; the rate is 66% (U.S. Census Bureau, 2010). The percentage of children living with two married parents has declined 3% from 2000 to 2010 (U.S. Census Bureau, 2010). Just over 24% identified the primary family structure as being single parent, grandparent, or other. In 2010, 1.65 million children under 18 years old were living with a grandparent, without a parent in the home (U.S. Census Bureau, 2010). This number rose 8% from 2001 (U.S. Census Bureau, 2010). These data are presented in Table 8.

Table 8

*Phase Two Question: What Was the PRIMARY Family Structure You Were Raised between the Fourth and Tenth Grades?*

	Frequency	Percent
Phase Two Sample Total	346	52.7
TwoParentBiological	189	28.8
TwoParentStepParent	47	7.2
Single Father	6	.9
SingleMother	54	8.2
Grandparent(s)	7	1.1
Other adult(s)	8	1.2
Phase One Sample Total	No Response	311
Total	657	100.0

The data presented in Tables 9-16 provide the frequencies and percentages for the areas of mentor help. As indicated in Hypotheses 2, there is a relationship between resilience score and mentor impact. Improved school performance such as grades and test scores found that 78.6% agreed or strongly agreed that the mentor helped them in this area (see Table 9). Improved school attitude and motivation found 83.3% agreed or strongly agreed that the mentor helped them in this area (see Table 10). Improved school behavior (getting in trouble less) found that 69.1% agreed or strongly agreed that the mentor helped them in this area (see Table 11). Improved school attendance found that 63.5% agreed or strongly agreed that they received help from the mentor in this area (see Table 12). Improved self-esteem/self-confidence found that 89.3% agreed or strongly agreed that the mentor helped them in this area (see Table 13). Setting career and/or future goals found that 83.9% agreed or strongly agreed that help was given by the mentor (see Table 14). Dealing with life stressors (event/tragedy) found that 77.2% agreed or strongly agreed that they received this help from the mentor (see Table 15). Dealing with relationships found that 67.8% agreed or strongly agreed that they were aided by the mentor (see Table 16). Overall, in every area, at least 63.5% of the mentees indicated that mentors helped them in one of the areas.

Table 9

*The Mentor Helped Me Improve School Performance (Grades, Test Scores)*

	Frequency	Percent
Strongly Disagree	19	6
Disagree	11	3.5
Neutral	38	11.9
Agree	116	36.5
Strongly Agree	134	42.1
Total	318	100.0
No Mentor	339	
Total	657	

Table 10

*The Mentor Helped Me Improve School Attitude and Motivation*

	Frequency	Percent
Strongly Disagree	13	4.1
Disagree	10	3.2
Neutral	30	9.5
Agree	111	35.0
Strongly Agree	153	48.3
Total	317	100.0
No Mentor	340	
Total	657	

Table 11

*The Mentor Helped Me Improve School Behavior (Getting in Trouble Less)*

	Frequency	Percent
Strongly Disagree	15	4.9
Disagree	15	4.9
Neutral	65	21.1
Agree	82	26.6
Strongly Agree	131	42.5
Total	308	100.0
No Mentor	349	
Total	657	

Table 12

*The Mentor Helped Me Improve School Attendance*

	Frequency	Percent
Strongly Disagree	15	4.8
Disagree	21	6.7
Neutral	79	25.1
Agree	86	27.3
Strongly Agree	114	36.2
Total	315	100.0
No Mentor	342	
Total	657	

Table 13

*The Mentor Helped Me Improve Self-Esteem/Self-Confidence*

	Frequency	Percent
Strongly Disagree	10	3.1
Disagree	7	2.2
Neutral	17	5.3
Agree	96	30.2
Strongly Agree	188	59.1
Total	318	100.0
No Mentor	339	
Total	657	

Table 14

*The Mentor Helped Me Set Career and Future Goals*

	Frequency	Percent
Strongly Disagree	13	4.1
Disagree	8	2.5
Neutral	30	9.5
Agree	101	32.0
Strongly Agree	164	51.9
Total	316	100.0
No Mentor	341	
Total	657	

Table 15

*The Mentor Helped Me Deal With Life Stressors (Event/Tragedy)*

	Frequency	Percent
Strongly Disagree	16	5.1
Disagree	15	4.7
Neutral	41	13
Agree	92	29.1
Strongly Agree	152	48.1
Total	316	100.0
No Mentor	341	
Total	657	

Table 16

*The Mentor Helped Me Deal With Relationships*

	Frequency	Percent
Strongly Disagree	19	6
Disagree	26	8.2
Neutral	57	18
Agree	90	28.4
Strongly Agree	125	39.4
Total	317	100.0
No Mentor	340	
Total	657	



### Analysis of Hypotheses

H1: Adolescents who had the presence of a mentor will have significantly more resilience than adolescents who did not have a mentor.

