The relationship between cultural/ethnic identity and individual protective factors of academic resilience

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William & Mary - School of Education

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The Relationship between Cultural/Ethnic Identity and Individual Protective Factors of Academic Resilience

A Dissertation

Presented to

The Faculty of the School of Education

The College of William and Mary in Virginia

In Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

By

Dale E. Weaver

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THE RELATIONSHIP BETWEEN CULTURAL/ETHNIC IDENTITY AND INDIVIDUAL PROTECTIVE FACTORS OF ACADEMIC RESILIENCE

ABSTRACT

The purpose of the current study was to explore the relationship between cultural/ethnic identity and the individual protective factors of academic resilience. A correlational design and multiple regression were utilized to compare students from a convenience sample of two different ethnic groups (African Americans and European Americans) in one high school in Virginia. Students' ethnic identity scores were compared with their scores of resilience. The relationship between ethnic identity, resilience, and academic success was also examined. Results indicated that a significant positive relationship existed between cultural/ethnic identity and resilience. The study also revealed that a significant positive relationship existed between cultural/ethnic identity and the individual protective factors of resilience (optimism, self-efficacy, interpersonal sensitivity, and emotional control). Findings indicated that resilience predicted grade point average (GPA). The study also found that parents' educational level was significantly correlated with their children's GPA. Results of the study also revealed that ethnic identity and the interaction between negative life events and resilience did not predict academic success. There were no significant differences between Black and White students on measures of ethnic identity, resilience, and negative life events.
CHAPTER ONE: INTRODUCTION

Statement of the Problem

Fifteen million children in the United States today are at-risk of failing in school and dropping out; the number grows larger every year (Thompson, 2006). However, despite the odds being stacked against them, many at-risk students are still able to overcome adverse circumstances, have positive developmental outcomes, and do well academically in school. We have limited understanding about how these successful children and youth are educationally resilient to high-risk family and community environments. Not enough research has been done to determine exactly how and to what extent students’ cultural/ethnic identity affects their resilience. By understanding how a student’s cultural/ethnic identity might influence at-risk adolescents, researchers may learn how to provide the environments and support needed to enhance all students’ success (Vincent, 2007).

Justification for the Study

Although many students do well in school academically, graduate from high school, and go on to lead productive lives as responsible members of society, many other students do not fare as well. More than twenty-five percent of the 40 million children and adolescents enrolled in school are at risk for school failure (Dryfoos, 1990). Each year in the United States, about 700,000 students drop out of school. In Virginia last year, 18 percent of students did not graduate on time (Virginia Department of Education, 2009). Approximately twenty-five percent of all 18- and 19-year-olds have not graduated from high school (Center for the Study of Social Policy, 1992).

School underachievement, failure, and dropout have been linked to individual, family, and contextual variables (Lerner & Galambos, 1998). Research indicates that students who lack
individual competencies or family and community protective factors have a greater likelihood of maladaptive outcomes in adulthood (Bronfenbrenner, 1986; Masten & Coatsworth, 1998; Duncan & Brooks-Gunn, 2000; Werner, 2000). Students who fail in school tend to have lower cognitive ability, less motivation, and lower self-esteem (Lerner & Galambos, 1998). Family variables that can contribute to the success or failure of adolescents include the nature of parenting, interactions between youth and their parents, and socialization practices (Crystal & Stevenson, 1995). Contextual variables that affect developmental outcomes include social support for learning, integration and involvement in the school setting, and the quality of peers and teachers at school (Gamoran & Nystrand, 1991).

The United States has been and continues to be a nation of diversity. The American population has expanded to include immigrants from ethnic minority groups, such as people from Central and South America, Asia, Africa, the Pacific Islands, and Europe (Howard, 1999). American classrooms are experiencing the largest influx of immigrant students since the turn of last century. Students of color will make up about 46 percent of the nation’s student population by 2020 (Pallas, Natriello, & McDill, 1989). As counselors and educators, we would be remiss if we did not attend to the unique needs of this diverse population in our school systems. Researchers continue to study how these groups adapt, persevere, and overcome adversity to become resilient and succeed in our educational system. A key premise of this study is that the stronger students’ cultural/ethnic identity and the higher their resilience, the more likely it is that they will be successful academically.

The Challenges of Adolescence

Adolescents typically experience dramatic changes in their lives. This period is characterized by a high degree of turmoil, during which teen-agers experience changes in their
biological, cognitive, psychological, and social characteristics (Lerner & Spanier, 1980). Adolescents experience hopes and fears, challenges, and successes. They also face multiple crises, including violence, substance use and abuse, unsafe sex, and chronic poverty (Dryfoos, 1990). As teen-agers transition through this difficult time, they often see themselves as having little opportunity to do better—in other words, to have a life characterized by societal respect, achievement, and opportunity (Lerner & Galambos, 1998). At-risk teen-agers often feel a growing sense of despair and hopelessness exacerbated by underachievement, school failure, and dropping out. Increases in risky behavior among this age group have been well-documented in the literature (Lerner & Galambos, 1998; Thompson, 2006). Juvenile violent crimes are on the rise, as are births to unmarried teens, single parent families, and the teen violent death rate (Annie E. Casey Foundation, 1995).

The problems adolescents face during this turbulent time are also reflected in the statistics within the public school system in the United States. The number of students dropping out of school among Blacks and Latinos is increasing (U.S. Census, 2008). The costs to society of this huge number of students failing and dropping out are enormous. For example, dropouts are less likely to be employed, more likely to be on welfare for the long term, and more likely to commit violent crimes (Schorr, 1988). Student dropouts are also at higher risk for conduct problems, depression, physical or mental disabilities, and severe health problems (Carnegie Corporation of New York, 1994).

It is against this backdrop of information that Lerner and Galambos (1998) conducted a review of the literature pertaining to resilience focused specifically on adolescents who face multiple risks. This body of research is particularly relevant, as the current study utilized adolescents in high school for the sample. Lerner and Galambos found a constellation of six sets
of individual and contextual factors that were associated with the actualization of risk behaviors in adolescence: (a) age, (b) expectations for education and school grades, (c) bad behavior, (d) peer influences, (e) parental influences and (f) neighborhood influences. A brief explanation of each contextual factor follows.

First, regarding age, the earlier students engage in risky behavior, the more likely they will suffer negative consequences of those behaviors (Lerner & Galambos, 1998). Second, students who have low expectations for good grades and success will be at greater risk for school failure. Third, bad behavior, such as disciplinary infractions, tardies, and absences, all contribute to increased risk of failure. Fourth, having peers who engage in deviant or risky behavior increases the odds that adolescents will participate in similar risky behavior. Fifth, if parents do not adequately monitor their children, it is more likely that at-risk behaviors will actualize. Sixth, living in a neighborhood characterized by poverty or high-density living increases the likelihood of adolescents engaging in risky behaviors and subsequently failing and dropping out of school.

Lerner and Galambos (1998) studied the problem of increased risky behaviors of adolescents and made several recommendations to promote the positive development of young people. By involving multiple characteristics of the adolescent, including his or her developmental level, knowledge of risk-taking, intrapersonal resources (i.e., self-esteem, self-efficacy, beliefs, and values), and interpersonal management skills, successful risk prevention programs can be developed (Peterson, Duncan, & Canady, 2009). The most effective programs will be those that emphasize students' strengths and assets. These include "their capacities for positive development, their possession of attributes—protective factors—that keep them moving forward in a positive developmental path" (Lerner & Galambos, 1998, p. 435). According to Schulenberg, Maggs, and Hurrelmann (1997), these protective factors include individual
attributes (self-esteem, religious values, knowledge, skills, and motivation to do well) as well as contextual attributes (authoritative parents, prosocial peer group), and are integral to the healthy development of adolescents. The current study examines the relationship between ethnic identity and resilience among two different groups of adolescents and can best be understood by providing the theoretical rationale for resilience and multicultural theory.

Theoretical Rationale

Resilience Theory

School failure is thought to be caused in part by the presence of risk factors that contribute to emotional difficulties and poor functioning. These risks can originate from the individual or from his or her environmental context (Werner, 1993). Risk factors do not predict a negative outcome with certainty; rather, they expose youth to circumstances associated with a greater likelihood of a maladaptive or unhealthy outcome (Lerner & Galambos, 1998). Risk normally involves the presence of risk antecedent conditions which create vulnerabilities in the individual’s environment that are likely to lead to problem behaviors with serious negative health outcomes (Arrington & Wilson, 2000). When an adolescent is exposed to high risk antecedent conditions in his or her environment, this exposure can increase the likelihood of a poor developmental outcome (Bronfenbrenner, 1986).

According to resilience theory, students who have more protective factors tend to be more educationally resilient, since these factors protect or insulate students from the effects of risk factors (Werner, 2000). Werner’s conclusions were based on an analysis of data from a 30-year longitudinal study of 698 ethnic minorities from Kaua’i, Hawaii. According to Werner, individual protective factors observed repeatedly in resilient adolescents included an internal locus of control, positive self-concept and temperament, and greater social maturity. Resilient
students typically had individual resources that are associated with academic success, such as
cognitive abilities, motivation, and self-efficacy (Stevenson & Stigler, 1992). Although many
students may possess these individual characteristics, resilient students relied on these
capabilities to help them overcome adverse circumstances in their environment.

Besides the individual protective factors listed above, Werner (2000) reported a number
of external protective factors that occurred within the family, school, and community which
increased the odds of a positive developmental outcome. Within the family, these included a
strong maternal bond or affectionate tie to an alternate caregiver, grandparents, and siblings.
From the school, teachers and mentors were repeatedly found to exert a positive influence on at-risk youth. In the community, prosocial relationships with friends and caring adults provided a protective effect. Now that resilience theory has been described briefly, an explanation of one specific type of resilience, namely, academic resilience, is needed.

Academic Resilience

Understanding how some youth are successful at school despite having to overcome adverse personal and environmental factors holds promise as a possible way to help more adolescents be academically successful. Educational or academic resilience is defined as “the heightened likelihood of educational success despite personal adversities brought about by environmental conditions and experiences” (Wang, Haertel, & Walberg, 1997, p. 4). In Western culture, getting good grades in school is considered an important developmental task and is a marker for healthy outcomes later in life (Masten & Coatsworth, 1998). Educational resilience can be thought of as a continuous interaction between an individual and characteristics of his or her environment. Resilience consists of two components: the presence of significant adversity and achievement of a positive outcome despite the threat or risk (Garmezy, 1991; Masten&
Coatsworth, 1998; Rutter, 1994). In order for an adolescent to be considered resilient, he or she must be experiencing some type of risk or adversity and be doing well despite the risk(s). The developmental outcome depends on how the risk and protective factors interact. Resilience theory provides the foundation for understanding the first part of the study. The second part of the study can best be understood by a review of multicultural theory, which explains how culture can alter the way in which adolescents make meaning of their experiences.

*Multicultural theory*

In addition to resilience theory, this study included culture and ethnic identity theory as one of its foundations for examining and comparing different groups of students. Many researchers have suggested that adolescents' race/culture/ethnicity has a significant influence on how they deal with adverse circumstances (Lerner & Galambos, 1998; Garcia Coll & Magnuson, 2000; Arrington & Wilson, 2000; Yasui & Dishion, 2007). Sue and Sue (2003) studied multicultural theory and noted that people's worldviews, largely influenced by their cultural background, can have a powerful influence on their ability to successfully adapt to the environment. According to Sue & Sue, worldviews are "composed of our attitudes, values, opinions, and concepts and affect how we think, define events, make decisions, and behave" (p. 268). Members of minority groups often perceive and experience their lives differently based in part on their cultural upbringing and different worldviews. In Western culture, European Americans, currently the dominant group, tend to assume their worldview is shared by members of all other cultures (Sue & Sue, 2003). This group tends to emphasize individual-centered values, verbal expressiveness, self-disclosure, and direct communication of thoughts and feelings. However, many members of other cultures do not share those same values, which can cause them to make meaning of their world differently. The coping strategies adolescents employ
to negotiate their world, including the school environment, are thought to be based in part on their cultural attitudes and values. Keeping resilience and multicultural theories in mind, the discussion next focuses on the body of knowledge that has been developed the past several decades on resilience, followed by race, culture, and ethnicity.

Research on Resilience

Garmezy, Masten, and Tellegen (1984) are credited with the earliest research on resilience, when they studied the children of schizophrenic mothers in search of precursors to the development of psychopathology. What they found was that many children were functioning quite well, despite adverse circumstances, and for that reason, focused their research on these positive behaviors, which they defined as stress resistance. Thus began a series of research experiments entitled Project Competence. Results of several of the studies by Garmezy et al. (1984) suggested that, when certain protective factors were present among children and youth, they imparted a type of immunity against stress. Researchers labeled this category of behavior in children “immunity versus vulnerability,” since there appeared to be a conditional relationship between stress and personal attributes related to adaptation (Garmezy et al., 1984, p. 102). In other words, personal attributes modulate (dampen or amplify) the impact of stress as a variable. Thus, when certain protective factors are present, they impart a kind of immunity against stress. Garmezy recommended that future studies examine the major parameters of stress, coping, and competence to identify the key developmental processes found in competent functioning and resilience.

A series of studies took place between 1970 and 1989 which attempted to delineate the developmental milestones that normally occur as children grow up. Havighurst (1972) defined these milestones as developmental tasks and included things such as attaching to a primary
caregiver, developing self-control, and learning compliance. School adjustment, developing a sense of self, and forming close friendships, were also considered as developmental tasks. Masten and Coatsworth (1998) researched skill sets that were tied to successful outcomes and found that self-control and the ability to self-regulate both emotion and attention were linked to academic success and prosocial behavior.

The list of researchers studying resilience expanded as scholars attempted to compile a list of both risk and protective factors that influenced developmental outcomes. Werner (1993) examined data from a 30-year longitudinal study begun in 1955, which resulted in lists of both risk and protective factors thought to influence academic, career, and life outcomes. For example, risk factors included poverty, child abuse/neglect, parental mental illness, substance abuse, and teen-age pregnancy. Individual protective factors included cognitive ability, self-efficacy, self-esteem, and problem-solving ability.

Some researchers subsequently began applying the research on risk and protective factors of resilience to the field of education. For example, Wang et al. (1997) conducted a meta-analysis of 179 studies and surveyed 61 educational researchers. Results of their analysis suggested five contexts within the school setting that supported educational success. These included strong classroom practices, close ties between home and community, excellent curriculum delivery, positive school wide practices, and supportive state and district policies. Another key finding from the Wang et al. (1997) meta-analysis was the importance of family member involvement. When family members were actively engaged, student attendance and achievement increased, while delinquency and disciplinary problems decreased. While acknowledging the important role families, schools, and communities play in successful
outcomes, researchers still sought a more in-depth understanding of the origins and causes of risk, described in the next section.

Antecedents of Risk

Although the trend for studies was to focus on resilience and protective factors, investigators have continued to explore the causes or antecedents of risk in order to better understand the origin of poor developmental outcomes and dysfunction. Carbonell, Reinherz, and Giaconia (1998) stated that risk can be thought of as events or conditions that make a poor outcome more likely. However, because risk is present, it does not predetermine a negative outcome; rather, it simply makes the probability higher (Masten & Coatsworth, 1998). Bowlby (1951) was among the first to suggest that family experiences can have a strong effect on children’s psychological development. Bronfenbrenner (1986) also suggested that children are part of a living system and are embedded in their surrounding contexts. Based on the premise of the environment influencing resilient outcomes, researchers began to search for clues to find the antecedents of risk within three contexts: the individual, the family, and the community.

As researchers began to understand specific risk conditions, they realized that risk factors were not static and unchanging, but appeared to be more dynamic in nature. Doll and Lyon (1998) examined developmental pathways of risk and found that experiencing negative life conditions increased the incidence of mental health problems. They suggested that risks do not occur in isolation but are better thought of as constellations of interrelated hazards. According to Doll & Lyon, case studies were a suggested method to document similarities and differences in individuals’ responses to adversity, while longitudinal studies could be utilized to trace adolescents’ pathways to risk from childhood, to adolescence, and then to adulthood.
Further exploration of risk antecedents led to studies that examined key environmental risk factors. One such risk that is frequently described in the literature is low socioeconomic status (SES). Researchers have consistently determined that low SES is a reliable predictor of unfavorable outcomes in adulthood (Doll & Lyon, 1998; Duncan & Brooks-Gunn, 2000; Schoon & Parsons, 2002). Lack of financial resources, family disorganization, and overcrowded conditions are thought to all contribute to poor outcomes. Financial hardships have been correlated with lower grades, since they may limit students’ exposure to enrichment activities. Duncan and Brooks-Gunn (2000) found that children living in poverty were twice as likely to drop out of high school. Schoon and Parsons (2002) analyzed data from a 30-year longitudinal study conducted with participants from Great Britain who had experienced poverty in childhood. Subjects were rated on their social class and competence (academic attainment and behavior). Results of their study suggested that the biggest risk factors that contributed to poor outcomes included a lack of parental involvement, a large family size, teen-age motherhood, and child or adolescent placement in juvenile detention.

A second major environmental risk factor that researchers have studied is single-parent families. Several researchers found that children of single-parent families were more likely to have lower grades, lower test scores, and to drop out of school at a higher rate than children who were raised by two parents in intact families (Astone & McLanahan, 1991). One of the key reasons children from single-parent families have poor outcomes is as a direct result of poverty. According to the U.S. Census (2008), nearly half the single-parent families in the U.S. live below the poverty level. One means of escape from poverty for single parents is marriage. According to a study by Amato and Maynard (2007), families with parents that are married and
sharing a household have economic advantages, including sharing bills, resources, and the ability to generate two incomes rather than one.

A third key environmental factor associated with poor outcomes is being a minority. Several studies have examined minority status and its correlation with life trajectories. According to Sellers, Copeland-Linder, Martin, and Lewis (2006), racial or ethnic minority youth have an increased risk for academic problems at school and the development of mental health problems. An example of a study that documented poor academic outcomes was done by Gutman, Sameroff, and Eccles (2002), which examined the academic achievement of African American students as it related to exposure to risk factors. These risk factors included maternal depression, income, education, and occupation; increased family life stresses; and neighborhood characteristics. Gutman et al. (2002) found that Black teen-agers living in poverty experienced a decline in grade point average (GPA) between fifth and sixth grade. Their findings suggested that as exposure to risk factors increased, students had more absences and lower test scores.

Rutter (1971) found that adolescent minorities with multiple risk factors also had an increased likelihood of developing psychiatric disorders. With a clearer understanding of the antecedents of risk, researchers next turned to studies that focused on the origins of resilience.

Antecedents of Resilience

Protective factors are considered to be on the opposite end of the behavioral spectrum and to be precursors to resilient outcomes among adolescents (Werner, 1993; Masten & Coatsworth, 1998). It is thought that protective factors moderate a person's reaction to stress or adversity and interact with the sources of risk to reduce the probability of negative outcomes. According to Rutter (1979), protection from risk does not mean risk is completely avoided; rather, a resilient individual engages with risk and copes with it. Protective factors emanate from three sources: the
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individual, the family, and the environment or social context. Werner's (1993) extensive study of longitudinal data taken from a cohort of 698 people born in Kaua'i in 1955 revealed a concise set of individual protective factors. These included sociability, above-average intelligence, an internal locus of control, positive self-concept, and strong achievement motivation.

Other studies that examined protective factors were focused specifically in the school setting. For example, Reis, Colbert, and Hebert (2005) investigated 35 ethnically diverse, academically talented adolescents over a three-year period. Students were considered high-achieving and selected to participate in the study if they scored above the 90th percentile using local norms on standardized intelligence or achievement tests and demonstrated superior performance (i.e., high grades) in one or more academic areas during elementary, middle, or high school. Researchers found that successful adolescents exhibited resilient attitudes and behaviors, were hard workers, involved in extracurricular activities, and able to rely on at least one supportive adult for guidance and mentoring. Catterall (1998) studied an empirical database from the National Education Longitudinal Study of 1998 and found that the most important protective factors that contributed to academic success included family support, school responsiveness, and engagement in school activities. This link between families and schools, as well as strong community support, has been shown to be one of the key components that contribute to resilience.

Families, Schools, and Communities

Researchers that have studied resilience examined the antecedents of risk and protective factors, as well as their sources, which included the individual, family, and community. During the 1980s and 1990s, some investigators began to study the environmental context of adolescents in more detail and realized that there was an interaction between three of the key social
components, namely families, schools, and communities. Bronfenbrenner’s (1986) work was considered to be the foundation for understanding the family context as it related to schools and the community. He discussed a mesosystem model, in which the family was the principal context within which events for the child took place. Bronfenbrenner argued that other settings and institutions interact and operate with the family interdependently. Barrow, Armstrong, Vargo, and Boothroyd (2007) applied this model to a case study and found that coalitions can be built between families, schools, and communities that foster positive perceptions about an adolescent’s capabilities.

Henderson and Mapp (2002) studied the school-family-community triad from the perspective of the school. Their meta-analysis synthesized 51 studies done in the past 11 years that examined school-family-community partnerships. Results of their analysis indicated that higher levels of parent and community involvement in the schools resulted in higher grades for students, better attendance, higher graduation rates, and better social skills. Bryan (2005) also examined the school-family-community partnership by focusing on how academic achievement could be positively influenced. Her research suggested that, when supportive relationships were established among key stakeholders, programs could be established that promoted academic success. So far, the discussion of research on resilience has covered antecedent conditions of both risk and protective factors of resilience, as well as the contribution of families, schools, and communities towards resilient outcomes. A way to assess resilience was clearly needed.

Assessments of Resilience

Once researchers had firmly established the advantage being resilient had for adolescents, they began to develop ways to measure it. Resilience assessment instruments included: the Hardiness Scale (Kobasa, Maddi, & Khan, 1982); the Dispositional Resilience Scale (Bartone
Ursano, Wright, & Ingraham, 1989; the Conner-Davidson Resilience Scale (Conner & Davidson, 2003); the Resiliency Scale for Adolescents (Hjemdal, Friborg, Stiles, Martinussen, & Rosenvinge, 2006), and the Resilience Scale for Children and Adults (Prince-Embury, 2008). However, these resilience assessment instruments did not attempt to measure differences in culture. As a result, Clauss-Ehlers (2008) designed the Cultural Resilience Measure (CRM) to address this shortcoming. Her findings from use of this instrument in a recent study suggested that culture and diversity can influence and promote resilience.

Similarly, Song (2003) modified Noam and Goldstein’s (1998) Resilience Inventory to capture cultural differences among respondents. Song’s inventory was designed in part to detect differences between Eastern and Western cultures. Her 44-item inventory is composed of six subscales: optimism, self-efficacy, interpersonal sensitivity, emotional control, peer relationships, and adult relationships. Research findings suggested that the subscales that tapped positiveness about self and supportive adults predicted academic resilience. The contribution of race, culture, and ethnicity to resilient outcomes has recently aroused increased interest and warrants further exploration.

Race, Culture, and Ethnicity

Tajfel (1981) defined ethnic identity as “that part of an individual’s self-concept which derives from knowledge of his (or her) membership in a social group together with the value and emotional significance attached to that membership” (p. 255). According to Phinney and Ong (2007), development of ethnic identity occurs in two components: exploration and commitment. Exploration is defined as seeking information and experiences relevant to one’s ethnicity, while commitment refers to a strong attachment to and personal investment in a group. Phinney and Ong also cited self-categorization as an important element of ethnic identity (identifying oneself...
as a member of a particular group). Additionally, ethnic behaviors have been included in many measures of ethnic identity, such as speaking the same language and eating the same food. Finally, shared values are considered to be important indicators of one’s closeness to the group (Phinney & Ong, 2007).

The terms culture and ethnicity are often used interchangeably (Betancourt & Lopez, 1993; Phinney & Devich-Navarro, 1997; Arrington & Wilson, 2000; Phinney & Ong, 2007). Rohner (1984) defined culture as a system of meaning learned and shared by an identifiable group, while Betancourt and Lopez (1993) defined ethnicity as sharing a common nationality, culture, or language. Culture can be a determinant of ethnic identity and being part of an ethnic group can also determine culture. Phinney & Ong (2007) stated that ethnic identity derives from a sense of peoplehood within a group, a culture, and a particular setting. Falicov (1995) defined culture as contexts of shared world views, meanings, and behaviors that derive from memberships in different groups.

Phinney (1996) further defined ethnic groups in the United States as people of color that are nondominant because they are non-European in origin. Phinney explained that the term ethnicity encompasses race. One of the most widely used instruments to measure ethnic identity, Phinney’s Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) used the following explanation on the instrument: “In this country, people come from many different countries and cultures, and there are many different words to describe the different backgrounds or ethnic groups that people come from” (p. 1). Phinney listed the following ethnic groups in the MEIM, which are also often categorized as cultural groups: Asian American, African American, Hispanic, Latino, White, Caucasian, European American, American Indian/Native American, and Mixed.
Among scholars and researchers, there is widespread disagreement on both the meaning and usage of the terms *race* (Wilkinson & King, 1987; Jones, 1991) and *ethnicity* (Betancourt & Lopez, 1993; Phinney & Ong, 2007). Race often is thought to be determined by visible physical characteristics, such as skin color and facial features. Some researchers stated that the term ethnicity subsumes race, since racial identity refers to a sense of collective identity based on a sense of a common heritage. Ethnicity, then, refers to the broad groupings of Americans mentioned above on the basis of both race and culture of origin. In sum, there is much overlap and shared meaning between the terms *race*, *culture*, and *ethnicity*. Therefore, the three terms will be used interchangeably and will be used to represent a sense of belonging, a shared nationality, culture, language, norms, attitudes, beliefs, or values. A closer examination of two particular ethnic groups, African Americans (Blacks) and European Americans (Whites) is covered in the next section.

**African Americans**

Considerable research has been done with regard to the relationship between racial identity and resilience of African American children and youth. Many Blacks have to overcome poverty or face systemic oppression, which can result in poor psychological outcomes (Thornton, Chatters, Taylor, & Allen, 1990). At the same time, researchers have looked at the function of racial socialization as a means of strengthening racial identity. According to Arroyo and Zigler (1995), a strong racial identity has been shown to facilitate the development of competencies among African American adolescents. A strong sense of Black identity can serve as a suit of armor to protect youth from negative environmental influences (Miller & MacIntosh, 1999).

Several studies exemplified how African American parents protected their children through the transmission of cultural values meant to strengthen their racial identity. A study by
Lamborn, Dornbusch, and Steinberg (1996) found that African American parents, who applied restrictive controls on their children while at the same time demonstrating high levels of warmth, provided a protective effect for their children. Another example of the protective effects of parenting practices can be seen in the Baldwin, Baldwin, and Cole (1990) longitudinal study of 152 minority and nonminority families with children in the 12-14-year-old range. Their findings suggested that parents from successful high-risk families were more vigilant when monitoring their children's compliance with family rules. Children whose parents applied restrictions to school-related conduct were shown to have better homework completion rates and higher grades.

Several other studies were able to demonstrate a positive correlation between a strong racial identity and academic success. McCreary, Slavin, and Berry (1996) found that a positive racial identity among Black adolescents was associated with youth successfully handling stressful situations and reducing the occurrence of disciplinary infractions. Peters and Massey (1983) studied African American families and found that parents could buffer their children from the stressors of racism and poverty through teaching them culturally-based coping mechanisms. Bowman and Howard (1985) found that parents who passed proactive messages to their children regarding how to handle racism was a significant variable associated with favorable academic outcomes.

Besides positive academic outcomes, researchers have investigated the link between a positive racial identity and psychological well-being. Sellers et al. (2006) studied 314 African American adolescents and found that their perceptions of racial discrimination were correlated with depression and stress. However, those students who scored higher on measures of racial identity were found to have lower levels of stress and depression. The researchers hypothesized this was because a strong racial identity could serve as a protective resilience factor and help
prevent the internalization of inferiority beliefs. Miller and MacIntosh (1999) examined African Americans who had received services through the juvenile court system. Their findings suggested that a positive racial identity could help protect Black teens against the discrimination and daily hassles related to racist remarks or prejudicial treatment in the school or neighborhood they typically experienced. Wong, Eccles, and Sameroff (2003) used longitudinal data to examine the influence of ethnicity on psychological outcomes as well as school achievement indicators. Findings indicated that a strong ethnic identity was positively correlated with good psychological health, as well as higher academic motivation and self-esteem. In sum, the studies cited above suggest there are significant protective effects that result from a strong racial identity. Whites also benefit from a strong racial identity, yet there are several key differences between Whites and Blacks, as described in the next section.

