The Relationship Among Locus of Control, Coping Style, Self-Esteem and Cultural Identification in Female Adolescents

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THE RELATIONSHIP AMONG LOCUS OF CONTROL, COPING STYLE, SELF-ESTEEM, AND CULTURAL IDENTIFICATION IN FEMALE ADOLESCENTS

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ABSTRACT

THE RELATIONSHIP AMONG LOCUS OF CONTROL, COPING STYLE, SELF-ESTEEM, AND CULTURAL IDENTIFICATION IN FEMALE ADOLESCENTS

Jennifer Butler-Sweeney

The purpose of the present study was to explore the variables of locus of control, coping style, and self-esteem in an all-female, culturally diverse sample of adolescents. While many studies have evaluated the variables of locus of control, coping style, and self-esteem within the adolescent population, these efforts involved predominately Caucasian samples. Thus, the present study examined these variables in the context of race and ethnicity. The results of this study are mixed in that there were some findings that support the study hypotheses and others that were not in the anticipated direction. As predicted, there was a correlation between locus of control and coping style. Specifically, as problem-focused coping strategies decreased, locus of control became more external. It was hypothesized that this sample would exhibit greater levels of emotion-focused coping than problem-focused and consequently, there would be a greater tendency to be externally, rather than internally oriented in terms of locus of control. These two hypotheses were not supported; the participants was more internally oriented than expected and individual’s engaged in problem and emotion-focused coping strategies with equal frequency.

This study further hypothesized that, consistent with previous research, there would be ethnic differences in the tendency to seek spiritual support as a problem-
focused coping strategy. This was not the case in the current sample, however, this finding needs to be evaluated in terms of the small sample size and under-representation of certain ethnic groups in the current sample. Lastly, race, locus of control, and coping style were all significant predictors of self-esteem, as anticipated. Specifically, an internal locus of control was predictive of higher levels of self-esteem, as was a greater prevalence of problem-focused coping strategies. Race was a significant, positive predictor of self-esteem.

Overall coping style, correlations between various methods of coping, and types of self-esteem were evaluated as supplemental analyses and contributed to the interpretation of the findings and implications for future research. While this study evaluated the way in which the variables of locus of control, coping style, and self-esteem function individually and in interaction with one another in the female adolescent population, future research should focus on delineating coping behavior in terms of preferred sequences, rather than mutually exclusive categories. Further, the variables of ethnic identity and current stress levels should be evaluated to see the ways in which these constructs impact locus of control, coping style, and self-esteem, assessing simultaneously for ethnic differences within these constructs.
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DEDICATION

I dedicate this document to my husband Shannon and our daughter, Alexandra. It is difficult to find the words to thank someone for being so many things in your life. My husband is my best friend, and a constant source of happiness and perspective. His humor, sacrifice and endless support allow me to aspire to every goal that I have. And to our daughter, Ally, who represents the best in both of us; she has changed the way that I look at the world and taught me to recognize what is truly important. The two of them are my every motivation and my heart and I love them more than words can express.
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CHAPTER I

Introduction

Current research has highlighted the importance of understanding the effects of key psychological variables on the developing adolescent personality. Among these variables are locus of control, coping style and self-esteem, which have all been linked to various positive and negative outcomes during this developmental stage (Howard, 1984; McCubbin & Thompson, 1987). Further, these variables and the relationships among them are important in ascertaining how the adolescent experience is unique and may differ from the ways in which adults perceive and cope with their environment.

Locus of control refers to the individual tendency to appraise what factors are responsible for one’s successful, as well as problematic, outcomes (Folkman & Lazarus, 1985). Locus of control is typically described as a tendency toward a more external or internal orientation (Kerr & Gross, 1997). Individuals possessing an internal locus of control believe that they are able to exercise effort and intervene before a situation in their lives yields a specific outcome. Should this outcome be negative or disappointing to the individual, responsibility is taken for the behavior that may have brought about such a result. In contrast, an external locus of control refers to the tendency to attribute her or his outcomes to circumstances outside the realm of personal responsibility, such as luck, fate or the presence of another person exercising her or his own agenda (Rotter, 1966).
Locus of control has been linked to many developmental outcomes for adults and adolescents alike, such as self-esteem (Mullis & Chapman, 2000), school satisfaction among adolescents (Heubner, Ash & Laughlin, 2001) and levels of perceived stress (Luthar, 1991). Enger, Howerton and Cobbs (1994) found that individuals with high self-esteem also had an internal locus of control. In addition, individuals who reported specifically that they have a poor body image were found to exhibit an external locus of control, whereas positive body image was associated with an internal orientation (Mable, Balance, & Galgan, 1986). Lastly, in a study looking at female participants in exercise programs, internal locus of control was positively correlated with a high self-concept (Doganis, Theodorakis, & Bagiatis, 1991).

While there are many psychological variables that have been linked to locus of control and coping style, the relationships between these variables and self-esteem is one of the most frequently documented (Byrne, 2000, McCullough, Ashbridge, & Pegg, 1994; Mullis & Chapman, 2000). Self-esteem is defined as an individual’s perception of self as competent, capable, and in possession of various other positive qualities that deem her or him worthy of love and attention from others (Phinney & Chavira, 1995). Specifically, high self-esteem has been positively correlated with academic achievement (Howerton, Enger, & Cobbs, 1992) and reduced anxiety (Kerr & Gross, 1997). In studies exploring locus of control among adolescent populations, self-esteem has been found to be related to this construct. Specifically, an internal locus of control has been linked to high self-esteem (Enger et al., 1994).
In addition to locus of control and self-esteem, coping style has been explored and deemed important as a variable construct that impacts an individual’s ability to successfully navigate her or his environment. Coping style refers to the set of behaviors that an individual employs to successfully handle stressful experiences and regulate the negative emotions that accompany such experiences (Compas, Malarne, & Fondacaro, 1988). Inappropriate and unproductive coping styles have been linked with a variety of deleterious outcomes, such as adjustment difficulties and health problems (Nicolotti, El-Sheikh & Whitson, 2003).

The literature identifies several styles of coping that individuals seem to readily employ, including: (a) problem-focused or active coping, (b) emotion-focused coping, (c) spiritual coping, and (d) distraction coping (Patterson & McCubbin, 1987; Peacock, Wong, & Reker, 1993). Problem-focused coping, also identified as approach or active coping, refers to the tendency to take active and deliberate steps to identify and then subsequently lessen or eliminate the source of one’s stress or conflict (Anshel, 1996). In contrast, emotion-focused coping refers to a more passive style in which an individual may avoid or attempt to ignore the stressful circumstance, vent to others or engage in wishful or fantasy like thinking (Mullis & Chapman, 2000). Spiritual coping involves the tendency to perceive things as humanly uncontrollable and manipulated by a higher being (Patterson & McCubbin, 1987). Lastly, distraction or escape coping involves doing something to take one’s mind off the conflict entirely, such as engaging in a physical activity or relaxation (Nicolotti et al., 2003). While spiritual and distraction coping have
been named as distinct coping styles in the above findings, there is extensive research that places distraction coping under the umbrella of emotion-focused coping and seeking spiritual support as a direct and problem-focused coping strategy (Mullis & Chapman, 2000; Patterson & McCubbin, 1987; Sinha, Wilson & Watson, 2000). Studies looking for gender differences have found that adolescent males and females differ with regard to choosing a coping strategy; specifically, females are more likely to engage in emotion-focused coping than males (Frydenberg & Lewis, 1991).

Research has explored the possibility that individuals do not adhere exclusively to one coping strategy continuously, but rather use one style over another depending upon one’s appraisal of the situation. For example, Lazarus and Folkman (1984) found that when an individual correctly perceives an event as controllable, such as achieving a certain grade or job promotion, problem-focused coping is the most effective strategy. In other circumstances perceived to be uncontrollable, such as the loss of a loved one, emotion-focused strategies such as venting to a friend, are more effective.

Both locus of control and coping style have been found to vary by gender and race (Byrne, 2000; Chapman & Mullis, 2000). There are several studies that have looked at both internal locus of control and coping style among African American adolescents (Luthar, 1991; Scott, 2003; Weist, Freedman, Paskewitz, Proescher, & Flaherty, 1995). Research has found locus of control to be an important variable among African American youth (Luthar, 1991). Specifically, it was found that a more internal locus of control correlated with high levels of resiliency among an at risk population of African American
adolescents. These individuals were said to be more at risk for poor school performance and discipline problems, due to economic disadvantages and lack of family support. Further research, however, needs to delineate locus of control by examining the effects of cultural differences. Those that do examine racial differences and how they affect the variable in question do not offer a comparison with other ethnicities. For example, the finding that a more advanced racial identity status is linked to having an internal locus of control for African Americans (Cosby, 1999) did not look for comparisons within a culturally diverse sample.

Further, it has been documented that African American adolescents employ certain characteristic coping strategies, such as spirituality and seeking support from their community (Daly, Jennings, Beckett, & Leashore, 1995) more so than Caucasian adolescents. While there is a need for further exploration in this area, there has been some evidence to support the existence of differences among African American and Caucasian adolescents in terms of locus of control and coping styles (Mullis & Chapman, 2000). Research looking at cultural differences in the relationship between body image and locus of control found that overall, Asian adolescents had a more negative body image than African-American adolescents in a given sample (Prendergast, 2000). This research highlights the need to continue to delineate how these variables differ depending upon one’s race.

The remainder of this chapter will address the following areas: statement of the problem, conceptual and operational definition of variables, limitations of existing
research, significance of the study, the research questions and hypotheses posed by the present study, and finally, the anticipated limitations associated with this research.

Statement of the Problem

Research suggests that adolescents having an internal locus of control accept responsibility for their actions. This leads to the development of positive attributes such as self-esteem (Moos, 1990) and other adaptive characteristics, such as greater amounts of cognitive empathy (Parton & Day, 2002) and sound moral reasoning (Howard, 1984). Similarly, a problem-focused style of coping among adolescents has been linked to other positive outcomes, such as having an increased self-concept and fewer behavioral problems (Weist et al., 1995).

Self-esteem has been identified as an influential determinant of positive adolescent development and as such, needs to be further evaluated and analyzed in conjunction with other variables to enhance both conceptual and practical knowledge of this period of development (Moos, 1984). While the literature exploring coping skills and locus of control among adolescents is abundant, many of these findings involve largely White samples and, as such, what is known about how these constructs work during adolescence may only be true for Caucasian populations (Chubb, Fertman, & Ross, 1997). Other authors suggest that that while research looking at locus of control and self-esteem among racially diverse samples is scant, this is an increasingly necessary and valuable body of research (e.g., Wood, Hillman, & Sawilowsky, 1996).
There have been comparisons made regarding locus of control and body image and how these vary among African American and Asian adolescents. Prendergast (2000) for example, found that African Americans reported having a better body image than Asian adolescents and that poor body image was associated with an external locus of control for both races. Research has also highlighted that there are racial differences in coping strategies (Mullis & Chapman, 2000) among African American and Caucasian female adolescents, yet this finding needs to be further explored and replicated. Research evaluating preferences for emotion or problem-focused coping strategies as well as locus of control compared Indian with Canadian adolescent females and found that overall, Indian students preferred more emotion-focused coping strategies that the Canadian participants. This study did not involve comparisons with any other ethnicities (Sinha et al., 2000).

In summary, internal locus of control and problem-focused coping have both been linked with certain positive developmental outcomes, such as high self-esteem. Current research, however, has not evaluated whether an internal locus of control is associated with the tendency to employ problem-focused coping strategies among adolescents. Additionally, while extensive research has explored the effects of age and gender on locus of control and coping strategies, fewer studies have addressed racial differences in these constructs within the adolescent population.

In an effort to extend the knowledge base concerning these variables, the present study will examine racial differences among a diverse sample of female adolescents in an
effort to further delineate how race may affect the outcome variables of locus of control, coping style, and self-esteem. Some gender differences have been found in both coping style and locus of control (Chubb et al., 1997). There is evidence to support that adolescent females engage in more emotion-focused coping than their male counterparts and that this leads to a failure to directly cope with the problem (Mullis & Chapman, 2000). Rotherham-Borus, Trautman, Dopkins, & Shrout, (1990) found that among an adolescent female sample, suicide attempters engage in wishful thinking, an emotion-focused coping strategy, more so than those who did not attempt suicide.

Given that the sample is entirely female, the study does not assess for gender differences. However, it is important to assess coping style and locus of control among female adolescents, as these variables have been found to interact with negative outcomes specifically for this group, such as teen pregnancy (Young, Martin, Young, & Ting, 2001) and poor body image (Prendergast, 2000). Rosenthal, O’Griffith, Succop, and Biro et al., (2002) found that adolescent females that employed an emotion-focused coping style, (e.g., wishful thinking) were more likely to acquire a sexually transmitted disease. These findings support the need to further explore how female adolescents cope and develop a more external or internal locus of control orientation. Finally, the relationship between locus of control, coping strategies, and race will be explored to see how these variables may influence levels of self-esteem.
Limitations of Existing Studies

While there are many studies evaluating the presence of coping style and locus of control, there are certain limitations within the existing literature that necessitate the need for further research in this area.

Correlation Between Locus of Control and Coping Strategies

There are many studies that highlight locus of control and coping strategies as important behavioral and cognitive variables (Carr, 2001; Rosenthal, Biro, Cohen, Succop, & Stanberry, 1995). However, there is sparse existing research that explores the relationship between these two variables. Locus of control has been named as one of the significant factors that may lead to the development of one style of coping over another (Farris-Fisher, 2003; Folkman & Lazarus, 1985); however, the theoretical link between an internal control orientation and an active or problem-focused coping style has not been addressed. It is expected that there would be an increased tendency for an individual with an internal locus of control to engage in problem-focused coping, as she or he would be more likely to perceive an event as controllable than would one with a more external orientation.

Given the documented relationship between coping style and locus of control and the positive outcomes that are associated with these variables, it is expected that the tendency to engage in problem-focused styles of coping would involve an individual possessing an internal locus of control. This dynamic is possible because one believes
that circumstances are within one's spectrum of control and thus, choices can be made and acted upon to solve problems and improve the situation. The present study seeks to ascertain if an internal locus of control is associated with a greater tendency to employ problem-focused coping strategies.

_Inadequate Attention to Racial Variables_

Existing literature highlights the fact that what we know of many psychological variables during the adolescent period of development is derived from studies that involve largely White samples and Western cultures (Chubb et al., 1997; Dong, 2003; Mullis & Chapman, 2000; Wood et al., 1996). As such, these studies highlight the need to replicate previous findings with a racially diverse sample in an effort to delineate how these variables are affected by race.

**Significance of the Study**

It is expected that locus of control and coping style will be correlated because they are linked conceptually and empirically in both a theoretical and practical way. It is important, however, to continue to delineate how these constructs differ depending upon racial classification (Chapman & Mullis, 2000). It is essential that research continues to identify what psychological variables are linked to positive outcomes for all adolescents, rather than just White adolescents (Weist et al., 1995). This body of research educates counselors, teachers and other professionals interacting with adolescents on how best to
understand the developing adolescent personality. A more comprehensive understanding of these dynamics equips professionals working with this population to emphasize strengths and address challenges that are specifically affected by gender and racial considerations. The extent to which this is done effectively leads to appropriate interventions and educational tools.