An independent samples *t* test was employed to analyze the data to determine if the presence of a mentor during adolescence would lead to a higher resilience score. The total Resilience Scale (RS-14) mean score for those identifying a mentor was 84.21, and the total for those not identifying a mentor was 82.06. No significance between the presence of a mentor and resilience score was found. The independent groups *t* test revealed that those with a mentor ( $M = 84.21, SD = 12.94$ ) did not significantly differ from the group without a mentor ( $M=82.06, SD = 15.207$ ), as predicted,  $t(640) = 1.917, p = .056, \eta^2 = .103$ . Hypothesis 1 was not supported.

H2: There will be a statistically significant correlation between the reported impact of a mentor relationship and resilience.

A Pearson correlation was used to analyze the data to determine if there was a statistically significant correlation between the reported impact of a mentor and resilience scores. As hypothesized, there was a statistically significant correlation between the impact of a mentor and resilience,  $r(313) = .378, p < .001$ . Hypothesis 2 was supported; it had a moderate correlation.

H3: Adolescents that had a school-based mentor will have significantly more resilience than adolescents who did not have a school-based mentor.

An independent samples *t* test was employed to analyze the data to determine if adolescents having a school-based mentor will have significantly more resilience than those who had a personal, or nonschool-based, mentor. The test revealed that those with a

mentor ( $M = 83.28$ ,  $SD = 13.78$ ) did not significantly differ from the group without a mentor ( $M = 83.46$ ,  $SD = 13.24$ ) as predicted,  $t(268) = .108$ ,  $p = .914$ ,  $\eta^2 = .403$ .

Hypothesis 3 was not supported.

H4: Adolescents who had or mentor for 2 or more years will have significantly more resilience than adolescents who had a mentor for less than 2 years.

An independent samples  $t$  test was engaged to analyze the data to determine if adolescents having a long-term mentor of 2 or more years will have statistically more resilience than those persons with a short-term mentor of less than two years. The test revealed that those with a short-term mentor ( $M = 82.91$ ,  $SD = 14.36$ ) did not significantly differ was the long-term mentor group ( $M = 84.63$ ,  $SD = 12.453$ ) as predicted,  $t(304) = -.996$ ,  $p = .320$ ,  $\eta^2 = .564$ . Hypothesis 4 was not supported.

#### Ancillary Findings

Two ancillary findings were analyzed. In Phase Two of data collection, two additional questions were added to the questionnaire for further study; they were (a) What was the primary family structure you were raised in between the fourth and tenth grades? and (b) Were you identified as academically gifted and talented by the school? The questions were added for further information and to determine if there was a relationship between primary family structure and resilience and to determine if there was a relationship between gifted and talented and resilience. Independent samples  $t$  tests were run and no significance relationship was found between the identification as academically gifted and talented by the school and resilience. Also, no significant relationship was found between resilience and the primary family structure respondents were raised in between fourth and tenth grades.

## Summary

Chapter IV provided the descriptive and comparative findings based on the research questions and hypotheses for resilience. The researcher collected data from a questionnaire through non-probability methods. There were two subscales: impact of a mentor, and resilience score. Each subscale produced a good Cronbach alpha, which means that the instrument had a satisfactory level of reliability.

The presence of a mentor, length of the mentor relationship, and source of mentorships were not significant variables in the study in relation to resilience. First, those with a mentor and those without a mentor were compared. Next, the length of the mentorship, short term (one year or less) or long term (2 to 7 years), were compared. Then, the participants with school based mentors versus nonschool-based or personal mentors were compared. Finally, a significant relationship was found between the reported impact of a mentor and resilience.

## CHAPTER V

### DISCUSSION

#### Introduction

The purpose of this study was to determine if there was a relationship between resilience and the presence of a mentor during adolescence. A quantitative study was conducted to test the hypotheses, and data were collected and analyzed in *SPSS 17* by the researcher. The conclusions, limitations, implications, and recommendations are explained in Chapter V.

The sample size of this quantitative study was 657. There were slightly more participants in Phase One than in Phase Two of collection. Convenience sampling was used. The majority of participants completed the questionnaire by online format. Female participants accounted for more than 60% of the sample. This could be because the researcher is female and during Phases One and Two the online format questionnaires were sent to people known to the researcher. Many could have been female acquaintances of the researcher. More than half of the sample identified themselves as white. The investigator may have more acquaintances or friends of the similar race and many of the respondents answered through a survey link on an online social network (Facebook).