*European Americans*

Many researchers have pointed out that there are significant differences between Whites and members of other racial/ethnic groups in terms of how they define their own identity and its importance (White & Burke, 1987; McDermott & Samson, 2005; Diemer, 2007; Grossman & Charmaraman, 2009). According to Knowles and Peng (2005), White racial identity has been an under-investigated construct, often unseen and unacknowledged. This could be because race and ethnicity play a less salient role for White adolescents, simply because they are in the majority. Many White adolescents and young adults deny their White privilege because it can spare dominant group members the discomfort of admitting unearned advantages merely by being White (McDermott & Samson, 2005). People of color often rely on ethnic identity as a source of unity and strength in the face of prejudice and discrimination (Phinney, 1996). In contrast, many Whites do not believe they have a race at all (Jackson & Heckman, 2002). One possible reason
for this phenomenon is that Whites may feel uncomfortable with White privilege and may be reluctant to admit being White, because membership carries with it some invisible advantages.

Although Whites tend to downplay the importance of race and ethnicity when they are in the majority, some researchers have found that, when Whites are in the numerical minority, they have an increased need for group solidarity (Phinney, Cantu, & Kurtz, 1997; Grossman & Charmaraman, 2009). This phenomenon aligns with social identity theory, namely, that when people have contact with others from different ethnic groups, their need for in-group identification increases (French, Seidman, Allen, & Aber, 2000). McDermott and Samson (2005) did a survey of the literature regarding White racial and ethnic identity in the U.S. and found that there is no one size fits all among Whites. Being White is considered to be a complex identity; its meaning depends on the social context. For example, Whites living in poverty or in poor neighborhoods may have different experiences and perceptions of their identity and may not experience the same level of privileged existence that other Whites have.

Grossman and Charmaraman (2009) recently completed a study that compared racial and ethnic identity among Whites from three different high schools with varied racial composition. In one school, Whites were the clear majority (84%); in the second school, the ethnic ratio was more balanced (Whites 55%, Blacks, 23%); and in the third school, there were only 16% Whites compared to 68% Latino and 15% Black students. Grossman and Charmaraman’s findings suggested that the value of race/ethnic identity among Whites varied depending on whether they were in the numerical majority or minority. When Whites were the minority, they placed a higher value on their ethnicity; when they were the majority, however, they downplayed the importance of their race or ethnicity. This finding is consistent with previous research by Helms and Carter (1990), in which Whites denied the meaningfulness of race for their personal identity,
based on being members of the majority culture. Researchers have also learned that many people in our country do not just have one cultural identity; rather, they are considered bicultural and identify with two different cultures at the same time.

**Bicultural Competence**

In the United States, minorities are rarely operating with one cultural or ethnic paradigm. Rather, they often live in two worlds: the culture of their origin and the mainstream, dominant culture. This phenomenon is sometimes referred to as being bicultural. Bicultural competence is defined as having the ability to function effectively in both cultures simultaneously (Phinney & Devich-Navarro, 1997). Some researchers describe bicultural competence as a process of acculturation (Berry, 1980), while others suggest that individuals alternate between living and acting in their original culture and their host culture (Lafromboise, Coleman, & Gerton, 1993). Chestang (1972) applied the model of bicultural identity or competence to African Americans and found that Blacks develop behaviors that help them adapt and navigate through a hostile environment. Miller and MacIntosh (1999) reported that successful Black adolescents developed the ability to live a dual existence in the school setting by adhering to mainstream American values while maintaining a sense of connection within the Black social structure.

Diemer (2007) studied the Black-White, two-world phenomenon using a qualitative format and interviewed seven African American male college students in a school that was 87% White. Results of the study indicated Blacks felt most successful when they were able to maintain positive attitudes towards both cultures. Another finding was that Blacks reported they were “code switching” (Diemer, 2007, p. 3), or changing words or dialects when switching between the White mainstream culture to a predominantly Black setting. Phinney and Devich-Navarro’s (1997) study examined differences between African American and Mexican American
high school students using a qualitative interview format. Findings suggested that participants identified with their original culture to varying degrees. Some students identified strongly with their culture of origin, while others felt more of a balance between mainstream American culture and their original culture. A third group of students felt separated from their American identity and identified solely with being Black or Mexican. In sum, it seems that many adolescents in the United States maintain a dual identity: their culture of origin and the mainstream American culture. Adolescents identify with these cultures and form ethnic identities, which then affects their outlook and decisions they make regarding how to adapt and fit in with the two cultures. Once the value of culture and ethnic identity was established, a need to measure it became necessary.

Measuring Ethnic Identity

The development of ethnic identity models began with Erikson’s (1968) model of ego identity. Erikson hypothesized that people developed an identity over time that consisted of childhood identifications, interests, and talents. Tajfel (1981) theorized that ethnic identity is an aspect of social identity that includes membership in a social group. Phinney’s research on ethnic identity evolved from Erikson’s identity model and included a shared sense of identity with others of the same ethnic group. Phinney (1992) developed a measure of ethnic identity called the Multi-Group Ethnic Identity Measure (MEIM). Originally, the measure consisted of 14 items that assessed three core components of ethnic identity assumed to be common across all ethnic groups: a sense of attachment or belonging, development of an achieved identity, and involvement in ethnic practices (Phinney & Ong, 2007). However, the number of items was reduced from 14 to 6 to simplify the instrument and improve validity and reliability. Two pilot studies with the new design yielded good internal consistency (reliability) scores. As described
above, instruments that measure both resilience and ethnic identity have been developed. Additionally, in order to complete our understanding of all the processes under consideration, a way to assess adversity was needed, since the definition of resilience includes the ability to overcome difficult circumstances. The next section briefly describes several ways to measure negative life events.

Negative Life Events and Resilience

As noted previously, resilience has been defined as "successful adaptation despite adversity" (Luthar, Cicchetti, & Becker, 2003, p. 543). Therefore, in order for adolescents to be defined as resilient, an instrument that measures adversity must be administered. Holmes and Rahe (1967) were among the first to measure stressful life events when they developed a rank-ordered scale of 43 life events and assigned a relative weight to each, depending on frequency of occurrence. Later researchers, including Sarason, Johnson, and Siegel (1978), developed measures of stressful life events that enabled participants to not only indicate which events happened to them, but also rate the impact these events had on their lives. Others, such as Brady (2007), developed stress inventories that measured both risk and resilient factors. Peterson et al. (2009) modified Holmes and Rahe’s rating scale so that it was appropriate for children and adolescents. Once resilience, ethnic identity, and negative life events were understood and ways to measure them created, a need existed to link these three elements together to determine their relationship to each other.

Implications for Research

Because we do not fully understand how cultural/ethnic identity and individual protective factors of academic resilience may influence academic success, researchers have not explored all possible avenues for analyzing and improving outcomes for the majority of students (Yasui &
Dishion, 2007). Winfield (1995) also noted that there are few studies that examined the concept of resilience in relation to the experience of minority cultures. Super and Harkness (1986) commented that future research on risk and resilience needs to look more carefully at other developmental niches that characterize the interface of child and culture. According to Galambos and Leadbeater (2000), we need “a more in-depth picture of the diversity of adolescent experiences both within and across different cultures and ethnic or racial groups” (p. 289).

These researchers, along with many educators, are interested in discovering ways to help more students succeed in school. There appears to be a need for a study that examines the relationship between cultural/ethnic identity and the protective factors of resilience. Another area worthy of consideration is to investigate whether ethnic identity and resilience are positively correlated with or predict academic success (as measured by grade point average). These findings could better inform policies, help create more targeted prevention/intervention approaches, and enable more students to succeed at school. Further, they could be used to highlight to educators the value of strengthening students’ ethnic identity or individual protective factors of resilience as a means of increasing students’ academic success.

Purpose of the Study

Although much research has been done in the past that looked at risk and protective factors of resilience (Garmezy, Masten, & Tellegen, 1984; Masten & Coatsworth, 1998), few studies have examined the relationship between cultural/ethnic identity and resilience. Several investigators have noted this gap in the research and recommended that more studies explore the influence culture may have on resilient outcomes (Winfield, 1995; Arrington & Wilson, 2000; Garcia Coll & Magnuson, 2000). Many studies done on culture and ethnic identity during the past 20 years have only included African Americans. In these studies, stronger ethnic identity
was thought to buffer minorities against the negative effects of discrimination and prejudice (Baldwin et al., 1990; Gutman et al., 2002). Additionally, little research has examined Whites and their cultural or ethnic identity, since they are the default racial group and are often ignored (McDermott & Samson, 2005). Moreover, few studies have examined the positive effects of culture and ethnic identity on both resilience and academic outcomes in the school setting. Therefore, there appeared to be a need for research that looked at the relationship between ethnic identity and resilience among both Blacks and Whites. Additionally, research was needed that examined the relationship between ethnic identity, resilience, and academic success.

Researchers have determined that adolescents develop individual protective factors that can help buffer them against the negative effects of risk factors that occur in their environment. These risks can occur within the family at home, the school setting, or the community at large. However, when working with adolescents, the best way counselors and educators can impact students' outcomes is by strengthening their individual protective factors. Therefore, the current study focused primarily on the relationship between adolescents' cultural/ethnic identity and their individual resilience protective factors. Results indicated that students' cultural/ethnic identity was significantly correlated with resilience. Additionally, ethnic identity was significantly correlated with each of the four individual resilience protective factors: optimism, self-efficacy, interpersonal sensitivity, and emotional control. Another key finding was that resilience predicted GPA. In other words, students with higher mean scores of resilience also had higher grade point averages. This knowledge could offer an additional prevention strategy for educators to help more students succeed at school—through strengthening students' individual resilience protective factors, educators could help improve students' grades. The research questions and procedure are described below.
Research Questions

This study examined the following questions:

1) Are ethnic identity and resilience positively correlated?

2) Is there a positive relationship between cultural/ethnic identity and the individual protective factors of academic resilience (optimism, self-efficacy, interpersonal sensitivity, and emotional control?)

3) Do resilience, cultural/ethnic identity, negative life events, and the interaction of resilience and negative life events predict academic success?

4) Are there significant differences between Blacks and Whites regarding their cultural/ethnic identity, resilience, or negative life events?

Procedure

Data was collected for the study in each of ten health classes in one high school in Virginia. The researcher had students complete surveys during one class period lasting one and a half hours. Four different instruments were used. First, a demographic questionnaire was used to determine the students' age, grade, who the student lived with, and his/her parents' educational level. Second, students completed a self-rated Multigroup Ethnic Identity Measure – Revised (MEIM-R; Phinney & Ong, 2007), which utilized a five-point Likert scale (from strongly agree to strongly disagree). Third, a 44-item Resilience Inventory (RI) was administered, which asked students to answer questions regarding four individual protective factors of resilience: optimism, self-efficacy, interpersonal sensitivity, and emotional control (Song, 2003). The RI also utilized a Likert scale, ranging in values from one (always false) to five (always true.) The subscale scores on each of these individual protective factors of academic resilience were compared to ethnic identity scores to determine if relationships exist. Fourth, a negative life events inventory (NLEI)
was administered to determine the extent to which students had experienced adversity in their lives during the past year (Peterson et al., 2009).

Once the self-report surveys were completed, the researcher calculated the means for the MEIM-R, the RI, the RI subscales, and the NLEI, and then entered the data into the Statistical Package for the Social Sciences (SPSS). The analysis was completed, comparing ethnic identity levels among Blacks and Whites with the composite resilience score as well as the individual subscale scores for optimism, self-efficacy, interpersonal sensitivity, and emotional control.

Group mean scores for Blacks and Whites on each of the three measures: the MEIM-R, the RI, and the NLEI, were compared to each other using independent groups t-tests. Multiple regression was then utilized to determine whether or not ethnic identity and resilience predicted GPA. A multiple regression analysis was also used to determine if GPA could be predicted by ethnic identity, resilience, negative life events, and the interaction of resilience and negative life events. An additional variable that was considered included whether parents’ educational level was significantly correlated with their child’s GPA. Several key terms are used throughout the paper and are defined below.

Definition of Terms

*Culture*: a distinct system of meaning that is learned, shared, and transmitted by a group of people from one generation to the next (Betancourt & Lopez, 1993).

*Ethnic identity*: that part of an individual’s self-concept which derives from knowledge of his or her membership in a social group together with the value and emotional significance attached to that membership (Tajfel, 1981).
**Ethnicity:** broad groupings of Americans on the basis of race and culture of origin; normally thought to consist of cultural characteristics, such as norms, values, attitudes, behaviors, and a sense of belonging (Phinney, 1996).

**Race:** any of the traditional divisions of humankind, the most common being the Caucasian, Mongoloid, and Negro, characterized by supposedly distinctive and universal physical characteristics (Dictionary.com, 2008).

**Resilience:** the manifestation of positive adaptation despite significant life adversity (Luthar, 2003).

**Educational resilience:** the heightened likelihood of educational success despite personal adversities brought about by environmental conditions and experiences (Wang et al., 1997).

**Limitations of the Study**

There were several limitations to the current study. One of the cautions regarding research utilizing a correlational design is to be careful when making assumptions about causation when differences between groups occur. According to Betancourt and Lopez (1993), it is sometimes assumed that because two groups are from two distinct cultural or ethnic groups, they differ from one another on key cultural dimensions, which may or may not be true. Differences in exposure to risk, scores of resilience, and success at school (as measured by GPA) may be the result of other unmeasured variables. Other studies have examined GPA in depth to determine what the key factors are that contribute to students earning high grades. For example, in a study by Newman, Myers, Newman, Lohman, and Smith (2000), students reported that the most important factors that contributed to their academic success included: cognitive ability, reading skill, working hard, good study habits, paying attention, taking good notes, focus, and...
determination. These factors were not examined in this study, because the current study focused specifically on the contribution of ethnic identity and resilience to academic success.

Another limitation of the study was the small sample size ($N = 122$) and the lack of representative cultural/ethnic groups. Because there were only enough participants in the school to effectively study Blacks and Whites, the potential similarities and differences between other groups, such as Asian Americans, Latino Americans, and Native Americans, were not explored. Future studies should include larger numbers of participants, be randomly selected, and be representative of all major racial/cultural/ethnic groups in the United States.

Caution must be exercised when drawing causal conclusions about the relationships between variables. For example, if students with high ethnic identity scores have higher resilience scores, one cannot conclude that having a strong ethnic identity leads to greater resiliency. Likewise, if higher scores of resilience are positively correlated with higher grades, it cannot be concluded that one variable *causes* the other.

Summary

This chapter provided a description of the current problem, offered justification for the current study, explained the theoretical rationale, listed research questions, described the procedure for data collection, defined relevant terms, and discussed possible limitations. The next chapter will review relevant literature regarding the antecedents of risk and resilience, the influence of schools, families, and communities on resilient outcomes, and measuring resilience. The researcher will then critically review literature on culture and meaning making, especially as it relates to African Americans and European Americans. Subsequent sections will be devoted to race, culture, and ethnicity, bicultural competence, racial and ethnic identity, measuring ethnic
identity, and the influence of negative life events on resilience. Finally, the theoretical rationale for resilience and multiculturalism will be discussed.
CHAPTER TWO: LITERATURE REVIEW

Introduction

This chapter includes a summary of key research on resilience as well as on culture, meaning making, and ethnic identity. Particular attention is paid to African American and European American ethnic groups, since these two groups are the largest in population at the school where the research was conducted and were the focus of this study. The antecedents of both risk and resilience for the individual are discussed, followed by a review of research on the influence of families, schools, and communities on resilient outcomes. Next, the manner in which researchers have attempted to measure resilience is examined, followed by an examination of research on culture and meaning making, bicultural competence, race, and ethnicity. The literature review then covers how ethnic identity and negative life events have been measured. Finally, the theoretical rationale for both resilience and multicultural theory is discussed.

Research on Resilience

The early research on the construct of resilience began in the 1970s when Garmezy, Masten, & Tellegen (1984) studied children of schizophrenic mothers. These researchers were interested in identifying the precursors to later psychopathology and found that some of the children had an attentional dysfunction and were also deficient in social competence. Both of these factors were thought to be suggestive of a potential risk for maladaptive behaviors later in life. What surprised Garmezy et al. (1984) was the majority of children considered vulnerable who revealed adaptive patterns of social behavior and functioning. Garmezy et al. labeled this construct as stress resistance, defined as manifestations of competence despite exposure to stressful events.
For his initial study, Garmezy et al. (1984) identified three community-based cohorts. The first consisted of 200 elementary school children who had been exposed to a heterogeneous sampling of stress life events. The second cohort was comprised of 32 children who had experienced a profound congenital heart defect during childhood. The third cohort was a group of 29 severely handicapped children who were leaving a special school to be mainstreamed into a regular public high school. There were a total of 200 children and their families that completed all phases of Garmezy's project and participated in six hours of parent interviews and two hours of child interviews. After parents completed Life Events Questionnaires (Coddington, 1984), researchers conducted parent interviews that involved detailed probing of the context of all negative and ambiguous life events that occurred within the family during a two-year period. Researchers also obtained a global child competence rating, which included measures of academic achievement, general intellectual ability, classroom behavioral competence, and interpersonal competence. Children also participated in laboratory studies that involved observations of their personal attributes, and completed several stress and competence indicators.

The parent and child interviews generated comprehensive information about the child's reported stressors, including significant life events that had occurred the previous two years. The laboratory observations generated information about three topics: the role of social cognition, reflectivity-impulsivity and delay of gratification, and divergent thinking and humor. Measures of school-based competence gathered data on the following: academic achievement, including both grades and scores on standardized achievement tests; classroom behavior competence, as measured by teacher ratings; interpersonal competence; and general intellectual ability, as measured by the Wechsler Intelligence Scale for Children (Silverstein, 1975). Using factor analysis and multiple regression/correlation, three models emerged as a result of Garmezy's
study. Although students' behavior fell across a spectrum, the researcher was able to identify three broad patterns (or factors) within which nearly all participants fell. The first model Garmezy entitled *compensatory* and involved children whose stress factors and personal attributes (protective factors) were seen as combining additively. In other words, the impact of severe stress in these children appeared to have been counteracted or compensated for by personal qualities of strength. The second factor the data revealed was called the *challenge* model. Provided the degree of stress was not excessive, it served as an enhancer of competence for students whose measurements of competence and stress fit this category. Garmezy entitled the third model *immunity versus vulnerability*, because there appeared to be a conditional relationship between stress and personal attributes with respect to adaptation. Garmezy found that when certain protective factors were present, they imparted a kind of immunity against stress for children whose qualities fit with this factor. Furthermore, when children demonstrated attributes of personal vulnerability, they appeared to be more impacted by stressors in their lives.

Garmezy et al. (1984) pointed out that these three broad categories (compensatory, challenge, and immunity vs. vulnerability) should not be considered mutually exclusive—two categories could be combined, in some instances. The researchers noted that these three broad areas simply guided analyses of relations between the major situational and personal variables. For example, the challenge and immunity models represented two different types of *coping*, as researchers attempted to describe the relationships between personal attributes and stressful circumstances.

The research by Garmezy et al. (1984) in the field of resilience was groundbreaking, because it established the foundation for many studies to come that would focus on risk and protective factors first delineated by Garmezy et al. In fact, Garmezy is considered by many to be
the Johnny Appleseed of American psychology, "planting ideas around the world concerning risk, competence, and protective factors" (Rolf, Masten, Cicchetti, Neuchterlein, & Weintraub, 1990, p. xiii). Garmezy's study had many strong features, including utilization of in-depth interviews with parents and children, use of three different sample groups, laboratory observations, measures of school-based competence, detailed factor analysis, and use of multiple regression. One limitation to the study was the restricted age range for participating children (grades 3-6 only), in that the development of competence can best be understood over a longer period of time. Another shortcoming was the fact that the sample chosen from cohort one was not purposeful; that is, it did not represent particular students at risk for developing psychopathology, as in earlier studies. Third, the information was gathered at one moment in time, which did not address the developmental nature of resilience. According to Werner (2000), resilience is best understood by conducting longitudinal studies that last over a period of years, since protective factor clusters continue to emerge over a person's lifetime. Despite these limitations, Garmezy's study set the stage for further studies of competence, a term which later came to be known as resilience. Garmezy et al. suggested a course for future research: "By identifying major parameters of stress, coping, and competence and examining these over time, it may be possible to speculate in a heuristic fashion on the developmental processes implicated in competent functioning and resilience" (Garmezy, Masten, & Tellegen, 1984, p. 108).

The studies of schizophrenia conducted by Garmezy et al. (1984) can be viewed as forming the foundation for later studies on resilience. Prior to Garmezy's work, researchers only studied deviant or pathological behavior. Following his work, a paradigm shift in research began to occur, as researchers realized that knowledge of normal development was thought to be necessary to understand deviations from normality (Thompson, 2006). Resilient functioning was
seen as one end of the spectrum of behavior, with maladaptive responses at the other end of the spectrum. Garmezy's research then became a springboard for hundreds of studies on competent functioning or resilience.

According to Masten and Coatsworth (1998), children and youth are judged to be competent based on meeting certain milestones in their lives, as defined by culturally transmitted expectations that are deemed important by parents, teachers, and significant others. These behavioral markers have come to be known as developmental tasks (Havighurst, 1972). For example, an attachment to a primary caregiver, self-control, and compliance are considered important tasks for pre-schoolers. During middle childhood, school adjustment, academic achievement, getting along with peers, and following rules are considered developmental milestones for competence. During adolescence, successful transition to high school, academic achievement, self-identity, forming close friendships, and involvement in extracurricular activities are all considered important developmental milestones in the achievement of resilience.

In the context of relationships with others, Masten and Coatsworth (1998) also found that the ability to self-regulate emotions was an important skill set that led to successful outcomes for youth (1998). These researchers surveyed numerous studies and found that children's ability to direct their attention was linked to prosocial behavior and peer popularity (Eisenberg, Fabes, Shepard, Murphy, Guthrie, Jones, et al., 1997). Self-control was also seen as a required skill that contributed to students' ability to be compliant within the school setting and to exhibit prosocial behavior. This skill set has been found to be helpful in the family setting, where children are expected to become compliant with parent requests and to internalize the family standards for behavior (Schaffer, 1996).
Other researchers have developed their own lists of risk and protective factors relating to individual abilities and characteristics. Werner (1993) identified individual protective factors that included cognitive ability, humor, self-control, social skills, empathy, an internal locus of control, self-efficacy, self-esteem, problem-solving skills, family harmony and cohesion, and the presence of a supportive adult role model. Findings from this study revealed that resilient children who exhibit these protective traits and abilities have an increased capacity to overcome traumatic life events and still do well in both school and life.

Werner (1993) evaluated data from a comprehensive longitudinal study of all 698 people born on the island of Kaua'i, Hawaii in 1955. Roughly one third of the original cohort formed the group that was at high risk for poor developmental outcomes, since they had been exposed to multiple risk factors during infancy and childhood. Werner compiled a list of risk factors that occurred throughout individuals’ lifetimes, from infancy to adulthood, that were replicated in two other longitudinal studies of at-risk children. The seven key risks she identified included poverty, child abuse/neglect, parental mental illness, parental substance abuse, divorce, and teenage motherhood.

A longitudinal study of this magnitude presented several challenges. The first challenge encountered by the researchers in the Kaua’i study was how to identify children that would be considered at-risk. They decided to include those children who had complications at birth and whose parents who had experienced some kind of psychopathology, family instability, and/or chronic poverty. A second challenge encountered by researchers when analyzing data from this study was deciding on and standardizing instruments that measured resilience over time. They decided to obtain data through multiple sources, which included the following: individuals’ own accounts of success and satisfaction with work, self-reports of family and social life, self-
reported states of psychological well-being, relationships with others, and public records, such as those from the court (i.e., criminal history, spouse or child abuse, substance abuse, or history of mental health disorders). A third challenge researchers faced was how to determine who was in fact resilient. This required a value judgment on the part of the researchers. Conclusions were reached after interviewing both the subjects in the study and significant others close to them, such as friends and relatives. According to Werner (1993), one key limitation noted in the study was a lack of a low-risk control group to compare to the high-risk group. Using the low-risk group as a control group would have been helpful, especially when addressing the question of whether resilient children differ from children who are doing equally well but do not have the same high-risk profiles. Despite the three challenges and one key limitation listed above, Werner’s analysis of the Kaua’i longitudinal study had great value, in that it added to the body of literature on factors that protected individuals from risks they encountered over their lifetime.

Beside longitudinal studies that examined the influence of risk and protective factors on outcomes over a lifetime, Werner (2000) noted three other key types of studies on resilience that have been conducted in the past several decades. First, there have been studies of children and youth from high-risk backgrounds who have overcome great odds. The second type of research examined sustained competence under conditions of ongoing stress, such as divorce. These studies were primarily longitudinal in nature, since they looked at the effects of stress over time (Emery & Forehand, 1994). The third type of study Werner reviewed were investigations of individuals who successfully recovered from serious childhood traumas (Burnette, 1996). Under each of the three types of studies described above, researchers focused on how protective factors and mechanisms buffered children’s reactions to adversity so that their adaptation was more successful (Masten & Coatsworth, 1998).
More recently, Masten (2001) analyzed the literature regarding resilience and noted there have been two major approaches that have characterized the designs of resilience studies. The first type of study, variable-focused, “tested for linkages among measures of the degree of risk or adversity, outcome, and potential qualities of the individual or environment that may function to compensate for or protect the individual from the negative consequences of risk or adversity” (Masten, 2001, p. 229). The second type of study, person-focused, compared people who have different profiles across time on sets of criteria to ascertain what differentiates resilient children from other groups. Regardless of the design approach utilized, current research into risk and protective factors of resilience has as its ultimate goal the promotion of competence, the enhancement of individual and community protective assets, facilitation of protective processes, and reduction of risks or stressors (Masten, 2001).

Other researchers have looked specifically at resilience research in the field of education. For example, Wang et al. (1997) surveyed the research on resilience, reviewing 91 meta-analyses, 179 authoritative review articles, and a survey of 61 educational researchers. They determined that there were five types of resilience studies found in the literature: synthesis studies of the knowledge base on resilience; comparative field-based studies of low- and high-achieving inner-city schools; correlational studies linking characteristics of resilient students to attributes of their families, schools, and communities; survey studies that identify effective practices and policies to promote student learning and other educational outcomes; and intervention studies that demonstrate the impact of resilience-promoting strategies on students’ learning, affect, and behaviors.

Through their meta-analysis, Wang et al. (1997) found five broad contexts within the school setting that served as protective mechanisms that supported both healthy development and
educational success. These included strong classroom practices, close ties between home and community, excellent curriculum design and delivery, positive school wide practices and policies, and supportive state and district policies. According to their analysis, factors that protected against adversity included a positive parent-child relationship, family cohesion, warmth, required responsibility within the family, high expectations, and an absence of discord.

Wang et al. (1997) also found that active engagement of family members was associated with several positive outcomes, including improved student achievement, increased student attendance and decreased student dropouts, decreased delinquency, and reduced teen-age pregnancy rates. Within the school, a teacher’s concern, high expectations, and role modeling were shown to serve as key protective factors for students against the likelihood of academic failure. In summary, among all the studies on resilience completed to date, the majority have examined risk factors, resilience factors, and the interaction between the individual and his or her environment. Researchers have searched for ways to minimize adolescents’ exposure to risk and to enhance individual protective factors. Accordingly, the next two sections discuss the antecedents of risk and resilience.

Antecedents of Risk

Risk is characterized as events, characteristics, or conditions that make a negative outcome more likely (Carbonell et al., 1998). The presence of risk does not automatically predetermine negative outcomes; it merely elevates the probability of an undesirable outcome (Masten, 1994). Resnick and Burt suggest that risk is best conceptualized from an ecological perspective (1996). Children and youth should be considered as living systems, embedded in their surrounding contexts (Bronfenbrenner, 1986). Risk normally involves the presence of risk antecedent conditions creating vulnerabilities in the individual’s environment that are likely to
lead to problem behaviors with serious negative health outcomes (Arrington & Wilson, 2000).

When an adolescent is exposed to high risk antecedent conditions in his or her environment, this exposure can increase the likelihood of a poor developmental outcome (Bronfenbrenner, 1986).

Risk factors can originate from the individual, the family, or from the individual's community or social context (Lerner & Galambos, 1998; Werner, 2000; Duncan & Brooks-Gunn, 2000; Schoon & Parsons, 2002). Risks that can occur within individuals include lack of skill in three areas: social, cognitive, or emotional (Thompson, 2006). Adolescents that lack the following social skills face an increased risk for poor outcomes: assertiveness, decision-making ability, empathy, impulse control, anger management, and inability to make meaningful contacts (Stellas, 1992). Cognitive skill deficits that can occur and negatively impact outcomes include an external locus of control, a lack of abstract reasoning, a lack of awareness/sensitivity to others' feelings, and a lack of problem-solving ability (Ross & Ross, 1989). Emotional skill deficits include an inability to handle emotions, an inability to settle disagreements, an inability to care about others, and an inability to handle stress (Goleman, 1994).