Further, research has shown links between parenting interventions and locus of control. Anecdotal data and observation of the adolescent population yields agreement that in general, teenagers in present society are not readily accepting of responsibility for their behavior and the shortcomings therein and that this is very often perpetuated by parental influences. Specifically, parents with enabling types of behaviors are shown to have children with an external locus of control (Lynch, Hurford, & Cole, 2002). Knowing that external locus of control is linked to problematic behaviors, such as aggression and poor self-concept, research endeavors such as these can appropriately address parenting skills, giving specific consideration to how these dynamics may differ by race.

Definitions of Terms

The following are conceptual and theoretical definitions of the variables in this study, based on existing literature, followed by the operational definition for each variable as it is used in the present study.

*Internal Locus of Control:* An internal locus of control is the psychological orientation involving an acceptance of responsibility for personal actions and the belief
that many circumstances in life and the way in which outcomes develop are within the
realm of one’s control (Chubb et al., 1997). Internal locus of control is operationally
defined as a low score on the Nowicki and Strickland Locus of Control Scale for
Children, where $< 20 = $ a more internal locus of control (Nowicki & Strickland, 1973).

*External Locus of Control:* An external locus of control is defined as a tendency
to attribute one’s life circumstances to outside forces, such as another person’s agenda,
luck, or fate (Halloran, Doumas, Richard, & Margolin, 1999). External locus of control
will be operationally defined as a high score on the Nowicki and Strickland Locus of
Control Scale for Children, where $> 20 = $ a more external locus of control (Nowicki &

*Problem-Focused Coping:* Problem-focused coping refers to an active and direct
way of coping with life stress and negative situations. This type of coping involves
strategies such as utilizing social supports and professionals and addressing the problem
by actively looking for a solution (Lazarus & Folkman, 1984). Problem focused coping
will be operationally defined as an average score on the problem-focused coping
dimension of the Adolescent Coping Orientation for Problem Experiences (A-COPE;
McCubbin & Thompson, 1987). The A-Cope will display how frequently these types of
coping behaviors are used.
Emotion-Focused Coping: Emotion-focused coping involves avoidance and
distraction tactics, such as wishful thinking and ventilation of feelings without looking
for a solution (Mullis & Chapman, 2000). Emotion-focused coping will be operationally
defined as an average score on the emotion-focused coping dimension of the Adolescent
Coping Orientation for Problem Experiences (A-COPE; McCubbin & Thompson, 1987).
The A-Cope measure will yield a score indicating the frequency with which emotion-
focused coping strategies are used.

Self-Esteem: Self-esteem is the psychological construct that refers to the presence
of high self-regard and efficacy, a feeling that the self is competent and worthy of
positive feedback from others (Ebata & Moos, 1989; Phinney & Chavira, 1995). Levels
of self-esteem will be operationally defined by the individual’s score on the Coopersmith
Self-Esteem Inventory (Coopersmith, 2002), with 100 being the highest possible score.

Race and Ethnicity: Race and ethnicity are used as interchangeable terms
throughout this document, and include both racial and ethnic classifications for the three
groups to which participants are assigned. Although race and ethnicity are not
synonymous, there are many research findings that use the two terms interchangeably to
cover various demographic, social, and economic circumstances (Angel & Angel,
2006; Holzer, Swanson, & Shea, 1995; Phinney & Chavira, 1995). Race and ethnicity
will be operationally defined as the self-reported racial identification provided by
participants. (See Appendix D; Question # 3 on the Demographic Questionnaire).
Research Questions

The following are the questions to be addressed in the following study:

1. What is the relationship between locus of control and coping style?

2. Do adolescent females tend to employ more problem-focused or emotion-focused coping styles?

3. Do adolescent females tend to report a more internal or external locus of control?

4. Given the literature indicating a preference for religious coping (a problem-focused coping style) in the African American and Asian community, will the patterns of problem-focused coping vary by race?

5. What is the influence of locus of control and coping style on self-esteem and is there variability among racial groups?

Hypotheses

1. It was expected that there would be a correlation between locus of control and coping style. Individuals with a more internal locus of control would tend to employ higher levels of problem-focused coping and lower levels of emotion-focused coping.

2. Due to previous research indicating the prevalence of emotion-focused coping among female adolescents it was expected that, overall, the participants would report higher levels of emotion-focused coping strategies than problem-focused coping behaviors.
3. Due to the expected correlation between locus of control and coping style, it was expected that there would be an overall greater tendency toward an external locus of control.

4. Due to previous research indicating a greater prevalence of seeking spiritual support as a coping strategy for African American adolescents, it was expected that African Americans would employ seeking spiritual support, a problem-focused coping strategy, more so than other races.

5. It was expected that both locus of control and coping style would be predictive of higher levels of self esteem. It was not known if race would be a significant predictor of self-esteem.

Delimitations of Present Study

Current research suggests that there is a relationship between levels of racial identity and the outcome variables in this study (Farris-Fisher, 2003; Neville, Heppner, & Wang, 1997). Specifically, research has found a link between an internal locus of control and the internalization stage of racial identity among African American adolescents (Cosby, 1999). In addition, Harps (2005) found that among a sample of African American adolescents, high levels of racial identity correlated with fewer symptoms of depression, yet lower levels of self-esteem, suggesting that identifying with one's race and being exposed to the negative affects of racism decreased self-esteem. Other research involving African American adolescents (McCreary, Slavin & Berry, 1996) found that
high levels of racial identity served as a protective factor against being bothered by negative stereotypes concerning their race and improved overall levels of self-esteem.

It must be considered, therefore, that the comparisons that these measures yield for this sample on the variables of locus of control, coping style, and self-esteem are related to levels of racial identity. Further research should include a measure of racial identity to determine how it interacts with these variables, as this analysis is outside the scope of the present study.

Another potential limitation involves the possibility that racial variability and socioeconomic status confound one another. In order to address this issue, however, a both racially and economically diverse student body was found at a co-educational public school and an all-female parochial school. To identify economic classification, students will be asked which lunch program they participate in (e.g., free lunch, half-priced lunch, or full priced lunch). This will provide data to analyze whether economic variability is influencing the variables in the present study.
CHAPTER II

Review of Related Literature

This chapter summarizes research findings related to all of the variables of interest in the present study. The purpose of this chapter is to expand on the definitions and discussion in Chapter I in an effort to increase the reader’s understanding of the theoretical and empirical rationale for the current study. It consists of the following five sections: (a) a general discussion of locus of control, (b) a discussion of coping behaviors and styles, (c) the correlation between locus of control and coping style, (d) the relationship between locus of control, coping style, and self-esteem, and (e) specific racial differences with regard to locus of control, coping styles and self-esteem. Each of the five sections will discuss the need for studying adolescent females specifically with respect to these variables.

Locus of Control

Locus of control is a psychological construct that involves appraisal and reinforcement of behavior. For decades, researchers have been interested in the concept of behavioral reinforcement and how this leads to the construction of either an internal or external locus of control (James, 1957; Nowicki & Strickland, 1973; Phares, 1967). An individual’s locus of control has also been described in the literature as attributional style, defined as being one’s tendency to attribute life circumstances to either internal or external causes (Kaslow, Rehm, Pollack, & Siegel, 1984; Seligman, Kaslow, Alloy,
Peterson, Tannenbaum, & Abramson, 1984). Specifically, individuals with an internal locus of control perceive that the eventual outcome or reinforcement for their behavior is the direct result of their efforts, personality strengths, and intentions. One's behavior, therefore, is reinforced and analyzed through internal structures and the individual's contention that she or he is responsible and eventually rewarded for positive outcomes. If this eventual outcome is somehow disappointing or does not meet the individual's hopes and expectations, then the responsibility for such circumstances is also evaluated in such a way that personal responsibility is emphasized (Lefcourt, 1966; Rotter, 1966).

In contrast, the belief that a behavioral or situational outcome is the result of external factors, such as another person's agenda, luck, or chance, is associated with a more external control orientation. These individuals tend to evaluate life circumstances by looking for another individual or circumstance to hold accountable for negative outcomes and perhaps do not feel adequately gratified when a situation resolves itself positively (Joe, 1971; Rotter, 1966).

The construction of a locus of control orientation and its influence on human behavior was initially evaluated by examining how this construct worked within adult development (Lefcourt, 1966; Phares, 1967, Rotter, 1966). Certain researchers extended this work and examined how this construct develops within and influences the behavior of children and adolescents (Coleman, Campbell, Hobson, McPartland, et al., 1966; Nowicki & Strickland, 1973). Baier (1961) found that locus of control tended to become more internal with age and that this developmental process assisted in bringing about
specific positive outcomes, such as school achievement. Further, internal locus of control was also associated in this study with higher socioeconomic classes and white culture in comparison to African Americans.

Due to the primary focus on adult development in earlier research, there was a need for research efforts designed at developing an adequate measure of locus of control specifically geared toward children and adolescents. Bailer (1961) constructed a 23-item yes or no questionnaire with statements designed to ascertain locus of control while Battle and Rotter (1963) developed the Children’s Picture Test of Internal-External Control. Crandall, Crandall and Katkovsky (1965) developed a measure that elicited children’s beliefs about what circumstances were responsible for outcomes related to school achievement. These measures and the research that was conducted as relevant to their development led to the construction of the Nowicki and Strickland (1973) Locus of Control Scale for Children. This scale has been widely used and determined to be both reliable and valid by Nowicki and Strickland’s work as well as by more current research (Enger, et al., 1994; Huebner et al., 2001). This scale will be used in the present study and will be further explained in Chapter III.

Extensive research has focused on locus of control and the way in which it interacts with important developmental constructs within the adolescent population (Kerr & Gross, 1997; McCullough et al., 1994). Specifically, an internal locus of control, (Strickland, 1989) has been linked to many positive variables that are instrumental to adaptive adolescent development. Among these variables are school retention rates and
achievement (Edstrom, Goertz, Pollack & Rock, 1986), social maturity (Lefcourt, 1981) and higher scores on standardized achievement tests (Stipek & Weisz, 1981).

Various studies have examined locus of control within a given population of adolescents to further the understanding of how this construct interacts with other consequential variables. Kerr and Gross (1997) found that for female adolescent gymnasts, for example, locus of control was related to an increased self-esteem and fewer feelings of anxiety.

McCullough and colleagues (1994) looked specifically at a sample of male and female adolescents in positions of leadership in their high school and measured the way in which locus of control interacted with leadership behavior. Findings demonstrated that leaders were more internally oriented than non-leaders in the same school and that groups led by these leaders were performing at a superior level.

A study comparing a sample of young adolescent sexual offenders with non-offenders (Parton & Day, 2002) found a relationship between internal locus of control and non-offending behavior. Among the non-offenders identified in the sample, an internal locus of control was related to a higher level of cognitive empathy than the sexual offenders produced.

Given the documented relationships between internal locus of control and numerous positive outcomes, it is reasonable to expect a link between the presence of an external locus of control and negative or maladaptive outcomes. Research has in fact found correlations between an external locus of control and many behavioral domains
that are detrimental to successful development, such as aggressive behavior (Halloran et al., 1999). An external locus of control has been linked to certain behavioral issues that affect one's physical health, such as obesity and cigarette smoking (Greenberg, 1993; Presson, Chassin, & Sherman, 2002). Studies concerning body image have found a link between negative feelings about one's body and general appearance and an external locus of control (Mable et al., 1986).

Certain studies have examined locus of control with populations of adolescents that were considered to be at risk. Luthar (1991) identified a sample of African American adolescents who were at greater risk for developmental difficulties due to lower socioeconomic status, an inability to access resources, and a lack of familial support. An internal locus of control was found to be a protective factor against poor grades and a decreased self-concept in this sample. Similarly, Nunn and Parish (1992) identified a sample of at-risk students, defined as being those with previous incidents of discipline and academic problems while at school, (e.g., skipping class, detentions, and poor grades). These adolescents were found to be more externally motivated than the control group and felt that there was very little they could do to exercise control over future outcomes and behaviors.

Research delineating the effects of gender on locus of control has yielded conflicting results. For example, Cairns, McWhirter, Duffy, and Barry (1990) found that females were more internally oriented than were males, while another study found no gender differences (Adame, Johnson, & Cole, 1989), and still other findings suggest that
males were more internally motivated than female adolescents (Archer & Waterman, 1988). These conflicting findings suggest that there may be other factors interacting with gender to produce one control orientation over another.

There has been considerable attention, however, focused upon female adolescents, locus of control, and the unique concerns that exist for this population. Young and colleagues (2001) found that adolescent girls with an external locus of control were more likely than those with an internal focus to become pregnant during their teenage years. Female adolescents in this sample were said to make little connection between their own abilities and efforts (e.g., attempting to go to college) and a possible positive outcome, (e.g., career opportunities).

In a study looking at depressed female adolescents who had attempted suicide, their attributional style was found to be a factor associated with irrational and depressed thinking. Specifically, the belief that all of one's positive traits were the result of chance happenings or the efforts of other people was found to be a characteristic thought process among the depressed portion of the sample (Rotherham-Borus et al., 1990). Other studies have replicated this link between depression and an external attributional style for females (Lazarus, 1981). Given these findings, the present study will explore locus of control within an exclusively female sample, as this construct influences the behavior of female adolescents in various important ways.
Coping Styles

Coping styles have been a focus of psychological research historically (Dewey, 1933), more recently (Lazarus & Folkman, 1984) and in current literature (Chapman & Mullis, 2000; Schmeelk-Cone & Zimmerman, 2003;). Coping, in general, refers to the process an individual goes through when demands of the external environment exceed her or his resources. One must cope with these demands and the ensuing emotional, physical, and psychological responses that such taxing circumstances may elicit (Folkman & Lazarus, 1985).

Coping behavior is an important variable to understand because of the documented relationship between coping style and overall measures of psychological well-being (Friedman, 1991). Further, an individual’s ability to successfully cope with perceived stressors has been linked to psychological variables such as better adjustment to marital conflict (Nicoltti et al., 2003) and perceived closeness to family members (Hamid, Xiao, & Leung, 2003).

Considerable information exists regarding the classification of coping styles and the types of behaviors that fall under the umbrella of the various styles. The most widely cited and discussed distinction between coping styles concerns the differences that exist between a problem-focused verses an emotion-focused style of coping (Monat & Lazaraus, 1991). Problem-focused coping involves an individual directly and intentionally attempting to alleviate or if possible, eliminate the source of stress or discomfort. Emotion-focused coping, however, involves a focus on managing the
emotions associated with a conflict and includes such behaviors as wishful thinking, venting, denial, or avoidance of the problem (Heppner, Cook, Wright, & Johnson, 1995). Other research identifies problem-focused coping as approach coping, while emotion-focused is referred to as avoidance coping (Krohne & Hindel, 1988; Roth & Cohen, 1986).