Black/African Americans accounted for 36% of the sample. Whites and Blacks were the two largest racial identity groups acknowledged by the respondents. The large number of Black respondents could be a result of the state location of the research. The state has a large population of Black/African Americans. Also, during Phase One of research, the in-person distribution method was held at a public university that has a high

enrollment of African American students. The remaining racial identity groups combined accounted for less than 10% of the total sample population. These numbers directly reflect the United States Census demographic information for the state of Mississippi, where the researcher is located.

Of the 311 respondents in Phase Two, 72% of the group were raised in a two parent family home structure versus a single parent or alternative home structure. This reported percentage is 6% higher than the general population (U.S. Census Bureau, 2010). This differential may be due to the sample choice which included many adults in higher education. Just over 24% identified the primary family structure as being single parent, grandparent, or other. In 2010, 1.65 million children under 18 years old were living with a grandparent, without a parent in the home (U.S. Census Bureau, 2010). This number rose 8% from 2001 (U.S. Census Bureau, 2010). The effect of this change in household structure is a topic for further research. The outcomes are still being revealed. The trend has been increasing since 2001. As family structures change, children and adult resilience could be affected.

Aside from demographic information, the remaining questions related to resilience and mentors. The average resilience score reported was 83.08, a score of moderate resilience. A score of 98 was the highest possible, and a score of 14 was the lowest score possible on the RS-14 Scale developed by Wagnild and Young (1993). The moderate resilience score could reflect a resilient sample, which included many college students and educators. The fact that many of the adults were in college or connected to the researcher, a college trained educator, is another reason the sample could have an

initial rate with higher level of resilience. The respondents obviously were resilient or successful enough to continue in higher education.

Just under half of the sample identified having a mentor between fourth and tenth grades. Of those who identified a mentor, more than one third of them identified a teacher as a mentor. These results could simply be reflective of the answers of the participants or they could be related to the profession of the researcher and the capacity in which she knew many of the participants through teaching, college, or work. The sample consisted of former students, classmates, teachers, friends, and colleagues of the investigator, who is a teacher and a student. Convenience sampling was used in this study.

During Phase Two of the research, almost 40% of the Phase Two sample reported being identified as academically gifted and talented by the school. On average, the gifted and talented population makes up less than 10% of the total population and typically closer to 5%. This number could be high because the examiner taught gifted and talented students for 7 years. Many of the gifted and talented are known to the researcher and are still in personal contact even though the investigator no longer teaches them. The study found no significant relationship between school identification of gifted and talented and resilience but further investigation should be completed to explain this finding.

### Conclusions

Relationships between mentors and resilience were tested during this study. Both the presence of a mentor and the type of mentor did not significantly impact the resilience score of the participants. This finding was surprising to the researcher but may have been due to intrinsic resilience or motivation of the sample. The findings concur what Wagnild and Young's (1993) explanation that resilience is a personality characteristic,

not a learned trait. Neither intrinsic resilience nor intrinsic motivation were measured in this study, but both could be an area of future study as an explanation of the findings of this research. In contrast to the findings of Spencer (2006), the current study's findings revealed that the length of the mentorship was not a benefit. The length of mentorship did not affect the resilience level. A long-term mentor of 2 or more years did not yield a higher resilience than a short-term mentor of less than a year.

The presence, type, or length of the mentor relationship did not affect resilience, but those who identified a mentor reported a significant impact of the mentor relationship and resilience. Those who reflected back to the time period between fourth and tenth grades and remembered a mentor realized that there was an impact. These mentors were memorable to the respondents, and they believed they impacted and made a difference in mentees' lives. The participants had to reflect back at least 3 years and as long as 65 years. They recognized the mentor impact when completing the questionnaire and remembering the adolescent years.

The mentees gave credit to the mentor and acknowledged that the mentor relationship did have an impact on their lives. Although statistically there was no relationship between the presence of a mentor and resilience, the mentees indicated that there was an impact, maybe not a statistically significant impact, but nonetheless an impact. As in Maslow's hierarchy of needs, the students believe their needs are being met by the mentor. In schools and in life, mentors can help provide safety, love, and esteem for learners, leading to self-actualization.