In contrast to studying risk and resilience factors that are considered to be static and unchanging, other researchers have examined the developmental pathways of risk. Doll and Lyon (1998) found extensive research that examined risks children and youth face and the impact of youth being reared in adverse circumstances. The first iteration of studies demonstrated that negative life experiences were associated with the development of mental health problems. Bowlby's (1951) initial work provided strong evidence that family experiences can have a measurable impact on children's psychological development. Later studies began to develop detailed conceptualizations of how certain risks related to various outcomes, thereby establishing different types of developmental pathways (Rutter, 1971). Two types of studies
emerged during this period: individual case studies and epidemiological studies. Case studies documented how individuals responded to adversity, tracing the pathways of risk from childhood to adulthood. In contrast, epidemiological studies identified static risk factors that were thought to predispose certain populations to negative outcomes. Both types of studies warranted consideration for use, as they each added to the understanding of the construct of resilience.

Doll and Lyon (1998) summarized their findings by stating that most risks can be conceptualized as “constellations of interrelated social hazards” (p. 8); that is, they are chronic life conditions and are interconnected. The key risk factors found included poverty, low parent education, marital discord, family dysfunction, ineffective parenting, child maltreatment, poor physical health of child or parent, and parent mental illness or incapacity.

Most researchers in the field of resilience now acknowledge that many of the risks that adolescents face emanate from the environment. The three environmental risk antecedents that have consistently been correlated with poor educational outcomes are socioeconomic status (SES), single-parent status, and minority status (Schoon & Parsons, 2002; Vincent, 2007). Describing how these environmental conditions affect adolescents’ developmental outcomes can deepen our understanding of how these risks increase the likelihood of educational failure.

The first key environmental risk factor is SES. Low SES often includes indicators such as inadequate financial resources, an overcrowded home, family disorganization, or other adverse living conditions (Rutter, 1987). Researchers have determined that low SES experienced in childhood is a consistent predictor of unfavorable outcomes in adulthood (Doll & Lyon, 1998). Additionally, low SES is considered a major risk factor for academic problems leading to educational failure. Duncan and Brooks-Gunn (2000) reviewed the research on the effects of poverty and found several pathways through which income affects students. Families with little
money and resources often experience poor nutrition, overcrowding, and unsanitary living conditions. Lack of financial resources may also limit students' ability to experience enrichment activities (museums, concerts, camps, specialized programs) and can also negatively impact their academics. In fact, Duncan and Brooks-Gunn (2000) determined that children living in poverty were twice as likely to repeat a grade and drop out of high school. Caution must be maintained when interpreting these results, as the body of literature on the effects of poverty on children has major shortcomings. First, family income and child outcomes may not be accurately measured because data was taken from outdated sources or studies that were narrowly focused on local communities. Second, and perhaps most important, “family income is not reported in many national data sources that contain crucial information about child outcomes” (Duncan & Brooks-Gunn, 2000, p. 188-189). In the absence of accurate information about family income, researchers have used other variables such as parent educational level, occupation, and single-parent status, to infer family income levels. However, income level and social class are not always synonymous. According to Duncan and Brooks-Gunn, there are only modest correlations between the typical measures of SES mentioned above and economic deprivation. Thus, caution must be exercised when inferring a family's level of income and associated living conditions.

One example of an in-depth longitudinal study done with children who experienced serious socioeconomic disadvantage can be found in Schoon and Parsons' (2002) research. They analyzed data collected from the National Child Development Study (NCDS) and the British Cohort Study (BCS70) over a 30-year period. The sample included all people born in Great Britain between March 3 and 9, 1958. From this overall pool of participants, subsamples were selected who had experienced poverty during childhood. Follow-up data collection occurred six
times from childhood to adulthood (ages 7, 11, 16, 23, 33, and 42) and included information on subjects’ physical, psychosocial, and educational development.

The researchers created two indexes: one for socioeconomic resources and one for competence. The purpose of the social index was to bring together in a single scale items that were hypothesized to be indicators of a common underlying dimension: the socioeconomic resources available to the household. Socioeconomic indicators measured included parent’s social class, education, prestige, and lifestyle. These indicators were defined and measured using an instrument created in Great Britain called the Registrar General’s measure of social class (Schoon & Parsons, 2002). Also included in the social index was a second measure of socioeconomic resources referred to as material conditions, and included three conditions: household overcrowding, household amenities, and housing tenure (rent or own). The second index created, known as the competence index, measured academic attainment and behavior adjustment. Academic attainment was derived at ages five and seven by using the Human Figure Drawing Test (Harris, 1963), the Copy-A-Design Test (Osborn, Butler, & Morris, 1984), the Southgate Reading Test (Southgate, 1962), and the Problem Arithmetic Test (Pringle, Butler, & Davie, 1966). Behavioral adjustment was measured by the Rutter A scale (Rutter, Tizard, & Whitmore, 1970), which was completed by the parent during a home interview.

Schoon and Parsons’ (2002) approach was to conceptualize the connection between conditions of social risk and manifest competence. Therefore, they created the social and competence indexes to enable them to categorize participants as either in the top or bottom quartile, socially and academically. People rated in the lower quartile according to the socioeconomic index were defined as socially disadvantaged; those rated in the lower quartile on academic attainment tests and the behavioral assessment were deemed to be less competent.
Longitudinal data on these two subgroups of subjects were then analyzed and compared to those people who scored in the upper quartile. Additionally, Schoon and Parsons compared the children who had experienced serious socioeconomic disadvantage with a control group of children who had not experienced any socioeconomic adversity at the same age.

A logistic regression analysis was then conducted utilizing participants’ protective and vulnerability factors. These included indicators of family characteristics, supportive family environment, family stability, and outcomes in adulthood. Results of the analysis indicated that factors offering the highest protection from risk and poor developmental outcomes included being born to a mother whose education extended beyond high school, having a mother who was at least 26 years old, having a father who assisted with domestic tasks, and having parents who were involved in the child’s education. Resilient children (those who had higher than average academic and behavior competence scores) were found to be more likely to graduate from school qualified to enter the job market with vocational or technical skills and more likely to be employed by age 26. Further, children deemed vulnerable (meaning they were in the high-risk group based on being in the lower quartile of the social and competence indices) were more likely to begin a family before age 26, while socially advantaged individuals were more likely to delay family formation.

Several key findings emerged from Schoon and Parson’s (2002) analysis of the NCDS and BCS70 longitudinal studies. First, parental involvement in children’s education benefitted both the socially disadvantaged as well as the socially advantaged. Second, teen-age motherhood appeared to increase the likelihood of educational and behavior problems. Third, a large family size had a detrimental effect for children living in poverty. Fourth, placing children and youth in juvenile detention appeared to have a “devastating influence on the formation of individual
competencies” (Schoon & Parsons, 2002, p. 270). Fifth, when comparing resilient, at-risk children to the control group of children from more privileged backgrounds who did not experience as much risk, the researchers found that the resilient children did not succeed to the same level as their more privileged peers. Schoon and Parsons had two major conclusions: the family context plays an important role in enabling young children to fully develop their competences and the experience of early social disadvantage has life-long consequences. A key limitation to this study was that the protective factors defined were not specifically associated with ameliorating specific risks in specific contexts. Future studies should address this shortcoming by attempting to determine exactly which factors provide protection from which risks (Schoon & Parsons, 2002). Nonetheless, the findings of this comprehensive longitudinal study were valuable, in that they suggested that resilient children can improve their odds of success if they can rely on a strong family. However, they may not be able to completely overcome the negative effects of growing up in poverty so that they achieve the same level of success as their more privileged peers.

Besides socioeconomic disadvantage, another environmental risk factor that is correlated with a greater likelihood of teen-agers’ academic difficulties is living in single-parent families. According to Astone and McLanahan (1991), children of single-parent families are more likely to have lower test scores, lower grades, and drop out of school at higher rates compared to students from intact, two-parent families. One of the reasons for this trend is that single-parent families, on average, are poor. Data from the U.S. Census (2008) indicated that nearly half of single-parent families with only the mother present have a very low income, while only nine percent of two-parent families live at the poverty level. Fifty-nine percent of America’s single mothers had incomes that were less than half of the average family’s national income (Duncan &
Brooks-Gunn, 2000). According to research by Amato and Maynard (2007), in 2003, the child poverty rate was more than four times higher in single-parent households than in married-couple households. Growing up in poverty, often associated with living with only one parent, has been shown to greatly increase the odds of school failure (Duncan & Brooks-Gunn, 2000).

A third key factor associated with poor developmental outcomes for at-risk adolescents is being a minority. Research that has examined minority status and its correlation with various life trajectories has consistently found that racial or ethnic minority youth have an increased risk for negative developmental outcomes (Sellers et al., 2006). Arrington and Wilson (2000) noted that, compared to European Americans, African, Asian, Latino, and Native American youth all share a normative stressor: prejudice, racism, and discrimination. When adolescents have to constantly deal with these types of stressful events in their daily lives, it threatens the development of mentally and behaviorally healthy outcomes.

One study in particular examined the effects of multiple risk and protective factors on three achievement-related measures—GPA, absences, and math achievement test scores. Gutman et al. (2002) found that Black adolescents were particularly vulnerable to the risk of increased academic problems, including such long-term outcomes as school failure and dropping out of school. For example, a study by Gutman et al. revealed that African American teen-agers living in poverty experienced a decline in GPA between fifth and sixth grade. A similar study by French, Seidman, Allen, and Aber (2000) determined that not only GPA, but self-esteem and class preparation, declined between middle school and high school. Rutter (1979) researched risk factors and found that adolescents with multiple risks had an increased likelihood of developing psychiatric disorders. The term multiple risks refers to a combination of risk factors one person may face simultaneously. In Gutman’s (2002) research, several risk factors were cited that have
been linked to poor developmental outcomes: maternal depression, low SES, children who grow up in single-parent homes, a larger family size or greater number of children living in the home, family life stresses, and growing up in poorer neighborhoods. Gutman et al. found several risk factors that weighed heavily on the positive development of African American youth, including maternal depression, maternal education, maternal income, maternal occupational status, living in a single parent home, having a larger family with a greater number of children in the home, increased family life stresses, and neighborhood characteristics.

During the Gutman et al. (2002) research, participants were assessed in seventh grade as part of the Maryland Adolescent Development in Context (Cook, 1998). There were 897 African American families (61%) and 460 European American families (31%), while 124 families (8%) reported a mixed racial-ethnic background. These figures matched the racial distribution of the county at large. A multiple risk/promotive score for each child was calculated, with risk and promotive factors each being determined as either present or absent. Risk factors included maternal education, maternal depression, marital status, number of children in household, family stressful events, family income, highest occupation in household, and degree of neighborhood poverty. The promotive factors included consistent discipline, democratic decision-making, parental school involvement, teacher support, and peer support. Grade point averages, absences, and standardized test scores were also collected and correlated with the risk and promotive factors.

There were five key findings in the Gutman et al. (2002) study. First, correlation and hierarchical regression analyses indicated that adolescents had lower GPAs, more absences, and lower math achievement test scores as their exposure to risk factors increased. A second finding was that the most consistent predictor of an adolescent’s GPA was parents’ consistent discipline.
and school involvement. A third finding was that children living in dangerous environments appeared to benefit from high levels of parent control, as evidenced by higher grades in school. The fourth result was that peer support was associated with higher math achievement scores. The fifth finding was that “African American adolescents exposed to multiple risks who perceive that they can depend on their peers for help with their personal and school difficulties may be more likely to experience higher academic outcomes” (Gutman et al., 2002, p. 394).

Several limitations to the Gutman et al. (2002) study were evident. First, the research was largely correlational, which made it difficult to determine causality between key variables, such as the relationship between parental discipline at home and students’ GPAs. Another example was the positive correlation found between supportive friends and academic success. It could be argued that academically successful students seek more supportive friends, rather than assuming that having supportive friends causes students’ grades go up. Second, the sample was not random and only included families living in a suburban rather than an urban, inner-city environment. Because the sample for this study did not include a representative cross-section of African American families exposed to different levels of risk, the findings may differ from studies of African American youth living in poor inner-city communities. For example, adolescents in poor communities may be more likely to experience a greater number and higher severity of risk factors. Third, other factors that could have affected GPA, such as academic efficacy or gender, were not measured. Nonetheless, this study had value, in that it suggested that as African Americans have greater exposure to risk, their grades tended to go down. On the other hand, promotive/protective factors that were present appeared to lessen the impact of risk factors and promoted better academic outcomes.
Other researchers have studied the relationship between risk factors and psychological functioning. For example, Carbonell et al. (1998) examined risk and resilience factors of adolescents who were identified as being at risk for major depression. Their study was part of a larger longitudinal research project at the Simmons College School of Social Work (Reinherz, Giaconia, Pakiz, Silverman, Frost, & Lefkowitz, 1993). Data was gathered four times from subjects at ages 5, 9, 15, and 18. Structured interviews and questionnaires were completed by students, their teachers, and their parents. The sample included 108 adolescents identified as having three or more risk factors associated with the development of major depression. Researchers then compared the following three groups: (a) adolescents who met DSM-III-R criteria for depression ($n = 24$), (b) adolescents who were not depressed but who met criteria for another DSM-III-R Axis 1 diagnosis ($n = 42$), and (c) adolescents who did not meet the criteria for depression ($n = 42$). The third group, at-risk adolescents with no psychiatric diagnoses, was further divided into resilient students and students who were not considered resilient. Students were designated as resilient if they exhibited a high level of positive functioning and well-being ($n = 14$). These resilient students were then compared to the remainder of the non-diagnosed group ($n = 28$).

Students diagnosed as being clinically depressed according to the DSM-III-R were also evaluated for several other risk factors, including negative perceptions of his or her role in the family; unpopularity with peers; anxiety, either self-reported or reported by the parent; poor self-concept; health problems; death of a parent; family conflict; and parental remarriage (Reinherz et al., 1993). The three groups were compared using a three-way ANOVA, while the resilient group was compared to the non-resilient (but not clinically depressed) group of adolescents utilizing $t$-tests.
Measures of functioning and well-being included the Youth Self-Report (Achenbach, 1991), grade point average, the Rosenberg Self-Esteem Scale (Rosenberg, 1979), the Piers-Harris Children's Self-Concept Scale (Piers, 1984), the Interpersonal Problems Scale (Reinherz et al., 1993), and the Arizona Social Support Interview Scale (Barrera, 1980). Researchers established the following criteria for resilience: the absence of lifetime clinical depression according to the DSM-III-R; positive functioning, as indicated by the absence of significant externalizing behavioral difficulties on the Youth Self-Report; and a sense of well-being, indicated by a score above the median on the Rosenberg Self-Esteem Scale.

Carbonell et al. (1998) found that the depressed group reported more behavioral difficulties, such as a negative self-concept and a pessimistic outlook on life, whereas the students categorized as no diagnosis emerged as having the fewest problems. Carbonell et al. also determined that family factors, including family cohesion and effective functioning, were associated with increased resilience. Social support, measured by the Arizona Social Support Interview Scale, (Barrera, 1980) was also positively correlated with resilience. This instrument captured the degree to which participants felt they had support available when needed. In sum, Carbonell et al.'s research suggested that resilience, enhanced by family environment and a social support structure, served as an important protective factor in decreasing the likelihood of depression during adolescence. This study was limited, in that the sample size of students at risk for depression who were considered resilient was small ($n = 14$). Additionally, the majority of participants were White, had roughly the same socioeconomic status, and all came from one small, New England community. Use of the homogeneous sample limited the generalizability to other populations and geographic areas of the United States. Nonetheless, this study was valuable in that it suggested that adolescents at risk for developing depression can reduce their
risk through the strengthening of resilient protective factors, especially family and social support. Researchers have not only studied factors that increase risks, but have also examined those factors thought to protect individuals from risk.

**Antecedents of Resilience**

Protective factors are thought by many researchers to be antecedents or precursors of resilience (Werner, 1993; Masten & Coatsworth, 1998; Thompson, 2006). According to Werner (1993), protective factors are mechanisms that moderate a person's reaction to stress or chronic adversity so that his or her adaptation is more successful. As noted in Chapter 1, protective factors are thought to interact with the sources of risk to reduce the probability of negative outcomes. Protective factors can occur in three domains: individual, family, and the social environment (Masten & Coatsworth, 1998). Examples of individual resilient factors include high self-esteem, an easy-going disposition, good cognitive ability, and an internal locus of control. Family protective factors include family cohesion, a good relationship with at least one parent, high expectations, and socioeconomic advantage (Carbonell et al., 1998). Examples of key social environmental protective factors include having a positive relationship with an adult figure outside the family, perceiving teachers are fair, positive school experiences, opportunity to develop self-esteem, and connections to prosocial groups. Other protective factors include providing opportunities for students to succeed in school and the community by helping them encounter graduated challenges that enhance both their competence and confidence (Rutter, 1987; Werner, 1993; Masten & Coatsworth, 1998). Schools can offer a protective effect through high teacher expectations, a nurturing school environment, and effective instruction (Wang et al., 1997).
Protective factors are sometimes thought of as processes that protect at-risk students from risk mechanisms (Rutter, 1987). Protection from risk does not necessarily mean a person completely avoids the risk; rather, he or she successfully engages with it. In this manner, a person adapts and copes with adverse situations. For example, an adolescent living in poor conditions at home could have these adverse conditions buffered by high intelligence and self-esteem, which could help the individual negotiate favorably with delinquent peers and turn down offers to join a gang or commit a crime. Rutter (1994) identified four protective mechanisms that enhanced the development of resilience. These included reducing negative outcomes by altering the risk or the child’s exposure to risk, reducing the negative chain reaction following risk exposure, establishing and maintaining self-esteem and self-efficacy, and opening up new opportunities.

A number of protective factors have been cited in studies that have examined various aspects of children and adolescents’ lives. Three of the most significant protective factors that are thought to contribute to resilience include (a) family cohesion and support, (b) school connection, and (c) school involvement. First, family cohesion and support is considered by some to be the biggest source of protection for adolescents (Brody, Stoneman, & Flor, 1995). According to Vincent (2007), “Family is children’s first and perhaps most powerful contact with the world and provides the setting in which most children develop and learn” (p. 55). Second, outside of the family, teacher-student relationships are considered crucial in fostering resilience (Doll & Lyon, 1998). Not only are relationships with adults at school important but the overall school climate as well. Resilient students who demonstrated high academic achievement, motivation, and attendance indicated that the perception of a positive learning environment contributed to their success. Third, increased levels of school involvement, including sports and
other activities, have been shown to serve as protective factors and promote positive outcomes (Catterall, 1998; Gutman et al., 2002).

A good example of the value of school involvement can be found in a three-year study by Reis et al. (2005). These researchers investigated 35 ethnically diverse, academically talented adolescents over a three-year period. Students were considered high-achieving if they scored above the 90th percentile using local norms on standardized achievement tests and achieved high grades in one or more academic areas during elementary, middle, or high school. Observation and interview data were gathered on these 35 students in the home, social, athletic, and academic settings. Thick descriptive case studies were constructed for each participant. Thick description is defined as “probing the intentions, motives, meanings, contexts, situations, and circumstances of action” (Glesne, 2006, p. 27). According to Patton (2002), utilizing thick description opens up a world to the reader by providing rich, detailed, and concrete descriptions of people and places. Reis et al. found that 17 academically talented students had begun to underachieve during high school, while the other 18 students, who were also academically talented, became high achievers. These high-achievers were able to overcome problems associated with their families, their schools, and their social environments.

Reis et al. (2005) cited several reasons why the high-achieving students performed well. First, their resilient attitudes and behaviors seemed to emerge from a combination of personal, environmental, and social hardships. These students experienced stress and adversity, yet developed a strategy to handle it. Analysis of interviews revealed that ability to work hard in honors classes, involvement in extracurricular activities, and the presence of at least one supportive adult as reasons for their resilience. In contrast, students who underachieved seemed to have had risk factors that thwarted the development of resilience. These factors included lack
of positive peer support, having a sibling who had dropped out of school or abused substances, absence of positive parental role models, and a lack of involvement in school programs. Limitations to this study included the small sample size and the fact that it was a qualitative study, which made it problematic to generalize results to other schools and settings. Despite these limitations, this study was valuable in that it suggested that adolescent success or failure may depend on whether students have protective resources, are willing to work hard, get involved in school activities, and learn to rely on at least one supportive adult.

Werner's (1993) examination of data from the Kaua'i longitudinal study revealed several protective factors that occurred within the family. First, she found that maternal competence appeared to be associated with successful adaptation of high-risk children. This included mothers with a higher educational level (beyond high school) and competent caregiving. Second, if a parent or primary caregiver was unavailable, affectionate ties with an alternate caregiver became paramount, such as a grandparent, aunt, or uncle. Third, Werner found that sibling caregivers provided a protective buffer against marital upheaval or permanent loss of a parent as a result of death, desertion, or divorce. In Werner's study, siblings were found to be major sources of emotional support, especially in times of separation and divorce of their parents. Fourth, resilient children that adapted well despite adversity were observed to demonstrate what Werner termed required helpfulness. This meant that they would take on domestic responsibilities around the house and do part time work to help support the family. Finally, Werner found that many resilient children had strong religious beliefs and a sense of faith that everything would work out in the end. This faith and belief that their lives had meaning and purpose proved to be one of the most important protective factors, especially among those who had overcome great adversity.
Werner (1993) observed that two additional sources of protection reside in the community: friends and school personnel. With regard to friends, Werner observed that resilient children were well-liked by classmates and maintained several close friendships through adulthood, calling on them for ongoing emotional support. In the school setting, resilient children seemed to enjoy being at school and found a way to put whatever abilities they had to good use. In many cases, children were able to make school a home away from home, as it became a refuge from a dysfunctional living situation. Teachers and other school personnel were found to serve as mentors and role models and to have a significant protective influence on at-risk children. In sum, Werner found that many resilient children relied on several sources of support, including a competent mother, an alternate caregiver in the absence of parents, or school personnel. Many resilient children also found strength in acts of required helpfulness and having faith that their life had a purpose.

Other researchers have focused their studies of risk and resilience factors within the academic setting. For example, Catterall (1998) used data from the 1988 National Education Longitudinal Study (NELS) to do an empirical analysis of performance-based risks and the conditions under which students improve their academics. The NELS survey examined a nationally representative sample of eighth-graders, with a follow-up two years later when students were tenth-graders. There were 24,588 students included in the first set of data collection and 20,706 students in the data collection that occurred two years later. Three groups of student ethnic categories were analyzed: Hispanic, African American, and all ethnicities combined. Clusters of three broad topics were analyzed: (a) student decisions to drop out of school, (b) commitment resilience to persist in school, and (c) resilience of academic achievement. In order to measure the likelihood of dropouts, the researchers assessed the student
data for the presence of predictor variables thought to contribute to increased dropout rates. Predictor variables used in the model included family background, school achievement and test scores, family behaviors supporting academic achievement, engagement in extracurricular activities, and student attitudes related to motivation. Students high in these predictor variables were considered to have a higher probability of dropping out of school. Resilience of commitment to persist in school was identified by assessing changes in students' beliefs between eighth and tenth grade as to whether or not they would graduate. Students who were considered as having high commitment resilience were those who had doubts about completing high school while in eighth grade; however, by tenth grade, these students had changed their minds and believed they would graduate. Catterall defined academic resilience as the tendency of students achieving at low levels in eighth grade to achieve at significantly higher levels by grade 10.

Using logistic regression analysis, Catterall (1998) found significant predictors of dropouts, commitment resilience, and academic resilience. Among all students, Catterall found several factors predicted dropping out of school, including low SES, low English and math grades, low test scores, low math proficiency, lower activities composite, and low confidence in graduating. Significant predictors of commitment resilience included SES, math and English grades, test scores, an activities composite, confidence in graduating, school responsiveness, and family supports. The activities composite was a score that documented amount of participation in both in-school and after-school activities. School responsiveness involved school practices that responded to student needs and demonstrated caring for students. Predictors of academic resilience included SES, higher math grades, school responsiveness, family supports, confidence in graduating, and activities composite. Findings from the study revealed that students who reported more involvement in both school-based activities (those which take place at school
during regular hours) and extracurricular activities (those that take place before and after school hours, both at school and at other locales) scored significantly higher on measures of commitment resilience.

Several limitations to the Catterall (1998) study were evident. First, school involvement was measured by capturing the number of activities done and hours spent by each student, not depth of involvement in a particular activity. Second, causal order could not be determined; that is, it could not be determined if resilience led to increased student participation in school activities or increased participation in school activities led to increased resilience. Finally, Catterall stated that analyzing a large database such as NELS resulted in a lack of true understanding of the feeling and motivation behind children's orientation and motivation. A mixed-method study, in which analysis of data was accompanied by follow-up interviews with students, may have provided more insight into what adolescents' experiences really meant to them. In sum, according to Catterall, among the predictors of academic and commitment resilience mentioned above, three stood out as the best predictors of recovery from low performance: family supports, school responsiveness, and community activities. The importance of the family, school, and community and their combined influence on resilient student outcomes is discussed below.

The Influence of Families, Schools, and Communities on Resilient Outcomes

The work of Bronfenbrenner (1986) was important because it laid the foundation for understanding that families exert a powerful influence on children and can be considered as part of many other systems in society. Research paradigms can be distinguished by three different environmental models that can be sources of external influence on the family: (a) mesosystem, (s) exosystem, and (c) chronosystem. Bronfenbrenner entitled the primary system influencing
human function as the mesosystem, in which the family is the principal context in which human development takes place, but in several different settings. According to Bronfenbrenner, the processes operating in these different settings are not independent of one another. For example, things happen at home that affect how children do at school, and vice versa. The mesosystem model, then, is characterized by the interdependence of events that occur within the family and those that occur outside of the family but that have an effect on family members in some way. The mesosystem model "identifies the influences operating in both directions between the principal settings in which human development occurs" (Bronfenbrenner, 1986, p. 723).

Bronfenbrenner stated that the exosystem model is one in which the psychological development of children in the family is affected by what occurs in other settings in which parents live their lives. This model considers influences that are external to the developing child, such as the parents’ workplace, social networks, and community influences on family functioning. The third environmental system paradigm is known as the chronosystem model. This model takes into account changes over time that occur within the person and also within the environment. According to Bronfenbrenner (1986), utilizing this model allows researchers to "examine the influence on the person’s development of changes (and continuities) over time in the environments in which the person is living" (p. 724). Two types of events in the chronosystem model typically occur around a life transition: normative and nonnormative. A normative event includes regular occurrences that happen to most people, such as entering school, beginning puberty, or marriage. In contrast, nonnormative events include such occurrences as a death or severe illness in the family, divorce, or moving. The three models discussed above are important to keep in mind because they create a paradigm by which to view the behavior of adolescents. Children and youth do not operate in a vacuum; rather, they are part
of a number of different systems that operate interdependently. Therefore, when attempting to understand adolescents, it is important to keep in mind that the family is a system that operates within other external systems and has a tremendous influence on the developmental outcomes of adolescents. Families also have an influence on student outcomes in the school setting.

Henderson and Mapp (2002) examined evidence that families and communities connected with schools can make a difference in student success. These researchers conducted a meta-analysis that examined school-family-community-partnerships by synthesizing 51 studies completed between 1995 and 2002. They analyzed seven types of studies, including literature reviews, reports based on interviews and site visits, descriptive case studies, pre-experimental studies, correlational studies, quasi-experimental studies, and experimental studies. These studies fell into three broad categories: the impact of family and community involvement on student achievement; effective strategies to connect schools, families, and community; and parent and community organizing efforts to improve schools.

According to Henderson and Mapp (2002), all studies were reviewed to make sure they had a solid research foundation. For example, experimental, quasi-experimental, and correlational design studies utilized adequate statistical controls. For qualitative case studies, research that contained sound theory, objective observation, and thorough design were evaluated. Henderson and Mapp ensured that the data collected and conclusions reached were consistent for all studies reviewed. Studies evaluated were grouped in the following eight general topics: evaluations of programs and interventions, family activities at home vs. at school, home-school interactions, family processes and time use, community effects, culture and class, community organizing and constituency building, and literature reviews. Their results suggested that schools that were able to engage families and communities together had three practices in common: a
focus on building trusting, collaborative relationships among teachers, families, and community members; recognition and respect for families' needs, as well as class and cultural differences; and a philosophy of partnership where power and responsibility were shared.

Henderson and Mapp (2002) also found that when there were high levels of parent and community involvement in the schools, students earned higher grades, enrolled in higher-level programs, adapted well to school, attended school regularly, had better social skills, and had higher graduation rates. In addition to the informative findings, the researchers noted several general limitations to the studies reviewed. First, there was not enough longitudinal research because of the limits of funding. Without these long-term studies, researchers may have had difficulty measuring the long-term value of programs and interventions designed to bring about and maintain student academic improvement over time. Second, sample sizes were small in many cases, thus making it hard to generalize the results to other populations and reducing the power of the statistical analyses. Third, there was an overuse of self-report instruments, which made it difficult to independently verify findings, since self-report instruments could be subject to response bias. In other words, participants may answer questions in a socially desirable way rather than truthfully because they may think that's what the researchers want them to do. Fourth, some of the findings have mixed, ambiguous, or incomplete findings. Despite these limitations, this meta-analysis demonstrated the influence family-school-community partnerships can have on student academic resilience and success and suggested a link between a positive partnership and higher grades. According to Henderson and Mapp (2002),

Taken as a whole, these studies found a positive and convincing relationship between family involvement and benefits for students, including improved academic achievement. Although there is less research on the effects of community involvement, it also suggests
benefits for schools, families, and students, including improved achievement and behavior. (p. 24)

Bryan (2005) studied educational resilience and how academic achievement can be positively influenced through family-school-community partnerships. She examined the critical roles urban school counselors play in implementing partnerships that foster student achievement for minority and poor students. Bryan found that forming family-school-community partnerships helped to establish supportive relationships, including parent-teacher partnerships, and helped establish programs that promote student academic success. Research findings suggested when these partnerships are formed, risk-reducing mechanisms are put into place that can help foster protection for students in the following four ways: children are less impacted by the effects of direct risks they face, exposure to risk is either reduced or the risk modified, children's self-esteem and self-efficacy are enhanced, and children are provided meaningful involvement in their environments.