Further research on coping suggests that the tendency to place all coping behaviors into a mutually exclusive category of either problem or emotion-focused strategies is overly simplistic and does not encompass all of the coping behaviors that an individual may produce (Carver, Scheier, & Weintraub, 1989). Sandler, Tein, and West (1994) divided coping into the distinct categories of active, support, avoidance, and distraction coping. Avoidance coping is referred to as encompassing the tendency to deny that there is a problem as a method of coping. Distraction coping refers to the act of withdrawing from the source of stress by changing focus and ignoring the issue entirely. While these are regarded as distinct categories in this research, other findings submit that denial and behavioral withdrawal in an effort to avoid the stressor are all examples of emotion-focused coping strategies (Lane, Jones, & Stevens, 2002).

Similarly, there are findings that define spiritual coping as a distinct style that involves relinquishing personal control over a problematic or challenging circumstance and allowing oneself to be comforted by the fact that a higher being will intervene and solve the problem (Peacock et al., 1993). Certain findings identify seeking spiritual
solace as a problem-focused coping strategy that is more prevalent among African Americans than Caucasians (Mullis & Chapman, 2000; Patterson & McCubbin, 1987).

Patterson and McCubbin (1987) noted that while an individual may engage in the direct action of a problem focused-coping strategy, she or he may also simultaneously use an emotion-focused strategy such as venting or relaxing in an effort to manage the tension associated with the distressing circumstance. Further, an individual may engage in emotion focused coping and appraisal coping simultaneously by altering the meaning of an upsetting event through minimization, yet at the same time seek to manage the tension by venting or distraction techniques. This further corroborates research that highlights that coping behaviors do not always fit into mutually exclusive categories and that one may engage in many classifications of coping simultaneously in order to meet all the emotional and psychological demands of a given situation.

The present study focuses upon the distinction between problem and emotion focused strategies due to the previous literature that predominately categorizes most coping behaviors into one of these two categories (Compas et al., 1988; Endler & Parker, 1990; Folkman & Lazarus, 1985; Lane et al., 2002; Mullis & Chapman, 2000). Additionally, there are many findings that suggest that problem-focused coping strategies, in general, yield more efficacious outcomes for individuals than employing only an emotion-based style (Compas et al., 1988). Previous literature has cited examples when emotion-focused strategies, (e.g., wishful thinking and denial, have been maladaptive and even dangerous to an individual’s well-being (Mullis & Chapman,
2000). It should be noted, however, that some research has found emotion-focused strategies to be initially helpful when an individual’s level of personal control over the stressor is limited, such as the loss of a loved one or personal illness (Lane et al., 2002; Lazarus, 1981; Lazarus & Folkman, 1984). Frydenberg and Lewis (1994) suggest that individuals have coping behaviors that are situation specific and do not adhere to one style of coping exclusively.

Specific studies examining the adolescent population and the benefits of problem-focused coping have found many areas of development that have been positively affected by the use of these more direct coping behaviors. Moos (1990) found that overall mental well-being was associated with problem-focused coping strategies, while Mullis and Chapman (2000) found a link between low self-esteem, a self-perceived lack of empowerment, and emotion-focused coping strategies. Further, avoidance of the problem, an emotion-focused coping strategy, undermines personal control and increases the likelihood of psychological problems, such as depression (Olah, 1995). As is the case with locus of control, several researchers have found a link between self-esteem and coping style (Carver et al., 1989; Chubb et al., 1997; Ebata & Moos, 1989; Moos, 1990).

In the specific population of Asian Indian adolescents, distancing oneself from the problem and minimizing its importance, two indirect or emotion-focused strategies, were linked to aggression, hostility and risk-taking behavior, such as substance abuse (Sinha et al., 2000). Further, Schmeelk-Cone and Zimmerman (2003) found a correlation between active or problem-focused coping and fewer reports of chronic stress, anxiety, depression,
and antisocial behavior among African American adolescents. Problem-focused coping has been linked to more adaptive handling of marital conflict (Compas et al., 1988) and Heppner and colleagues (1995) linked problem-focused coping with psychological adjustment for children and adolescents.

Research examining gender differences and coping style has found that females tend to engage in emotion-focused strategies, such as venting feelings and wishful thinking, more so than males who engage in more problem-focused coping (Frydenberg & Lewis, 1991; Patterson & McCubbin, 1987). Other research, however, suggests that while adolescent girls may discuss their problems more and vent to invested others, adolescent males also employ different, yet equally maladaptive, emotion-focused strategies, such as blaming and avoidance of the problem (Hamid et al., 2003).

While there is a need for further research in this area, there are findings that suggest adolescent females are vulnerable to negative outcomes should they engage only in emotion-focused coping. For example, links have been found between emotion-focused coping and a greater likelihood of acquiring a sexually transmitted disease for adolescent females (Rosenthal et al., 2002). In a sample of depressed females who have attempted suicide, non-problem-focused coping was found to be a factor. While this research did not cite emotion-focused strategies as the reason for the depression, it was found that these depressed girls were not able to generate alternatives or solutions to problems and felt ineffective and powerless as a result. These feelings then in turn exacerbate depressed thinking (Rotherham-Borus et al., 1990). Given these findings and
the prevalence of emotion-focused coping in general for girls, the present study will focus on the coping behavior of adolescent females to further ascertain how problem or emotion focused coping style interacts with other variables, specifically, locus of control and self-esteem.

Relationship Between Locus of Control and Coping Style

Folkman and Lazarus (1980, 1985) have maintained that cognitive appraisal of a given situation directly impacts the choice, as well as the effectiveness, of the coping style that is employed. They submit that appraisal, defined as one’s assessment of the stressful circumstances that necessitate coping behavior, involves a primary and secondary thought process. The primary process involves an individual evaluating what is at stake for her or him in a particular difficult circumstance. The secondary process involved in the same appraisal is the individual then contemplating what options she or he has in terms of how to cope, how effective each option would be, and how others will likely respond, given the choice of one option over another. The emotional reaction to a given stressor is influenced by an individual’s primary appraisal process. The more an individual feels is at stake, the more intense her or his emotional reaction. What is deemed to be of high value, and thus worthy of an intense emotional reaction, varies depending upon the individual’s characteristics such as her or his values, beliefs, personality, and motivation, as well as situational circumstances (Folkman & Lazarus, 1985).
Folkman and Lazarus (1980) maintain that problem-focused coping is appropriately used when an individual appraises the source of stress as controllable, such as studying for a difficult test. Conversely, emotion-focused coping should be used when the stressor is uncontrollable, such as the sudden loss of a loved one. Individuals rely on both problem and emotion-focused coping and the decision to engage in one style versus another depends upon one’s accurate appraisal of the situation (Folkman & Lazarus, 1985). McCrae (1984) found an association between problem-focused coping and the way in which one coped with what was appraised as challenging for the individual. Emotion-focused coping in this study, such as wishful thinking, was associated with personal losses.

Other research explores the correlation between appraisal and coping behavior. Coping varies, for example, with the appraisal of how threatening a situation is to one’s well-being (Folkman, Lazarus, Dunkel, DeLongis & Gruen, 1986). Additionally, the perceived effect that one’s coping will have on changing the stressor has been found to cause variability in coping behavior. In a study conducted by Stone and Neale (1984) perceived levels of control over daily hassles was found to correlate with problem-focused coping. In this study, an individual feeling that her or his response to a stressor will successfully alleviate the source of such stress, led to the tendency to appraise the situation as controllable and engage in problem-focused, rather than emotion-focused coping. Further, Folkman and Lazarus (1985) found a correlation between perception of control and fewer emotion-focused coping strategies in response to anxiety in test-taking.
situations. While the theoretical relationship between appraisal of control and coping style has been discussed in previous literature, the need for systematically measuring this relationship has been identified as a necessary extension for future research (Peacock et al., 1993). Lastly, Trivits (2005) identified locus of control as one of the factors that would influence an adolescent’s coping behavior in response to stressful situations.

Given the documented relationship between cognitive appraisal and perceived levels of control, it is expected that locus of control will affect coping behavior in the present study. While the aforementioned findings do not specifically state that locus of control affects appraisal, which in turn affects coping style, they do point to situational and personality characteristics that influence appraisal, one of which was perception of control. It is possible that the accuracy with which one appraises an event as controllable or uncontrollable is directly related to a locus of control orientation. While emotion-focused coping may be effective when the event is truly outside the realm of personal control, such as an unexpected death, it can be problematically used when the event is in fact controllable such as studying for a test and improving one’s grade. The tendency to attribute the controllable event of improving one’s grade to external forces, such as an uncooperative teacher, is indicative of an external locus of control and has been found to be ineffective (Kerr & Gross, 1997; McCullough et al., 1994).

Adolescence, in particular, is a time when individuals seek to achieve balance in their environment among many conflicting variables, such as the simultaneous need to exert autonomy and independence from parental influence, yet still have the structure and
support obtained from sound parenting skills (Patterson & McCubbin, 1987). Given these specific developmental tasks and the tumultuous emotions associated with them, adolescents may be at an increased risk for an inaccurate or tainted appraisal of stressful situations (Chubb et al., 1997). Consistent with previous research that states the link between personality variables such as self-esteem and situational variables such as level of motivation (Monat & Lazarus, 1991), it is expected that locus of control will also be an influential personality variable that interacts with coping style. Specifically, it is hypothesized that adolescents in this sample who espouse an internal locus of control will also have a tendency to engage in more problem-focused coping.

Relationships Among Locus of Control, Coping Style, & Self-Esteem

Previous literature has documented the relationship between self-esteem and both locus of control and coping style. It is, therefore, included in the present study in an effort to both replicate previous findings as well as ascertain if there are any additional effects of race interacting with these variables. Self-esteem has been defined as the extent to which an individual respects and likes oneself as a person (Harter, 1990). It is continually documented as an influential variable associated with adaptive adolescent development (Chubb et al., 1997; Mullis & Chapman, 2000; O’Malley & Bachman, 1979; Phinney & Chavira, 1995; Rosenberg, 1989). Low levels of self-esteem are associated with various problematic and debilitating conditions, such as depression and anxiety (Rosenberg, 1989.)
It is particularly important to explore the construct of self-esteem within the context of adolescent development given previous research that suggests self-esteem fluctuates during this period (Fertman & Chubb, 1992; Simmons, Rosenberg, & Rosenberg, 1973). This fluctuation may be associated with the fact that adolescents are often struggling with their personal self-concept due to constantly trying to navigate precarious circumstances that affect their self-esteem, such as success in school and approval from peers (Collins, 1991; Patterson & McCubbin, 1987).

In terms of the link between locus of control and self-esteem among adolescents, it is found that high self-esteem is positively correlated with an internal locus of control (Griffore, Kallen, Popovich, & Powell, 1990). Further, Chaadler (1976) found negative correlations between internal locus of control and a poor self-image. In a more current study looking at female athletes (Kerr & Gross, 1997), low self-esteem was positively correlated with an external locus of control.

Correlations between coping style and self-esteem among adolescents have also been documented in the literature. Specifically, Moos (1990) found a link between high self-esteem and a decreased prevalence of emotion-focused coping strategies. Further, Lane and colleagues (2002) found a correlation between maladaptive coping strategies, such as self-blame and behavioral withdraw and low self-esteem. Carver and colleagues (1989) found a positive correlation between problem-focused coping strategies and high self-esteem, while emotion-focused coping, such as denying the problem in an effort to manage the distressing emotions, was associated with low self-esteem. Lastly, Terry
(1994) found those that reported a high self-esteem also reported the use of problem-focused coping strategies, such as active planning and organization. Due to these tendencies that are reported in the literature, it is expected that there will be a correlation between self-esteem and coping behavior in the present study. Specifically, participants with high self-esteem will tend to engage in more problem-focused coping than emotion-focused coping behaviors.

Research associated with gender differences and self-esteem has yielded conflicting results. While some studies have found no gender differences in self-esteem (Bohan, 1973; Mullis & Chapman, 2000; Mullis & Mullis, 1997), many other studies have found that male adolescents report higher self-esteem than do female adolescents (Byrne, 2000; Spivak & Shure, 1985; Stark, Spirito, Willimans, & Guevremont, 1989). Given these findings and the unique struggles that female adolescents experience in terms of developing a stable self-esteem (Gilligan, 1988; Prendergast, 2000), it is important to look at female adolescents in particular with regard to self-esteem and how it interacts with both locus of control and coping style, as is the focus of the present study.

Racial Differences

It is a documented limitation of existing research that what is known of the many constructs that influence adolescent development, such as locus of control, coping style and self-esteem, is the result of studies involving predominately Caucasian adolescents (Chubb et al., 1997; Gilbert, 1992; Gilligan, 1988). Current research has begun to
respond to this deficiency and explore these constructs using adolescents from other ethnicities, such as African Americans (Enger et al., 1994; Luthar, 1991; Neville et al., 1997), Hispanic individuals (Farris-Fisher, 2003; Kupermine, Blatt, Shahar, Henrich, & Leadbeater, 2004), and Asians (Hamid et al., 2003; McCullough et al., 1994; Wong, 2006). Although there continues to be a need for expansion and replication in this area, some research has begun to specifically compare how certain constructs differ by looking at a racially diverse sample and comparing individuals of different cultures with each other (Mullis & Chapman, 2000; Prendergast, 2000; Sinha et al., 2000).

Research examining locus of control in African American and Asian adolescents, for example, has found an association between positive body image and internal locus of control among a sample of adolescent females (Prendergast, 2000). Another study with African American adolescents found that a high level of racial identity is associated with an internal locus of control (Cosby, 1999). Two studies have focused on samples of African American youth as at-risk populations for negative outcomes, such as poor performance in school and delinquent behavior, due to primarily economic disadvantages (Luthar, 1991; Wood et al., 1996). Both of these studies have identified internal locus of control as a protective factor against these outcomes for African American adolescents. Lastly, a study with an at-risk population of specifically adolescent African American males found a higher prevalence of external locus of control (Enger et al., 1994).

Coping behavior has also been explored within the African American population. Coping behavior, in general, for African Americans, has been found to involve a heavy
reliance on familial, community, and spiritual support (Daly et al., 1995; McCreary et al., 1996.) Maton, Teti, Corns, Viera-Baker, Lavine, Gouze, and Keating (1996) found that African American adolescents tend to rely on familial, peer, and spiritual support more so than Caucasians. In one study with African American adolescents, it was reported that they readily looked for spiritual support as a method of coping, which was identified as a problem-focused coping style (Scott, 2003). Similarly, Weist and colleagues (1995) found that problem-focused coping strategies were linked to increased self-concept and fewer behavioral problems in a sample of predominately African American adolescents. There are conflicting results, however, where no racial differences were found in terms of coping style (Phinney & Chavira, 1995).