The majority of participants in the study that identified a mentor believed the mentor helped them to improve school performance, school attitude and motivation,

school behavior, school attendance, self-esteem/self-confidence, set career and/or future goals, deal with life stressors, and deal with relationships. This is the social cognitive theory in action. A pupil improving in cognitive learning ability could then have higher self-esteem and lead to improved school attendance and attitude. Behaviors are better predicted from the beliefs rather than the actions (Bandura, 1986). These students gain self-efficacy as a by-product of the mentoring relationship. The students that have built up strong feeling of self-efficacy are well prepared to educate themselves when the time comes to rely on their personal initiative (Bandura, Social Foundations of Thought and Action, 1986).

#### Limitations

The following were limitations of the study:

1. The fact that the participants had to be 18 or older could have been a limitation due to the fact that there was a reflective memory requirement necessary in order to respond to the questionnaire. The participants had to recall back at least 3 years and as long as 65 years. Time may have caused respondents to have forgotten important facts, even having been mentored.
2. This study included a large number of college students. This is a limitation because many of the respondents would already be considered successful or resilient enough to be enrolled in college. On the other hand, the only requirement to complete the questionnaire was to be 18 years old or older, so some of the sample may not have been enrolled in higher education; and it cannot be assumed that all were enrolled in higher education or that all were students.



3. The sample was limited to people available by contact via a social networking site, (Facebook), by e-mail, online, or in person. The researcher drew from different sources: former students who are adults or colleagues at Arizona State University, The University of Wisconsin, Pearl River Community College, The University of Southern Mississippi, and various other higher education institutions. The participants were from Florida, Mississippi, Louisiana, Arizona, Ohio, Illinois, Georgia, Alabama, Wisconsin, Minnesota, and other states. The researcher works in the education field. Many of these people are in the education field and were aware that the researcher is a teacher; so there may be a biased judgment that the questionnaire is about teachers and education. Many of the participants asked to complete the survey were friends, students, or colleagues so they may be interested in the topic by association.
4. This research was limited to a year of study so the lead investigator could not spend multiple years studying and researching topic and this could be a limitation to the findings.
5. Two questions were not asked in the Phase One questionnaire so the sample sizes of Phase One and Phase Two vary and the results are not applicable to the entire sample.
6. Over half of the sample completed the questionnaire online so this means the person may have a computer or access to a computer but not all people do. The people may have an economic advantage because they can afford a computer or have access to one to use. In the culture of poverty, computer

access may be less accessible and therefore be at a disadvantage or less resilient.

### Implications

Numerous implications and recommendations for policy and practice can be taken from this study. Future researchers may choose to use an online, in-person, or combination sample for studies based on the large number of responses collected. Both online and in-person collections generated over three hundred responses in a short period of time with relative ease. The data collected through the non-probability methods yielded high numbers. Future researchers may consider the methods used in this study when seeking samples of high power.

The data indicated that most mentees agreed a mentor impacted their lives in positive ways. Counselors, teachers, and parents may choose to match students with a mentor or be a mentor for them to attain positive results in students. This may help school leaders identify the impact of mentors on students. If students are reporting the impact of mentors, as they did in this study, then school leaders, educators, and academicians can view the areas of most impact. Student achievement is a high priority in all schools, so if the results find that a mentor might increase student achievement that would provide factual evidence and data to build mentor programs in school districts.

The priority of increased academic achievement can be aided by adding more mentor programs in schools. Of the students mentored, 77.6% agreed that mentors helped them improve school performance, such as grades and test scores, as did the participants in the Holt et al. (2008) study. School districts, superintendents, and school leaders should take note of the responses of participants and budget money for mentoring

programs in the schools. Almost 90% of the students mentored believe the mentor helped improve self-esteem and self-confidence. Therefore, if social cognitive learning theory and self-efficacy are applied to the remark above, these students will then achieve, believe in themselves, and do better in other areas such as academics or career planning. These findings are similar to Hurd and Zimmerman's (2010) study that found that natural mentor relationships helped youth build self-esteem.

In schools and in life, mentors can help provide safety, love, and esteem for learners, leading to self-actualization. Today, in many schools, children are seeking the basic physiological needs as well. Many schools provide free breakfast and free or reduced cost lunches to provide the basic need of food to children. After this necessity has been satisfied, schools, teachers, students, and mentors can work to ensure that safety, love, esteem, and self-actualization needs are met. A mentor can help with this process. Albert Bandura's social cognitive theory would promote an intervention such as a mentor. A pupil may improve in cognitive learning due to a mentor and, therefore, improve engagement in school and feelings of self-efficacy to make continuous improvement.