Researchers feel generally that when partnerships are in place and working effectively, a number of positive outcomes can occur. First, a warm, accepting climate is established in the schools in which parents feel welcome. Second, parents’ skill and leadership can be increased through participation in professional development opportunities. Parents and other family members who get involved in the school often feel empowered by the process (Davies, 1995). Third, families are able to connect with other families as well as key members of the community to build social capital or networks of trust they can draw from to increase the odds of success for their kids (Epstein & Sanders, 2000). Fourth children's chances of success in school and life can be enhanced when they receive direct support and encouragement from parents, teachers, and community members (Epstein, 1995). In sum, school-family-community partnerships
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overwhelmingly seem to produce the protective factors that foster educational resilience in children (Bryan, 2005.) Researchers determined there were many components that can contribute to resilient outcomes; what is needed are ways to be able to accurately measure resilience.

Resilience Assessment Strategies

There have been several instruments developed to measure resilience, including the Hardiness Scale (Kobasa et al., 1982); the Dispositional Resilience Scale (Bartone, et al., 1989); the Conner-Davidson Resilience Scale (Conner & Davidson, 2003); the Resiliency Scale for Adolescents (Hjemdal et al., 2006); and the Resiliency Scale for Children and Adults (Prince-Embury, 2008). However, few of these have addressed cultural factors that might also influence resilient outcomes. In response to this deficit, Clauss-Ehlers developed the Cultural Resilience Measure (CRM; Clauss-Ehlers, 2008), a 90-item questionnaire that "focuses on how the individual negotiates stress through a combination of individual characteristics as well as cultural background, cultural values, and factors in the sociocultural environment" (p. 202). The CRM attempts to measure how resilience develops in people from diverse cultural backgrounds. The CRM Five subscales comprise the CRM, including (a) childhood stressors, (b) global coping, (c) adaptive coping, (d) maladaptive coping, and (e) sociocultural support. The first subscale, childhood stressors, measures nine types of events that potentially have an impact on children's optimal level of functioning. This subscale includes questions that ask students about teasing, bullying, being hit, and being physically or sexually abused. The second subscale, global coping, focuses on sociocultural factors in coping and asks questions such as "Did you incorporate something larger than yourself to cope with the situation?" (p. 203). The third subscale, adaptive coping, includes 10 personal characteristics that represent positive coping styles of handling a stressor, such as resilient, connected, confident, competent, or flexible. Respondents are asked
whether they view themselves as having that characteristic when coping with adverse circumstances. The maladaptive coping subscale is identical in format to the adaptive coping measure, except that the ten characteristics students are asked about are indicative of maladaptive reactions, such as depressed, lonely, anxious, insecure, and selfish. The fifth subscale, sociocultural support, includes five items that ask about different environmental, social, and cultural supports participants encountered when dealing with adversity. For example, one question is “Did your cultural values help you overcome the adversity you faced?” (p. 203).

Clauss-Ehlers also asked one additional question to participants during the study that had to do with insight timing: “At what point in your development did you gain insight about the difficulty you faced?” (p. 204).

Clauss-Ehlers (2008) administered the CRM to 305 women at a large northeastern state university, along with the Connor-Davidson Resilience Scale (CD-RISC; 2003), a traditional measure of resilience that has been shown in previous studies to have construct validity. The CD-RISC yields one overall resilience score based on a 25-item measure. Participants respond to each item using a five point Likert scale ranging from 0 to 4, with 0 representing not true at all and 4 equally true nearly all the time. Connor and Davidson reported the CD-RISC had a Cronbach’s alpha of .89 and established convergent validity with the Hardiness Scale at .83. The participants in Clauss-Ehler’s study included different percentages of four ethnic groups: White (49%), Latina (18%), African American (16%), and Asian (16%).

Although there were four different ethnic groups represented in the study, Clauss-Ehlers (2008) did not analyze the results based on ethnicity; she simply lumped everyone into one group and performed the statistical analyses using all the participants. Factor analysis was applied to scores of each of the five CRM subscales to explore relationships among the possible
components of cultural resilience. Clauss-Ehlers found three factors that summarized relationships among risk and resilience influences. First, sociocultural aspects of coping had high factor loadings, which included high scores in both global and adaptive coping. Factor two corresponded to stress and negative experiences—highest factor loadings included childhood stressors and maladaptive coping. The third significant factor that was revealed was a confluence of sociocultural support, maladaptive coping, and insight timing. According to Clauss-Ehlers, the earlier participants gained insight into the adversities they experienced, the better they were able to cope with and overcome these adversities. This three-factor model suggested that individuals exposed to stress responded both adaptively and maladaptively. It also suggested that coping is influenced by sociocultural support, which is comprised of adaptive culture, traditions, and cultural legacies. According to Clauss-Ehlers, a person’s culture can influence adaptive development because many coping strategies are learned through his or her cultural values, beliefs, and practices.

Results of Clauss-Ehlers’ (2008) study suggested that culture and diversity can promote and influence resilience. Clauss-Ehlers hypothesized that one way this can be done is to call on resources from resilience areas in individuals’ lives. The data also suggested that early insight into cultural struggles can lead to greater understanding and therefore greater resilience. There were some inherent limitations built into this study. First, the researcher did not address cultural differences between the four ethnic groups: Blacks, Whites, Asians, and Latinas. The CRM included questions regarding whether or not participants utilized sociocultural support when coping with stress, but did not define specifically what those cultural supports were nor determine how these sociocultural supports may have differed among participants of the four ethnic groups. Second, the researcher only used women as subjects, so results cannot be
generalized to populations that include both genders. Third, the participants were college-age from one area of the country and may have different values, attitudes, and upbringing than people of different ages, socioeconomic backgrounds, and from other parts of the United States. Since the sample was not randomly selected, it was not representative of the overall population in the United States and researchers cannot generalize their findings to other populations and settings. Fourth, the CRM lacks proof of any ongoing reliability or validity. Without reliability, there is no way to determine the amount of measurement error, nor is it likely that other researchers would be able to replicate the results using the same instrument. Without validity, there is no way to determine to a statistically significant degree that the instrument measures the constructs it intends to measure. Nonetheless, this research added to the literature, in that it attempted to measure cultural resilience and capture differences in coping strategies and utilization of protective resources that may vary based on cultural differences.

Song (2003) noted that few attempts had been made to develop instruments that measured the various aspects of resilience in adolescence. According to Werner (1993), the development of age-appropriate resilience measures is something that researchers need to address. Song also noticed the shortage of measures that reflect cultural differences in resilience responses and revised the Resilience Inventory (Noam & Goldstein, 1998) as a means to detect these differences. Especially in adolescence, Song wanted to develop a survey that reflected how culture influences adolescents when they make meaning of their experiences. Her 44-question self-report questionnaire attempted to capture several values of Eastern cultures, including relational harmony, empathy, endurance, and control. Song’s revised subscales contain measures of optimism, self-efficacy, relationships with adults, peer relationships, interpersonal sensitivity, and emotional control. Song stated, “The optimism and self-efficacy sub-scales tap a child’s
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view of self and the world, a salient dimension of resilience in Western culture, while the interpersonal sensitivity and emotional control subscales are important dimensions of resilience in Eastern culture” (p. 23). Her new measure had increased internal consistency reliability scores, improved test-retest reliability, and substantial evidence of construct validity. The instruments developed by Clauss-Ehlers and Song highlight the importance researchers have begun to place on the influence culture may have on how children and youth make meaning of their experiences. In addition to developing instruments that measure resilience, several other researchers have created programs or interventions that promote resilience, as described in the next section.

Culture and Meaning Making

Besides risk and resilience factors, an area that has been frequently overlooked in past research is culture and its influence on resilient outcomes in adolescents. Culture is considered to be a distinct system of meaning that is learned, shared, and transmitted by a group of people from one generation to the next (Betancourt & Lopez, 1993). Falicov (1995) defined culture as contexts of shared world views, meanings, and adaptive behaviors derived from simultaneous memberships and participation in multiple settings and situations. Lerner (1995) stated cultural contexts include race, ethnicity, gender, socioeconomic status, sexual orientation, and religion.

Gielen and Roopnarine (2004) suggested that cultural factors have been shown to contribute to children’s cognitive and socioemotional development in the following four key ways. First, children’s culture affects their choice of activities and behaviors through the physical and social settings of daily life. Second, social and cultural norms and values regulate children’s behavior. Third, while children are growing up, they are being socialized by their parents’ belief systems and parenting practices. Fourth, formal education imparts not only knowledge, but
cultural values as well from adults to youth. Culture and its influence on development cannot be fully understood without also taking into consideration race and ethnicity.

**Culture, Race, and Ethnicity**

The terms culture, race, and ethnicity are often used interchangeably, yet few psychologists, researchers, and educators have been able to agree on a meaning for each term. The lack of a clear definition can cause confusion and be an obstacle to progress (Brislin, 1983; Rohner, 1984). For example, race is normally defined in terms of physical characteristics, such as skin color, facial features, and hair type. Betancourt and Lopez (1993) stated that the three so-called races in the world, Caucasoid, Negroid, and Mongoloid, have more within-group differences than between-group differences. For example, among each racial group, there are numerous shades of skin color, a wide variety of facial features, and many different types of hair. The differences in physical characteristics between members of the same racial group are in many instances greater than the differences between racial groups. Genetic studies of blood groups, enzymes, and proteins have also found differences between individuals of the same tribe or nation to be greater than differences between racial groups (Zuckerman, 1990). Thus, both physically and genetically, racial groups are often more alike than they are different. According to Betancourt and Lopez (1993), racial groups are “inadequate as a general explanatory factor of between-group variations in psychological phenomena” (p. 631).

The term ethnicity has been associated with and used interchangeably with both culture and race. Ethnicity is typically used in reference to groups that are characterized in terms of nationality, culture, or language. According to Betancourt and Lopez (1993), a person’s cultural background can help determine ethnic identity, and being part of an ethnic group can determine a person’s culture. Thus when using the terms race, culture, and ethnicity, it is best for researchers
to be specific about exactly what they mean by using clear, concise definitions (Betancourt & Lopez, 1993).

Phinney (1996) found that the meaning of the two terms, race and ethnicity, were intertwined and were therefore best understood when used together as one construct. Moreover, “The psychological importance of race is derived largely from the way in which one is responded to by others on the basis of visual racial characteristics” (Phinney, 1996, p. 919). Ethnicity refers to broad groupings of Americans on the basis of race and culture of origin. According to Phinney, members of different ethnic groups are affected by the ways others respond to them based on their ethnic category or ethnicity. Members of ethnic groups often experience differential treatment, which can affect both their identity development as well as their life chances in our society. Phinney further argued that ethnicity can be considered as culture as well, since a common assumption is that ethnicity focuses on cultural characteristics of a particular group, including norms, values, attitudes, and behaviors. For many people, ethnicity is central to their identity, as they can choose what role it plays in their lives (Waters, 1990). According to Phinney (1996), “The stronger one’s ethnic identity, the greater the contribution identity makes to one’s self-concept” (p. 922).

Other researchers have combined the two terms, race and ethnicity, into one construct (race-ethnicity), given that recent research has found many parallels between these two domains, such as a sense of belonging, learning about one’s group membership, and responding to discrimination (Phinney & Ong, 2007; Grossman & Charmaraman, 2009). Cross and Cross (2007) noted that these two terms (race and ethnicity) are both conceptually and statistically overlapped. Their research suggested that these terms are both socially constructed and theoretically interlaced. Phinney and Ong (2007) agreed, stating that the term *ethnicity*
encompasses *race*, because there is widespread disagreement among researchers as to its meaning and usage (Jones, 1991; Wilkinson & King, 1987). According to Miller and MacIntosh (1999), racial identity refers to a sense of collective identity based on a person’s perception of a common racial heritage. Research by Arroyo and Zigler (1995) suggested that racial identity is multifaceted and affects behavior, attitudes, and a person’s psychological state. Therefore, based on the conclusions reached by the researchers cited above, the terms race, racial identity, ethnicity, and ethnic identity will be used interchangeably.

The current study focuses on adolescence, which can be a particularly turbulent time for many teen-agers. The researcher is interested in determining the influence culture and ethnic identity may have on resilience, as well as examining whether or not ethnic identity and resilience are predictive of academic success among high school students. Many researchers have noted the influence race/culture/ethnicity has on adolescents’ development (Werner, 1993; Garcia Coll & Magnuson, 2000; Song, 2003; Yasui & Dishion, 2007). According to Yasui and Dishion (2007), “Culture permeates the ecology of all youth, but is especially salient for those of minority status, who are more likely to be aware of the power of culture on assumptions and daily behavior” (p.138). These authors suggested that adolescent ethnic minorities develop and maintain unique adaptive strategies that promote resiliency: “Sociocultural influences play significant roles in shaping one’s coping ability, psychological adjustment, and identity development” (p. 138). Yasui and Dishion stated that both racial and ethnic identity are key components that form the basis of resilience among children of color. Further, Phinney and Chavira (1995) found that positive attitudes about one’s ethnicity are central to healthy psychological functioning. Numerous studies have found positive psychological outcomes associated with racial identity development (Gary & Berry, 1984). According to Yasui and
Dishion (2007), “Racial identity development serves as a critical element in the psychological adjustment for ethnic minority youth” (p. 142). Because the current study focused exclusively on two groups of adolescents, African Americans and European Americans, the following section reviews studies that have examined cultural factors of these groups as they relate to resilient outcomes.

**African Americans**

Many African American children and youth face struggles not encountered by other racial and ethnic groups. They often grow up having to overcome obstacles such as poverty and inferior housing (Peters, 1985). Many Black adolescents must also face systemic discrimination and oppression, which often results in poor psychological outcomes (Thornton et al., 1990). Miller (1999) argued that racial socialization can act as a buffer against negative racial messages that occur in an adolescent’s environment. Arroyo and Zigler (1995) determined that a strong racial identity can facilitate the development of both cognitive and social competencies among African American teen-agers. Cognitive competencies refer to academic skills, such as the ability to think analytically, reading comprehension, note-taking, and study skills. Social competencies include such things as the ability to get along with others, ask appropriate questions, and comply with rules.

Racial socialization has been defined as providing for and raising children—tasks parents share with all parents (Peters, 1985). However, raising physically and emotionally healthy Black children in a society in which being Black is frequently perceived negatively is more of a challenge (Thornton et al., 1990). For African American parents, racial socialization includes teaching children how to deal with racial issues and prejudice (Bowman & Howard, 1985). Through this learning process, parents are *socializing* their children, preparing them to face an
environment that is sometimes hostile. Racial socialization, then, involves teaching children to think and behave in a certain manner, which is often transmitted through parental modeling of "modes, sequences, and styles of behavior" (Boykin & Toms, 1985, p. 42). However, regardless of the method, many Black youth receive the critical message from their parents and other family members that race will affect available options and chances of succeeding in life and that competencies to navigate a sometimes hostile environment must be developed (Miller, 1999). Racial socialization can be thought of as a "suit of armor" to protect adolescents from a negative environment (Miller & MacIntosh, 1999, p.161).

Several research findings addressed African American cultural values and how transmission of these values can provide a protective effect for their children. For example, many African American parents applied restrictive controls on their children, while at the same time demonstrated high levels of parental warmth, which has shown to have a protective effect (Lamborn et al., 1996). Nobles (1974) stated that parenting practices of African Americans are often governed by parents' perceptions of realistic risks their children may encounter. A study by Baldwin et al. (1990) found that, for both Black and White families, applying strict parenting strategies has both reduced children's exposure to risk and led to more positive academic outcomes. In sum, the above research findings suggest that the strict parenting style employed by many African American parents can have a protective effect on their children.

Several studies focused specifically on African American adolescents found a positive relationship between racial socialization, successful environmental adaptation, and academic success. For example, McCreary et al. (1996) surveyed 311 African American students attending a week-end church retreat on four measures: problem behavior (measured by the Problem Behavior Scale; Farrell, Danish, & Howard, 1992); self-esteem (measured by the Revised
Rosenberg Self-Esteem Scale; Rosenberg, 1979); life events (measured by the Life Events Scale for Adolescents; Coddington, 1984) and emotional support (measured by the Perceived Emotional/Personal Support Scale; Slavin, 1991). The findings suggested that strong racial socialization was a contributing factor to the ability of youth to successfully handle stress and reduce the occurrence of problem behaviors. The study utilized sound methodology and instrumentation; however, the ability to generalize results was limited because the sample consisted of participants attending a religious retreat. These students may have been different than a sample of nonreligious groups of African American adolescents (McCreary et al., 1996), in that nonreligious students may not have utilized community protective factors to the same degree.

Peters and Massey (1983) studied the stress many Black families in America experience. According to these researchers, Black families live under the continuous stress of oppression; their ability to live, work, and survive is consistently strained. Pierce (1975) described the living conditions of many Black families as mundane, extreme environmental stress. In other words, their living environment is one in which racism and subtle oppression are constant and mundane, especially with regard to employment and education. Pierce stated that Blacks cannot live an hour of their lives without being reminded of their blackness in some way.

Peters and Massey (1983) applied an adaptive model, known as ABCDYX (Hill, 1972) to a specific case drawn from an earlier study, entitled the Toddler Infant Experience Study (TIES; Peters & Massey, 1983). The case involved an African American woman working as a mid-level manager in a small company, living with her two children and her partner. Her partner recently moved out, which added to her financial difficulties. She was subsequently laid off from her job and had difficulty obtaining employment, despite being highly qualified. According to
the model, a sequence of events occurred, as follows: a precipitating event (A) created a need for resources (B), the event was defined by family and friends (C), mundane extreme environmental stress was experienced (D), which produced the crisis (Y), in this case, loss of a job, followed by the reaction (X) to the crisis. Researchers then described how the woman attempted to harness resources, namely, her friends, family, and members of her church to get through the crisis and obtain gainful employment elsewhere. This study exemplifies how, through the crisis and response to it, minority families manage to find ways to support one another (through family, friends, and community networks) and look for alternative solutions. One noted limitation to this research was that the case study information was taken from a previous study, whose purpose was analysis of child socialization processes. Therefore, the details regarding protective factors and resources the woman utilized to gain employment and financial stability were lacking. Still, the study was viable because it showed a real-world example of how a member of the Black community struggled to overcome pervasive stress in their environment by utilizing available protective factors.

Bowman and Howard (1985) studied 377 African American adolescents to determine the relationship between race-related socialization, motivation, and academic achievement. Data was obtained from a national sample of three generations of Black families. The participants were between the ages of 14 and 24 and were members of the youngest cohort of the three generation family sample. During an 80-minute interview with each participant, measures were utilized to determine student progress and how students had been socialized by their parents. These measures included self-reports of grades in school, a four-item index of self-efficacy, and questions related to race-related socialization themes transmitted by parents. Multiple regression was then utilized to investigate the separate effects of race-related socialization. Results revealed
four types of racial socialization transmitted by parents, including ethnic pride (23%), emphasis on achievement (14%), racial barrier consciousness (13%), and interracial protocol (13%). Racial identity orientations included, in order of frequency, racial pride, ethnic heritage, and Black unity. Results also suggested that proactive messages from parents about how to manage race-related obstacles was a significant variable in helping youth attain high academic achievement. Additionally, researchers found that adolescents who believed that they had an ability to control their environment had higher ratings of motivation as well as higher academic achievement. One limitation to the study noted was that, although researchers pointed out that awareness of racial barriers enabled youth to operate more effectively in the academic environment, there was no explanation as to how or why. Despite this shortcoming, this study was important because it suggested that ethnic pride, transmitted through parental racial socialization, is associated with higher academic achievement.

Another study attempted to determine the relative influence of a strong racial identity on buffering Black adolescents from the effects of negative environmental conditions. Sellers et al. (2006) studied the interrelationships of racial discrimination, racial identity, and psychological functioning in a sample of 314 African American adolescents. Researchers surveyed Black teenagers on the following characteristics: racial identity, racial discrimination, perceived stress, depressive symptomology, and well-being. Multiple regression was then used to determine relationships among variables. Sellers et al. found that African American adolescents’ perceptions of racial discrimination were correlated with depression and increased levels of stress. However, Black teenagers who had higher racial identity scores had lower levels of both depression and stress. Therefore, the findings suggested that racial identity can buffer Blacks from the negative effects of racial discrimination and improve their levels of psychological...
functioning. Sellers suggested this may be because those adolescents with higher private regard for themselves and their race reported lower levels of depression and stress.

Results of the study by Sellers et al. (2006) were consistent with other researchers, who found a direct link between racial identity and psychological well-being (Azibo, 1983; Baldwin, 1984). For example, Baldwin (1984) found that having a strong identification with being Black, successfully integrating the values of their culture, and developing a specific African American value orientation were necessary components of psychological well-being for Black adolescents. Additionally, Sellers’ findings suggested that having a strong racial identity often served as a protective resilience factor for minorities by helping prevent the internalization of inferiority beliefs. For example, if Black adolescents were treated as if they were stupid, a strong belief in themselves and their identity might cause them to ignore the incident and assume the offending party was incorrect. One limitation to Sellers’ study was that it made the assumption that racial discrimination for Blacks occurred at the level of racial hassles only. Daily racial hassles included such things as being treated suspiciously or being talked down to. The study did not take into account how adolescents would respond to more blatant or overt forms of racial discrimination. Blatant racist events included such things as being harassed by police, being denied service, or being discouraged from seeking higher education by a teacher (Kessler, Mickelson, & Williams, 1999). Therefore, more research is needed before generalizing these results to other situations in which more overt types of discrimination take place. Nonetheless, the research above suggests that when African American youth face potential stressors in the community, a strong racial identity can serve as a protective factor and increase resiliency.

Other researchers examined the impact of racial identity on academic outcomes. For example, Miller and MacIntosh (1999) selected 131 participants through a sample of adolescents
from urban schools who were receiving services through the juvenile court system. The independent variable was stress, as measured by the Perceived Stress Scale (Cohen, Kamarck, & Merrellstein, 1983), while the dependent variable was GPA. In addition to GPA, researchers also measured daily attendance, time spent on homework, and participation in school activities. Several other measures were used to determine the extent to which resilience protective factors moderated the effect of stress on academic achievement. The Racial Socialization of Adolescent Scale (Stevenson, 1994) was used to measure racial socialization. Racial identity was measured with the Multigroup Ethnic Identity Measure (Phinney, 1992), the Racelessness Scale (Arroyo & Zigler, 1995), and the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992).

Results of their study (Miller & MacIntosh, 1999) suggested that a positive racial identity protected African American adolescents against the discrimination and daily hassles they often experienced. Results also suggested that a strong sense of ethnicity protected adolescents against obstacles that negatively impacted academic performance. There were several significant limitations to this study. First, the sample was not random and, thus, cannot be representative of all urban African American adolescents. Second, disadvantaged Blacks were selected from an urban environment; the study did not include adolescents from other environments (such as rural areas). Third, the reliability scores of several measures were low; for the Racial Socialization of Adolescent Scale, the Cronbach’s alpha score was .77; for the Multigroup Ethnic Identity Measure, the Cronbach’s alpha score was .71. Finally, the use of only one indicator of academic success (GPA) could be limiting, in that it only provides a partial understanding of the concept of resilience (Miller & MacIntosh, 1999). According to these researchers, the concept of resilience is extremely complex and would be better understood by including additional indicators of resilience. For example, in the school setting, standardized test scores, student levels of
involvement in school activities, and teacher observation forms could provide additional indicators about school success. Nonetheless, this study contributed to the literature in that it suggested there are positive linkages between the strength of African American adolescents' racial socialization, racial-ethnic identity, and academic resilience.

Wong et al. (2003) highlighted research that examined the influence of ethnicity on several outcomes, including school achievement, academic motivation, mental health, and problem behaviors. The relationship between ethnic identity, experiences of discrimination, and academic and social functioning among African American adolescents was explored. Data used to support the Wong et al. study was drawn from the Maryland Adolescents Development in Context (MADIC) study, which began as part of a larger longitudinal research project entitled the Study of Adolescents in Multiple Contexts (Cook, 1998). Because the data for both studies was collected collaboratively, extensive information was available about adolescents and their families. There were 1,480 adolescents and their families in the first cohort and 5,000 students in the second cohort. Questionnaires were administered twice to students: at the beginning of 7th grade and again at the end of 8th grade. Students provided information about their perceptions of their families, friends, and their own attitudes and behaviors.

Several instruments were used, including a perceived discrimination measure, a measure of ethnic identity, achievement motivation, academic achievement, mental health, selection of friends, and problem behaviors. Perceived discrimination was measured by a scale developed by the staff at MADIC. Adolescents reported how often they experienced negative treatment at school by both peers and teachers as a result of their race. The ethnic identity measure was a four-question survey that asked students how strongly they identified with their race/ethnicity. Achievement motivation was measured by two four-item scales: one regarding the school's value
and the other about self-competency beliefs. The school value scale included questions about the importance of school for students, while the self-competency beliefs scale asked adolescents to evaluate their own math and other academic abilities as compared to others. Academic achievement was measured by comparing GPAs for each of four academic subjects in 7th and 8th grade: English, math, science, and health. Measures of mental health included questions about (a) depression, (b) anger, and (c) self-esteem. Depression was measured using the Symptoms Checklist Revised (SCL-90-R; Derogatis, 1983); anger was measured using three items from the SCL-90-R, while self-esteem was measured using Harter’s (1982) global self-worth scale. 

Selection of friends was evaluated by asking students seven questions developed by the staff at MADIC, focused on adolescents’ perceptions of their friends’ characteristics. Problem behaviors were assessed using an 11-item questionnaire developed by Elliot, Huizinga, and Menard (1989). On this questionnaire, students were asked if they had engaged in different types of delinquent behavior, such as stealing, lying, fighting, or skipping classes.

Hierarchical regression analyses were conducted for main effects to determine whether being connected to an ethnic group acted as a protective factor against perceived discrimination. Results indicated that a strong connection to one’s ethnic group was positively correlated with good psychological health, including higher academic motivation, better school achievement, improved mental health, and greater self-esteem. Interaction effects were analyzed between adolescents’ connection to their ethnic group and perceived discrimination on changes in self-competency beliefs, school achievement, perception of friends’ positive characteristics, and problem behaviors. Results of the hierarchical regression analysis indicated that, as African American adolescents’ connection to their ethnic group increased, greater perceived discrimination was associated with smaller decreases in self-concept of ability, school
achievement, friends’ positive characteristics, and problem behavior. In sum, these results suggested that ethnicity can provide a protective effect for African American adolescents.

Wong’s study had two inherent limitations. First, since the findings were correlational, it was difficult to determine causality. More studies are needed to determine if there is directionality between perceived discrimination and psychological adjustment. Second, many of the discrimination measures used were self-report and may have been subject to perceptual biases of the participants. Third, the Hawthorne effect may have taken place, since students were aware that their perceptions of discrimination were being examined and may have altered the number of cases of discrimination and daily hassles they reported in order to appear more socially desirable. Despite these limitations, this study suggests that, while ethnic discrimination can be harmful to African American adolescents’ psychological health and academic achievement, a strong connection to their ethnic group can serve as a powerful protective factor.

Other researchers have examined African American and European American families to look for linkages between risk factors, protective factors, and favorable outcomes with regard to stress-resistant families and children. For example, Baldwin et al. (1990) examined a longitudinal sample of 152 minority and nonminority families (57 minority, 95 nonminority), both intact and single-parent, from a wide range of socioeconomic levels to determine if successful parents in high-risk families showed a pattern of parental variables different from that shown by successful parents in low-risk families. The sample on which this study was based came from a longitudinal sample of families studied by Sameroff, Seifer, and Zax (1982) between 1971 and 1974. Parents and children who participated in the original study were interviewed separately. During the interviews, parents reported on 28 life events for their children, based on a scale developed by Herzog, Linder, and Samaha (1982). The life events
questionnaire asked parents to provide a variety of information about the child’s behavior, both at home and at school. Parents also ranked their children based on the parents’ perceptions of their children’s ranking of 13 family values, which included things such as good judgment, obedience, and responsibility (Kohn, 1977). Parents then completed several other measures that rated their own depression, malaise, and intelligence. Children were given a cognitive outcome score that consisted of averages of their IQ score (based on the Weschler Intelligence Scale for Children), spelling and arithmetic test scores, and a school achievement score. Families were then divided into high-risk and low-risk groups, depending on their cognitive outcome score, as described above. Four risk variables were used to compare families: family occupation level, family education level, minority status, and absence of the father. Families received a score for each of the risk variables, which were then translated into a z score to make the risk variables comparable. High-risk families were considered to be those in the highest third of the sample in terms of risk, while the low-risk group was the remaining two-thirds.