While there is a need for more extensive research in this area, Mullis and Chapman (2000) specifically compared African American and Caucasian female adolescents and found no differences in self-esteem. This study did, however, find that African Americans employed certain problem-focused strategies more often, such as relying on spiritual support and self reliance, than the Caucasian participants who reportedly relied on the use of ventilating feelings more frequently. Overall, however, emotion-focused coping was more prevalent than problem-focused coping in this sample of females. While this study did not include a measure for locus of control, the authors acknowledged that, consistent with previous research, locus of control is associated with both self-esteem (Mullis & Mullis, 1997) and coping style (Moos, 1990) and consequently they stated that the relationship between all three variables needed to be
further delineated. Further, it is necessary to extend this research by analyzing several racial classifications, rather than just comparing Caucasians and African Americans. The present study will specifically look at a culturally diverse sample of adolescent females and look for racial differences in locus of control, coping style, and self-esteem.
CHAPTER III

Methods and Procedures

This chapter provides the following information: participant selection and known demographics, measures and data collection procedures, study design, rationale for grouping of participants, the statistical analyses that were used to test each hypothesis, and power analyses.

Selection of Participants

This sample consisted of 128 adolescent females who were students at two racially and economically diverse schools in the Northeast, a co-education public school, and an all-female, parochial school. The sample consisted of two sub-groups: 93 participants from the co-educational public school and the 35 participants from the parochial school. Participants were drawn from the ninth and tenth grades only with ages ranging from thirteen to sixteen. Chapter IV contains a complete review of the demographic data.

For the public school participants, permission was obtained from the Principal of the school, the Director of Guidance, and the Superintendent of the public schools in that region. This individual granted written permission provided certain guidelines were adhered to throughout the study. These guidelines were the following: (a) protect the anonymity of district, school, and students, (b) provide a copy of all surveys for parental review to be kept in the Guidance Office for all interested parents to peruse, (c) a parent
letter was sent that stated that the study took the form of a survey and parents who desired may review the survey at the high school, and (d) to follow all necessary legal guidelines when video or audio-taping participants, although this was not applicable in the present study. The school administration was provided with the measures and the parents were informed that these instruments were available at the school for review in the recruitment letter. This letter explained the study and what would be involved should they choose to participate.

Initially, participants at the co-education public school were recruited through a mailing that was sent to the homes of female students identified by the school. This mailing included a letter from the Principal, the Recruitment letter, two copies of the Parent Consent Form, and two copies of the Student Assent Form. A stamped envelope addressed to the school was included so that they could sign one copy of the Parent Consent Form and the Student Assent Form and return it to the school through the mail without having to pay for postage. The researcher prepared and paid for the mailings, yet the school attached the labels with home addresses in an effort to protect anonymity. This recruitment process was largely unsuccessful and generated only five interested participants who sent back the forms. In consultation with the school, it was decided that it would be better to identify a day in which the researcher would visit several classes and ask for participation in person, with faculty being asked to remind the students to have their parents sign the form and return it to school.
On this identified day, the researcher gave students a brief description of the study and informed them of the voluntary nature of their participation. If they communicated interest and a willingness to participate, students were given a Recruitment Letter, two Parent Consent Forms, and two Student Assent Forms. They were asked to obtain their parent or guardian’s signature and return the forms to school prior to the designated day for data collection. Data was collected only from those who had a signed Parent Consent Form and signed a Student Assent Form.

Based on information provided by the co-educational public school, the student body is approximately 40% Asian, 30% Black (e.g., African American, Jamaican, and Haitian) 20% Caucasian, 5% Latino(a) and 5% who identified as other. They did not have specific information on economic classification, yet stated that the student body is diverse in terms of socioeconomic status.

At the parochial school, permission was obtained by the principal and Director of Guidance. Further approval was not necessary given that this was a parochial school. The same procedure as above was followed for this school as well, however, a mailing was not attempted with this student body given the lack of success with this approach in the public school. The school declined providing information on the ethnic or economic classifications of the student body, yet stated that this was a diverse student population in both these regards.
Data Collection

Participants completed four measures, which took approximately 30-35 minutes to complete. These measures included the Demographic Questionnaire, The Nowicki-Strickland Locus of Control Scale for Children (LCSC), The Adolescent Coping Orientation for Problem Experiences (A-COPE), and the Coopersmith Self-Esteem Inventory (CSI). The time period for administration of the study was one class period which was 50 minutes in length. Five to ten minutes was used for instruction and obtaining assent from students who had not filled out the Student Assent Form prior to data collection. This was followed by an allotment of 25-30 minutes to complete each of the three measures. Both schools gave me permission to use a portion of the next class period if necessary to collect materials and dismiss the students. This was not necessary, as every participant finished the measures prior to the class period ending. There were only two individuals who did not complete all four measures completely. The two that did not complete all measures were disregarded from the final data analysis. The procedures for data collection is outlined below:

Both schools identified a class period that was used for data collection. The public school identified a study hall block for a large portion of ninth and tenth grade students. The parochial school designated various English classes. The Principal in both schools developed a master list of all parents who had given informed consent and students who have given assent. At the public school, these individuals were asked to report to the Guidance Department conference room on the day of data collection. At the parochial
school, the researcher visited the English classes, identified those who had signed Parent Consent Forms and Student Assent Forms with assistance from the principal and conducted the study in the classroom with those identified students. Those students who were not participating were asked to quietly read a book or work on an assignment related to that class.

The Recruitment Letter, Parent Consent Form, and Student Assent Form are included as Appendix A, B, and C respectively. These forms have been de-identified in order to protect the anonymity of the schools.

Measures

Demographic Questionnaire. The demographic questionnaire asked each student for the following demographic information: age, race, grade, economic classification, and participation in extra-curricular activities. Economic classification was ascertained by asking the student's whether or not they were enrolled in one of three lunch programs at the school, (i.e., free lunch, half-priced lunch, or full priced lunch). After consulting with school administration, they felt that this would be a more accessible question to ask the students, whereas many may be unfamiliar with other measures of economic status (e.g., parental income).

Nowicki & Strickland Locus of Control Scale for Children (LCSC; 1973).

Developed by Nowicki and Strickland (1973) the LCSC is a 40 item questionnaire that
asks for a yes or no answer to each question. Some example items are the following: (a) Are you often blamed for things that are not your fault?, (b) Do you feel that the best way to handle most problems is just not to think about them?, and (c) Do you feel that when something goes wrong, there is very little you can do to make it right?

The original item construction of this scale was derived from Rotter’s (1966) definition of the internal-external control of reinforcement dimension. School teachers were consulted in the construction of these items that assessed interpersonal dynamics for children at a fifth-grade level. This scale was originally validated on a sample of 1,017 Caucasian adolescents in grades 3-12; it was therefore acceptable for use with both children and adolescents. For the purposes of this study, it is most noteworthy that the test-retest reliability coefficient was .71 for tenth graders. Another study (Chubb et al., 1997) reported a 6 week test-retest reliability coefficient of .75 for this scale.

A recent research study used this scale and produced further psychometric properties with varying populations. In a study conducted by Enger and colleagues (1994) internal consistency was found to be .594 for a sample of African American adolescents. Weist and colleagues (1995) used the LCSC with a sample of 164 predominately African American ninth graders yet did not report psychometric properties for that sample. The reliability coefficient was .525 for the sample in the current study.

As above, this scale consists of 40 items and asks for a yes or no answer to each item. Scores can range from a 0 to 40, with higher scores indicating a more external orientation and lower scores indicating an internal locus of control. Some items are
worded as such that "yes" indicates an external locus of control, while others are reverse coded. Each external response scored one point. The total score for this measure was the sum of these points. The higher the number of points, therefore, the more external the locus of control.

*Adolescent Coping Orientation for Problem Experiences (A-COPE; Patterson & McCubbin, 1987).* The A-COPE is a 54 item questionnaire developed by Patterson and McCubbin (1987). In a Likert-scale format, participants are asked to indicate how often they use each strategy as a method of coping with difficult circumstances (1 = *never*, 2 = *hardly*, 3 = *sometimes*, 4 = *often*, 5 = *most of the time*). This instrument measures three styles of coping: (a) coping by direct action or problem-focused coping, (b) coping by altering the meaning of the stressful event (appraisal coping), and (c) coping by managing the stress and emotions or emotion-focused coping. This scale was originally validated on a sample of 709 adolescents from the Midwest, all of whom were high in socio-economic status and 96% were Caucasian. Factor analysis results yielded twelve coping behaviors accounting for 60% of the variance in the correlation matrix. The four coping behaviors that are considered emotion-focused and their alpha reliability coefficients are as follows: (a) ventilating feelings (.75), (b) seeking diversions (.75), (c) avoiding problems (.71), and (d) relaxing (.60). Five of these behaviors were considered problem-focused and were the following: (a) developing social support (.75), (b) solving family problems (.75), (c) seeking spiritual support (.72), (d) investing in close friends (.76), and (e) seeking
professional support (.50). Lastly, two behaviors, developing optimism and being humorous, are examples of appraisal or cognitive patterns. Their alpha reliability coefficients were .69 and .72 respectively. Given that the majority of these patterns fall into the two categories of emotion or problem focused coping, and given the literature that cites these two categories as the most widely used and identified coping strategies, the present study will focus only on the prevalence of these nine coping patterns in this sample; identifying emotion-focused, problem-focused, and appraisal-focused coping strategies. The reliability coefficient of .86 is for the overall scale (Patterson & McCubbin, 1987).

Although original validation of this scale was obtained using a predominately Caucasian sample with high socio-economic status, further research has used this instrument with more diverse populations. Mullis and Chapman (2000) used this scale with a sample of males and females, grades 7-12, from lower and middle class families. A factor analysis yielded 3 factors accounting for 53% of the variance. Factor 1 was labeled problem-focused coping, factor 2 was labeled cognitive-focused, and factor 3 was labeled emotion-focused coping. Inter-factor correlations were .16 (Factors 1 & 2), .21 for factor 1 and 3 and lastly, .13 for factors 2 and three. In another study, Mullis and Chapman (2000) used the A-Cope with a racially diverse sample of African American and Caucasian adolescents. Cronbach’s alpha for this sample was .87. The reliability coefficient was .85 for the sample in the current study.
This scale was used and scored in two ways. As was used in the above studies, each participant was given an overall score for coping, which is the sum of all the items. Nine items are reverse scored as they indicate negative ways of coping. Thus, the overall coping score reflects the degree to which the individuals employ positive coping strategies.

For the purpose of testing the hypotheses posited by the current study, each participant was also given a score for the prevalence of emotion focused, problem focused, and appraisal focused coping strategies. This was arrived at by summing the total score on the items that comprise the individual factors without reverse scoring any of these items. This is necessary to obtain an accurate score of how often a person is coping in each of these three ways, regardless of whether it is determined to be a positive or negative coping strategy. The prevalence of emotion-focused and problem-focused strategies are assessed in the hypothesis tests of the present study. Appraisal-coping factors will be assessed and analyzed in the Supplemental Analyses section of Chapter IV as they are cited often in the literature, yet remain outside the scope of the current study.

*Coopersmith Self-Esteem Inventory-School Form (CSI; 1981).* Developed by Coopersmith (1981), the CSI is a 58-item questionnaire that yields a continuous measure of self-esteem. Participants answered each item with a “like me” or “unlike me” response. Certain items are considered to be high self-esteem items and a “like me” response yields a point. Items that are low self-esteem items and are answered “unlike
me” also yields a point. The scale yields a total self-esteem score which is comprised of four sub-scales which provide separate classifications of types of self-esteem: general self, social self-peers, home-parents, and school academic. There are 26 items that assess general self-esteem, and then 8 items each for social self-peers, home-parents, and school academic. The remaining 8 items comprise the Lie Scale, which is a measure of validity and is interpreted separately from the rest of the scale. The highest possible score on the general self sub-scale is a 26, and the highest score is an 8 on each of the remaining three sub-scales. This yields a possible highest score of fifty. This number is than multiplied by 2 for a total possible score of 100, the higher score meaning greater self-esteem. Spatz and Johnson (1973) found a reliability coefficient of .86 for use with this instrument and ninth graders. Mullis and Chapman (2000) used this instrument with a racially diverse sample of African American and Caucasian adolescents and found a .79 reliability coefficient. The reliability coefficient for this measure was .77 in the current study. See Appendix D for the Demographic Questionnaire.

Study Design & Statistical Analyses

The following statistical procedures were used to analyze each hypothesis:

1. Hypothesis 1 predicted that among all races, there would be a correlation between locus of control and coping style. Individuals with a more internal locus of control would employ (a) higher levels of problem-focused coping and (b) lower levels of emotion-focused coping. This was tested using two Pearson-\(r\) correlations.
2. Hypothesis 2 predicted that, overall, there would be a higher prevalence of emotion-focused coping strategies in this sample than problem-focused coping strategies. This was assessed by calculating the mean score for the emotion-focused coping factor and calculating the mean score for the problem-focused coping factor and then conducting a paired sample t-test to determine if the difference between these groups was significant.

3. Given the expected correlation between an emotion-focused coping style and external locus of control, Hypothesis 3 predicted that an external locus of control would be more prevalent than an internal locus of control in this sample. This was tested using a one sample t-test to determine whether the mean score for this sample is significantly above the midpoint of the scale, which separates internal from external locus of control.

4. Hypothesis 4 predicted that there would be a difference in type of problem-focused coping used by the African American population, specifically, that this group would be more likely to use the strategy of seeking spiritual support. This was assessed with a Multivariate Analysis of Variance (MANOVA). The independent variable in this analysis was race and the composite dependent variable includes the five types of problem-focused coping behaviors identified by the A-COPE. These five behaviors were as follows: developing social support, solving family problems, seeking spiritual support, investing in close friends, and seeking professional support.

5. Hypothesis 5 predicted that self-esteem is influenced by locus of control, coping style, and race. This was assessed with a multiple regression analysis, with self-
esteem as the criterion variable and the predictor variables being locus of control, level of problem-focused coping style, level of emotion-focused coping style, and race.

Rationale for Grouping of Participants

For the purpose of creating more equal groups for statistical comparisons on the basis of race, the 126 participants that identified an ethnic classification were divided into three categories: (a) Caucasian, (b) Black and Hispanic, and (c) Asian. The Black participants described themselves as being African American, Haitian, or Jamaican. Hispanic participants stated they were either Hispanic or Puerto Rican. Among the Asian participants, there were reports of Chinese, Japanese, Indian, Pakistani, and Filipino ethnicity. The Pakistani participants were originally identified as a separate grouping, then later placed under the heading of Asian, because there were only four of these participants and it was the most appropriate grouping of the three choices indicated.

It is important to note that under these broad categories of ethnicity, there are varying cultural distinctions that could be affecting the variability of the constructs of interest in the present study. It was necessary, however, to place participants who identified themselves as Black \((n = 11)\) and Hispanics \((n = 16)\) in one group for a total of 27 subjects so that the overall group would be more comparable in size to the other two racial categories. Although there are obvious cultural differences between Blacks and Hispanics and the sub-cultures that are included in this grouping, previous research has linked the two racial groups together on certain outcome variables such as well-being,
(Smith, 2004) and levels of parental involvement (Suizzo & Soon, 2006). In terms of the variables of interest in the present study, Farris-Fisher (2003) found locus of control and self-esteem to be protective factors for both African American and Latino(a) adolescents. Other research places African Americans and Latinos in the same category on the basis of having similar adjustment difficulties, such as low socio-economic status and less positive relationships with parents (Kuperminc et al., 2004). Given the above findings and the lack of a comparable singular representation from either of these ethnicities in the current sample, a decision was made to group the two groups together.