School counselors may take this research and apply the findings to their work with children. Since Wooley and Bowen (2007) described the adolescent years as most critical in regards to resilience, counselors should work to add mentors or mentoring programs to schools to encourage school engagement and further achievement. Almost 80% of the students mentored believed the mentor helped them deal with life stressors. The mentors helped them improve self-esteem, set career and or future goals, deal with life stressors, and deal with relationships. Along with this study's findings, Anda (2001),

Flom and Hansen (2006), McCormick (1990), and Wyatt (2009), also found that mentors helped the students set future goals and guided their career paths. Similar to what Johnson and Wiechelt (2004) found, this study concluded that mentors help children deal with life stressors and can help reduce their effects. All of these items are topics that counselors work on with students; the mentors would act as an assistant to the counselor's cause. The mentors were a protective factor who helped the students.

Like Holt et al. (2008), who found that mentoring prevented a decline in school engagement for urban youth and decreased the chances of discipline infractions, the present study found that mentors helped them in many areas including improving school attitude and motivation, behavior (getting in trouble less), and attendance. The current study and that of Holt et al. (2008) contrasted in regards to school attendance and did not find any significant changes in the number of students absences. Sperandio's (2008) and Zimmerman et al. (2002) studies' results, such as the one's in this study, concluded that a mentoring relationship improved school attitude and motivation. In the sample for this study, 83.3% believed that the mentor aided their improved attitudes and motivation. With a mentor, the students feel more connected to school and have, or perceive that they have, more teacher support. Students want to be in school when they have a mentor. School becomes a safe place, not a hostile environment.

#### Recommendations for Future Research

Further studies on the extent of impacts of mentors could enrich this research and the field of education. A qualitative study of people in a mentoring relationship during and after the mentoring relationship could provide more details of the impacts of mentors on the lives of mentees. Future studies for mentoring should include other variables besides

resilience. The other variables could be a significant factor in a successful mentoring relationship and education. The lack of significance the researcher found could be a result of the sample choice.

The use of variables other than resilience and a broader sample could connect the missing variables or factors. Moe et al. (2007) found that over 6 million children lived with a parent who had abused alcohol or drugs. Educators need to address these outside factors and other missing variables to help the students in education. One of these outside factors could be the family structure of the student. Although no significant relationship was found between primary family structure and resilience, further studies on family structure and student education is suggested.

Teachers were the largest group identified as mentors for mentees in this study. Further research should explore the teacher as an informal mentor and the teacher as a formal mentor to identify if there is a difference in the relationships. Classrooms teachers that are mentors may be more formal than a Pep Club advisor. The formal and informal teacher mentors roles can be differentiated.

Long-term studies of mentoring in schools and a more specific focus on educational resilience are two areas of research that should be explored to examine this topic more critically. Resilience can be developed to overcome risks and negative events. The average resilience score of the sample was 83, a score of moderately low to moderate resilience and the majority of the sample was college students. This resilience mean is rather high. Further research should examine whether resilience itself could be a predictor of success in college. If teacher-mentor are proven to increase postsecondary participation, then school districts, and, specifically, high schools should be working to

build strong mentor relationships between teachers and students. More research on resilience as a personality trait versus a state gained or built should be considered by researchers in education but also in psychology. Extended research in resilience will foster more in-depth study to guide future research focus. Further study in the education field will benefit, most importantly, our youth

## APPENDIX A

## INSTITUTIONAL REVIEW BOARD APPROVAL



## THE UNIVERSITY OF SOUTHERN MISSISSIPPI

Institutional Review Board

118 College Drive #5147  
 Hattiesburg, MS 39406-0001  
 Tel: 601.266.6820  
 Fax: 601.266.5509  
 www.usm.edu/irb

**HUMAN SUBJECTS PROTECTION REVIEW COMMITTEE  
 NOTICE OF COMMITTEE ACTION**

The project has been reviewed by The University of Southern Mississippi Human Subjects Protection Review Committee in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.  
 Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **10111804**