Risk groups were compared according to six parenting variables, including restrictiveness, explanation of family policy, democracy of policy, severity of penalties, policy clarity, and effectiveness of policy. Results of this study suggested that successful high risk families (as measured by the children’s cognitive outcome score) were “more restrictive and authoritarian in their policies and were also more vigilant in monitoring their children’s compliance than successful low-risk families” (Baldwin et al., 1990, p. 277). Additionally, parental restrictions on children from high-risk families were higher regarding school-related conduct. Parents from high-risk families also monitored children’s homework completion and school progress more closely than unsuccessful high-risk families. An additional finding was that children’s responsibility, good judgment, and self-control were more highly valued in high-risk
homes, suggesting that these attributes may contribute to better academic success. Taken as a whole, these findings suggested that the influence of restrictive parenting practices directly contributed to higher school achievement, especially among high-risk families fighting against the negative influences of the neighborhood.

One limitation to the study was the arbitrary decision to categorize only the top one-third of families as high-risk based on four measured variables (family occupation level, family education level, minority status, and absence of the father). The authors did not explain why that particular cutoff point was selected. Another limitation included using a previous data set (from the 1971-1974 time period) that was generated by a different group of researchers (Sameroff et al., 1982). Because the current research team did not establish the criteria by which families and their children were selected, they were forced to interview individuals that may not have been randomly selected, which could limit the generalizability of the study. Despite its weaknesses, the study had value and added to the literature by confirming that restrictive parenting practices in both Black and White high-risk families were associated with children’s positive academic outcomes. In addition to the studies that examined the racial and ethnic identity of African Americans, a number of similar studies have been accomplished that focused specifically on the ethnic identity of Whites.

*European Americans*

Although there have been numerous studies that have explored ethnic and racial identity for adolescents of color the past decade, there have been fewer studies that have explored the role of racial/ethnic identity for Whites (Knowles & Peng, 2005). According to Bonnett (1998), the term *White* is typically used to refer to those with European ancestry, thus, when referring to European Americans, researchers are talking about Whites. Further, the *centrality* people assign
to their racial/ethnic identity varies widely (Sellers, et al., 2006). Many Whites do not believe they have a race at all (Jackson & Heckman, 2002) and this invisibility makes research on what it means to be White more difficult. Because White is often the default racial category, many people in the United States assume that, since the majority of individuals are White, this racial category does not need to be examined as part of research studies. Thus, this invisibility of Whiteness becomes a barrier to research on White racial identity (Hyde, 1995; McIntosh, 2003), which could explain why fewer studies of White ethnic identity have been conducted as compared to other ethnic groups. Further, the denial of White privilege is believed to form the foundation for a color blind ideology that harbors racism (Grossman & Charmaraman, 2009). Several studies have documented the lower level of importance Whites place on race/ethnicity compared to other ethnic groups, such as Blacks, Latinos, or Asian Americans (Phinney, 1996; McDermott & Samson, 2005; Grossman & Charmaraman, 2009). Additionally, Frankenberg (1993) stated that Whites may harbor a fear of negative external perceptions of White racial identification, which discourages them from actively acknowledging White racial identity.

McDermott and Samson (2005) surveyed the literature on White identity and noted a shift in focus from White ethnic identity to White racial identity, a change that has been occurring gradually. When Whites first emigrated from Europe to America in the late 1800s, their ethnic identity (i.e., Irish, Italian, Jewish) served as a source of dignity, pride, and privilege (Roediger, 1991). During the late 1800s and early 1900s, European American ethnic communities that developed mainly in larger cities were important sources of identity maintenance for these immigrants and their descendents. However, as European ethnic groups dispersed to suburban neighborhoods, White ethnic identity became less important and more emphasis was placed on White racial identity (Alba & Nee, 1997). This shift reflected the fact
that, for most Whites in America, their European ancestral origin had little impact on their daily lives. Similarly, for many Blacks in our country, their ethnic identity formation is based primarily on being Black in America, rather than being an African Black. For many Blacks, coming from Africa occurred more than 200 years ago and is thought to no longer be relevant to their sense of ethnic identity (Resnicow & Ross-Gaddy, 1997; McDermott & Samson, 2005).

More recently, social scientists and researchers have observed that being White is not the same for all Whites. McDermott and Samson (2005) posited that Whiteness is a situated identity, a complex social identity whose meaning depends on social situation or context. Marginalized Whites, such as those living in poverty, are likely to have an entirely different situation and may not experience a constant state of privilege as do Whites of a higher socioeconomic status (Rasmussen, Klinenberg, Nexica, & Wray, 2001). Whites of lower socioeconomic classes reported feeling both shame and pride in their racial identity. Studies of more privileged Whites revealed that they feel a mix of pride, denial, or ambivalence in being White (Jaret & Reitzes, 1999). In sum, “there is no standard way of classifying how Whiteness is experienced” (McDermott & Samson, 2005, p. 256).

An example of the varied understanding of what racial and ethnic identity means to Whites can be found in a recent study conducted by Grossman and Charmaraman (2009). A mixed-methods exploratory study was conducted that examined the diverse content and context of White adolescents’ racial-ethnic identities. Grossman and Charmaraman sampled 781 high school students from three New England schools with varied racial and economic composition. The main goal of their study was to examine White adolescents’ explanations of the level of importance they placed on their race and/or ethnicity in three different contexts: (a) when they
were the majority, (b) when they were clearly a minority, and (c) when they were a numerical minority but in a more multicultural setting.

Students were asked to self-identify their race-ethnicity, using categories taken directly from the 2000 U.S. Census form. The students surveyed attended one of three high schools: one in which they were a majority (84% White), one in which they were clearly a minority (16% White), and one in which the ratio of ethnic groups was more balanced (55% Black, 23% White, 15% Asian American, and 7% Latino American). The researchers then asked students open-ended questions regarding the importance of ethnic identity and qualitatively analyzed the phenomenological themes that emerged using a grounded theory approach (Schwandt, 2001). Using thematic analysis and coding (Rossman & Rallis, 2003), they found the following major themes among the students, in the following order of precedence: (a) racial disengagement, (b) positive regard, (c) unexamined racial-ethnic centrality, (d) ambivalent regard, (e) awareness of inequities, and (f) acceptance of diversity. The largest thematic category of students’ responses was racially disengaged (42%). In this category, students made comments about having a colorblind ideology, such as “race should never matter; it does not define who you are” (Grossman & Charmaraman, 2009, p. 146) or the importance of individuality over race, such as “being White does not define who I am, my personality and interests do” (p. 146). The next largest thematic category was positive regard (37%), which contained three subthemes: external pride, internal pride, and homophily. An example of a comment about external pride is as follows: “your race is who you are” (p. 146), while a comment thought to represent internal pride is as follows: “being Italian is a big part of my identity” (p. 146). The third subcategory of positive regard the authors entitled homophily, defined as a preference for or comfort with others of the same racial or ethnic background. An example of a homophily comment that demonstrates
a preference for others of the same background is as follows: “it’s nice to have an ethnic background to associate with because of a feeling of brotherhood and companionship” (p. 146).

In the unexamined category 18% students made comments such as “my race does not really matter” (p. 146), suggesting that they believed their race was an unimportant part of their identity. Fewer White students reported that they were aware of inequities (16%), making comments such as “race has a clear social impact on an individual’s life; to completely ignore it is ignorant” (p. 146). Only 5% of White students commented about White privilege, as illustrated in the statement: “I think that if I was of a different race I might get treated differently because of stereotypes” (p. 146). Finally, 4% of White students interviewed made comments with a theme of accepting diversity, such as “I think that in order to understand a person, you need to know what race/ethnicity they are. Different races imply things about experiences you have had that have shaped you” (p. 146).

According to Grossman and Charmaraman (2009), the general lack of engagement with race and ethnicity the White students demonstrated is consistent with past research, in which Whites denied the meaningfulness of race for their personal identity in their lives (McDermott & Samson, 2005). For example, some Whites say ethnic differences should be forgotten, while some adolescents are unable to even articulate what it means to be White (Jackson & Heckman, 2002). White adolescents were more likely to attribute their accomplishments solely to individual causes, rejecting positive or negative influences of either race or ethnicity (DiTomaso, Parks-Yancey, & Post, 2003). Results of Grossman and Charmaraman’s study (2009) suggested that White students in schools in which they were a minority placed a higher value on their ethnicity. For example, 25% of White students attending the Latin high school (16% of the total school population was White) reported a colorblind ideology, as compared to 11% of White
students that espoused that ideology in the majority White school. In the positive regard category, 17% of White students in the Latin high school made comments about their external pride, as compared to only 3% of students in the White majority school. However, when White students were in the numerical minority, they reflected more on both the meaning and value of what it meant to be White. These findings suggest that when one racial group is in the numerical majority, they tend to downplay the importance of their race/ethnicity in defining their identity, especially since they may assume that their homogeneous environment is the norm.

There were several inherent limitations of the Grossman & Charmaraman (2009) study. First, since qualitative, open-ended questions were utilized, a broad range of responses presented much ambiguity that was difficult to interpret and code. Results of qualitative studies cannot be generalized to other populations (Rossman & Rallis, 2003). Second, since the study focused on adolescents from the Northeast United States, these findings may not be generalizeable to other regions of the country in which there is a different racial-ethnic composition. Third, because of low levels of White participants in several of the schools, the ability to compare results between the schools was reduced. Despite these limitations, this study had merit and contributed to the literature, in that it detected differences among White students regarding their attitudes towards their own racial/ethnic identity in schools in which they were in the numerical minority versus the majority.

Other studies compared Whites to Blacks to determine if any differences existed in their self-reported views of ethnic identity. For example, White and Burke (1987) examined White ethnic identity by comparing 139 White undergraduates at Indiana University to 73 Black undergraduates, utilizing Stryker's (1980) ethnic identity model as a theoretical paradigm. This model is based on identity theory and assumes that ethnic identity consists of three related
concepts: (a) ethnic identity salience, (b) ethnic role/group commitment, and (c) self-esteem. A measure of the first concept, ethnic identity salience, was determined by asking students how important it was to have their close friends, parents, and people in general think of them in terms of their ethnicity. The second concept, ethnic role/group commitment, was measured by asking students how many of their friends and close friends became their friends because of their ethnicity. The third concept, self-esteem, was gauged using Rosenberg’s (1965) global self-esteem instrument. According to White and Burke, ethnic identity is thought to include all of the following components: identity salience, identity commitment, and self-esteem. Understanding an individual’s ethnic identity can best be done by measuring each of the above components and then seeing how they relate to each other. Results of the study revealed several interesting findings. First, for both Blacks and Whites, the higher their level of commitment to their ethnic identity, the greater their level of ethnic identity salience. However, for a second finding, Blacks and Whites differed. For Blacks, the more friends and acquaintances they had as a result of their ethnicity, the higher their self-esteem. In other words, some activities and social events are geared towards African Americans, such as certain fraternities, sororities, clubs, and organizations. In contrast, among Whites, the more friends and acquaintances Whites had as a result of being White, the lower their self-esteem. Additionally, a third finding revealed that Whites who were rated as having a higher commitment to their White identity scored lower on their self-esteem. The authors speculated that Whites may feel some sort of “White insecurity” that accompanied their identity commitment (White & Burke, 1987, p. 326). That is, they may worry what others think about their strong sense of White identity and therefore prefer to disassociate themselves from being White because of perceptions others may have about social dominance (McDermott & Samson, 2005). Blacks, on the other hand, had higher self-esteem
scores as their commitment to being Black increased. The researchers hypothesized that Blacks may feel a higher sense of self-worth because their involvement with other Blacks brought them a feeling of pride. These findings are consistent with other research on ethnic identity, suggesting that people's opinions of themselves and the strength of their ethnic identity may vary depending on whether they are members of the dominant (White) social group or a minority (Black) social group (White & Burke, 1987; McDermott & Samson, 2005). However, there are also individuals who have dual or bicultural identities—their culture of origin and that of the mainstream culture. Bicultural competence, then, appears to require a dual set of competencies which requires further exploration.

Bicultural Competence

Cultures in the United States are often blended with the mainstream culture (Sue & Sue, 2003; Phinney & Devich-Navarro, 1997). There does not appear to be a pure minority culture that has not been influenced to some degree by the dominant White culture. During adolescence, minority youth seek to establish a secure racial, cultural, or ethnic identity and face differing demands from their culture of origin and the dominant culture (Phinney & Devich-Navarro, 1997). Adolescents from two cultures have to strike a balance between the two. Lafromboise et al. (1993) stated that biculturally competent individuals have the ability to function effectively in more than one culture. Moreover, the families of adolescents from ethnic minorities exert a substantial influence on their development and outlook. According to Garcia Coll and Magnuson (2000), when examining the relationship between ethnic identity and resilience, "it is crucial to take into consideration not just the child's ethnic, racial, or cultural group but also the child and family's level of acculturation within the dominant mainstream society" (p. 100).
Several researchers have described bicultural competence as a process of acculturation (Berry, 1980; Yasui & Dishion, 2007) or absorption into the dominant or mainstream culture, while at the same time remaining integrated by retaining aspects of the culture of origin. Laframboise et al. (1993) developed a framework of acculturation using five separate models: (a) assimilation, (b) acculturation, (c) fusion, (d) alternation, and (e) multiculturalism. Ethnic minorities in the United States are thought to transition through each of these five models or stages in the order listed. The first model, assimilation, refers to an ongoing process of absorption into the mainstream culture. People in this stage are adapting their attitudes and behaviors so as to be socially accepted by mainstream society, but may lose their cultural identity in the process. The second model, acculturation, describes people who are competent in the dominant culture but retain their identity as members of their culture of origin. People in this stage are learning to integrate themselves within the mainstream culture in order to survive. The third model, fusion, is based on the melting pot theory, in that cultures who share economic, political, and geographic realities will fuse together to create a new culture. The fourth model is known as alternation and represents a person’s competence in both the mainstream and minority cultures. Laframboise et al. suggested that individuals in this stage of acculturation coexist in both cultures and have the ability to choose one or the other culture and adapt their behavior on the basis of sociocultural context. Finally, the fifth model, entitled multicultural, defines a context in which people are able to maintain their distinct cultural identities while working together in a single multicultural social structure. In sum, “each of these models of acculturation provides a general framework from which we can understand the psychological impact, social experiences, and individual challenges associated with being bicultural” (Laframboise et al., 1993 p. 160).
One study compared the bicultural competence and ethnic identity of two ethnic groups: Blacks and Hispanics (Phinney & Devich-Navarro, 1997). The mixed-methods study used questionnaires combined with individual interviews to gather data about high school students’ ethnic identity, American identity, and other-group attitudes. The sample consisted of 98 African American and Mexican-American high school students from two public high schools in Los Angeles. Students completed the Multigroup Ethnic Identity Measure (Phinney, 1992) and were also interviewed using semi-structured, open-ended interview questions. Results of the study indicated that students identified with their culture of origin and the mainstream American culture to varying degrees. Based on the findings, students were categorized into three groups: blended, alternating, and separated biculturals. Blended bicultural students had good feelings about being American as well as a positive sense of their own ethnicity. Students who alternated between cultures acknowledged being American, yet recognized they were part of two distinct cultures and had strong feelings for their own culture of origin. The third category, separated biculturals, included students who did not identify with being American and preferred to think of themselves as solely either African American or Mexican American. Separated students stated that they felt America was too White and did not feel part of it; thus, being bicultural was not an option in a society that did not accept them. Limitations of the study including using graduate students to conduct interviews and the fact that when researchers use the qualitative method (i.e., interviews), results could be difficult to replicate and therefore cannot be generalized to other settings. Despite these limitations, the study had value, in that it added to the research on understanding how students assimilate their bicultural identity to varying degrees.

Several other studies focused specifically on African American students and how they have to live a bicultural existence in the United States. Chestang (1972) suggested that African-
Americans developed character behaviors that helped them adapt and navigate in a hostile environment. Clark’s bicultural identity theory (1991) stipulated that Blacks resided in two worlds—Black and White. Well-adjusted African American adolescents demonstrated their ability to live a *dual existence* in the school setting by adhering to the mainstream (White) values and beliefs while at the same time maintaining a sense of self and connection within the Black social structure (Miller & MacIntosh, 1999). In this way, Blacks are thought to form a *bicultural identity* to successfully cope with racism, achieve academically, and yet maintain a strong sense of group identity (Clark, 1991). Racial socialization, a strong racial identity, and bicultural competence all appear to serve as protective factors and contribute to successful adaptation or resilience for African American youth.

An example of research that examined how Blacks negotiate a predominantly White world can be found in a study by Diemer (2007). Diemer used a qualitative format while interviewing seven African American males from a predominantly White western university. The racial composition was White (87%), Black (.7%), Asian American (3.1%), and American Indian (.8%). Diemer was specifically interested in learning how Blacks felt constrained by a White opportunity structure that restricted both their career development and occupational attainment (Constantine et al., 1998). The phrase *two worlds* was used to describe going between or negotiating an individual’s culture of origin and a host culture’s structure (Diemer, 2007).

Diemer (2007) used open-ended interviews and analyzed results using grounded theory (Rossman & Rallis, 2003); several relevant findings emerged. First, participants defined successful adaptation as being able to maintain positive attitudes towards both cultures. Second, interviewees reported that the most important bicultural ability was being able to alternate between dualistic environments by using different words or dialects to communicate.
example, the Black dialect was defined by several participants as the capacity to use “barbershop talk” to communicate in predominantly Black settings. However, using the Black dialect may not be as effective in an advanced graduate seminar or a business meeting with high-level executives (Diemer, 2007, p. 12). Third, participants reported the need to feel connected to both their Black culture of origin and the mainstream White culture in order to feel optimally competent.

Diemer’s study of African American’s men’s bicultural competence had several limitations. First, it relied heavily on self-report interview data, which could be subject to misinterpretation by the researcher. Second, the participants may have provided biased responses because of their desire to present themselves in a positive light. Third, by the researcher’s own admission, participants did not describe exactly how they developed bicultural competence. Despite these limitations, this study contributed to the literature because it identified the experiences and competencies of African-American men as they attempted to negotiate two worlds: the dominant White culture and their own culture of origin. As described above, adolescents’ racial socialization and ethnic identity can vary, based on upbringing and social context. Researchers have searched for proven ways to strengthen students’ cultural/ethnic identity. Accordingly, several of these evidence-based programs are described below.

**Evidence-based Practice**

Knowing the potential value a strong cultural/ethnic identity can have in contributing to students’ psychological functioning and academic performance has motivated researchers to design prevention and intervention programs in the school, family, and community settings. One such program described by Bass and Coleman (1997) is entitled the Rites of Passage. This was a school-based program designed to prepare African American males to take advantage of the educational opportunities available to them. This program is based on the premise that becoming
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grounded in the values and social support system of students’ culture of origin is necessary before students can develop and demonstrate competence in a second culture. One key goal of the Rites of Passage is to help African American adolescents develop a positive sense of cultural self through a social and cultural inoculation process that facilitates healthy development.

In Bass and Coleman’s (1997) intervention, six African American males in sixth grade at one school in a small, Midwestern city participated in the program. These students were considered at-risk for academic underachievement and were referred by the school psychologist and social worker for two reasons: their grades appeared to be below potential and they had problems controlling in-class behavior. Students were evaluated using a classroom behavior scale completed by their teachers, academic goals (established by the students at the beginning of the intervention), school disciplinary records, and GPA. Students participated in a 20-week group intervention in which they met with a teacher once a week for 45 minutes. During the first ten sessions students learned the seven Kwanzaa principles of Umoja (unity), Kujichagulia (self-determination), Ujima (collective work and responsibility), Ujamma (cooperative economics), Ma (purpose), Kuumba (creativity), and Imani (faith; Karenga, 1980). During the second ten sessions, students learned how to put the principles into practice by sharing with the group the challenges they faced living out the principles and reaching their academic goals. Each student monitored his own behavior and provided a monthly self-evaluation to the group.

As reported by teachers, results indicated students showed significant positive changes in both behavior and academic performance, as well as a significant drop in the number of disciplinary infractions. Several parents commented how much the program had helped their children. These findings suggest that African American students can decrease their problem behaviors and increase their academic motivation through participation in cultural strengthening
programs such as the Rites of Passage. Study limitations included the small sample size, lack of random assignment, lack of a control group, and no reliability or validity estimates. Nonetheless, this program holds promise as a viable way to strengthen the cultural pride and ethnic identity of African American students, reduce problem behaviors, and increase academic performance.

Another study reported successful results when implementing the Rites of Passage Program with African American boys that involved students as well as their parents. Harvey and Hill (2005) evaluated the MAAT Center for Human and Organizational Enhancement, Inc. Rites of Passage program that took place after school in a community setting over a three-year period. The participants were 57 at-risk African American boys between the ages of 11 and 14 years who had been referred from the criminal justice system and local schools. The program used a strengths-based perspective consisting of an eight-week orientation phase, weekly meetings that emphasized African and African American culture, and a transformation ceremony, in which youth demonstrated their personal growth, knowledge, and skills to family and friends. The three elements of the program were an after-school component, family enhancement and empowerment activities, and individual and family counseling. Pre- and post-test data was collected on self-esteem (Rosenberg, 1965), academic orientation (Johnston, O’Malley, & Bachman, 1987) and drug knowledge (Centers for Disease Control and Prevention, 1991; Kolbe, Kann, & Collins, 1993).

An analysis of the outcome evaluation data for the Rites of Passage study revealed that participants had statistically significant gains in self-esteem and knowledge about drug abuse. Participants also experienced sizeable increases in both racial identity and cultural awareness. Parents reported stronger bonds with their sons, while parenting sessions resulted in increases in knowledge about effective strategies of child rearing and empowerment. Results suggested that
individual and family counseling sessions contributed to stronger family bonds between parents and their children. Limitations to this study included the small sample size and lack of random sampling. Additionally, during the first two years, researchers augmented the original control group of 30 individuals with new participants when the original members left the program. During the third year, a different control group was selected from a low-income community in a nearby city. Despite these weaknesses, results from this Rites of Passage program suggested that the most effective youth interventions are multifaceted approaches that focus on strengthening students' ethnic identity through the individual, family, and community (Harvey & Hill, 2005).

A similar evidence-based program was designed to promote cultural assets for African American females through a school-based intervention, entitled the Young Empowered Sisters (YES!) Program (Thomas, Davidson, & McAdoo, 2008). The goal of the program was to offer young African American women an empowering experience and to provide them “competencies and skills needed to negotiate and overcome the challenges presented in a racially oppressive society by attempting to enhance their perceived control and self-efficacy” (p. 286). Through the YES! Program the adolescent girls were provided mediums to develop psychological, social, and academic competencies while becoming more resilient and achieving positive youth development outcomes, including optimism. There were 74 9th and 10th grade students in the YES! intervention, with 38 girls in the control group and 36 girls in the intervention group. Students met once a week after school for ten weeks. The program consisted of three overarching themes: cultural values, African American history, and contemporary culture. One lesson focused on collectivism, a traditional African value, defined as a cultural orientation in which interdependence and social obligations are given precedence over personal needs. Another lesson addressed racism awareness, a cultural asset thought to enable students to manage and overcome
racial stressors. A third lesson taught the adolescent girls the importance of engaging in
liberatory activism; that is, being involved in prosocial activities that bring about positive
transformation of their environment.

Pre- and post-tests were administered to both control and intervention groups and
consisted of the following five measures: the Multigroup Ethnic Identity Measure (Phinney,
1992), the Racism Awareness Scale (Thomas, Townsend, & Belgrave, F., 2003), the Children’s
Africentric Values Scale (Belgrave, Townsend, Cherry, & Cunningham, 1997), the Intentions to
Liberatory Youth Activism Scale (Thomas et al., 2008), and the Liberatory Youth Activism
Scale (Thomas et al., 2008). Results of the YES! Program revealed that the intervention
significantly increased participants’ ethnic identity, racism awareness, collectivist orientation,
liberatory youth activism, and gave them a more hopeful outlook for the future. These findings
demonstrated that a school-based intervention could strengthen minority students’ ethnic identity
and provide them with protective strategies through increased knowledge and appreciation of
African and African American history and culture. Limitations included use of psychometric
measures that were heavily influenced by White middle-class values and developed, tested, and
used on White youth (Kumpfer et al., 2002). A second limitation involved a lack of follow-up
after the initial posttest. It is possible that the effects of the intervention may wear off after time;
therefore, it is essential to conduct at least one long-term follow-up after the initial intervention
to increase confidence regarding the long-term effects of the YES! intervention. Nonetheless,
this study demonstrated that Black female adolescents can be empowered through school-based
interventions that facilitate an awareness of their social context, ethnicity, cultural values, and
social change activism.
Grantham and Ford (2003) found that the psychological well-being of gifted minority students was often overlooked and created a program that included academic and counseling interventions. Their research findings suggested that, for Black adolescents, a strong ethnic identity can have a significant impact on positive attitudes towards school, motivation, and achievement. Grantham and Ford recommended proactive and aggressive school-based interventions that helped students feel more confident in their abilities, more motivated, and provided support needed to overcome academic shortcomings. One recommended way to accomplish results was through regular multicultural counseling, in which individual and group sessions allowed students opportunities to share their concerns regarding peer pressure, conflict resolution, family issues, or other concerns. Schools can help build positive relationships between minority and White students and between students and teachers. Grantham and Ford also suggested implementation of a mentoring program designed to help empower students, improve their decision-making skills, help clarify their goals for the future, and give them a sense of direction and purpose. Students could be paired with an adult of the same gender and race to serve as a role model. One example of a successful mentoring program is the Big Brothers/Big Sisters Program, described below.

The Big Brothers/Big Sisters Program is a well-known, evidence-based program that is the largest mentoring organization in the United States (Morrow & Styles, 1995). This program consists of traditional one-on-one mentoring between a youth and adult, carefully matched based on a culturally-sensitive screening process. Behaviors targeted for improvement include individual, family, and school risk factors, such as delinquency, substance use, violent behavior, family conflict, academic failure, and persistent antisocial behavior at school. A national evaluation of the program (Grossman & Garry, 1997) found that the mentoring that occurred
through the Big Brothers/Big Sisters program produced positive results. For example, adolescents who were mentored were less likely to use drugs and alcohol, less likely to use violence against others, less likely to miss school, more likely to have positive feelings about school, and more likely to have stronger relationships with both peers and parents.

Another successful evidence-based intervention is the CHOICES Program (Vera, Caldwell, Clark, Gonzales, Morgan, & West, 2007), a multisystem, school-based intervention designed to enhance the personal and academic effectiveness of urban adolescents of color. The program features a competency-promotion perspective, in which children benefit from interventions that enhance their developmental competencies (social, emotional, and academic). The CHOICES Program is designed to be culturally relevant and to build individual strengths while attending to cultural contexts such as neighborhood, social class, race, and ethnicity. The program was implemented for eight years (1997-2005) with 200 7th- and 8th-graders in an urban public school, as well as with their parents and teachers. The student program consisted of eight 45-minute sessions during school hours, while teacher and parent interventions occurred before school every other week. The student curriculum was comprised of lessons on identity exploration, self-esteem and self-worth, decision-making skills, peer pressure, career exploration, goal setting, and study skills. Parent and teacher sessions included presentations, followed by discussions on themes such as raising a healthy adolescent in today’s cultural context, facilitating communication, and providing academic support for the adolescent at home.

Pre- and post-tests were administered using the Adolescent Self-Rating for Prosocial and Anger Management Skills (Yung & Hammond, 1995) and the Risky Situation Self-Efficacy Scale (Reese & Vera, 1995). The Adolescent Self-Rating scale is an eight-item scale that assesses youths’ perception of their social skills, using a five-point Likert scale. The reliability of
the scale was .84 and good construct validity was reported (Yung & Hammond, 1995). The Risky Situation instrument is a ten-item, five-point Likert scale that measures students’ confidence in their ability to use social skills when faced with risky peer situations. Reliability was reported at .74, while no validity estimates were provided. Initial results suggest the program was effective in bringing about positive change in students. Ongoing narrative feedback was collected from students, parents, and teachers, and indicated participants believed students had improved their self-esteem, self-efficacy, social skills, and peer refusal skills. One limitation was the lack of a formal evaluation, due to unexpected events that took precedence over the normal curriculum, such as a gunshot wound to one of the students, apartment fires, student sexual assaults, and student pregnancies. Instructors altered the weekly lessons to allow students to process these events. The authors admitted that more rigorous program evaluation should be completed to fully evaluate the program’s effectiveness. Despite these limitations, it appears that interventions such as the school-based CHOICES program can enhance adolescents’ social and academic self-efficacy through incorporation of a culturally relevant curriculum that involves students, their teachers, and parents.