Research that has evaluated the experience of Asian adolescents has identified similarities between individuals from various geographical regions in Asia. Specifically, research involving Chinese adolescents has identified that the appraisal of family cohesion has an impact on the use of problem-focused coping strategies in that those individuals who had a positive perception of their family environment had a greater tendency to employ problem-focused coping strategies (Hamid et al., 2003). Similarly, research evaluating Indian adolescents also identified positive appraisal of family as a way of mitigating the effects of a stressful situation (Sinha et al., 2000). These findings highlight a conceptual link between the variables of interest in the present study for Chinese and Indian adolescents, thus justifying the rationale to place them into the same racial category in the present study. There are no known findings that link the Pakistani experience with that of these other Asian cultures on these particular variables, yet it was the most logical geographical grouping given the other two racial categories of
Caucasians and Blacks/Hispanics. The grouping of these participants in this manner will be further discussed as a limitation of the present study in Chapter V.

Power Analysis

In order to determine appropriate sample size in an effort to produce meaningful outcomes in this study, four power analyses were conducted. These were done using the computer program G* Power (Faul & Erdfelder, 1992). The first hypothesis that was written to examine the correlation between locus of control and coping style was tested using two Pearson-\(r\) correlations. The first correlation examined is between internal locus of control and problem-focused coping. The second correlation is between external locus of control and emotion-focused coping. Assuming values of alpha = 0.05 and power = .80, a power analysis was conducted using a \(t\)-test for correlations. With a medium effect size, the required sample size would be sixty four. The power for this test is .10 for a small effect and .50 for a large effect.

The second hypothesis examined the overall prevalence of problem-focused coping patterns compared with the prevalence of emotion-focused coping patterns. For an accurate comparison of scores, each individual was given a mean score for problem and emotion-focused coping. The mean of the problem-focused coping subscale was compared with the mean of the emotion-focused subscale. This was tested using a paired-sample \(t\)-test. The power analysis for this hypothesis was done using the parameters for a one sample \(t\)-test. Assuming values of alpha = .05 and power = .80 with a medium effect
size, the required sample size would be one hundred and two. The power for this test is .20 for a small effect size and .80 for a large effect size.

The third hypothesis examined the prevalence of locus of control in this sample to evaluate if there was a greater tendency to have an external or internal locus of control. This was tested using a one-sample t-test. Assuming values of alpha = .05 and power = .80 with a medium effect size, the sample size would be one hundred and two. The power for this test is .20 for a small effect size and .80 for a large effect size.

The fourth hypothesis looked at the specific coping behaviors within problem-focused coping to see if racial groups differ in the prevalence of seeking spiritual support. This was tested using a MANOVA analysis with the independent variable being the three racial groups: (a) Caucasian, (b) Blacks and Hispanics, and (c) Asians. The composite dependent variable is the five types of problem-focused coping that are identified by the A-COPE scale (Patterson & McCubbin, 1987). These five behaviors were as follows: developing social support, solving family problems, seeking spiritual support, investing in close friends, and seeking professional support. To detect a medium effect at the .05 alpha level and power = .80, a sample size of 128 was required. With a sample of 128, power would be .10 for a small effect and .40 for a large effect.

The fifth hypothesis looked at how self-esteem would be affected by locus of control, coping style, and race and was tested using a multiple regression analysis. The criterion variable in this analysis was self-esteem and the predictor or independent variables were race, locus of control, level of problem-focused coping style, and level of
emotion-focused coping. The power analysis for a multiple regression model used the predicted effect size, sample size, and number of predictor variables in the model.

Assuming a sample size of 128 that was required for the MANOVA, the power to detect a small effect is .02, a medium effect is .15 and .35 for a large effect.
CHAPTER IV

Results

This chapter includes demographic information for the current sample, descriptive statistics for the primary variables discussed in this study and how these vary by race, results of the hypothesis tests, supplemental analyses, and a summary of the findings of the study.

Demographic Characteristics

The study sample was comprised of 128 female participants, 52 Caucasian (40.6%), 11 Black (8.6%), 43 Asian (33.6%), 16 Hispanic (12.5%), and 4 Pakistani (3.1%). Two participants did not include their ethnicity in the demographic questionnaire. Data was collected from 130 participants, however, two were omitted from the study analysis because of incomplete data. Overall age ranged from 13 to 16 years ($M = 14.6$, $SD = .57$). Seventy one (55.5%) of the participants were in the ninth grade and 57 (44.5%) were in the tenth grade. Economic status was assessed by placing participants into three categories, free lunch, half-priced lunch, and full price lunch. Students who participate in free or half-priced lunch programs have been identified by the data collection sites as needing economic assistance in some way. In this sample, 8 (6.3%) participate in the free lunch program, 6 (4.7%) participate in the half priced lunch program and 93 participate in the full priced lunch program (72.7%). Twenty-one
participants did not give a response to this question. In this sample, 17 (13.3%) participants participate in sports, 20 (15.6%) participate in school sponsored clubs, 2 (1.6%) in artistic activities, such as drawing, dancing, or writing, 71 (55.5%) participate in various combinations of the above activities, and 18 (14.1%) stated that they did not participate at all in extra-curricular activities. This sample was comprised of two sub-groups; 93 participants from a co-educational public school and 35 from a single education parochial school. These participants were put together for the purposes of having a larger overall sample. As is explained in Chapter III, the Black and Hispanic participants were placed together in a group and the Pakistani participants were placed in the Asian group. Table 1 displays the demographic variables for the entire sample. Tables 2 and 3 summarize the demographics for the public and parochial school portions of the sample respectively.
**Table 1**

*Overall Sample Demographic Variables*

<table>
<thead>
<tr>
<th></th>
<th>Caucasian</th>
<th>Blacks/Hispanics</th>
<th>Asians</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=52</td>
<td>n=27</td>
<td>n=47</td>
</tr>
<tr>
<td></td>
<td>(40.6%)</td>
<td>(21.1%)</td>
<td>(36.7%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>23</td>
<td>14</td>
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<td>15</td>
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<td>11</td>
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<td>16</td>
<td>2</td>
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</tr>
<tr>
<td><strong>Grade</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>32</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>Sophomore</td>
<td>20</td>
<td>9</td>
<td>27</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Half-Priced</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Full-Prices</td>
<td>40</td>
<td>16</td>
<td>37</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td>10</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>School Clubs</td>
<td>5</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Artistic Activities</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Combination</td>
<td>29</td>
<td>15</td>
<td>26</td>
</tr>
<tr>
<td>None</td>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>
Table 2

Public School Demographics

<table>
<thead>
<tr>
<th></th>
<th>Caucasian</th>
<th>Blacks/Hispanics</th>
<th>Asians</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$n=34$</td>
<td>$n=13$</td>
<td>$n=44$</td>
</tr>
<tr>
<td></td>
<td>(37%)</td>
<td>(14.1%)</td>
<td>(48%)</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>11</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>15</td>
<td>22</td>
<td>7</td>
<td>27</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Grade</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freshman</td>
<td>16</td>
<td>8</td>
<td>16</td>
</tr>
<tr>
<td>Sophomore</td>
<td>18</td>
<td>5</td>
<td>27</td>
</tr>
<tr>
<td><strong>Lunch</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Free-Lunch</td>
<td>0</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Half-Priced</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Full-Priced</td>
<td>31</td>
<td>9</td>
<td>36</td>
</tr>
<tr>
<td><strong>Activities</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports</td>
<td>8</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>School Clubs</td>
<td>1</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Artistic Activities</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Combination</td>
<td>20</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td>None</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 3

**Parochial School Demographics**

<table>
<thead>
<tr>
<th></th>
<th>Caucasian</th>
<th>Blacks/Hispanics</th>
<th>Asians</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=18</td>
<td>n=14</td>
<td>n=3</td>
</tr>
<tr>
<td></td>
<td>(51.4%)</td>
<td>(40%)</td>
<td>(8.6%)</td>
</tr>
</tbody>
</table>

**Age**

| 13    | 0   | 1   | 0   |
| 14    | 13  | 9   | 3   |
| 15    | 4   | 4   | 0   |
| 16    | 1   | 0   | 0   |

**Grade**

| Freshman | 16 | 9   | 3   |
| Sophomore| 2  | 4   | 0   |

**Lunch**

| Free lunch | 1  | 0   | 0   |
| Half-Priced| 0  | 2   | 1   |
| Full-Priced| 9  | 7   | 1   |

**Activities**

| Sports     | 2  | 0   | 0   |
| School Clubs| 0  | 0   | 0   |
| Artistic Activities | 4  | 2   | 2   |
| Combination | 9  | 7   | 0   |
| None       | 3  | 5   | 1   |
Descriptive Statistics for Primary Variables

Prior to testing actual study hypotheses, overall descriptive statistics (means, standard deviations, minimum and maximum scores and ranges) were calculated for scores on each of the primary variables of interest in the present study. Means and standard deviations were also calculated on each of these variables for the three ethnic grouping of Caucasian, Black and Hispanic, and Asian. Table 4 displays these calculations.

Table 4

Descriptive Statistics for Primary Measures

<table>
<thead>
<tr>
<th>Means and Standard Deviations</th>
<th>Caucasians</th>
<th>Blacks/ Hispanics</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locus of Control</td>
<td>15.56 (5.84)</td>
<td>13.81 (4.6)</td>
<td>14.91 (4.6)</td>
</tr>
<tr>
<td>Emotion-Focused Coping</td>
<td>64.63 (10.09)</td>
<td>68.81 (9.14)</td>
<td>64.28 (10.31)</td>
</tr>
<tr>
<td>Problem-Focused Coping</td>
<td>54.79 (9.9)</td>
<td>55.48 (12.03)</td>
<td>52.32 (9.37)</td>
</tr>
<tr>
<td>Overall Coping</td>
<td>168.53 (20.5)</td>
<td>171.07 (23.33)</td>
<td>168.3 (19.47)</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>65.19 (19.8)</td>
<td>66.1 (11.58)</td>
<td>59.48 (15.2)</td>
</tr>
</tbody>
</table>
Tests of Hypotheses

Correlation Between Locus of Control and Coping Style

Hypothesis 1 stated that there would be a correlation between locus of control and both problem and emotion-focused coping for the study sample. Specifically, it was expected that the more internal one's locus of control, the greater the tendency to employ more problem-focused coping strategies and fewer emotion-focused coping strategies. This hypothesis was evaluating using the Pearson $r$ correlation statistic. This hypothesis was partially supported in that there was a significant negative correlation between locus of control and problem-focused coping strategies, $r \ (126) = -.27, p = .003$. However, the correlation between locus of control and emotion-focused coping strategies was not significant, $r \ (126) = .17, p = .052$. It was not true, therefore, that the more external one's locus of control, the greater the prevalence of emotion-focused coping strategies. The significant correlations that are not specifically evaluated by this hypothesis will be discussed in the supplemental analyses section of this chapter. Table 5 summarizes the intercorrelations of these variables for this sample.

Prevalence of Emotion-Focused and Problem-Focused Coping Strategies

Hypothesis 2 evaluated whether or not there was a greater prevalence of emotion-focused coping than problem-focused coping in the current sample. As was discussed in Chapters I and II, female adolescents have been identified as utilizing more emotion-focused coping practices than their male counterparts. It was expected, therefore, that in
Table 5

*Intercorrelations Between Locus of Control and Coping Style*

<table>
<thead>
<tr>
<th></th>
<th>Locus of Control</th>
<th>Emotion-Focused Coping</th>
<th>Problem-Focused Coping</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Locus of Control</td>
<td>.172</td>
<td>-.265**</td>
<td>-.144</td>
<td></td>
</tr>
<tr>
<td>Emotion-Focused Coping</td>
<td>.301**</td>
<td></td>
<td>.187*</td>
<td></td>
</tr>
<tr>
<td>Problem-Focused Coping</td>
<td></td>
<td></td>
<td>.56**</td>
<td></td>
</tr>
</tbody>
</table>

2-Tailed Significance Levels; *p < .05; **p < .01

This all-female sample, emotion-focused coping would be more prevalent than problem-focused coping. This was evaluated by assigning a mean score to each person for the emotion-focused and problem-focused coping factor and then conducting a paired-sample t-test to evaluate whether or not the difference in means was significant.

Hypothesis 2 was not supported. The mean score for emotion-focused coping ($M = 2.84, SD = .44$) was not significantly different from the mean score for problem-focused coping ($M = 2.85, SD = .55$), $t(127) = -.27, p = .79$. This result indicates that in
In this sample, emotion-focused coping strategies were not more prevalent than problem-focused coping strategies as hypothesized.

**Prevalence of an External Locus of Control**

Hypotheses 3 stated that given the expected correlation between an emotion-focused coping style and an external locus of control, an external locus of control would be more prevalent in this sample. This was tested using a one sample t-test to evaluate whether the mean for locus of control was significantly greater than the midpoint of the scale mean for an internal locus of control.

This hypothesis was not supported as the mean for locus of control (M = 14, SD = 5.12) was significantly lower than the midpoint of the scale, $t(127) = -11.26, p < .001$. It was hypothesized that the mean would be significantly greater than the midpoint of the scale, thus indicating a more external locus of control. This finding indicates that this sample is more internally oriented than originally hypothesized.

To evaluate how locus of control may vary by ethnic group, an ANOVA analysis was conducted. This did not yield a significant result, $F(2, 123) = 1.02, p = .36$. This finding reveals that there were no significant differences in locus of control among the three racial groups.
Types of Problem-Focused Coping and Racial Variability

The five categories that comprise the total score for the problem-focused coping factor are developing social support, solving family problems, seeking spiritual support, investing in close friends, and seeking professional support. It was originally hypothesized that within these five specific strategies, there would be racial differences in the prevalence of seeking spiritual support as a primary coping behavior. This was anticipated because of previous findings that have highlighted an increased prevalence of seeking spiritual support within the African American (Mullis & Chapman, 2000) and Asian cultures (Sinha et al., 2000).

This hypothesis was tested using a MANOVA analysis with race as the independent variable and the five types of problem-focused coping as the composite dependent variable. This hypothesis was not supported because the results of the MANOVA were not significant, $F(10, 238) = .876, p = .56,$ suggesting that in this sample, ethnicity did not affect the tendency to seek spiritual support more so than any other problem-focused coping strategy. The univariate ANOVA statistics were also evaluated and were not significant for any of the dependent variables.

Race, Coping Style, and Locus of Control as Predictors of Self-Esteem

Hypothesis 5 stated that locus of control, emotion-focused and problem-focused coping, and race would be significant predictors of self-esteem in the current sample. In order to examine this hypothesis, a standard multiple regression analysis was employed,
with locus of control, coping style, and race as the predictor variables and self-esteem as the criterion variable. This hypothesis was supported in that the multiple regression was significant, $R^2 = .37$, adjusted $R^2 = .35$, $F(4, 121) = 18.10, p = .001$. It can be concluded from this statistic, therefore, that this set of predictor variables accounts for 35% of the variability in the criterion variable of self-esteem.