PROJECT TITLE: **Adult Resilience Resulting From Mentoring During Adolescence**

PROPOSED PROJECT DATES: **11/15/2010 to 11/14/2012**

PROJECT TYPE: **Dissertation**

PRINCIPAL INVESTIGATORS: **Pola C. Jakacki**

COLLEGE/DIVISION: **College of Education & Psychology**

DEPARTMENT: **Educational Leadership**

FUNDING AGENCY: **N/A**

HSPRC COMMITTEE ACTION: **Expedited Review Approval**

PERIOD OF APPROVAL: **12/02/2010 to 12/01/2011**

Lawrence A. Hosman  
 Lawrence A. Hosman, Ph.D.  
 HSPRC Chair

12-14-2010  
 Date





## 9. The mentor helped me...

<i>Circle the number in the appropriate column</i>	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Improve school performance (grades, test scores).	1	2	3	4	5
Improve school attitude and motivation.	1	2	3	4	5
Improve school behavior (getting in trouble less).	1	2	3	4	5
Improve school attendance.	1	2	3	4	5
Improve self-esteem/self-confidence.	1	2	3	4	5
Set career and/or future goals.	1	2	3	4	5
Deal with life stressors (event/tragedy).	1	2	3	4	5
Deal with relationships.	1	2	3	4	5

## PART B

## The 14-Item Resilience Scale (RS-14)

Date \_\_\_\_\_

Please read the following statements. To the right of each you will find seven numbers, ranging from "1" (Strongly Disagree) on the left to "7" (Strongly Agree) on the right. Circle the number which best indicates your feelings about that statement. For example, if you strongly disagree with a statement, circle "1". If you are neutral, circle "4", and if you strongly agree, circle "7", etc.

Circle the number in the appropriate column	Strongly Disagree				Strongly Agree		
	1	2	3	4	5	6	7
1. I usually manage one way or another.	1	2	3	4	5	6	7
2. I feel proud that I have accomplished things in life.	1	2	3	4	5	6	7
3. I usually take things in stride.	1	2	3	4	5	6	7
4. I am friends with myself.	1	2	3	4	5	6	7
5. I feel that I can handle many things at a time.	1	2	3	4	5	6	7
6. I am determined.	1	2	3	4	5	6	7
7. I can get through difficult times because I've experienced difficulty before.	1	2	3	4	5	6	7
8. I have self-discipline.	1	2	3	4	5	6	7
9. I keep interested in things.	1	2	3	4	5	6	7
10. I can usually find something to laugh about.	1	2	3	4	5	6	7
11. My belief in myself gets me through hard times.	1	2	3	4	5	6	7
12. In an emergency, I'm someone people can generally rely on.	1	2	3	4	5	6	7
13. My life has meaning.	1	2	3	4	5	6	7
14. When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6	7

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## APPENDIX C

## PHASE TWO INSTRUMENT

**QUESTIONNAIRE****Part A**

1. What is your current age in years? \_\_\_\_\_
2. What is your gender \_\_\_\_\_
  - a) Male
  - b) Female
3. What is your racial identity? \_\_\_\_\_
  - a) American Indian or Alaska Native
  - b) Asian
  - c) Black/African- American
  - d) Hispanic or Latino
  - e) Mixed race/ Two or more races
  - f) White
4. What is the **PRIMARY** family structure you were raised in between the fourth and tenth grades? \_\_\_\_\_
  - a) Two parents- Both biological
  - b) Two parents- Include a step-parent
  - c) Single Parent- Biological father only
  - d) Single parent- Biological mother only
  - e) Grandparent(s)
  - f) Other adult(s), list it \_\_\_\_\_
5. Where you identified as academically gifted and talented by the school? \_\_\_\_\_
  - a) Yes
  - b) No
6. A mentor is a wise and trusted person who acts as a guide, advisor, counselor, or teacher to another person. Did you have a significant mentor between fourth and tenth grades? \_\_\_\_\_
  - a) Yes (If you answered yes, please continue to **Question #7**)
  - b) No (If you answered no, please continue to **Question #12, Part B**)
7. Describe your mentor. If you had more than one mentor, please select the **ONE** you view as most influential. Racial Identity of Mentor: \_\_\_\_\_
  - a) American Indian or Alaska Native
  - b) Asian
  - c) Black/African- American
  - d) Hispanic or Latino
  - e) Mixed race/ Tow or more races
  - f) White

8. Describe your mentor. Gender of mentor: \_\_\_\_\_

- a) Male      b) Female

9. Describe your mentor. Pick the description that best applies to our mentor. \_\_\_\_\_

- a) Administrator- Principal, Dean, Vice Principal  
 b) School/ Guidance Counselor  
 c) Teacher  
 d) Other school personnel  
 e) Athletic Coach  
 f) Clergy Person (deacon, minister, pastor, priest, rabbi)  
 g) Counselor/ therapist/ Psychologist  
 h) Relative (Non-parent)  
 i) Other (Please specify)\_\_\_\_\_

10. Describe your mentor. During what grade(s) was this person a mentor to you. Check All that apply.

- a) Fourth  
 b) Fifth  
 c) Sixth  
 d) Eighth  
 e) Ninth (freshman)  
 f) Tenth (sophomore)