In sum, the evidence-based programs described above provided examples of successful, culturally sensitive interventions that took place in the schools, families, and the community. Participation in these programs resulted in improvements in students’ in-school behavior, psychological functioning, and academic success. Creating instruments that accurately measure differences in people’s ethnic identity is the focus of the next section.

*Measuring Ethnic Identity*

The study of ethnic identity development began with Erikson’s model (1968) of ego identity. Erikson suggested that identity refers to a “subjective feeling of sameness and
continuity that provides individuals with a stable sense of self” (Phinney & Ong, 2007, p. 274).

Erikson believed that identity developed over time, beginning in childhood, through a process of reflection and observation. As children became adolescents and then adults, they achieved an identity that combined childhood identifications, individual interests, and talents. Marcia (1980) expanded this research by conceptualizing personal identity formation as consisting of two phases: exploration and commitment. Once adolescents have both explored key identity issues and made commitments, they are said to have an achieved an identity (Phinney & Ong, 2007).

Tajfel (1981) noted that ethnic identity could be viewed as an aspect of social identity that carries with it membership in a social group, as well as both the value and emotional significance attached to that membership.

Phinney’s research on ethnic identity evolved from Erikson’s (1968) initial studies (ego identity) and Marcia’s (1980) research (personal identity). The key difference with ethnic identity is that it not only refers to a sense of self but also “involves a shared sense of identity with others who belong to the same ethnic group” (Phinney & Ong, 2007, p. 275). Phinney and Ong observed adolescents and young adults move from ethnic identity diffusion (lack of a clear identity) to either foreclosure (a commitment without exploration) or moratorium (a period of exploration) to a better understanding of and commitment to their ethnicity. Based on the established importance of ethnic identity and its value in a person’s overall development (Betancourt & Lopez, 1993; Phinney & Ong, 2007; Yasui & Dishion, 2007), researchers needed to develop an instrument to measure the strength of a person’s cultural/ethnic identity. Because Phinney noted that there were no generic racial/ethnic identity measures, a questionnaire was designed that could be used interchangeably with any ethnic group. The resulting 14-item Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) has been one of the most widely
used instruments to assess the underlying process of ethnic identity formation. The MEIM assessed three core components thought to be common among all ethnic groups: a sense of belonging to the group, an achieved identity, and involvement in ethnic practices. However, when Phinney and Ong (2007) tested the MEIM with 5,423 adolescents from a variety of ethnic groups, factor analysis revealed two of the fourteen items did not fit the model and the remaining twelve items could be grouped into two factors: exploration and commitment. Additional statistical analysis led to the elimination of six of the remaining twelve items, since the analysis revealed the same result could be achieved if the survey only contained six items.

In the newly designed MEIM, known as the MEIM- Revised (MEIM-R; Phinney & Ong, 2007), three of the remaining six items address exploration and three address commitment. The MEIM-R has been carefully tested using both exploratory and confirmatory factor analysis, beginning with a pilot study with 93 high school students in southern California from four ethnic minority backgrounds (Phinney & Ong, 2007). Next, the instrument was tested with 192 ethnically diverse University students, including Latinos, Asian Americans, African Americans, European Americans, and others with a mixed heritage. The MEIM-R yielded Cronbach’s alphas of .83 for exploration and .89 for commitment, indicating good internal consistency. Face and content validity were tested with respect to the two ethnic identity constructs (exploration and commitment) using interviews and focus groups with minority youths. Thus, Phinney’s revised MEIM is shorter, contains two easily measurable subscales (exploration and commitment), has demonstrated reliability, and has limited validity.

There were two limitations noted regarding Phinney and Ong’s (2007) study. First, the sample was selected using college students from only one University. More samples from a diverse group of students, representing different ethnicities, socioeconomic statuses, and from
different parts of the country, might have resulted in wider variation in scores of ethnic identity among members of different ethnic groups. Because of the limited sampling region (one school in southern California), caution must be exercised when generalizing these results. Second, more work must be done to determine if the instrument has construct validity. Phinney mentioned only that face and content validity had been verified. Therefore, results of her study must be interpreted with caution until further measures of construct validity can be completed.

Phinney and Ong (2007) made two final recommendations for future studies of ethnic identity. First, while there is a need for a generic measure of ethnic identity, such as the MEIM-R, other measures must be developed that capture group-specific values, attitudes, values, and behaviors. Phinney’s second suggestion was that researchers take a process approach to understanding ethnic identity. Because ethnic identity is thought to change over time and to be based on the social context being experienced, the construct should be measured periodically to account for developmental changes that may occur over time. In addition to measuring ethnic identity and resilience, the amount and impact of negative life events on adaptive functioning must also be measured, to provide an indication of the degree of adversity experienced by adolescents who struggle to meet and overcome these challenges. Accordingly, the next section describes several instruments that measure negative life events.

**Negative Life Events and Resilience**

Research linking stress-related events with poor physical and psychological functioning is abundant in the literature. Dohrenwend and Dohrenwend (1974) determined that life stress affects physical illness. Wyler, Masuda, and Holmes (1971) found that significant life changes were related to the onset of serious chronic illness. Stress was found to affect not only physical functioning and be related to the onset and seriousness of illness, but to affect psychological
functioning as well. For example, Constantini, Braun, Davis, and Iervolino (1973) found that negative life stressors were related to the onset of depression, anxiety, and tension. Other social scientists found that stress was related to psychiatric symptomology (Dekker & Webb, 1974; Paykel, 1969) and anxiety disorders (Sandin, Chorot, Santen, & Valiente, 2004). Harris (1973) found that negative relationships existed between life stress and academic performance. Other researchers found that a single stressful life event may have a small impact on a teen-ager; however, collectively, multiple negative life events often have a cumulative effect, which can be devastating (Forehand, Biggar, & Kotchick, 1998).

Holmes and Rahe (1967) were among the first investigators to measure stressful life events among adults. They determined that a cluster of social events requiring change in ongoing life adjustment was significantly associated with the time of illness onset. As a result, they developed a schedule of recent experiences (SRE) after studying the relationship between life stressors and the onset of illness among 5,000 patients. Their resulting scale rank-ordered 43 life events and assigned each a relative weight, depending on the frequency of occurrence among the sample. Their resulting rank order of items was considered to be a magnitude of life events and was derived by taking the mean score of each item, dividing by 10, and then arranging the resulting scores in descending numerical order. Holmes and Rahe tested their instrument on a convenience sample of 394 subjects. Coefficients of correlation (Pearson’s r) were calculated when comparing a number of discrete groups contained in the sample. For example, males were compared to females, people over 30 were compared to those under 30, single people were compared to married people, and so on. All of the coefficients of correlation of the discrete groups being compared, with the exception of one, were above .90, giving an indication of the high reliability of the SRE. There was no mention of validity in this study, so results and
generalizability to other populations must be interpreted with caution. This instrument, one of the first of its kind, was valuable, in that later surveys that measured life events used the SRE as a template from which to develop their instruments.

Sarason, Johnson, and Siegel (1978) created a Life Experiences Survey (LES), in which participants ranked 57 stressful events that typically occur in life and rated the amount of perceived stress each event caused. The life experiences in the survey were chosen to represent life changes frequently experienced by individuals in the general population. Their survey was different from previous life events surveys, in that it included ten items designed to be answered only by college students, such as questions about stress caused by academic probation, failing an exam, or financial problems. The survey was also different from Holmes and Rahe’s SRE because participants were asked whether they viewed events as positive or negative and the impact the events had on their life at the time of occurrence. The LES contained seven ratings, from extremely negative (-3) to extremely positive (+3), with 0 being neutral. This rating scale allowed participants to reveal either positive or negative impacts life events may have caused, which differed from previously created life events scales. The LES was given to the same group of participants eight weeks apart. Test-retest reliability was .61 for the positive change scores, .72 for the negative change scores, and .82 for the total change scores. No measures of validity were provided.

Later life events assessments not only measured negative events, but included measures of resilience protective factors as well. For example, Brady (2007) developed the Youth Risk and Resilience Inventory (YRRI), which assessed the number and types of stressors experienced by children and adolescents, along with an assessment of protective factors as well. Thirty-six items measured risk factors, while eighteen items covered resilience factors. Respondents rate each of
the items on a five-point scale ranging from never (1) to very often (5). Use of the YRRI in recent studies resulted in reliability estimates above .80; however, no estimates of score consistency over time (test-retest reliability) were provided. Regarding validity, the items were said to have been constructed from a review of the literature on risk and resilience across a variety of disciplines. However, there was theoretical justification provided that established these items as the best items to assess risk and resilience among youth. Additionally, no empirical evidence was provided to support the claim that the YRRI is measuring what it intends to measure (risk and resilience factors among youth); thus, it lacks construct validity.

Peterson et al. (2009) studied gifted students to determine the prevalence and types of negative life events that occurred in gifted students’ lives and their potential effects on academic achievement. The researchers studied 121 gifted children over an 11-year period, from elementary school until high school graduation. Peterson et al. modified Holmes and Rahe’s 43-item SRE, narrowing the inventory down to 16 items that were considered appropriate for children and adolescents, plus one additional open-ended item that allowed students to write in additional stressful events that may have occurred (see Appendix E). The negative life events inventory (NLEI) was utilized to determine the types and amount of stress the children experienced each year. The NLEI was completed annually by parents during the study, and then results compared to retrospective interviews with students after high school graduation. One finding from this study was that the type of stress reported by students most often was associated with school-related challenges, not life events. A second finding revealed that children and adolescents often reported different stressors than those perceived by their parents. A third finding was that, despite numerous stressors in gifted students’ lives, the students were able to persist with achievement in spite of the life challenges they faced.
There were several limitations noted in the Peterson et al. (2009) study. First, no reliability or validity estimates were provided. Other limitations included a high amount of attrition among the original sample of 121 students, due to students moving or students and parents failing to consistently complete all measures for the duration of the study. Additionally, there was no systematic analysis of each of the items on the NLEI. Finally, the sample consisted of primarily White, middle-class students and should have included a diversity of ethnic groups. Nonetheless, this study had value because it was able to demonstrate that the majority of high-achieving students, despite experiencing negative life events and stress at school, were still academically successful.

In sum, studies of resilience would be incomplete if they did not include some measure of adversity, because, by definition, resilience is “successful adaptation despite adversity” (Luthar, 2000, p. 543). For the current study, the NLEI was selected as the instrument to measure adversity among the student population. The NLEI was designed based on the empirical research of Holmes and Rahe and was recently modified by Peterson et al. (2009) to measure adversity among children and adolescents. The 16 negative events contained in the inventory capture issues and problems currently faced by adolescents. The NLEI includes questions about moving, illness of the student or a family member, a personal accident that caused injury or was frightening, disability or death of a relative or immediate family member, several questions about separation and divorce of parents, unemployment, and one question that allows participants to cite an additional traumatic event not on the list. Thus, because the NLEI contains problems commonly encountered by today’s youth, use of the NLEI was most appropriate for this study. Although many studies have been done that examined resilience, very few studies have included consideration of the influence of culture and ethnic identity on resilient outcomes in the
academic setting. Additionally, instruments developed to measure negative life events typically do not include questions about experiences with racism and discrimination. Thus, all negative life events that students have experienced may not have been accurately determined. Clearly, more research is needed in this area.

A Need for Continued Study

Much research has been done in the area of resilience, including defining it, determining its antecedents, studying its risk and protective factors, and measuring it. The impact of negative life events on resilient outcomes has also been examined and research suggests that there is a negative correlation between resilience and negative life events. Many adolescents can bounce back when a few bad things happen to them; however, when a large number of negative events occur within a short period of time, the impact can be devastating. Another body of research has addressed cultural and ethnic identity. According to multicultural theory, people's worldview affects their way of interpreting and making sense of the world. The relationship between race, culture, and ethnicity has been explored and determined to contain much overlap and shared meaning. Collectively, the three terms (race, culture, and ethnicity) are believed to represent a sense of belonging, a shared nationality, culture, language, norms, attitudes, beliefs, or values. Ethnic identity has been measured and determined to consist of different levels of identity exploration and commitment; a person's level of ethnic identity is also thought to change over time. While generic measures of ethnic identity have been developed that can be used with any ethnic group, more specific instruments are needed that capture the values, beliefs, and behaviors of each particular ethnic group. Bicultural competence studies, in which adolescents assimilate their culture of origin with the American culture, have been conducted, revealing that people have varying degrees of balance between their two coexisting cultures, based in part on their
level of assimilation and social context. Additionally, ethnic identity appears to influence the 
resilient coping strategies of adolescents. In view of these developments, it becomes evident that 
a relationship may exist between cultural/ethnic identity and resilience. The current study sought 
to explore this relationship using resilience theory and multicultural theory as guiding 
frameworks.

Theoretical Rationale

Resilience Theory

Resilience refers to a “dynamic process encompassing positive adaptation within the 
context of significant adversity” (Luthar et al., 2000). Wolin and Wolin (1993) defined resilience 
as the capacity to bounce back, withstand hardship, and repair oneself. Thompson (2006) stated 
that resilience was “a set of qualities that foster the process of successful adaptation and 
transformation, despite risk and adversity” (p. 55). Resilience theory is based on the concept that 
there are factors, both risk and protective, that enable individuals to achieve adaptive 
developmental outcomes. These factors are normally thought to originate from the individual, 
family, school, and community. Resilience theorists posit that resilience factors interact with risk 
factors to ameliorate or lessen the risk or the negative impact of an event.

Researchers have developed lists of attributes or developmental assets that are thought to 
make up a resilient personality. These protective factors include things such as above-average 
intelligence, an easy temperament, an internal locus of control, self-efficacy, self-esteem, and a 
positive outlook (Werner, 1993). Risk factors are thought to exist and can emanate from both 
families and the surrounding environment. Common family risk factors that can negatively 
impact developmental outcomes of children and youth include such things as chronic poverty, 
low parental educational level, living in a single parent-family, parent pathology, divorce,
teenage parenthood, and medical problems of the child or parents. The most common environmental threat faced by adolescents is living in a dangerous neighborhood (Vincent, 2007).

Risk factors do not summarily predict a negative outcome; instead, adolescents that are exposed to adverse situations have a greater likelihood of a maladaptive or unhealthy outcome if the risk factors are present (Lerner & Galambos, 1998). Further, adolescents who have a set of protective factors they can rely on increase their chances of a successful, adaptive outcome despite the presence of risk. According to resilience theory, neither risk nor protective factors determine successful, resilient outcomes; rather, the determinant of outcome lies within the nature of their interaction.

**Multicultural Theory**

Sue and Sue’s (2003) theory on multiculturalism and meaning making is particularly relevant to the study of resilience. They postulated that a person’s worldview or how they perceive the world and make meaning of it is highly correlated with their cultural upbringing and life experiences. Sue and Sue stated that worldviews are “composed of our attitudes, values, opinions, and concepts and affect how we think, define events, make decisions, and behave” (p. 268). Their theory is particularly germane to the study on the relationship between cultural/ethnic identity and protective factors of resilience, because members of minority groups, such as African Americans and Latino Americans, often perceive and experience their lives differently based in part on their cultural upbringing. In our Western culture, European Americans tend to assume their worldview is shared by members of all other cultures (Sue & Sue, 2003). They emphasize individual-centered values, verbal expressiveness, self-disclosure, and direct
communication of thoughts and feelings. However, members of other cultures do not always share those same values, thus causing them to make meaning of their world differently.

Ibrahim (1985) developed a cultural value-orientation model that distinguished behavioral differences along four dimensions: (a) time focus, (b) human activity, (c) social relations, and (d) people/nature. Specifically, many Latino Americans had a present time orientation (what they’re doing now is more important than a later event), while European Americans had a future orientation (Garcia-Preto, 1996). Regarding human activity, in the dominant White culture, doing is valued over being and there’s a belief that one’s own worth is measured by task accomplishments (Sue & Sue, 2003). In other cultures, people do not have to be striving to do something all the time; it is enough just to be (Ibrahim, 1985). With regard to family obligations, many Asian American adolescents have a greater expectation to assist, respect, and support their families, compared to European American adolescents (Yasui & Dishion, 2007). Additionally, Asians tend to have an authoritarian, hierarchical approach to families and believe the father is the absolute family ruler (Sue & Sue, 2003). Regarding relationships of people to nature, many Native Americans believe people should coexist in harmony with nature, while many European Americans believe they should conquer and control nature (Ibrahim, 1985). The cultural differences cited above in the way people interpret time, human activity, social relations, and people/nature are important to take into account, as these cultural viewpoints can actually alter experiences and change how people perceive their world (Sue & Sue, 2003).

The premise of the current study is that adolescents are attempting to negotiate their world and be successful in school. However, they each possess a different combination of risk and resilient factors that originate from the individual, family, and environment. These risk and
resilient factors interact to directly influence adolescents’ developmental outcomes. In the past, researchers have overlooked the impact cultural and ethnic identity may have on resilient outcomes. Cultural upbringing and ethnic identity have been shown to be powerful influences on the way adolescents view their world and make meaning of it. However, few researchers have explored the way culture and ethnic identity impact the individual protective factors of resilience as they relate to academic success. This gap in the literature provides the rationale for this study; that is, there is a need to further examine the interaction between cultural/ethnic identity and resilience. The current study explored the nature of the relationship between ethnic identity and resilience protective factors and how these may influence academic outcomes among Black and White adolescents.

Conclusion

In the United States today, there are millions of adolescents at risk of school failure and dropping out. The students who fail often become a burden to society, as evidenced by an inability to earn a decent wage, increased episodes of crime and violence, and increased incidences of mental health problems. Yet many students who face high-risk family and environmental factors continue to do well academically, despite having to face adverse conditions. In light of the increasingly diverse population of students in America, there is little understanding of how culture/ethnicity influences educationally resilient youth in high risk families and communities.

Although researchers have quantified risk and resilient factors of individuals, environments and their interactions that promote resilience, they have offered insufficient consideration of the influence of cultural/ethnic identity on the individual protective factors of resilience for adolescents in the school setting. This study sought to fill that gap in the research
by directly assessing the relationship between adolescents’ cultural/ethnic identity and resilience. Specifically, the study examined whether or not there were significant differences between Blacks and Whites on scores of ethnic identity, resilience, negative life events, and academic outcomes. Determining whether positive correlations exist between ethnic identity, resilience, and GPA could improve students’ academic success by helping to increase their cultural/ethnic identity and by strengthening their individual protective factors of academic resilience. The next chapter will discuss methods, procedures, and the hypotheses mentioned above that were applied in the study.
CHAPTER THREE: METHODS AND PROCEDURES

The literature review in the previous chapter explored the notion of cultural/ethnic identity and analyzed different components of academic resilience. Although studies have been done that examined aspects of cultural/ethnic identity and resilience independently, few have linked ethnic identity with resilience, especially among adolescents from a high school population. Additionally, the possible linkage between ethnic identity, resilience, and academic success has not been firmly established in the research to date. To explore these possibilities, the current study sought to establish a relationship between cultural or ethnic identity, four individual protective factors of resilience, and academic success.

Chapter three describes the research method used in this study. This chapter identifies the research design, hypotheses, population, sample, data collection techniques, instrumentation, data analysis methods, and ethical considerations.

Research Design

The purpose of this exploratory study was to investigate the relationship between ethnic identity, academic resilience, and academic success for Black and White adolescents in a public high school. A descriptive correlational design with regression analysis (Gall, Gall, & Borg, 2007) was used to determine if significant relationships existed between multiple variables. Multiple regression was used to determine if certain variables, such as cultural/ethnic identity, resilience, and negative life events, were predictive of academic success (as measured by GPA).
Hypotheses

Ten hypotheses were investigated; the first seven sought to establish a link between ethnic identity and various protective factors associated with academic resilience:

1. A positive relationship exists between cultural/ethnic identity and resilience, as measured by subjects’ composite scores on the Multigroup Ethnic Identity Measure-Revised and their composite scores on the Resilience Inventory.

2. A positive relationship exists between cultural/ethnic identity and the resilience protective factor of Optimism, as measured by subjects’ respective scores on the Multigroup Ethnic Identity Measure-Revised and their subscale scores on the Resilience Inventory.

3. A positive relationship exists between cultural/ethnic identity and the resilience protective factor of Self-efficacy, as measured by subjects’ respective scores on the Multigroup Ethnic Identity Measure-Revised and their subscale scores on the Resilience Inventory.

4. A positive relationship exists between cultural/ethnic identity and the resilience protective factor of Interpersonal Sensitivity, as measured by subjects’ respective scores on the Multigroup Ethnic Identity Measure-Revised and their subscale scores on the Resilience Inventory.

5. A positive relationship exists between cultural/ethnic identity and the resilience protective factor of Emotional Control, as measured by subjects’ respective scores on the Multigroup Ethnic Identity Measure-Revised and the subscale score on the Resilience Inventory.
6. Resilience, as measured by the Resilience Inventory, and ethnic identity, as measured by the Multigroup Ethnic Identity Measure – Revised, are predictive of academic success, as measured by grade point average.

7. Ethnic identity, as measured by the Multigroup Ethnic Identity Measure – Revised, 2) resilience, as measured by the Resilience Inventory, 3) negative life events, as measured by the Negative Life Events Inventory, and 4) the interaction of resilience and negative life events are predictive of academic success, as measured by grade point average.

Drawing from previous research, the last three hypotheses sought to confirm anticipated differences between Blacks and Whites in their levels of life challenge and cultural identity and, accordingly, their levels of academic resilience. Although hypotheses eight, nine, and ten are stated in null terms, it was believed that there would be significant differences between Blacks and Whites and that each of these hypotheses would be rejected:

8. There is no difference between African Americans and Whites in ethnic identity, as measured by the Multigroup Ethnic Identity Measure – Revised.

9. There is no difference between African Americans and Whites in resilience, as measured by subjects' composite score on the Resilience Inventory and their subscale scores of Optimism, Self-efficacy, Interpersonal Sensitivity, and Emotional Control.

10. There is no difference between African Americans and Whites in negative life events, as measured by the Negative Life Events Inventory.
Sample and Demographics

The target population for this study was high school students in the United States. Permission was granted from The College of William and Mary's Human Subjects Committee to conduct the study. The school division and high school principal also granted permission for the study to be done. A convenience sample was drawn from the accessible population of students at one high school. The participants were students enrolled in Health I or Health II classes for the Spring 2009 semester. A total of 239 students in grades nine through twelve attended the ten health classes, however, parent consent was received from 136 parents and 122 students actually participated in the study. The percentage of different ethnic groups at the high school utilized in the study was similar to the population breakdown in the state of Virginia. According to the U.S. Census (2008), Virginia high schools are comprised of 72% Whites, compared to 69% Whites at the high school where the study was conducted. African Americans comprise 20% of the State’s high school population, compared to 24% at the high school from which the participants were drawn.

Data Collection

A cover letter (Appendix A) and informed consent forms (Appendix B) were mailed to parents of all students in the Spring semester health classes at the participating high school. Two copies of the consent form were mailed to parents who were asked to return one signed and dated copy and keep the other copy for their records. A self-addressed, stamped envelope was included for returning the consent form. The researcher followed-up with students for whom no consent form was returned by asking them to hand carry the consent form home, obtain a parent’s signature, and return it. Students whose parents did not give consent did not participate in the
study. As an added incentive for student participation, a drawing was held in each Health class in which one student whose parents returned the consent forms could win $20.00.

Prior to collecting the data, the researcher obtained class lists with each student’s name, grade, and ethnicity. This information was provided by the Information Technology (IT) and database specialist at the high school where the study was conducted. Each student was assigned a chronological number that was used throughout the data collection and analysis to identify a particular student. To ensure confidentiality, student did not write their names on the surveys—the names were de-linked from the surveys themselves. By following this procedure, it was highly unlikely that someone could tie survey data to a particular student. The researcher visited each of the ten health classes on three different days and explained the study and its purpose to the students. Four surveys were administered to the students: the Demographic Questionnaire (Appendix C), the MEIM-R (Appendix D), the RI (Appendix E), and the Negative Life Events Inventory (Appendix F). Short verbal instructions on how to complete each survey were given to the students in each class prior to the completion of each questionnaire. All survey materials contained the student’s unique identifying number on each page. Completed surveys were collected by the researcher and locked for safekeeping.

The IT/database specialist from the high school provided the researcher with students’ grade point averages for comparison with other student data. Once the survey instruments were collected from all students, their data was entered into an SPSS database. Surveys were kept in the researcher’s possession or locked in a secure area throughout the study, and access to the database was password protected and accessible only to the researcher. Data analysis results from SPSS were also kept secure and locked at all times.
Instrumentation

As indicated previously, four instruments were used to collect the data for this study, including (a) a demographic information questionnaire, (b) Multigroup Ethnic Identity Measure – Revised, (c) Resilience Inventory, and (d) Negative Life Events Inventory. Each of these measures is described below.

Demographic Information Questionnaire. (Appendix C)

The demographic information form was used to obtain basic background information about the students, including their age, grade level, who the student lives with, and highest educational level obtained by each parent. Its intended purpose was to determine the mean age and grade level of the overall sample and for each ethnic group. Additionally, parent data was used to explore one additional relationship—whether there was a significant correlation between parents’ educational level and students’ GPA.

Multigroup Ethnic Identity Measure – Revised (Appendix D)

The Multi-group Ethnic Identity Measure – Revised (MEIM-R) was based on the original MEIM, which was developed to measure ethnic identity development in adolescents and young adults (Phinney & Ong, 2007). The MEIM-R consists of six items; participants rate each item on a five-point Likert scale, from strongly agree to strongly disagree. The measure produces a mean score between one and five, calculated by totally the six raw scores of each of the six items, and then dividing by six to determine the average. This score represents the participant’s overall ethnic identity score. No norms or percentile scores have been established for the MEIM-R, which could have provided a way to compare the individual or group scores of students in a particular sample to other samples and populations. One way to interpret mean scores from the MEIM-R would be to use the five-point Likert scale as a reference. For example, a mean score of
one or two would be considered a low level of ethnic identity. Students with a mean score of three would be considered to have a moderate level of ethnic identity. Students with a mean score of four or five would be thought to have high levels of ethnic identity.

As part of a pilot study, Phinney and Ong (2007) administered the MEIM-R to 241 college students. Item responses were submitted to a confirmatory factor analysis that tested five alternative models. The first was a baseline model, reflecting the null theory that hypothesized the latent construct of ethnic identity consisted of numerous independent factors. The second model was the single-factor, which evaluated the measured variables as indicators of a single latent factor of ethnic identity. The third model was the correlated two-factor model, which stipulated that ethnic identity consists of two uncorrelated factors, exploration and commitment. The fourth model allowed the two latent constructs, exploration and commitment, to correlate. The fifth model was a second-order model, in which ethnic identity was explained by two first-order factors, exploration and commitment, and one second-order factor, ethnic identity. Results of a scaled chi-square test, a robust maximum likelihood technique, found the best fit of data among the five models described above was the correlated two-factor model, indicating the MEIM-R is an excellent representation of ethnic identity and consists of two uncorrelated factors, exploration and commitment. Reliability analysis for the overall MEIM-R revealed a Cronbach’s alpha of .81, while the Cronbach’s alpha for the exploration subscale was .76 and .78 for the commitment subscale.

Resilience Inventory (Appendix E).

Noam and Goldstein (1998) created the Resilience Inventory (RI) in recognition of the need for a developmentally appropriate, cross-culturally sensitive measure of youth resilience. The original 75 items were thought to comprehensively assess the personal and environmental
characteristics related to the construct of resilience. Domains of the RI believed to represent the construct of resilience during the adolescent phase included self-esteem, self-efficacy, friendships, optimism, responsibility, altruism, peer relationships, and supportive adults. Noam and Goldstein administered the RI in different countries with the aim of making future refinements to the instrument based on obtained findings. Results of their follow-up studies have not been published yet. Song (2003) revised the original RI in an attempt to further delineate cultural differences and to capture four values of Eastern cultures and make the RI truly cross-cultural, including relational harmony, empathy, endurance, and control. The revised RI includes questions regarding self-perception as well as relationships. Song’s 44-item inventory contains measures of six subscales, listed and defined below:

1. Optimism: the student’s positive perspective on the world
2. Self-efficacy: the student’s ability to deal with situations or things effectively
3. Relationships with Adults: support from and perceptions of adults
4. Peer Relationships: the student’s relationship with friends
5. Interpersonal Sensitivity: the student’s initiative to help others and improve his or her surroundings
6. Emotional Control: the student’s ability to control himself or herself emotionally

Using data from 721 8th grade Korean students, Song’s measure of adolescent resilience had internal consistency reliability that ranged from .61 to .81, with test-retest reliability ranging from .57 to .79. Confirmatory factor analysis indicated an oblique six-factor structure for scores on the test subscales. The construct validity of the RI was supported by positive correlations with measures of self-esteem, locus of control, social support and negative correlation with a measure of hopelessness. Criterion-related validity was supported by positive correlations with teacher
ratings of students in multiple resilience criteria and negative correlations with self-report symptom outcomes (Song, 2003).