In analyzing the standardized beta weights, the locus of control total score ($\beta = - .51, p < .001$) was significant and most robust, meaning that locus of control accounted for the largest portion of the variability in self-esteem among these predictor variables. The beta weight for problem-focused coping was significant and the second largest contributor ($\beta = .17, p = .04$). Lastly, the beta weight for race was significant ($\beta = -.16, p = .03$) and was responsible for the least amount of variability in the criterion variable of self-esteem.

The partial correlation statistic allows for an assessment of the independent contribution of each one of the predictor variables. Locus of control was again the most robust predictor of self-esteem, when the other predictors are taken out of the analysis (partial correlation = -.51). The individual contributions of problem-focused coping and ethnicity were .19 and .20 respectively. The individual contribution of emotion-focused coping was -.14 and was not significant as a beta weight. Table 6 summarizes the coefficients of this multiple regression analysis.
Table 6

Multiple Regression Analysis for Self-Esteem

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<tr>
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<tbody>
<tr>
<td>Locus of Control</td>
<td>-1.6</td>
<td>.253</td>
<td>-.51**</td>
</tr>
<tr>
<td>Problem Focused Coping</td>
<td>.28</td>
<td>.133</td>
<td>-.17*</td>
</tr>
<tr>
<td>Emotion-Focused Coping</td>
<td>.20</td>
<td>.131</td>
<td>-.12</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-3.1</td>
<td>1.37</td>
<td>-.16*</td>
</tr>
</tbody>
</table>

*p < .05; ** p < .01

Supplemental Analyses

In analyzing the data collected in the present study, there were findings that were outside the scope of the study hypotheses. They are relevant, however, in providing a broader understanding of the primary variables used in this study. These analyses may better inform the overall conclusions and implications for future research and practice, which will be discussed in Chapter V. This supplemental analyses section is divided into the following three categories: Coping as an Overall Measure, Correlation Between Problem-Focused and Appraisal-Focused Coping, and Types of Self-Esteem.
Coping as an Overall Measure

In the present study, coping style was assessed using the Adolescent Coping Orientation for Problem Experiences (A-COPE; Patterson & McCubbin, 1987). This instrument yields a continuous measure of overall coping efficacy. To arrive at a score for this measure, an individual’s overall score is calculated by summing each item. As outlined in Chapter III, nine items were reverse scored so that an individual who never or rarely uses a negative coping strategy (e.g., being mean to others and doing drugs) is given a 4 for rarely and a 5 for never. This is done so that the higher the overall score, the better the indication that one is coping with problems by utilizing productive coping strategies.

The overall measure of coping in this sample \((M = 169.1, SD = 20.62)\) appeared identical to that of the normative sample \((M = 168.7, SD = 26.3)\) (Corcoran & Fischer, 2000) suggesting that the individuals in this sample are functioning as well as the normative sample in terms of employing adaptive coping strategies. This was confirmed through a one-sample \(t\)-test. The result was insignificant, \(t(127) = .24, p = .81\), confirming that there was no significant difference between the study sample and the normative sample in terms of overall coping. While this particular normative sample did not account for variations by race, the current study sample did not produce significant racial differences in terms of an overall coping score, Caucasians \((M = 168.5, SD = 20.5)\), Blacks/Hispanics \((M = 171, SD = 23.33)\) and Asians, \((M = 168.3, SD = 19.5)\). An ANOVA was conducted to assess for ethnic differences in overall coping and was not
significant, $F(2, 123) = .17, p = .84$, confirming that there were no significant differences in overall coping among ethnic groups.

Hypothesis 1 evaluated the correlation between locus of control and both problem- and emotion-focused coping. The statistical analyses that were conducted to evaluate Hypothesis 1 yielded a significant correlation between locus of control and problem-focused coping, $r(126) = -.27, p = .003$. The correlation between locus of control and emotion-focused coping, however, was marginally insignificant, $r(126) = .17, p = .052$. To further evaluate this hypothesis, a supplemental analysis of the correlation between overall score for coping and locus of control was conducted. This revealed a significant negative correlation between overall coping and locus of control, $r(126) = -.26, p = .003$. This indicates that as locus of control increased, indicating a more external orientation, the overall coping score decreased. This suggests that an external locus of control is correlated with the tendency to employ maladaptive coping strategies. Although the correlation between locus of control and emotion-focused coping was not significant, this supplemental finding suggests that the utilization of negative coping strategies in this sample was correlated with having an external locus of control. While negative coping strategies are not necessarily limited to emotion-focused strategies, all nine of the items that were identified as being negative on the A-Cope are also among the emotion-focused coping strategies.

Lastly, there was a positive correlation between overall coping and self-esteem, $r(126) = .34, p < .001$, suggesting that the higher one’s overall coping efficacy, the higher
one's self-esteem. This adds to the general understanding that overall feelings of coping efficacy have a positive effect on one's self-esteem.

**Correlation between Problem-Focused and Appraisal-Focused Coping Strategies**

The A-COPE identifies twelve factors that are considered sub-categories of coping style. Nine of the twelve factors are identified as being either primarily problem-focused or emotion-focused strategies. These sub-factors are the primary focus of the analyses involved in evaluating each of the five hypotheses. Appraisal coping, however, is a third identified sub-category of coping that is cited frequently in the literature (Folkman & Lazarus, 1985; Patterson & McCubbin, 1987) and as such, is included in this section for a supplemental understanding of the current study sample with regard to coping behavior.

Appraisal coping refers to the process of assessing and altering the meaning of a stressful circumstance as a means of coping with the distress associated with that event. The categories that are examples of appraisal coping as defined by the A-COPE are developing self-reliance and being humorous. An example item of the developing self-reliance factor is "try to see the good things in a difficult situation." An example item of the being humorous factor is "try to be funny and make light of it all."

Patterson and McCubbin (1987) acknowledge that although the scale is divided into the three sub-factors of problem, emotion, and appraisal-focused coping, these categories are not mutually exclusive and certain behaviors may involve the primary
function of each of these three categories simultaneously. The primary function of problem-focused coping is taking direct action, whereas the primary function of emotion-focused coping is managing tension. Appraisal-coping involves the primary function of altering meaning. It is possible that a person may eventually take a direct action, such as seeking professional support (problem-focused) after they have let off steam by complaining to friends (emotion-focused) and attempted to try and make light of it all (appraisal-focused), all in response to the same distressing event. Given the fact that these sub-categories of coping are interconnected conceptually, a supplemental analysis was conducted to evaluate the correlations between each of the three categories of coping that was assessed in the context of the study.

This was evaluated by looking at the Pearson-\(r\) correlations between types of coping style. The correlation between problem and emotion-focused coping was significant, \(r\ (126) = .30, p < .001\). The correlation between problem and appraisal coping was also significant, \(r\ (126) = .56, p < .001\). Lastly, the correlation between emotion-focused coping and appraisal-focused coping was significant, \(r\ (126) = .19, p = .04\). While Patterson and McCubbin (1987) found that the three factors of emotion, problem and appraisal-focused coping are correlated with one another, this supplemental analysis was conducted to confirm that this was the case for the current sample. It was hypothesized that emotion-focused coping would be more prevalent than problem-focused coping. Given that this hypothesis was not supported, a supplemental analyses
was conducted to see how problem and emotion-focused coping are in fact taking place in the current sample, since one was not more prevalent than the other.

This finding suggests that many of the behaviors that are classified into these sub-categories are occurring simultaneously. All of these correlations are in the positive direction, indicating that as the prevalence of one coping strategy increases, so does the prevalence of the other strategy in this sample. This is further substantiated by looking at Hypothesis 2 that evaluated the mean score of problem (\( M = 2.85, SD = .55 \)) and emotion-focused coping (\( M = 2.84, SD = .44 \)) and found no significant difference, indicating that these participants do not fall into one exclusive category in terms of what types of coping behaviors are being employed. The factors that could be contributing to this finding, as well as the further delineation of what types of coping styles are distinct, are a worthwhile direction for future research and will be discussed further in Chapter V.

*Types of Self Esteem*

In the current study, self-esteem was measured with a score on the Coopersmith Self-Esteem Inventory-School Form (CSI). Hypothesis 5 involved a multiple regression analysis in which overall self-esteem is the criterion variable and locus of control, problem and emotion-focused coping, and ethnicity are the predictor variables. This hypothesis was supported as locus of control, coping style, and race were all found to be significant predictors of self-esteem. This analysis did not address the subtypes of self-esteem that can be measured by the Coopersmith Inventory (general self-esteem,
peers/social self-esteem, home/parent self-esteem, and school academic) nor did it determine the levels of self-esteem for this sample compared with the normative group.

A supplemental analysis was conducted to compare this self-esteem measure with a normative sample to elucidate whether or not there was a type of self-esteem that was more prevalent in this sample and if this varied by race. It was expected that given this developmental time period when individuals are highly concerned with peer acceptance (Luthar, 1991; McCullough et al., 1994) there may be a tendency to report higher levels of this type of self-esteem, rather than self-esteem that is associated with one’s functioning at home, when there is often a contentious atmosphere between parents and adolescents.

A one sample t-test revealed that overall, this sample displayed higher levels of self-esteem than the normative sample, $t(127) = 4.5$, $p < .001$ (Coopersmith, 2002). There were no significant racial differences in overall self-esteem, however. This was confirmed through an ANOVA, which was not significant, $F(2, 123) = 1.95$, $p = .15$.

The means and standard deviations for the general self-esteem sub-scales for the three ethnic groups are the following: Caucasian ($M = 33$, $SD = 10.5$), Blacks/Hispanics ($M = 34$, $SD = 8.15$), Asians ($M = 30.51$, $SD = 8.9$). An ANOVA was conducted to evaluate for ethnic differences in general self-esteem and was not significant, $F(2, 123) = 1.76$, $p = .18$, indicating that the three ethnic groups are reporting similar levels of general self-esteem.
The study sample mean and standard deviation values for the social/peer self-esteem sub-category were the following for the three ethnic groups, Caucasian ($M = 12.8$, $SD = 3.84$), Blacks/Hispanics ($M = 12.6$, $SD = 3.0$) and Asians ($M = 11.96$, $SD = 3.51$). An ANOVA was conducted to determine if there were any significant differences in social/peer self-esteem among ethnic groups. This yielded a significant result, $F(2, 123) = 3.19$, $p < .05$. A post-hoc test revealed that, specifically, there was a significant difference between the Caucasian and Asian group, in that the Caucasian group reported higher levels of social/peer self-esteem than the Asian portion of the sample. There were no significant differences between Caucasians and Blacks/Hispanics in this regard nor between Asians and Blacks/Hispanics.

In terms of the home/parents subscale, the study sample produced the following means and standard deviations: Caucasian ($M = 9.34$, $SD = 5.5$), Black/Hispanic ($M = 9.6$, $SD = 4.1$) Asian, ($M = 8.64$, $SD = 4.4$). These were evaluated for ethnic differences through the use of an ANOVA. This result was not significant, $F(2, 123) = .402$, $p = .67$, indicating that the three ethnic groups did not display significant differences in the home/parents sub-category of self-esteem.

Lastly, the study sample produced an apparently greater overall score in the school/academic realm of self-esteem ($M = 10$, $SD = 4.21$) than the normative sample ($M = 7.9$, $SD = 4.1$). Given this apparent difference, a one-sample $t$-test was conducted to evaluate the significance of this difference in mean scores. This yielded a significant result, $t(127) = 5.8$, $p < .001$, indicating that this sample reported higher levels of
school/academic self-esteem than the normative sample. There was no significant variability in this realm based upon ethnic classification. Caucasian ($M = 10.4, SD = 4.9$), Blacks/Hispanics ($M = 10.1, SD = 3.44$) and Asians ($M = 9.6, SD = 3.82$). This was confirmed through an ANOVA which was not significant, $F (2, 123) = .46, p = .64$.

It is important to note that the Coopersmith Self Esteem Inventory is equipped with a validity precaution, designated as the Lie scale. These eight items produce their own total score and are not included in the overall measure of self-esteem. The total possible score that one could have is an eight. A high Lie scale score would indicate that an individual was not being forthcoming in her responses either due to guardedness or an effort to exaggerate one's level of self-esteem toward either extreme. The scale administration manual does not specify the cut off-score for which the Lie score would prohibit data from being interpreted. In this sample, however, the average Lie scale score for each of the three ethnic groups were as follows: Caucasians ($M = 2.35, SD = 1.6$), Blacks/Hispanics ($M = 2.45, SD = 1.6$) and Asians ($M = 2.5, SD = 1.5$). This finding suggest that overall, there was a low amount of guardedness or response manipulation seen in this measure. Further, there were virtually no differences in this regard due to racial classification.
Summary

The results of this study are mixed in that only certain hypotheses were supported. Overall, there were few significant racial differences in the primary outcome variables of locus of control, coping style, and self-esteem, suggesting that in this sample, the variability seen in these constructs were not attributable to ethnic classification.

It was expected in Hypothesis 1 that there would be a correlation between locus of control and coping style in the current sample. This hypothesis was partially supported in that a more external locus of control was correlated with a decrease in employing problem-focused coping strategies. The reverse, however, was not the case because greater amounts of emotion-focused coping were not correlated with having an external locus of control.

In terms of Hypothesis 2, it was expected that emotion-focused coping would be more prevalent in the current sample, consistent with previous research that identifies females as utilizing emotion-focused coping strategies more so than their male counterparts. The difference in means between prevalence of emotion-focused coping and problem-focused coping was not significant, indicating that this female sample did not utilize more emotion-focused coping strategies than problem-focused strategies, as originally anticipated.

Hypothesis 3 posited that given the expected correlation between emotion-focused coping and external locus of control, there would be a greater tendency toward an external locus of control in the current sample. This hypothesis was not supported and
in fact, the sample displayed a more internal locus of control orientation. In terms of ethnicity, there were no significant differences in locus of control.

Hypotheses 4 involved an exploration of the five types of problem-focused coping. These include seeking spiritual support, seeking professional support, developing social support, solving family problems, and investing in close friends. It was expected that the prevalence of seeking spiritual support would vary by racial group given the previous findings that suggest African American adolescents utilize this strategy more than their Caucasian peers. This hypothesis was not supported, suggesting that race did not impact the tendency to employ this particular problem-focused coping strategy.

The final study hypothesis evaluated whether or not the variables of locus of control, emotion-focused coping, problem-focused coping, and ethnicity would be significant predictors of self-esteem. This analysis yielded a significant result, indicating that in this sample, the combination of locus of control, coping styles, and ethnicity, were predictive of increased levels of self-esteem. In evaluating the individual contribution of each of the predictor variables, locus of control was the largest individual contributor, suggesting that locus of control was contributing to the variability in self-esteem more so than ethnicity and coping style.