11. Describe your mentor (the mentor helped you). Mark the number in the appropriate column.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1) Improve school performance (grades, test scores)	1	2	3	4	5
2) Improve school attitude and motivation	1	2	3	4	5
3) Improve school behavior (getting in trouble less).	1	2	3	4	5
4) Improve school attendance.	1	2	3	4	5
5) Improve self-esteem/ self-confidence	1	2	3	4	5
6) Set career and/ or future goals	1	2	3	4	5
7) Deal with life stressors (event/ tragedy).	1	2	3	4	5
8) Deal with relationships.	1	2	3	4	5

12. Please read the following statements. There are seven numbers, ranging from “1” (Strongly Disagree) on the left to “7”(Strongly Agree) on the right. Circle the number which best indicates your feelings about the statements. For example, if you strongly disagree with a statement, circle “1”. If you are neutral, circle “4”, and if you strongly agree, circle “7”, etc. Copyright 2009 Gail M. Wagnild and Heather M. Young. Used by permission. All rights reserved. “The Resilience Scale” is an international trademark of Gail M. Wagnild & Heather M. Young, 1993 Mark the number in the appropriate column.

1) I usually manage on way or another.

1	2	3	4	5	6	7
Strongly disagree			Neutral			Strongly agree

2) I feel proud that I have accomplished things in life.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

3) I usually take things in stride.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

4) I am friends with myself.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

5) I feel that I can handle many things at a time.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

6) I am determined.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

7) I can get through difficult times because I've experienced difficulty before.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

8) I have self-discipline.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

9) I keep interested in things.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

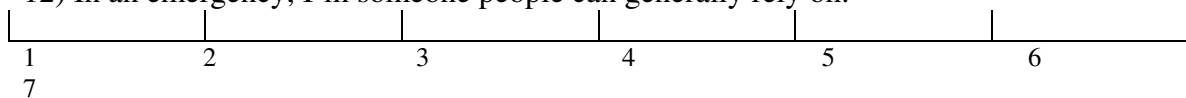
10) I can usually find something to laugh about.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

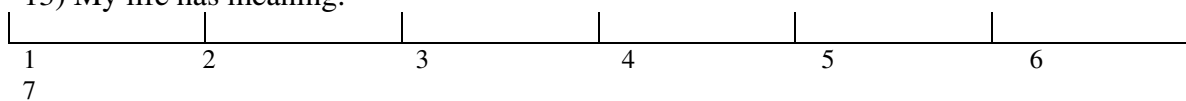
11) My belief in myself gets me though hard times.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

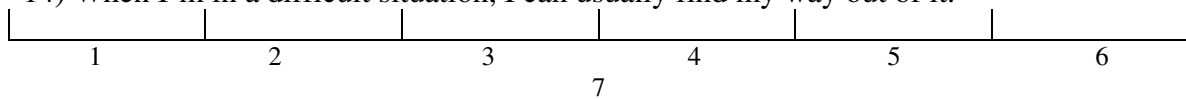
12) In an emergency, I'm someone people can generally rely on.



13) My life has meaning.



14) When I'm in a difficult situation, I can usually find my way out of it.



# APPENDIX D

## PERMISSION TO USE RS-14 INSTRUMENT

Download the Resilience Scale

Page 1 of 1

**The 14-Item Resilience Scale™ (RS-14™)**

Date \_\_\_\_\_

Please read the following statements. To the right of each you will find seven numbers, ranging from "1" (Strongly Disagree) on the left to "7" (Strongly Agree) on the right. Circle the number which best indicates your feelings about that statement. For example, if you strongly disagree with a statement, circle "1". If you are neutral, circle "4", and if you strongly agree, circle "7", etc.

	Strongly Disagree	1	2	3	4	5	6	7	Strongly Agree
1. I usually manage one way or another.	1	2	3	4	5	6	7		
2. I feel proud that I have accomplished things in life.	1	2	3	4	5	6	7		
3. I usually take things in stride.	1	2	3	4	5	6	7		
4. I am friends with myself.	1	2	3	4	5	6	7		
5. I feel that I can handle many things at a time.	1	2	3	4	5	6	7		
6. I am determined.	1	2	3	4	5	6	7		
7. I can get through difficult times because I've experienced difficulty before.	1	2	3	4	5	6	7		
8. I have self-discipline.	1	2	3	4	5	6	7		
9. I keep interested in things.	1	2	3	4	5	6	7		
10. I can usually find something to laugh about.	1	2	3	4	5	6	7		
11. My belief in myself gets me through hard times.	1	2	3	4	5	6	7		
12. In an emergency, I'm someone people can generally rely on.	1	2	3	4	5	6	7		
13. My life has meaning.	1	2	3	4	5	6	7		
14. When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6	7		