Song tested the cross-cultural transportability of the instrument using Multigroup confirmatory factor analysis. European American adolescents had comparable internal consistency estimates with the Korean students, with two notable exceptions. First, Korean students had higher scores on the subscale of emotional control, theoretically because many Asians value being able to control their feelings. European Americans, on the other hand, seemed to value the can do spirit and tended to score higher on questions of positiveness and self-esteem. Second, European Americans generally had higher means scores on the RI items on all six of the subscales listed above because European Americans tended to choose more extreme response categories compared to their Korean counterparts. An instrument that is able to detect differences between members of Eastern and Western cultures can be a valuable tool when studies are designed to focus on the differences between certain ethnic groups, such as between Koreans and European Americans. However, in the current study, only Whites and Blacks were compared, not Koreans or any other Asian ethnic groups. Therefore, the ability of the RI to detect differences in emotional control and self-esteem between ethnic groups from Eastern and Western cultures was of limited value.

The primary reason the RI was selected for this study was because it can render an overall mean score for adolescent resilience and because it can measure the key latent factors of resilience, including optimism, self-efficacy, interpersonal sensitivity, and emotional control. Additionally, the RI is based on previous resilience research, in which many of the same personality attributes were thought to be related to the construct of resilience, to include the factors of optimism, empathy, self-efficacy, determination, and ability to self-regulate (Werner,
1993; Kumpfer & Hopkins, 1993). Furthermore, the RI is simple to administer, score, and yields an overall mean score for resilience, as well as mean scores for each of the four subscales, which can then be compared to mean scores of ethnic identity and negative life events to determine if relationships exist. No norming scores have been established for the RI, which could have provided a way to compare students’ overall mean composite scores and their individual resilience factor scores to other samples and populations. One way to interpret mean scores from the RI would be to use the five-point Likert scale as a reference. For example, a mean score of one or two would be considered a low level of resilience (or one of its factors). Students with a mean score of three would be considered to have a moderate level of resilience, while students with a mean score of four would be thought to have higher levels of resilience. A mean score of five on the RI would be interpreted as the highest level of resilience possible. In sum, because the RI contains factors considered to represent the key domains of resilience, based on previous research, and because it is valid, reliable, and easy to use, the instrument was selected for the current study.

*Negative Life Events Inventory (Appendix F).*

By definition, resilience is the ability to overcome adversity and successfully adapt (Luthar, 2003). Therefore, an instrument was needed that captured adverse or negative life events that adolescents experience. Holmes and Rahe (1967) were among the first to develop an inventory that measured adverse life events in adults. Peterson et al. (2009) modified Holmes and Rahe’s original inventory, narrowing the 43-item measure down to 17 items that are considered appropriate for children and adolescents (see Appendix E). The resulting negative life events inventory (NLEI) was designed to gauge the types and amount of stress adolescents experience. The NLEI was selected among several life events questionnaires because it was the newest
instrument that had been developed and because the questions are specifically geared towards the stresses and events that occur in adolescents' lives. This survey was simply used to count the total number of negative life events (out of 17) students experienced in the last year. The NLEI does not have norms or percentile scores, which could have provided a way to compare the individual or group scores of students in a particular sample with other samples. Mean scores from the NLEI can be interpreted by considering the possible range of scores from one through seventeen. In this sample, the overall mean for the NLEI was 3.43, meaning the average number of negative experiences students had was a little more than three per year. The highest number of negative experiences reported by a student was 11, while several students reported having no negative experiences the previous year. Therefore, students who reported having no negative life experiences would have the lowest possible score. Those students with one or two negative experiences would be considered to have lower levels of bad experiences, while students with mean scores in the three-to-four range could be considered to have a moderate amount of negative life experiences. Students whose mean negative life experience scores were five or more could be considered to have higher levels of negative experiences. In other studies, the range of scores and standard deviation might be different and could indicate greater variability. Without established norms, it is problematic to use the NLEI to compare negative life events between different groups. The NLEI does not have any reliability or validity figures.

Data Analysis

In the data analysis, group mean scores for Blacks and Whites on each of the three instruments—the Multigroup Ethnic Identity Measure – Revised, the Resilience Inventory, and the Negative Life Events Inventory—were compared using the independent groups $t$-test procedure. Next, Pearson Product Moment correlational analysis was conducted to determine if a
relationship existed between ethnic identity (as measured by the MEIM-R), resilience (as measured by the RI), and its four subscales (optimism, self-efficacy, interpersonal sensitivity, and emotional control). Finally, stepwise multiple regression was used to determine whether RI, MEIM-R, and NLEI were predictive of GPA. An additional regression analysis was done to determine if GPA was predicted by ethnic identity (MEIM-R), resilience (RI), negative life events (NLEI), or the interaction of RI and NLEI.

**Ethical Considerations**

To ensure adherence to proper ethical standards, the following precautions were taken:

1. The Human Subjects Board of the College of William and Mary reviewed and approved the protocol in advance of the study to safeguard the welfare of the participants.

2. The dissertation chair, dissertation committee members, and the researcher all adhered to the *American Counseling Association Ethical Code* (1995) to protect the welfare of the participants.

3. Participants and their parents were informed in writing that their participation was voluntary. Parents gave their informed consent for their children’s participation in writing.

4. A written explanation of the study’s procedures was provided to both parents and students in advance of its implementation.

5. Approval to conduct the study was obtained in writing by following the school division’s procedures. Final approval was granted by the high school principal where the study was conducted.
6. All information was kept confidential and participant names were not associated with the data. Data gathered was coded to ensure anonymity.

7. Instrumentation was used in the explicit manner defined by the researcher.

8. Each instrument used in the study was scored, entered, and interpreted by qualified individuals.

9. Study results reported group scores only; individual data was not revealed.

Summary

The need to understand the relationship between ethnic identity, resilience, and their impact on academic success was the impetus for the current study. This study utilized a correlational design and multiple regression to determine similarities and differences among Black and White high school students, as well as to examine correlations between ethnic identity, resilience, negative life events, and grade point average. This chapter described the hypotheses, research design, and methods employed in this investigation. Sampling, correlational comparisons, multiple regression, and procedural processes were outlined. The instruments used were discussed, the data analysis approach was explained, and ethical considerations were presented. The following chapter presents the research findings.
CHAPTER FOUR: RESULTS

Introduction

The purpose of this study was to explore the relationship between cultural/ethnic identity, individual protective factors of academic resilience, and academic success. This chapter presents (a) descriptive demographics of the population and sample, (b) data analysis results related to the research hypotheses, and (c) results of data analyses for one additional finding.

Demographics of Sample

A demographic breakdown of the overall high school population and the sample of students who completed the surveys is contained in Table 4.1 and Table 4.2 below.

Table 4.1

*High School Population Demographic Data*

<table>
<thead>
<tr>
<th>Total students in school</th>
<th>Total students in health classes</th>
<th>Parent consent given</th>
<th>Number of students surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,039</td>
<td>239 (23%)</td>
<td>136 (13%)</td>
<td>122 (12%)</td>
</tr>
</tbody>
</table>

Table 4.2

*Demographics for High School Sample*

<table>
<thead>
<tr>
<th>Mean age in years</th>
<th>Number of each gender</th>
<th>Number of students in each grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.3</td>
<td>Male  63</td>
<td>Female  59</td>
</tr>
</tbody>
</table>

The demographic breakdown of African American and White students is contained in Table 4.3 below.
Table 4.3

African American and White Student Demographics for High School Sample

<table>
<thead>
<tr>
<th></th>
<th>Mean age</th>
<th>Number of each gender</th>
<th>Number of students in each grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in years</td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>African American students</td>
<td>15.6</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>White students</td>
<td>15.2</td>
<td>49</td>
<td>42</td>
</tr>
</tbody>
</table>

Analysis of the Research Hypotheses

In this section, results are discussed in relation to each of the ten research hypotheses.

Hypothesis One

A positive relationship exists between cultural/ethnic identity and resilience, as measured by participants' composite scores on the Multigroup Ethnic Identity Measure-Revised and their composite scores on the Resilience Inventory.

Results. The Pearson Product Moment correlation revealed that cultural/ethnic identity and resilience were significantly related ($r = .424, n = 122, p = .000$). Therefore, hypothesis one was supported. The means, standard deviations, and sample sizes for MEIM-R and RI are provided in table 4.4 and 4.5.
Table 4.4

Means, Standards Deviations, and Sample Size for MEIM-R

<table>
<thead>
<tr>
<th>Measure and group</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEIM-R Overall sample</td>
<td>3.20</td>
<td>.86</td>
<td>122</td>
</tr>
<tr>
<td>African Americans</td>
<td>3.32</td>
<td>1.05</td>
<td>20</td>
</tr>
<tr>
<td>Whites</td>
<td>3.13</td>
<td>.81</td>
<td>91</td>
</tr>
</tbody>
</table>

Hypothesis Two

A positive relationship exists between cultural/ethnic identity and the resilience protective factor of Optimism, as measured by subjects’ respective scores on the Multigroup Ethnic Identity Measure-Revised and their subscale scores on the Resilience Inventory.

Results. The Pearson Product Moment correlation revealed that cultural/ethnic identity and the resilience protective factor of Optimism were significantly related ($r = .271$, $n = 122$, $p = .003$). Therefore, hypothesis two was supported.

Hypothesis Three

A positive relationship exists between cultural/ethnic identity and the resilience protective factor of Self-efficacy, as measured by subjects’ respective scores on the Multigroup Ethnic Identity Measure-Revised and their subscale scores on the Resilience Inventory.

Results. The Pearson Product Moment correlation revealed that cultural/ethnic identity and the resilience protective factor of Self-efficacy were significantly related ($r = .439$, $n = 122$, $p = .000$). Therefore, hypothesis three was supported.
Hypothesis Four

A positive relationship exists between cultural/ethnic identity and the resilience protective factor of Interpersonal Sensitivity, as measured by subjects’ respective scores on the Multigroup Ethnic Identity Measure-Revised and their subscale scores on the Resilience Inventory.

Results. The Pearson Product Moment correlation revealed that cultural/ethnic identity and the resilience protective factor of Interpersonal Sensitivity were significantly related \( r = .231, n = 122, p = .011 \). Therefore, hypothesis four was supported.

Hypothesis Five

A positive relationship exists between cultural/ethnic identity and the resilience protective factor of Emotional Control, as measured by subjects’ respective scores on the Multigroup Ethnic Identity Measure-Revised and the subscale score on the Resilience Inventory.

Results. The Pearson Product Moment correlation revealed that cultural/ethnic identity and the resilience protective factor of Emotional Control were significantly related \( r = .241, n = 122, p = .008 \). Therefore, hypothesis five was supported.

Hypothesis Six

Resilience, as measured by the Resilience Inventory, and ethnic identity, as measured by the Multigroup Ethnic Identity Measure – Revised, are predictive of academic success, as measured by grade point average.

Results. A stepwise multiple regression was conducted using grade point average as the dependent variable and RI and MEIM-R as the predictor variables. The analysis revealed significant findings for the RI \( F(1, 121) = 13.632, p = .000, R^2 = .102 \) but not for the MEIM-R. Resilience level showed to be a significant predictor of grade point average, while the level of ethnic identity was not significant. Therefore, hypothesis six was partially confirmed.
Hypothesis Seven

Grade point average is a function of: 1) ethnic identity, as measured by the Multigroup Ethnic Identity Measure – Revised, 2) resilience, as measured by the Resilience Inventory, 3) negative life events, as measured by the Negative Life Events Inventory, and 4) the interaction of resilience and negative life events.

Results. A stepwise multiple regression was conducted using grade point average as the dependent variable and RI, MEIM-R, NLEI and the interaction of RI and NLEI as the predictor variables. The analysis indicated that RI was predictive of GPA ($t (121) = 3.692, p = .000, R^2 = .102$). However, MEIM-R ($t (121) = - .377, p = .707$), NLEI ($t (121) = - 1.504, p = .135$) and the interaction of negative life events and resilience ($t (121) = - 1.513, p = .133$) were not predictive of GPA beyond the contribution of RI. Therefore, hypothesis seven was partially confirmed, since resilience was predictive of GPA.

Hypothesis Eight

There will be no difference between African American and White participants in ethnic identity, as measured by their scores on the Multigroup Ethnic Identity Measure – Revised.

Results. An independent groups t-test was used to compare the African American and White samples on the MEIM-R. The t-test ($t (109) = .933, p = .353$) indicated no significant difference between groups. Therefore, null hypothesis eight was supported.

The means, standard deviations, and sample sizes for MEIM-R are provided in table 4.4 above.
Hypothesis Nine

There will be no difference between African American and White participants in level of resilience, as measured by their composite score on the Resilience Inventory and their subscale scores of Optimism, Self-efficacy, Interpersonal Sensitivity, and Emotional Control.

Results. A series of independent groups t-tests were conducted to examine the differences between the African American and White participants on overall resilience and the subscales.

1. The t-test for overall resilience ($t (109) = 1.002, p = .318$) indicated no significant difference between groups.

2. The t-test for the subscale of Optimism ($t (109) = 1.239, p = .218$) indicated no significant difference between groups.

3. The t-test for the subscale of Self-efficacy ($t (109) = 1.369, p = .174$) indicated no significant difference between groups.

4. The t-test for the subscale of Interpersonal Sensitivity ($t (109) = -.224, p = .823$) indicated no significant difference between groups.

5. The t-test for the subscale of Emotional Control ($t (109) = -.388, p = .699$) indicated no significant difference between groups.

In summary, there were no significant differences in RI and the RI subscale scores of Optimism, Self-efficacy, Interpersonal Sensitivity, and Emotional Control between African American and White participants. Therefore, null hypothesis nine was supported. The means, standard deviations, and sample sizes for the RI and its four subscales are provided in table 4.5 below.
Table 4.5

*Means, Standards Deviations, and Sample Size for RI and subscales: Optimism, Self-efficacy, Interpersonal Sensitivity, and Emotional Control*

<table>
<thead>
<tr>
<th>Measure and group</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>n =</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resilience Inventory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall sample</td>
<td>3.70</td>
<td>.49</td>
<td>122</td>
</tr>
<tr>
<td>African Americans</td>
<td>3.78</td>
<td>.46</td>
<td>20</td>
</tr>
<tr>
<td>Whites</td>
<td>3.66</td>
<td>.49</td>
<td>91</td>
</tr>
<tr>
<td>Optimism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall sample</td>
<td>3.64</td>
<td>.78</td>
<td>122</td>
</tr>
<tr>
<td>African Americans</td>
<td>3.81</td>
<td>.87</td>
<td>20</td>
</tr>
<tr>
<td>Whites</td>
<td>3.57</td>
<td>.76</td>
<td>91</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall sample</td>
<td>3.74</td>
<td>.55</td>
<td>122</td>
</tr>
<tr>
<td>African Americans</td>
<td>3.86</td>
<td>.48</td>
<td>20</td>
</tr>
<tr>
<td>Whites</td>
<td>3.67</td>
<td>.55</td>
<td>91</td>
</tr>
<tr>
<td>Interpersonal Sensitivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall sample</td>
<td>3.76</td>
<td>.66</td>
<td>122</td>
</tr>
<tr>
<td>African Americans</td>
<td>3.70</td>
<td>.80</td>
<td>20</td>
</tr>
<tr>
<td>Whites</td>
<td>3.74</td>
<td>.65</td>
<td>91</td>
</tr>
</tbody>
</table>
Emotional Control

<table>
<thead>
<tr>
<th>Measure and group</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall sample</td>
<td>3.05</td>
<td>.78</td>
</tr>
<tr>
<td>African Americans</td>
<td>3.00</td>
<td>.76</td>
</tr>
<tr>
<td>Whites</td>
<td>3.05</td>
<td>.79</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Measure and group</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLEI Overall sample</td>
<td>3.43</td>
<td>2.20</td>
</tr>
<tr>
<td>African Americans</td>
<td>3.55</td>
<td>1.93</td>
</tr>
<tr>
<td>Whites</td>
<td>3.30</td>
<td>2.18</td>
</tr>
</tbody>
</table>

Hypothesis Ten

There will be no difference between African American and White participants in negative life events, as measured by the Negative Life Events Inventory.

Results. An independent groups t-test was used to compare the African American and White samples on the NLEI. The t-test \( t(109) = .480, p = .632 \) indicated no significant difference between groups. Therefore, null hypothesis ten was supported. The means, standard deviations, and sample sizes for the NLEI are provided in Table 4.6 below.

Table 4.6

Means, Standards Deviations, and Sample Size for NLEI

<table>
<thead>
<tr>
<th>Measure and group</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall sample</td>
<td>3.43</td>
<td>2.20</td>
</tr>
<tr>
<td>African Americans</td>
<td>3.55</td>
<td>1.93</td>
</tr>
<tr>
<td>Whites</td>
<td>3.30</td>
<td>2.18</td>
</tr>
</tbody>
</table>
Additional Finding

There was one additional finding. A Pearson Product Moment correlation revealed that parents' educational level and students' GPA were significantly related (students' mothers: $r = .277, n = 115, p = .003$; students' fathers: $r = .256, n = 111, p = .007$). This is important, because it demonstrates a direct relationship between parents' educational level and their children's academic success, as measured by grade point average. This result is also similar to previous literature which found a well-established relationship between parent educational level and students' grades; the data in this instance is consistent with previous findings as expected.

Summary

This chapter reported the results of the data analysis procedures using independent groups $t$-tests, Spearman Product Moment correlations, and multiple regression analyses. The next chapter will discuss the results relative to the relationship between culture/ethnic identity, the individual protective factors of academic resilience, and academic success. Possible future implications and limitations of the current study will also be addressed.
CHAPTER FIVE: DISCUSSION

This chapter includes a brief introduction to the study and a discussion of the results as they relate to the hypotheses and previous research. Implications of findings, along with limitations and future recommendations, are also presented.

The focus of this study was to explore the relationship among cultural/ethnic identity, resilience, and academic success. Although much research has been done in the past that examined the risk and protective factors of resilience (Garmezy et al., 1984; Masten & Coatsworth, 1998; Werner, 1993, 2000), few studies have examined the positive and preventative effects of cultural or ethnic identity as potential protective factors that influence resilience and positive academic outcomes in the school setting. As presented in Chapter Two, other researchers have noted this gap in the research and recommended that more studies explore the influence culture may have on resilient outcomes (Arrington & Wilson, 2000; Garcia Coll & Magnuson, 2000; Yasui & Dishion, 2007; Phinney & Ong, 2007). The majority of research that examined the relationship between culture and resilience has focused on minorities and how culture and ethnic identity might buffer them against the negative effects of discrimination and prejudice (Baldwin et al., 1990; Gutman et al., 2002; Wong et al., 2003). Researchers have hypothesized that ethnic identity acts as a kind of immunization that buffers minority members from the effects of discrimination, racism, or prejudice. As a result, they have sought to examine how ethnic identity can be strengthened so as to increase its protective effect for minorities, including improving psychological functioning and academic success.

Another gap in the literature regarding the relationship between culture and resilience has been a shortage of studies that have examined European Americans (Whites) and their cultural or ethnic identity. Although Whites are currently the dominant ethnic group in the United States,
very few studies have examined what ethnic identity means to Whites. As discussed in Chapter Two, an exception is a recent study by Grossman and Charmaraman (2009), in which investigators evaluated Whites in a high school setting and determined that the strength and value of White ethnic identity varied depending on social context. When Whites were in the numerical majority, they tended to downplay or even deny they had a White identity, whereas, when they were in the minority, they considered their White identity to have greater value. Very few studies have compared Blacks to Whites to determine similarities and differences regarding their respective sense of ethnic identity, and even fewer have examined the relationship of ethnic identity to resilience and academic outcomes.

The rationale for the current study was based on this gap in the literature, in that it looked specifically at ethnic identity among Blacks and Whites and examined the relationship of their respective ethnic identities to resilience. It attempted to determine: (a) if ethnic identity and resilience are significantly correlated, (b) if ethnic identity or resilience predict academic success, (c) if there are any differences between Blacks and Whites on the measures of ethnic identity and resilience, and (d) if negative life events have any effect on resilience and academic success. Several interesting findings emerged. First, resilience was predictive of academic success (i.e., GPA), with students having higher resilience indicators also tending to have higher grades. Second, ethnic identity was significantly and positively correlated with resilience, as well as with each of the four component protective factors of resilience (Optimism, Self-efficacy, Interpersonal Sensitivity, and Emotional Control). Ethnic identity was not found to be significantly correlated with GPA, however, a significant correlation between parents' educational level and their children's GPA was found. This additional finding is considered to be important, since it suggests that parents' success, as indicated by educational level, has a direct
bearing on their children’s academic success, as indicated by grade point average. A complete discussion of all findings follows.

Discussion of Hypotheses

Hypothesis One

Hypothesis One suggested that there would be a positive relationship found between cultural/ethnic identity and resilience; it was confirmed by the data. The correlation was found to be statistically significant, and the strength of the relationship was considered to be moderate. The value of a strong ethnic identity is well-documented in the literature, as discussed in Chapter Two of this study. For example, among Blacks, Miller’s (1999) research suggested that racial socialization acted as a buffer against negative racial messages. Miller and MacIntosh (1999) determined that for African American adolescents, a strong racial identity served as a suit of armor and was linked to psychological well-being and higher school achievement. Peters and Massey (1983) demonstrated how ethnic minorities develop culturally-based practices, behaviors, and attitudes that acted as coping mechanisms and helped them be more resilient. For Whites, the research cited in Chapter Two suggests that White racial identity also has importance and value, but that it is situational in nature and imbedded in social context (Grossman & Charmaraman, 2009).

One way to interpret this finding is by thinking of culture as an adaptive mechanism that helps groups of people (i.e., different cultures) develop strategies to cope with difficult circumstances. Students seem to take their cues from their culture and incorporate these unique approaches into their own resilience strategies for dealing with difficult circumstances. The pride students feel in themselves and their own ethnic identity appears to generalize to an overall feeling of pride and translates into other areas of their lives, including the academic setting.
Thus, students who possess unique cultural norms and values seem to be better equipped to adapt to a changing environment and be resilient.

The significant correlation that was revealed between ethnic identity and resilience was an important finding. It suggests that one way to help students be more resilient in the school setting could be to strengthen their ethnic identity. As discussed in Chapter Two, one evidence-based program that has proven successful in the past is the Rites of Passage program (Warfield-Coppock, 1992; Bass & Coleman, 1997). Students could meet weekly after school to learn the seven African Kwanzaa principles, including unity, self-determination, collective work and responsibility, cooperative economics, purpose, creativity, and faith. Results of a study by Bass & Coleman (1997) suggest that academic motivation in Black males can be increased through acquisition of knowledge concerning their culture of origin. Another program discussed in Chapter Two was developed by Grantham and Ford (2003); these authors suggest a number of activities that could be created at school to help students deal with difficult circumstances. Counselors could offer multicultural counseling, in which sessions allow students to discuss coping with peer pressures, low teacher expectations, improving study habits, and asking for help. Counselors could also establish mentoring programs that enable students to meet with adult role models. Through the process of participating in cultural strengthening activities after school, during counseling sessions, and during mentoring discussions, students might increase their ethnic identity and thus be empowered to believe they will be successful and resilient in other areas of their lives, including academics.

Hypothesis Two

Hypothesis Two posed that cultural/ethnic identity will be positively related to the resilience protective factor of Optimism. This hypothesis was supported, as ethnic identity and
the resilience subscale of Optimism were found to be significantly related. This finding supported previous research conclusions that Optimism is an important individual protective factor against life stressors. It appears that strengthening students’ feelings of ethnic identity may bolster their sense of optimism which, in turn, could help students become more resilient.

As discussed in Chapter Two, the research findings of Yasui and Dishion (2007) suggest that a strong ethnic identity plays a key role in helping adolescents develop successful, culturally-based coping strategies. Other studies cited in Chapter Two found Optimism to be a key resilience protective factor (Doll & Lyon, 1998; Werner, 2000; Song, 2003). In fact, Werner’s analysis of the 30-year Kaua’i longitudinal study concluded that an optimistic attitude was one of the most important factors that helped the Pacific Islanders be resilient over their lifetime. Based on this research, programs could be implemented in the schools or community that may strengthen ethnic identity as well as Optimism. For example, one evidence-based program that has proven successful is the YES! Program (Thomas et al., 2008), which taught adolescents how to overcome the challenges presented in a racially oppressive society by enhancing their perceived control, self-efficacy, and optimism.

The promising implications of the findings for Hypothesis Two are that levels of ethnic identity and the individual protective factor of Optimism can be promoted as a potential means of increasing students’ academic resilience. As a result of participating in planful educational interventions, students may come to feel more proud of themselves and their ethnic identity and, thus, more optimistic towards the future. Were a situation to arise in the future that challenged participating students’ academic success, it is anticipated that they would be able to respond with greater optimism and, thus, with a stronger success-promoting “shield” of academic resilience.
Hypothesis Three

Hypothesis Three suggested that a positive relationship would exist between cultural/ethnic identity and the resilience protective factor of Self-efficacy. This hypothesis was supported, given that ethnic identity and Self-efficacy were found to be significantly related.

As discussed in Chapter Two, a study by Werner (1993) revealed that Self-efficacy was a key component of resilience. Therefore, it was not surprising that ethnic identity was significantly and positively correlated with Self-efficacy. Students’ belief that they could complete a task (self-efficacy) was by far the strongest correlation with ethnic identity in the study; it was nearly twice as high as the next closest individual academic protective factor of Optimism. This finding suggests that when students have a strong sense of ethnic identity and pride in their culture, they may be most likely to have a related higher level of confidence in completing work successfully.

The strong ethnic identity-to-self-efficacy correlation further suggests that teachers and counselors should make promotion of ethnic identity a key consideration of educational intervention programs aimed at developing the self-efficacy component of resilience. One suggested activity described in Chapter Two is to strengthen ethnic identity through multicultural counseling (Grantham & Ford, 2003). Multicultural counseling programs that have proven to be successful focused on developing a mutual understanding and respect between White students and racially diverse students, between faculty members of different cultural/ethnic groups, and between faculty and students. Research findings suggested that students who participated in the multicultural counseling program had higher levels of ethnic identity and increased confidence in successful completion of schoolwork.
Hypothesis Four

Hypothesis Four proposed that a positive relationship would exist between cultural/ethnic identity and the resilience protective factor of Interpersonal Sensitivity. This hypothesis was supported, since ethnic identity and Interpersonal Sensitivity were shown to be significantly and positively related. However, the magnitude of the relationship was the smallest among the four individual protective factors, suggesting that increasing students' levels of ethnic identity may make the least contribution to their development of academic resilience through facilitation of the interpersonal sensitivity protective factor. Being sensitive to the thoughts and feelings of others is a valued component in many cultures and, as shown in Chapter 2, is also a component of academic resilience. In the school setting, being aware of and sensitive to how others feel is thought to help students get along better with teachers and peers, and therefore, may be associated with better academic outcomes. Based on the current findings, it may be advantageous to supplement programs aimed at promoting resilience through strengthening ethnic identity with other types of interventions to ensure that the interpersonal sensitivity protective factor is also promoted, given that the ethnic identity intervention may not do so.

Hypothesis Five

Hypothesis Five suggested that ethnic identity and the resilience protective factor of Emotional Control were positively related. This was confirmed, as ethnic identity was found to be significantly related to Emotional Control, although the magnitude of the relationship was the third smallest among the four individual protective factors. Students with greater levels of ethnic identity tended to be better able to monitor their feelings and keep their emotions in check and to adapt more effectively in diverse cultural settings—qualities that appear contribute to academic resilience. This finding corresponds with previous research described in Chapter 2 that
consistently found adolescents who can control their own emotions to be more resilient to adversity (Thompson, 2006; Yasui & Dishion, 2007), and suggests that promoting emotional control should be an aim of initiatives to foster academic resilience. Based on the current findings, one means of facilitating greater emotional control in school-age students could be through promoting their sense of ethnic identity. This finding has important implications for counselors and teachers, who often struggle with finding effective interventions for students that have poor emotional control at school.

Two programs that could help strengthen ethnic identity are the YES! and CHOICES programs, described in Chapter Two. Participation in these programs could enable students to strengthen their ethnic identity, thus making it more probable that they would be improving their ability to control their emotions at the same time. Many students have anger issues or become aggressive at school, which often results in disciplinary action and can lead to a resultant decrease in academic performance. This finding could offer a fresh new approach to helping these students gain control of their emotions and enable them to better manage their anger. Through participation in culturally-based interventions such as YES! and CHOICES, students could learn ways to strengthen their ethnic identity, which could help them adopt more effective strategies to handle their anger. When students encounter situations in the future that make them angry or upset, having strengthened their ethnic identity may better enable them to express their feelings and control their emotions in a more culturally and socially appropriate manner.