Supplemental analyses revealed that in terms of overall coping efficacy, the study sample was functioning as well as the normative sample. This measure was virtually the same when evaluated for racial comparisons. Further, there was a significant correlation between the three major categories of coping, problem, emotion, and appraisal:
suggested that the prevalence of one coping strategy does not prohibit the simultaneous utilization of the other coping behaviors in a different category.

Overall, self-esteem was evaluated as a supplemental analysis and found that participants in this study reported higher levels of self-esteem than the normative sample. However, there were no ethnic differences in overall self-esteem. The validity scale of the self-esteem measure was evaluated, as well as the mean scores for each ethnic group in regard to the sub-components of the overall self-esteem measure. As is the case with other racial comparisons in this study, the self-esteem subscales revealed few ethnic differences. However, the Asian portion of the sample displayed lower levels of social/peer self-esteem than their Caucasian and Black/Hispanic counterparts. Further, this sample reported significantly higher levels of school/academic self-esteem than a normative sample, however, this did not vary by ethnic group. The possible interpretations and significance of these findings will be discussed in Chapter V, in addition to implications for future research and limitations of the present study.
CHAPTER V

Discussion

This chapter presents a discussion of the findings and is comprised of the following sub-sections: comparison of primary variables by race, discussion of demographic variables, study hypotheses as well as supplemental analyses, implications of the findings, limitations of the present study, implications for future research, and summary and conclusions.

Racial Comparisons of Primary Variables

In general, the results of this study did not reveal significant racial differences associated with the primary variables of locus of control, coping style, self-esteem, and overall coping efficacy. Consultation with both schools and their administration yielded the impression that although there is diversity in their student bodies, students from different cultures were not behaving in ways that differentiated themselves from one another. They felt that for the most part, there were no significant behavioral trends or differences among the racial groups in their student body and that social groups seemed to be predicated on many other variables more so than race, such as involvement in certain activities and academic status. It is interesting to note that the results of this study did not reveal any significant racial differences in the primary variable of locus of control, coping style, and self-esteem. This seems to be consistent with the anecdotal data provided by the administration of both schools that maintains that the differences in
behavior and personality among their students are not readily attributable to racial or ethnic classification.

Specifically, locus of control in this sample was more internal than was expected for all racial groups, yet it was more external than the normative sample. This did not vary by race. This finding suggests that, overall, Hypothesis 3 was not supported and this sample was more internally oriented than originally expected. The comparison with the normative sample, however, suggests that within this internal orientation, there was more of a tendency to display some behaviors associated with an external locus of control in the study sample in comparison to a normative sample.

In terms of coping style, there was no cultural variation in the tendency to employ problem or emotion-focused coping strategies, nor in an overall measure of positive coping behavior. This suggests that whatever variability there was in coping behavior in the current sample, it was not attributable to racial identification. This is inconsistent with previous research that maintains, overall, Caucasian adolescents utilize emotion-focused coping more so than African American adolescents (Maton et al., 1996). However, this finding is consistent with other research that analyzed coping style and race and found no significant differences in coping style on the basis of race (Phinney & Chavira, 1995).

Consistent with previous research, (Mullis & Chapman, 2000), this study revealed no differences in self-esteem between Caucasians and Blacks/Hispanics. Both of these groups, however, did report a higher level of social/peer self-esteem than the Asian
adolescents in this sample. This will be discussed further in the Supplemental Analyses section of this chapter.

Additional Demographic Variables

Additional demographic variables were explored to further understand certain circumstances associated with the study sample. Economic status was ascertained by asking the student which lunch program she participated in: free, half-priced, or full-price lunch. The students who participated in either the free or half-priced lunch were identified by the schools as having some family economic difficulties. The majority of this sample participated in full priced lunch (72.7%), indicating that most of the sample did not have or were not aware of economic hardships in the family. Twenty-one individuals, however, did not answer this item so the percentage is not reflective of the entire sample. On the basis of this criterion, therefore, this sample is not as economically diverse as was originally anticipated when these sites were selected for data collection.

More than half of the study sample reported participation in extra-curricular activities (55.5%). It was possible that there is a relationship between the prevalence of extra-curricular activities and the overall high levels of self-esteem that this sample displayed. This would be consistent with research that links participation in school activities with a greater sense of school self-esteem (Dotterer, McHale, & Crouter, 2007). In another study, however, the consistent drive to participate in as many activities as
possible that some adolescent’s feel leads to heightened anxiety (Melman, Little, & Akin-Little, 2007).

Primary Hypotheses

Correlation between Locus of Control and Coping Style

Results of this study reveal that there was a correlation between locus of control and coping style. Research identifies the connection between appraisal of a stressful event and the decision to employ a given coping style (Lazarus & Folkman, 1984). When an individual perceives the source of the stress as controllable, such as studying for a test she or he is likely to utilize a problem-focused coping strategy. If one doubts or relinquishes control over such a stressor, she or he is likely to cope through various emotion-focused strategies, such as venting and blaming others (Folkman & Lazarus, 1980).

This perception of control translates to the development of tendencies toward an external or internal locus of control, which then impacts an individual’s behavioral choices (Parton & Day, 2002). In this study, there was a correlation between an increased external locus of control and the employment of a reduced number of problem-focused coping strategies. When one attributes their life’s outcomes largely to the functioning of outside and uncontrollable circumstances, it is feasible that this would result in fewer direct and goal-oriented responses to a conflict. An externally oriented person may lack an awareness or acceptance of the fact that personal effort and accountability result in
positive outcomes. As such, this contention minimizes the individual’s desire to directly address the issue in an effort to avoid investing mental energy into a process that they deem ultimately futile.

Although there was a correlation between external locus of control and problem-focused coping, there was no significant correlation between external locus of control and increased prevalence of emotion-focused coping strategies. This, in conjunction with other study findings, suggests that the presence of problem-focused coping does not necessarily preclude an individual from employing emotion-focused coping simultaneously depending upon the nature of the stressor (Patterson & McCubbin, 1987). In the event that one does decide to cope in an emotionally focused manner, this does not necessarily translate to having an external locus of control.

*Prevalence of Emotion-Focused Coping Strategies*

Many of the variables that influence adolescent development have been evaluated looking specifically for gender differences. As discussed in Chapter I, there are findings that suggest that adolescent boys and girls cope in discrepant ways (Chubb et al., 1997; Gilligan, 1988). Anecdotal evidence based on observation of the adolescent female population, in addition to research findings, also yields the impression that overall, females cope by expressing their distress to others, crying, and rumination more so than males (Lengua, 2000). These are all identified as emotion-focused strategies and when used as a singular response to a distressing event or circumstance, they can lead to mental
health problems, such as depression and anxiety. Conversely, the utilization of problem-focused techniques, is associated with lower levels of reported depression among both males and females (Nolen-Hoeksema, Larson, & Grayson, 1999). Although the current study involved an all-female population and gender comparisons were not made, Hypothesis 2 was based on research delineating gender differences which leads to the expectation of an overall greater tendency toward emotion-focused coping in females.

The results of the present study, however, indicate that there is virtually no difference between the prevalence of emotion-focused coping and problem-focused coping among this female adolescent population. In order to evaluate this finding, one must consider the way in which these two coping behaviors were assessed. The A-COPE provides a continuous measure of overall coping efficacy. The factors that comprise this sub-set of emotion-focused and problem-focused coping were extracted from the overall scale and calculated for a mean score on the number of items that identified a coping behavior said to be either problem- or emotion focused. Due to the fact that this was an extension of the way the scale has generally been used, there was no normative data available for comparison of scores on the prevalence of the emotion-focused and problem-focused factors.

It is possible that in previous research that specifically assesses gender differences, prevalence of emotion-focused coping was higher in comparison to a parallel male population. When females' scores regarding emotion-focused coping are compared to their own scores for problem-focused coping, however, as is the case in the present
analysis, there are not as many notable differences. This finding does, however, suggest that the females in this sample are behaving in both problem-focused and emotion-focused ways and do not tend to favor either coping style exclusively.

**Prevalence of External Locus of Control**

Hypothesis 1 posited that there would be a correlation between locus of control and coping style. Hypotheses 2 addressed the expectation that there would be a greater prevalence of emotion-focused coping strategies among this all female sample. Hypothesis 3 combined the conceptual rationale of the first two hypotheses in that it was expected that given the anticipated correlation between emotion-focused coping and external locus of control, if emotion-focused coping was more prevalent in the current sample, than an external locus of control would also be more extant.

Hypothesis 3 was not supported, as there was a greater prevalence of internal locus of control among this sample. Although the Caucasian portion of the sample appeared to have a slightly higher mean on the locus of control measure than Blacks/Hispanics and Asians, these differences were not statistically significant. This suggests that there are no ethnic differences in locus of control, and that overall, this sample was more internally oriented than initially hypothesized.
**Ethnic Differences in Seeking Spiritual Support**

Various research efforts have focused upon ethnic differences in coping behavior and preferences (Avers, Sandler, West & Roosa, 1996; Coleman, Casali, & Wampold, 2001) and highlight the need for further exploration of how ethnicity impacts the decision to employ one coping strategy over another. Hypothesis 4 in the current study postulated that among the five problem-focused coping behaviors of seeking spiritual support, seeking professional support, solving family problems, investing in close friends, and developing social support, that there would be ethnic differences in the prevalence of seeking spiritual support. This was hypothesized in an effort to further replicate findings that identified African American adolescents as relying on spiritual support as a primary coping behavior, more so than Caucasians (Daly et al., 1995; Grant, O’Koon, & Davis, 2000; Maton et al., 1996).

This finding was not significant, indicating that in this sample there were no significant racial differences in the prevalence of utilizing the problem-focused strategy of seeking spiritual support. This finding needs to be interpreted cautiously given that African Americans are underrepresented in this sample. Eleven participants were identified as being Black, with 2 participants reporting Haitian, and 2 participants reporting Jamaican descent. Therefore, there were only 7 participants in the current sample, that identified themselves as being African American. It is therefore, not surprising that a hypothesis grounded in research involving African American
adolescents would not emerge as a significant source of variability on any of the outcome variables in the present study.

*Locus of Control, Coping Style, and Ethnicity as Predictors of Self Esteem*

Self-esteem has been identified in the literature as being an important determinant in overall developmental outcomes for adolescents as a whole, such as school performance and perception of peer acceptance (Rosenberg, 1989). Hypothesis 5 evaluated whether or not self-esteem would be significantly predicted by the following predictor variables: locus of control, problem and emotion-focused coping, and race. Results of the multiple regression analysis indicated that this collection of variables did significantly predict self-esteem in the current sample. The most powerful individual predictor was locus of control.

This finding is consistent with previous research that identifies a correlation between self-esteem and locus of control (Griffopore et al., 1990). Specifically, an external locus of control has been linked to poor self-esteem and an internal locus of control has been linked to higher levels of self-esteem as well as other desirable outcomes, such as a positive body image (Kerr & Gross, 1997; Prendergast, 2000).

Coping style and self-esteem have been identified in the literature as two constructs that interact with one another. For example, Moos (1990) found a correlation with increased self-esteem and a decreased prevalence of emotion-focused coping behaviors. Specifically looking at the African American population, Constantine,
Donnelly, and Myers (2002) found that an increased level of collective self-esteem was related to a greater prevalence of seeking spiritual support, a problem-focused coping strategy. It is possible that the African American participants in this sample did espouse high levels of collective self-esteem, however, the Coopersmith Inventory does not assess for this variable. Further, the use of such problem-focused coping behaviors as active planning and organization have been associated with high self-esteem in the adolescent population (Terry, 1994). Results of this study display that problem-focused coping was a significant individual predictor of self-esteem, however, emotion-focused coping was not. This suggests that the prevalence of problem-focused coping was significantly predictive of a higher level of self-esteem whereas, emotion-focused coping did not have the same effect. There is no evidence, however, that the prevalence of emotion-focused coping was associated with lower levels of self-esteem, specifically.

Other research identifies problem-focused coping as being correlated with high self-esteem. This finding maintains that the use of these strategies are correlated with a perception that life circumstances are controllable, which highlights the interaction between the three variables of self-esteem, coping style, and locus of control (Dumont & Provost, 1999).

Race was included in this analysis as a predictor variable to assess for potential racial differences with regard to self-esteem as a criterion variable. Research that assessed specifically for ethnic differences in self-esteem found no significance (Mullis & Chapman, 2000) suggesting that race did not impact overall self-esteem. This research
involved a comparison between Caucasian and African American adolescents and did not involve an Asian portion of the sample. This hypothesis evaluated race as a predictor variable of self-esteem and the result was significant. This suggests that, inconsistent with previous research, the variability in self-esteem in the current sample, was associated in part with racial classification.

Supplemental Analyses

Coping as an Overall Measure

As explained in Chapter IV, the A-COPE provides a continuous measure of overall coping efficacy. Due to the fact that the primary hypotheses of this study involved the prevalence of emotion and problem-focused coping, the overall coping measure is included as a supplemental analysis. The lack of significance in Hypothesis 2 may be attributable to the fact that overall, the individuals in this sample are coping virtually identically well to the normative sample.

The fact that this sample did not produce a greater prevalence in the utilization of emotion-focused strategies lends support to this finding which indicates overall, this sample is functioning comparatively well in terms of positive coping. This is inconsistent with previous findings that identify adolescent females as typically utilizing emotion-focused coping strategies, such as venting and ruminating (Lengua, 2000; Stein & Nyamathi, 1999). There was no variation on the basis of race with regard to this measure, in contrast to previous findings that found differences in coping based upon racial
identification (Constantine et al., 2002; Mullis & Chapman, 2000; Sinha et al., 2000). This may be due to the under-representation of certain racial groups in this sample, specifically, African Americans and Hispanics.

**Correlations Among Emotion, Problem, and Appraisal-Focused Coping**

Folkman and Lazarus (1985) are frequently cited as emphasizing the correlation between appraisal of a stressful event and coping style. If the appraisal is accurate and the person correctly identifies a situation as within her or his control, a problem-focused coping strategy will be employed. Conversely, a lack of or limited perception of control will result in the tendency to cope in an emotionally-focused manner, such as blaming and venting of feelings. Appraisal coping is identified as a sub-factor of the A-COPE, yet it is not as frequently cited in the literature as a prevalent coping strategy, particularly for females, and thus, these coping behaviors were not included as main point of analysis in this study.

A supplemental analysis was conducted to look for correlations among each of the three coping categories as defined by the A-COPE. This was done as a way of examining coping behaviors in light of Hypotheses 2 not being supported, indicating that there was not a greater prevalence of emotion-focused coping strategies as expected. There were significant correlations found among all three of the strategies, indicating that as the presence of one coping behavior increased so did the prevalence of the other two. This finding is significant in that the overall results of the study are suggesting that coping
behavior does not fall into one mutually exclusive category and that there is overlap among problem, emotion, and appraisal-focused coping. Further research needs to delineate the way in which these behaviors interact and under what circumstances one set of coping behavior is used individually or in conjunction with another category.