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## APPENDIX E

## PERMISSION TO USE THAD COCHRAN CENTER



The University of  
Southern Mississippi

Union and Programs  
A Division of Student Affairs

118 College Drive #5067  
Hattiesburg, MS 39406-0001  
Tel: 601.266.4396  
Fax: 601.266.5870  
union@usm.edu  
www.usm.edu/union/

Upon approval of The University of Southern Mississippi's Institutional Review Board (IRB),  
Pola C. Jakacki has my permission to survey students in the Thad Cochran Center in order to  
collect data for her research project, *Adolescent School Mentors and Late Adolescent Resilience*.

I understand that all participation is voluntary and that individual responses will be kept  
confidential. Further, any changes in the research protocol must be approved by the Southern  
Miss IRB.

A handwritten signature in cursive script that reads "Jami King".

Jami King

Event Services Manager

Thad Cochran Center



APPENDIX F  
INFORMED CONSENT

Dear College Student:

I am a doctoral candidate in the Department of Educational Leadership and School Counseling at The University of Southern Mississippi. I am collecting information for an education research project. The purpose of this investigative project is to determine if there is a relationship between adolescent school mentors and late adolescent resilience. The research seeks to examine the role of a mentor in the life of an adolescent and the mentoring relationship's impact on resilience of the mentee.

The questionnaire will take 10 to 20 minutes to complete. Your participation is completely voluntary, and you may terminate participation at any point without penalty or prejudice. All of the provided information that is gathered from the questionnaire will be anonymous. Any data inadvertently obtained during the course of this study will remain completely confidential. The completed questionnaires will be kept by the researcher for 3 years and then destroyed.

This study is potentially valuable because it will add to the body of knowledge concerning mentoring programs and resilience. The information may be useful to educators, teachers, higher education, administrators, and society. Participation may enrich the education field in practice and policy and promote further academic pursuit and research. The information obtained during the study may provide purposeful information to schools to increase academic achievement and enhancement of the student. Minimal harm or risks to participants are anticipated. The questionnaire asks

participants to reflect back on life between the school grades of 4 and 10. There is a risk of bringing up childhood memories that are potentially negative, as well as positive.

The overall data results from the submitted questionnaires will be combined for analysis and presented in a dissertation. If you would like to contact me with questions or would like to learn the results of the study, you may contact me, Pola C. Jakacki, at [pola.jakacki@eagles.usm.edu](mailto:pola.jakacki@eagles.usm.edu). The research is being conducted under the supervision of Wanda Maulding, Ph.D.

By completing and returning this questionnaire, you are indicating your consent to participate in this anonymous and confidential study used for the purposes described above.

Thank you for your participation.

*Pola C. Jakacki*

Pola C. Jakacki  
Doctoral Student  
The University of Southern Mississippi

*This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.*

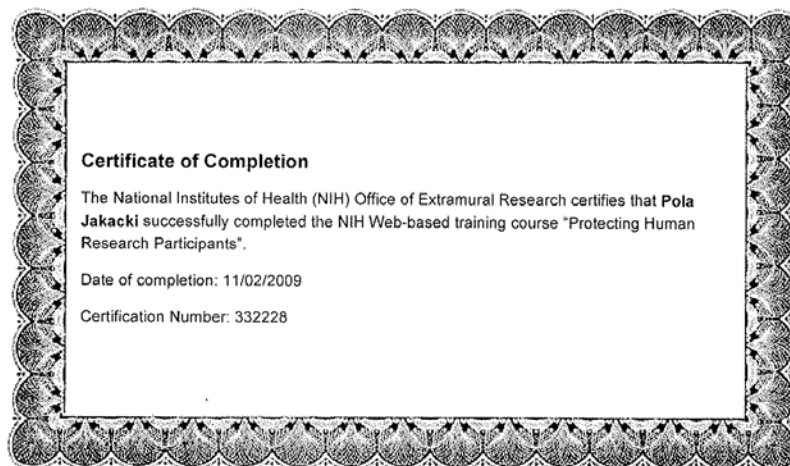
## APPENDIX G

## CERTIFICATE OF COURSE COMPLETION

## “PROTECTING HUMAN RESEARCH PARTICIPANTS”

Protecting Human Subject Research Participants

Page 1 of 1



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