_Hypothesis Six_

Hypothesis Six proposed that resilience and ethnic identity would predict grade point average (GPA). This hypothesis was partially confirmed, in that resilience was found to be predictive of academic success in terms of GPA, whereas ethnic identity was not found to be
significantly related to GPA and therefore did not predict higher grades. The magnitude of this resilience to GPA relationship was considered to be medium, as 10% of the variance in GPA was shared by resilience. From this finding, it is clear that resilience is important to academic success, and that promoting resilience is a salient goal in schools. The failure to find a significant correlation between ethnic identity and GPA was not anticipated. However, higher levels of ethnic identity were found to be associated with higher levels of resilience, and resilience predicted higher grades. It may be that ethnic identity makes an indirect contribution to academic success through its positive correlation with resilience—a recommended topic for further study.

As cited in Chapter Two, past research suggested that a strong racial and ethnic identity buffers minorities from discrimination and seems to result in better psychological functioning (Sellers et al., 2006) and academic outcomes (Gutman et al., 2002; Wong et al., 2003). The finding that resilience significantly predicted GPA was compelling, because it confirms the practical utility of engaging in efforts to build resilience in students. Combined with the other findings in this study relating stronger ethnic identity with greater resilience, this finding offers counselors and educators a new and fresh means of promoting students’ academic success that had not previously been applied. Also discussed in Chapter Two were ways that teachers and counselors could promote resilience by acquiring specific interventions to bolster students’ protective factors through programs that strengthen students’ ethnic identity.

Hypothesis Seven

Hypothesis seven suggested that grade point average could be predicted by ethnic identity, resilience, negative life events, and the interaction of resilience and negative life events. As noted in the previous discussion, although significant positive relationships were found to exist between ethnic identity and resilience, and resilience and academic success, no significant
relationship was found to exist between ethnic identity and academic success. Analyses related to Hypothesis Seven served to affirm that a strong ethnic identity may only contribute indirectly to higher grades.

The lack of a significant correlation between negative life events and academic success was unexpected. Also unexpected was the failure of the data to reveal a significant relationship between the interaction of resilience and negative life events. It was anticipated that students with higher resilience scores and a higher number of negative life events would still have higher grades because of the buffering effect their resilience may have provided. One explanation could simply be that the average number of negative life events (three per student) was too low to have a significant impact on students’ grades, and that if the number of negative life events had been higher, a positive relationship would have been detected. It could also be that there are high levels of variability among students regarding the nature of their risk and resilience factors and how these factors interact with negative events to impact academic success. It may be that certain risk or resilience factors have a more pronounced protective effect on students than others.

Chapter Two pointed out a limitation in most instruments designed to measure negative life events with regard to their capability to distinguish among the respective impacts of the negative live experiences students have experienced (Holmes & Rahe, 1967; Sarason et al., 1978; Peterson et al., 2009). Little is known about which negative events tend to have a more detrimental effect on students’ grades than others. Additionally, not much is known about the specific ways certain combinations of individual resilience factors buffer students from different types of bad life experiences. Therefore, additional study is needed to determine how negative life events interact with individual protective factors and affect resilient outcomes.
Hypothesis Eight

Hypothesis Eight proposed that there would be a difference between African Americans and Whites in terms of their possessed sense of ethnic identity. However, the null hypothesis statement was not rejected, and no significant differences in ethnic identity between Blacks and Whites were found. This was a surprising result, in that literature cited in Chapter Two suggested that Blacks would have higher levels of ethnic identity, because, compared to Whites, they typically face more adversity at school, within the family, and in their communities. There are several possible inferences that can be made regarding the lack of anticipated differences in ethnic identity for Blacks and Whites. First, it could be that there are no differences between Blacks and Whites with regard to their ethnic identity, and Black and White students feel the same levels of pride and identification with their ethnic group. However, this interpretation is in clear contradiction to the current literature that suggests that Blacks have higher levels of ethnic identity than Whites to protect themselves against the negative effects of racism and discrimination. Another inference that could explain the lack of differences in ethnic identity between these two groups is that the Black students in the particular school in this study may not have encountered a substantial amount of racism or discrimination as would be expected; thus, they may not have needed to rely on ethnic identity for its protective effect. This could be because the Blacks in this study may have been accepted by Whites as an integral part of the community, especially in the school setting. For example, both Black and White parents seem to be involved in school events and activities at about the same level, such as the parent-teacher organization, back-to-school night, and other events. In the same fashion, both Black and White students appeared to participate in school activities, such as plays, band and orchestra performances, clubs, organizations, and sports at a similar level. It could be that, in this
geographic community, Blacks felt welcome, were actively involved, and were accepted on equal terms by other ethnic groups, and, thus, Black students and their families did not experience as much racism and discriminatory treatment as would normally be expected. However, confirmation of this hypothesis is not possible, as it goes beyond the scope of this study.

Another possible interpretation for the unexpected lack of differentiation in ethnic identity among Blacks and Whites could be that the 15-year-old high school students had not fully developed their sense of ethnic identity. Phinney and Ong (2007) stated that ethnic identity develops in two sequential stages: Exploration, followed by Commitment. As mentioned in Chapter Two, Exploration is defined as seeking information and experiences relevant to one’s ethnicity, while Commitment refers to a strong attachment to and personal investment in a group. Further, French et al. (2000) stated that ethnic identity changes with age. The students who participated in this study were young—their average age was slightly more than fifteen years, and many may have been in the Exploration stage of ethnic identity and may not have yet progressed to Commitment, where they would be considered to have reached a more fully developed sense of ethnic identity. If true, this finding would seem to contraindicate further pursuit of this line of study with a high school population; however such a conclusion may be short-sighted, and should certainly be preceded by attempts at replication of the research involving measures of ethnic identity that are better suited to the level of commitment that can be expected in mid to late teens. Whereas high school students may not be ready to fully embrace their own ethnic identity, it is through relevant experiential learning programs in school that cultural exploration and commitment to ethnic identity can be fostered. Although progress may be slow, strengthening ethnic identity is considered an important activity that may help students.
become more resilient and may even indirectly contribute to better grades. Thus, despite the young age of the students in this study, sponsoring school-based programs that strengthen ethnic identity appears to have value and could be utilized as an additional method of enhancing students’ resilience and perhaps even indirectly improving their academic performance. More effective means to understand and enhance this potential benefit must be explored further.

The findings for Hypothesis Eight were unexpected, especially because the literature cited in Chapter Two suggested that minorities typically face higher levels of oppression and discrimination, which is normally accompanied by higher levels of ethnic identity. Without additional study, it appears that no one reason may be sufficient to explain the similarity of ethnic identity levels between Blacks and Whites in this study.

**Hypothesis Nine**

Hypothesis Nine suggested that there would be a difference between Blacks and Whites in resilience and its four subscales: Optimism, Self-efficacy, Interpersonal Sensitivity, and Emotional Control. However, the null hypothesis statement was not rejected, and no significant differences in resilience between Blacks and Whites were found. This finding was not anticipated, as it was thought on the basis of previous research that Whites would have higher levels of resilience because they were believed to be able to utilize more individual, family, and community protective factors. One potential reason for the lack of significant differences found in resilience scores among Blacks and Whites can be found in the Chapter Two discussion on risk and protective factors. White students tended to have more protective factors at their disposal, such as a supportive family environment, parents that were involved in their education, and access to resources (Duncan & Brooks-Gunn, 2000; Schoon & Parsons, 2002). However, in view of the findings, the Black families in this study may have been uniquely able to afford
substantial protection for their children, despite the increased risk that being a single-parent family configuration normally invokes. This protection could have come from extended family members (i.e., grandparents, aunts, uncles, cousins), significant adults in the community, or perhaps teachers or other staff members serving as mentors who took particular interest in students and provided a protective effect. Perhaps, in this school, in this community, at this point in time, the playing field has truly been leveled and both Black and White students have an equal opportunity to succeed. Having worked in the school for nearly two years, the researcher observed what appeared to be strong support for both Black and White students from family members and especially from school faculty and staff. Further, both Black and White students alike appeared to be active and involved in a myriad of school activities and seemed to get along well with each other. Additional study is needed to more accurately determine similarities and differences in how Blacks and Whites utilize individual, family, and community protective factors to counteract risks and take full advantage of their protective effects.

There are several important implications for the finding of no significance differences between Blacks and Whites in measures of resilience and its four subscales (Self-efficacy, Optimism, Emotional Control, and Interpersonal Sensitivity). First, according to resilience theory and the findings of this study, higher levels of resilience result in greater protective effects. The fact that both Blacks and Whites had similar resilience levels suggests that Blacks may have more protective factors at their disposal than anticipated and may have been able to harness more of these protective resources. Understanding the specific nature and availability of these resources is an important area for further study. Similarly, despite a higher percentage of Black students in this study living with a single parent, they seem to have been able to overcome potentially negative pressures of single parent households and still be resilient, once again
suggesting that they utilized their protective factors to a degree that afforded them more resilience than previous research might suggest. Third, it could be that the Black families whose students participated in the study were simply unique from other Black families in general. That is, despite the obstacles and challenges they experienced, their ability to bounce back, overcome difficult circumstances, and be resilient, was on the same level as White students that may not have experienced as much adversity. Perhaps the extraordinary adversity they have experienced during their lifetime has made them more firm in their resolve and created a similarly extraordinary will and ability to face challenges and overcome them by calling on whatever protective resources they have at their disposal. Additional study in this area is clearly needed.

In summary, we cannot summarily assume that minorities lack sufficient protective factors to buffer them from the risks they face on the basis of the differential levels of discrimination and oppression they normally face. It may be that there are other unanticipated protective factors that contribute to the successful outcomes of Blacks and other minorities that have not been accurately measured. Exploring all the protective factors that minority students utilize is an area that is worthy of further study.

Hypothesis Ten

Hypothesis Ten proposed that African Americans and Whites would have different levels of negative life events. However, contrary to expectation, the null hypothesis statement was not rejected; the difference between Blacks and Whites on the NLEI was minimal and was not statistically significant. There are several inferences that could be made regarding this finding. First, the lack of anticipated differences between Blacks and Whites in negative life events could be because there were no differences between these two groups of students. As mentioned in the
discussion of Hypothesis Nine, a clearer understanding of environmental risks faced by Blacks and Whites and how protective factors are utilized is needed.

Given what we currently know about continuing discrimination and differential Black-White access, another possible explanation for the similar scores of adversity could be that the 17 events measured on the NLEI were not representative of all the negative events that students actually experienced. Specifically, significant adversities that were not measured were discriminatory treatment, racism, and prejudice. Several studies referenced in Chapter Two (Gutman et al., 2002, Wong et al., 2003, Sellers et al., 2006) found that discriminatory behavior towards Blacks occurred more frequently and often had a detrimental effect on their psychological functioning. The fact that the NLEI only covered a limited type of negative life events and was not reflective of the systematic oppression of Black Americans could be considered as a limitation of the instrument itself. Had the NLEI more accurately reflected the full scope of adverse events, there may have been more of a difference between Blacks and Whites regarding their scores on the NLEI.

One recommendation for future studies is to include a measure of discrimination and racism experienced by both Black and White students, as well as to provide students an opportunity to include other traumatic events not listed on the NLEI. As discussed in Chapters Two and Three, none of the life events questionnaires that have been developed appear to accurately capture all negative events that happen to adolescents, especially racism and discriminatory treatment (Holmes & Rahe, 1967; Sarason et al., 1978, Peterson et al., 2009). One alternative could be to revise the NLEI to include all potential negative events that occur to adolescents today. Another recommended way to gather more accurate information from students on adverse experiences could be to conduct qualitative interviews. During the
interviews, students could be asked to describe any racist or discriminatory events, such as being harassed by police, being denied a public or private service, or being discouraged by a teacher from seeking higher education (Kessler et al., 1999). Students could also be asked to describe any other traumatic events not included in the NLEI that they had experienced, including things such as bullying, pressure to join a gang, experiences with gun violence, or abuse. The potential failure of the NLEI to accurately capture all adverse life events of students could be an excellent area to explore in future studies.

In summary, the findings for Hypothesis Ten run counter to expectation and professional literature, given the differential levels of oppression and discrimination normally faced by minority and majority populations. Inasmuch as there are several alternative explanations for the finding of no difference between Blacks and Whites in terms of their negative life events, the acceptance of no one explanation would seem to be appropriate without further study.

Additional Finding

There was one additional finding relating to parents' educational level as correlated with their children's GPA. Previous research (Schoon & Parsons, 2002; Duncan & Brooks-Gunn, 2000) suggests that parents' educational level is significantly and positively correlated with students' GPA because of the positive influence parents exert on their children. This additional finding was confirmed, in that for both Blacks and Whites in this study, higher levels of parental education were positively and significantly correlated with students' GPA.

There are several inferences that can be drawn from this finding. As mentioned in Chapter Two, parents exert a powerful influence on their children and can directly contribute to their academic success through encouragement, school involvement, and by setting a good example. Parents who value education and who achieve higher educational levels themselves
may be more likely to pass on this value to their children. Several evidence-based practices were discussed in Chapter Two that strengthen the school-family-community partnership (Henderson & Mapp, 2002; Bryan, 2005). These practices reported that when there were high levels of school-family-community involvement among key stakeholders, students earned higher grades, had higher attendance rates, better graduation rates, and developed more advanced social and emotional skills. These existing practices, coupled with the findings of this study emphasize how important it is for teachers and school counselors to keep in mind the critical role that parents play in their own children’s academic success and for them to encourage parents to be involved in school activities.

Limitations of the Study

A note was made in Chapter Three regarding a lack of normative data available for the instruments used in the study (i.e., the Multigroup Ethnic Identity-Revised, Resilience Inventory, and Negative Life Events Inventory). Without established norms, the means of the groups for each of the different measures cannot be compared to other samples and populations. Additionally, because there are no normative intensity levels established for each instrument, the magnitude of the mean scores for each group can only be estimated. For example, on the MEIM-R and the RI, a five-point Likert scale is used. Groups with mean scores rated in the one to two point range are thought to have low levels of the characteristic being measured, those with a mean score of three are estimated to possess a moderate amount, and scores of four and five are thought to indicate higher levels of the measured characteristic. Thus, the lack of normative data is considered to be a limitation of the study and its generalizability to other settings and populations. Another limitation of this study was the small sample size of the participants. There were a total of 122 students who answered the survey questionnaires; however, only 20 were
African American. The small sample size for this group could reduce the power of the tests and limit the ability to generalize the results to other populations. Secondly, the researcher had hoped to survey a variety of ethnic groups, including Latino Americans, Asian Americans, and Native Americans. However, because there were so few students from these ethnic groups in the school where the study was conducted, the group sizes were too small to work with their means. Having students from several different ethnic groups could have enhanced understanding of the relationship between ethnic identity, resilience, and academic success, by broadening the scope of possible cultural influences on the variables studied. Having only two ethnic groups (Blacks and Whites) in the study limits the generalizability of the findings to other ethnic groups.

An additional limitation was the sole use of self-report instruments. This could result in a response bias, especially if participants responded in a certain manner because they thought there was a socially desirable way to answer the questions. For example, their self-reported levels of ethnic identity could have been higher than expected simply because students presumed the researcher wanted them to report that they had a strong sense of ethnic identity. A final consideration is the previously noted potential limitation of the NLEI to measure all negative life experiences that occurred to students. There may have been incidences of discrimination and racist treatment as well as other traumatic events which went uncounted because the survey didn’t specifically list those events, thereby rendering an inaccurate picture of the total amount of adversity experienced by students.

Several results from this study should be interpreted with caution. For one, the significant correlations between ethnic identity and resilience, and between ethnic identity and the four resilience subscales (Optimism, Self-efficacy, Interpersonal Sensitivity, and Emotional Control) does not necessarily imply that one caused the other (Gall et al., 2007). One cannot
assume that stronger ethnic identity causes resilience, nor can one assume that higher scores of resilience and its individual protective factors cause stronger ethnic identity. All that is known is that ethnic identity and resilience are significantly correlated. Second, the data gathered was not collected through random sampling techniques but, rather, from a convenience sample of all students in Health classes from one high school during one semester. Random sampling could have been a way to ensure the sample was representative of the overall school population. Finally, students were all from the same school in Virginia. Their attitudes, beliefs, and values may or may not be representative of the attitudes, beliefs, and values of adolescents from other schools and other settings in different parts of the United States. Therefore, caution must be exercised when generalizing results from this study to other populations.

Despite its limitations, the study contributes to the literature in several key ways. First, a significant relationship between ethnic identity and resilience, including its individual protective factors, was revealed. Second, resilience was shown to be predictive of GPA. Third, contrary to current literature, there were no significant differences revealed between Blacks and Whites on measures of ethnic identity, resilience, and negative life events. Fourth, an additional finding revealed that parent’s educational level was significantly correlated with their children’s GPAs. Overall, the link between ethnic identity and resilience and the ability of resilience to predict grades have important potential implications. They afford new and fresh ways for counselors and teachers to increase ethnic identity, resilience, and, consequently, academic success for many students. Several recommendations are suggested in the next section that may help future researchers focus on specific areas that are worthy of further investigation.
Recommendations for Future Research

In the future, there could be several ways to expand on the results of this study. First, the relationship between ethnic identity and resilience should be explored in more depth. This could be done by increasing the sample size and including representatives from all the major cultural/ethnic groups in the United States, including Latino Americans, Asian Americans, and Native Americans. The ways different cultural/ethnic groups perceive their world, respond to stressors, and develop means to adapt and overcome adverse circumstances should be examined in greater detail. Second, researchers should sample participants longitudinally, since previous studies have suggested that both resilience and ethnic identity are developmental in nature and change over time. Third, researchers could divide a sample into high-risk, low-risk groups, and include a control group. Participants who had experienced many more negative life events or had experienced a greater amount of environmental stress could be studied in more depth to determine their level of resilience and how their protective factors helped them face and overcome adversity. Future studies could include a measure of the type and amount of discrimination, racism, and prejudice experienced by participants, as this stressor may have a profound effect on resilient outcomes. Researchers could also utilize a mixed-method design, in which data would be gathered using the quantitative method, followed by unstructured interviews (qualitative method). This combined technique could lead investigators to a better understanding of how culture and ethnicity impact the school environment by allowing participants to explain in their own words the ways in which their culture and ethnicity may influence their school academics. Further exploration of culture and ethnic identity might also help to illuminate our understanding of exactly how resilience protects adolescents from the effects of negative life events.
Summary of the Research

This study explored the relationship between cultural/ethnic identity and the individual protective factors of academic resilience. There were several promising results. First, resilience was a significant predictor of grade point average; that is, students with higher resilience scores were found to have higher grades. This knowledge could be very important to counselor educators, counselors, and teachers. Through helping adolescents improve their resiliency, educators could help more students achieve better academic outcomes. Findings also revealed that cultural/ethnic identity and the four individual protective factors of resilience (Optimism, Self-efficacy, Interpersonal Sensitivity, and Emotional Control) were significantly and positively correlated. This knowledge could be helpful to practitioners who are looking for ways to help students improve. Academic programs and interventions could include a focus on strengthening cultural and ethnic identity, knowing that it may help students become more resilient.

The study also found that Black and White adolescents had similar levels of ethnic identity, resilience, and negative life events. While cultural/ethnic identity appears to be an important factor in adolescent development, the findings indicated that ethnic identity and grade point average were not significantly related. However, ethnic identity may indirectly contribute to improved academics through helping to strengthen resilience. The study failed to confirm a significant positive correlation between GPA, ethnic identity, and the interaction between negative life events and resilience. An additional finding revealed that parents' educational level was significantly related to their children's grades.
Looking Forward

This study focused on finding a solution to a key problem in the United States—the large number of students at-risk for school failure. The study explored an area often overlooked by other researchers; that is, it sought to determine to what extent students’ cultural and ethnic identity affects their resilience and influences their academic success. Results revealed that there was a significant relationship between ethnic identity and resilience; several ways were suggested to strengthen ethnic identity as a means of helping students gain confidence and increasing their individual resilience protective factors. The current study also found that resilience predicted higher grades. This finding is powerful, in that strengthening students’ resilience could provide a viable way to help students improve their grades. Through continued studies that explore the contribution ethnic identity and resilience make towards academic success, researchers may move closer to a solution that provides the ideal support and environment needed to enhance all students’ success.
References


and resilience in children and adolescents (pp. 64-99). New York: Cambridge University Press.


Phi Delta Kappan, 76(9), 701-712.


Family Process, 34, 373-387.


(UMI No. 3274246)


Cultural Identity and Academic Resilience, 187

development in relation to social contexts (pp. 87-118). Mahwah, NJ: Lawrence Erlbaum Associates.


Dear Parents:

I am writing to let you know about a study I will be conducting at Warhill High School as part of my dissertation research through The College of William and Mary.

I am interested in learning about the relationship between cultural or ethnic identity and academic resilience. I plan to survey all students currently enrolled in Health classes at Warhill for the Spring 2009 semester. I have several short questionnaires I would like to have the students complete: a demographic questionnaire, an ethnic identity survey, a resilience inventory, and a survey of life events. I will complete my data gathering during one class.

I need your written permission in order for your son or daughter to participate. I have attached the parent consent form and a self-addressed, stamped envelope for your convenience. If you agree to allow your son or daughter to participate, please complete, sign, and date the attached permission form and mail to me in the stamped envelope. I provided an additional copy of the consent form (on the back of this letter) that you may keep for your records.

As an added incentive for student participation, I will hold a drawing among all students whose parents return their permission slip. One winner in each Health class will receive a $20 debit card that can be used in any establishment that accepts Visa or MasterCard.

I will provide you a written summary of the results at the conclusion of my study upon request. I really hope that you will take the time to complete the attached consent form and return to me as soon as possible.

Please feel free to contact me if you have any questions or concerns: my email address is deweav@wm.edu; my phone number at Warhill High School is 757-565-9107.

Thanks (in advance) for your cooperation!

Dale Weaver, M. Ed, LPSC
APPENDIX B

Informed Consent

I, (print your name here)...................................................................................., as the parent/legal guardian of (print your son or daughter’s name here)...................................................................................., give my permission for my child to participate in a study examining the relationship between cultural identity and resilience at Warhill High School. I understand that this study is being conducted by Dale E. Weaver, a doctoral candidate in Counselor Education at The College of William and Mary. This study has been approved by the Williamsburg-James City County Public Schools, the Principal of Warhill High School, and The College of William and Mary’s Human Subjects Committee.

I am aware that my son/daughter will be asked to complete four survey questionnaires during one Health class. The surveys my child will be asked to complete include the following: the Multigroup Ethnic Identity Measure-Revised, the Resilience Inventory, the Negative Life Events Inventory, and a brief demographic questionnaire (asks name, grade, gender, and parent education level).

I am aware that my child’s participation is voluntary and that he or she may withdraw from this study at any time without affecting his or her course grade. The assessments and demographic questionnaire will be confidential and identified by a code that the researcher will choose for instrument matching purposes. The study results will report class averages rather than individual scores and no names or any other identifying information will be reported.

I also understand that a copy of the results of the study will be mailed to me upon request. I am aware that I may report dissatisfaction with any aspect of this research project to the Chair of the Protection of Human Subjects Committee, Dr. Tom Ward, (757) 221-2358.

By participating in this study, I understand that there are no obvious risks to my child’s physical or mental health.

Confidentiality Statement

As the parent of a participant in this study, I am aware that all records will be kept confidential and my child’s name will not be associated with any of the results of this study.

I fully understand the above statements and hereby consent to my child’s participation in this study.

________________________________________

Parent/guardian’s signature
APPENDIX C

DEMOGRAPHIC QUESTIONNAIRE

1. How old are you? 
   ________________________________

2. What grade are you in? 
   ________________________________

3. Who do you live with? (Circle a, b, or c below)

   a. One biological parent only
   b. Both biological mother and father
   c. Other (please specify) ________________________________

4. What is the highest grade achieved by your mother? (Circle one answer below)

   a. Did not complete high school
   b. Completed high school but did not attend college
   c. Completed high school and some college classes
   d. Completed college
   e. Completed more classes after college
   f. I don't know

5. What is the highest grade achieved by your father? (Circle one answer below)

   a. Did not complete high school
   b. Completed high school but did not attend college
   c. Completed high school and some college classes
   d. Completed college
   e. Completed more classes after college
   f. I don't know
APPENDIX D
MULTI-GROUP ETHNIC IDENTITY MEASURE – REVISED

In this country, people come from many different countries and cultures, and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of ethnic groups are Latino, African American, Mexican, Asian American, Chinese, and many others. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in: In terms of ethnic group, I consider myself to be ____________________________

Use the numbers below to indicate how much you agree or disagree with each statement.

(5) Strongly agree  (4) Agree  (3) Neutral  (2) Disagree  (1) Strongly disagree

1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs. _______

2. I have a strong sense of belonging to my own ethnic group. _______

3. I understand pretty well what my ethnic group membership means to me. _______

4. I have often done things that will help me understand my ethnic background better. _______

5. I have often talked to other people in order to learn more about my ethnic group. _______

6. I feel a strong attachment towards my own ethnic group. _______

7. My ethnicity is

   (1) Asian or Asian American, including Chinese, Japanese, or others
   (2) Black or African American
   (3) Hispanic or Latino, including Mexican American, Central American, or others
   (4) White, Caucasian, Anglo, European American; not Hispanic
   (5) American Indian/Native American
   (6) Mixed; parents are from two different groups
APPENDIX E

RESILIENCE INVENTORY

Below is a list of the ways some children and adolescents act and think about themselves. Please circle your response to each question using the following scale:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>always false</td>
<td>usually false</td>
<td>half the time false</td>
<td>usually true</td>
<td>always true</td>
</tr>
<tr>
<td>half the time true</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th></th>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There's at least one adult I can talk to about my problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>I make friends easily.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>I don't trust adults.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>I take pride in sticking up for what I believe in.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>If I don't like something about someone else I try to put it in a nice way so they don't get hurt.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>I have more bad times than good.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7</td>
<td>I apologize when I accidentally hurt or offend someone.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>More good things than bad things will happen to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9</td>
<td>When there's a lot to think about or do, I can make it into smaller pieces and handle one thing at a time until everything gets done.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10</td>
<td>I don't like being around my friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>There are adults I look up to and admire.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>I try to look at a situation in different ways to understand it from different points of view.</td>
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</tr>
<tr>
<td>12</td>
<td>I don’t like to help people with their problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13</td>
<td>Even little things make me upset.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14</td>
<td>I have fun with my friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15</td>
<td>Adults usually ignore me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16</td>
<td>I start most days thinking I’ll have a bad day.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17</td>
<td>If the way I’m doing something isn’t working, I try to think of different ways to do it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18</td>
<td>I’m just as important as anyone else.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>I don’t have any friends I can trust.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20</td>
<td>Even if there are bad things, I’m able to see the good things about me and my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21</td>
<td>I’m bored by most things in life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22</td>
<td>I keep making the same mistakes over and over.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23</td>
<td>I don’t show any extra respect to authority figures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24</td>
<td>I am happy with all of the choices I have made in my life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25</td>
<td>I think things will get worse in the future.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26</td>
<td>There are lots of things I’m good at.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27</td>
<td>I get impatient when I have to wait for something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28</td>
<td>I make decisions before I have a chance to think about the consequences.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td></td>
<td>I stay calm even when there's a crisis.</td>
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</tr>
<tr>
<td>31</td>
<td>I am optimistic about school life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32</td>
<td>I don't pay attention to others and stick to what I want.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33</td>
<td>I have adults other than my parents, who are influential to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>34</td>
<td>I think that I am a lucky one.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35</td>
<td>People say that I understand them very well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>36</td>
<td>When something bad happens to me, I think that it will last long.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>37</td>
<td>I don't have many friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>38</td>
<td>I will get good grades in school exams.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>39</td>
<td>I discuss with adults if I have problems.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>40</td>
<td>I am not popular among friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>41</td>
<td>I listen to adults.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>42</td>
<td>I am a good listener.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>43</td>
<td>I am in good terms with my friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>44</td>
<td>I try to speak from the standpoint of others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
</tr>
</tbody>
</table>
APPENDIX F
NEGATIVE LIFE EVENTS INVENTORY

Place an X in front of any event you experienced during the past year.

____ 1. A move to a different house within the same school attendance area

____ 2. A move to a different house in a different school attendance area (or a change to a new school due to your parent’s request)

____ 3. One of your parents went back to work after taking care of a younger child at home

____ 4. A significant new illness

____ 5. A personal accident that was frightening

____ 6. A personal accident that resulted in injury

____ 7. A chronic (long-term) illness (that began this past year)

____ 8. A serious illness or disability in a family member or close relative

____ 9. The death of a family member or close relative

____ 10. Your parents got separated

____ 11. Your parents got divorced

____ 12. One of your parents got remarried

____ 13. You became part of a new, blended family

____ 14. One of your parents became unemployed

____ 15. One of your parents changed jobs

____ 16. One of your long-term pets died

____ 17. A traumatic experience occurred not mentioned above