*Types of Self-Esteem*

In this study, self-esteem was measured using the Coopersmith Self-Esteem Inventory-School Form. The overall measure of self-esteem was used as the criterion variable in the multiple regression analysis employed to evaluate Hypothesis five. This overall score of self-esteem was significantly higher than that of the normative sample, indicating that the study sample is functioning with higher amounts of overall self-esteem in comparison to a normative sample. This did not vary by race.

The measure also yields, however, interesting sub-scales and differentiates types of self-esteem. These types are general, social/peers, home/parents, and school/academic. In this sample, general, home/parents, and school/academic self-esteem were the same across ethnic classification, however, Asian adolescents displayed lower levels of social/peer self-esteem than Caucasians and Blacks/Hispanics. This sample displayed higher school/academic self-esteem than the normative sample.

It is noteworthy that although these comparisons revealed very slight racial differences, the Asian portion of the sample was lower than Caucasians and Blacks/Hispanics on the social/peer sub-scale of the overall self-esteem measure. This
suggests that while the participants in this sample are experiencing similar levels of overall self-esteem, the specific perception that one has of being accepted and recognized by peers, is lower among the Asian adolescents, yet similar among Caucasians and Blacks/Hispanics. The fact that school/academic self-esteem did not vary by ethnicity may be consistent with previous findings that cite Asian adolescents as individuals whose family environments emphasize and value academic success. Therefore, when one succeeds in the realm of school/academic functioning, the environmental reinforcement they most likely receive serves as a significant contributor to overall self-esteem (Cherian, 2001). This finding is also consistent with previous research that found no differences in self-esteem between Caucasians and African Americans (Mullis & Chapman, 2000). The current comparison, however, is between unequal sub-groups of ethnicities, however, which is identified as a limitation of the current study later in this chapter.

It was expected that adolescent females may exaggerate their social/peers self-esteem in a positive manner given the need during this developmental stage to feel accepted by one’s peers and have a strong sense that this area of their lives is going well (Gilligan, 1988). It also follows logically that during this developmental time frame, an individual adolescent may perceive her home environment or relationships with parents as particularly negative or contentious. This may be because of a home environment where one is being held more accountable for their actions than in childhood and expected to navigate the course of their lives with less assistance from adults. This,
compounded by the adolescent's simultaneous need for identity formation and increased autonomy during this time, often leads to increased conflict between parents and adolescents (Blechman & Culhane, 1993; Feldman, Fisher, Ransom, & Dimiceli, 1995). There was no significant difference, however, between a normative sample and the study sample on home/parents self-esteem.

Implications of the Findings

In Chapter I, the significance of the current study is discussed in terms of the general impact that having more knowledge of locus of control, coping style, and self-esteem within a racially diverse sample of adolescents would have on the understanding of this developmental time period. Specifically, any research contribution that allows the community to improve their knowledge base and understanding of adolescent developmental variables is a worthwhile endeavor. Having evaluated the findings at the study’s conclusion, however, the significance of the study can be discussed and presented in more specific terms. Overall, the variables of locus of control, coping style, and self-esteem are by themselves and in interaction with one another responsible for positive determinants of adolescent well-being to some degree. This is consistent with previous research involving these variables and the adolescent population (Luthar, 1991; Patterson & McCubbin, 1987; Weist et al., 1995).

The results of this study reveal that with regard to coping style, there is overlap between the types of coping behaviors that one employs. One does not function within
one coping regime exclusively, yet may utilize one particular type of coping strategy
depending upon what the situation calls for and the extent to which the stressor has been
appraised appropriately.

In assessing the way in which these variables function and interact with one
another specifically during adolescence, it is important to consider the developmental
task associated with this period of development, identity versus role confusion (Erikson,
1950). This developmental task elucidates the transient and precarious nature of the
adolescent personality and how there are many processes that take place that transition an
individual from childhood to adulthood. The fact that one may behave in a manner that is
indicative of an external locus of control, such as blaming others for their own
inadequacies, may be a function of the immaturity and the interpersonal uncertainty
associated with this time period. The decision to behave in a manner that is consistent
with emotion-focused coping, such as avoiding the problem rather than directly coping
with it by seeking professional or spiritual support may also be because of a lack of
communication skills consistent with the maturity level of this developmental stage,
rather than a fixed personality trait that will remain extant into and throughout adulthood.
These are constructs, therefore, that are likely to change with experience and maturity
and as such, an increased knowledge of how these variables can change and positively
impact the developing adolescent will most likely serve in enhancing a process that may
in fact occur naturally throughout the course of time and development.
Erikson identified this period of development as a time when one must navigate the increased demands of the environment in comparison to what was expected of an individual during childhood, while simultaneously working toward identifying one’s newly acquired roles and integrating them into a comprehensive self-identity. In addition to identity formation, other tasks associated with this time-period are personal growth toward self-assertion and autonomy, while simultaneously being concerned with peer acceptance (Ellison-Cole, 2003). One must consider how the three primary variables of locus of control, coping style, and self-esteem may be affected by these developmental challenges.

Specifically, an individual who is simultaneously looking to assert her or his independence, while concerning themselves with peer acceptance may be confused as to what aspect of their personality to emphasize depending upon the situation. One may have an internal locus of control and want to express responsibility for failing a test, for example. The peer group, however, is criticizing the teacher and saying that the test was too hard and therefore, unfair. The internally oriented person is then faced with the decision to behave in a manner that emphasizes personal accountability or engage in the external process that the peers are exercising, which may cause a more pleasing emotional reaction at the time. A similar process could happen when deciding to cope in a manner that is more emotion-focused than problem-focused in orientation. The developing adolescent recognizes the need to utilize a problem-focused coping strategy, such as seeking professional support by going to a guidance counselor. She may first vent
to friends and enjoy the feeling of affirmation she receives from the peer group, which is of paramount importance during this period of development. This process of venting may manage one’s tension to such an extent that seeking the professional support no longer is deemed necessary. Lastly, self-esteem is clearly impacted by the extent to which one can successfully navigate these identity contradictions while simultaneously feeling insulated by a supportive peer group.

There is evidence to support that these developmental challenges differ depending upon gender and ethnicity, thus necessitating the need for research that highlights the specific behavioral mechanisms associated with female adolescents and how these vary depending upon ethnicity. The results of this study are significant, in part, because of the specific emphasis placed upon adolescent females and racial differences in the outcome variables of locus of control, coping style, and self-esteem. Specifically, research has identified that males and females exhibit different expressions of depression as a result of managing the emotional tension associated with navigating challenges experienced within the developmental task of identity versus role confusion. Females reportedly exhibited depression that was directly related to the process of individuation, whereas their male counterparts engaged in more risk-taking behaviors that were hypothesized as being a way of masking depression (Adams, 2003).

Research involving African American adolescents identified how cultural variables impact the process of identity formation differently for those of different cultures (Daughtery, 2005). Specifically, African Americans who are operating within the
contextual framework of a collective sense of self in contrast to an individualized sense of self consistent with a more Caucasian experience, increases the complexity of the process involved in successfully balancing all of the conflicting sources of one’s identity, particularly when one’s peers may be of a different culture.

A further issue pertaining to the significance of this study and its implications, is seen in evidence that supports that parenting behavior affects locus of control in children. Specifically, enabling parenting behaviors, such as minimizing an adolescent’s mistakes and blaming others in the individual’s environment, such as teachers or peers, leads to a more external locus of control within the adolescent (Parton & Day, 2002). In this society of greater demands placed upon an adolescent in the form of academic pressure and having to be involved in many things simultaneously (Melman et al., 2007), parents may tend to lessen the adolescent’s load by assisting them in addressing certain issues. While this may be appropriate at times given the circumstances, parents should be made aware of the deleterious effects associated with a child developing a completely external locus of control orientation. This may lead to ineffective coping strategies and poor self-esteem as a result of feeling inadequate and not in control of one’s circumstances. While emotional support and guidance are always positive parenting behaviors, parents should be educated on how to balance displaying emotional support while simultaneously emphasizing personal accountability (internal locus of control).

In addition to parenting, this study has implications for others interacting with the adolescent community, such as teachers, counselors, administrators, and child study
teams. Counselors and teachers can be better informed in ascertaining how a female adolescent learns and navigates the social demands of her environment. Insight into these processes and the specific variables that are at play, such as locus of control, coping style, and self-esteem serves to better inform these professionals and make assessments and interventions that are developmentally and contextually appropriate, with a greater sensitivity to cultural nuances. In terms of assessment, for example, child study teams may include some screening measures in their battery designed to assess learning style differences and necessary educational accommodations. A general assessment of one's self-esteem, could better inform the assessment conclusions so that there is some insight into how the student in functioning emotionally, which impacts all other domains of behavior.

Limitations of the Present Study

In terms of issues pertaining to sample size, it is a methodological limitation of the current study that Blacks/Hispanics are under-represented in this sample \( n = 27 \) when compared to Caucasians \( n = 52 \) and Asians \( n = 47 \). Hypothesis 4 specifically assessed whether or not the problem-focused coping strategy of seeking spiritual support varied depending upon ethnic classification. The results were insignificant; however, there were only 11 Black participants, 7 of which identified as African American. It is necessary, therefore, to consider that the insignificant findings were attributable to the
small sample size and were not necessarily because of a lack of variability in this coping strategy as it is utilized by different racial groups.

As discussed in Chapter IV, participants had to be placed in overall groups so that there was some uniformity in numbers for statistical comparisons. One group heading involved so many varying cultures in this study. There are many nuances between the cultures that were placed under the heading of Asian, for example. The way in which the group was constructed was a necessary way of organizing the data, however, it is an inherent limitation that cultural differences were not assessed more sensitively and that people from such varying cultures were placed in the same category, such as a Chinese and Pakistani individual.

A further examination of variables that may be related to locus of control, coping style, and self-esteem yielded a conclusion that these three variables could be influenced by levels of mental health, specifically depression, anxiety, and existence of current stressors. The decision to employ one coping strategy over another is most likely affected by present mental health status and overall feelings of emotional stability. For example, the primary function associated with emotion-focused coping is managing tension (Patterson & McCubbin, 1987). It is possible that a person who ordinarily chooses a more direct, goal oriented coping behavior (problem-focused) is affected by a current stressor to such a degree that managing one’s tension is the task that needs to be attended to immediately. Having a measure of pathology, therefore, such as a depression, anxiety, or level of stress inventory, would be helpful in assessing what is in fact a tendency toward
one coping strategy over another, rather than a reaction to the distressing environmental circumstance taking place currently in one's life. The current sample did not include such a measure and so this analysis was not possible.

It is also important to consider that overall, this sample seems to be functioning extremely well in terms of having an internal locus of control, effective coping styles, and high levels of self-esteem. This is not necessarily a representative sample of the overall adolescent population that seemingly has many problematic and unhealthy circumstances with which to contend. A measure of current stressors and the presence of certain clinical symptoms, such as depression and anxiety, may have elucidated whether or not this particular sample is in fact functioning as well as it seems. In speaking with various faculty and administration members at both of these schools, the overall impression was that their student bodies were currently academically oriented and they did not feel that they were contending with difficult behavioral problems or poor attitudes on the part of the students. This may be a partial explanation for the overall positive ways in which this sub-group of adolescents are functioning in comparison to the adolescent population as a whole.

Hypothesis 4 evaluated the prevalence of seeking spiritual support among this ethnically diverse sample. As stated previously in this section, the small sample size and under-representation of Blacks and Hispanics, may have accounted for the insignificant result. The decision to seek spiritual support, however, may also be related to overall family dynamics and religiosity. A measure associated with assessing levels of
spirituality and religiosity was not included. This is a limitation in that such information would have allowed for an overall assessment of what type of religious behaviors vary by ethnicity. This would have given more information and helped delineate what is a function of religiosity and ethnicity exclusively, as well as the interactions therein. The present study evaluated only one aspect of a rich and complex set of descriptive behaviors and how they may vary by race.

As stated in Chapter I, this study did not assess for racial identity and its influence on the primary variables of interest. Previous research has illustrated that there is a connection between racial identity and internal locus of control, in that an internal locus of control is associated with the internalization stage of racial identity for African American adolescents (Cosby, 1999). Lower levels of self-esteem and high levels of racial identity were also found to be significantly correlated (Harps, 2005). While this sample would not have provided a sufficient amount of African American participants for analysis, it would have been helpful to ascertain the correlation between racial identity and the study variables for all races. In other research, Asian Indian adolescents displayed higher levels of ethnic identity status than their Caucasian peers (Cherian, 2001) yet this did not have an influence on choice of coping style, as was hypothesized.

Additionally, a limitation of the present study is seen in the inter-scale reliability of the Nowicki and Strickland Locus of Control Scale for Children. When this scale was used with a sample of African American adolescents, the reliability coefficient was .594,
which was low. This should be noted as a potential limitation as this was the scale that was used to ascertain locus of control for the African American portion of the sample.

In addition to the reliability statistic associated with this measure, the original scale was conducted with a 1973 normative sample. Although it has been used with more current samples, it is possible that there is a cohort effect present when using a measure written during this time frame with adolescents of this current generation. It is possible that the current population of adolescents may be significantly different from a sample over four decades ago in terms of the ways in which they conceptualize their environment and make behavioral choices. These aspects of their functioning are likely to impact locus of control and whether one tends to be more externally or internally oriented.

This study did not compare data generated from the two sub-groups of the overall sample, those from the public co-educational school ($n = 93$) and those from the all-female parochial school ($n = 35$). This comparison was not conducted due to the unequal number of participants in each group. It is possible, however, that there may have been some interaction between the primary variables analyzed in this study and how they may have been impacted by a different educational environment. This may have been particularly seen in the analysis of Hypothesis 4 that evaluated racial differences in the tendency to seek spiritual support. It is possible that the emphasis on seeking spiritual support as a coping strategy may be greater in a parochial school than a public school environment and as such, may have been more prevalent among those in a parochial school environment. This would have been an informative supplemental analysis to better
understand the factors associated with the prevalence of seeking spiritual support as a coping strategy among different racial groups.

Lastly, it should be noted that all data collected in this study was via self-report measures. Adolescents are functioning within a stage of development where they are struggling with maintaining a stable sense of self and navigating many conflicting social changes and stressors (Lengua, 2000). As a result, the process of taking these measures may have instilled some anxiety associated with the knowledge that one is being evaluated with regard to personality construction and social behavior, generally two precarious constructs for the adolescent population. This could influence one to respond in a socially appropriate way that minimizes any possible negative circumstances that could be present.

Recommendations for Future Research

The previous section of this chapter outlined specific procedural limitations of the current study. Addressing the above limitations would be worthwhile extensions of this current effort so that the interaction between race, locus of control, coping style, self-esteem, and their impact on adolescent development could be further delineated and understood.

Specifically, future samples need to include larger numbers of each racial group so that comparisons made on the basis of race are numerically compatible. The groups
that are formulated on the basis of ethnicity should be considered so that individual
differences within the culture are highlighted and differentiated whenever possible.

There are typically variables that impact the functioning of the primary constructs
evaluated in a research study that extend past the scope of the study hypotheses. In
evaluating the results of this study, primary constructs that would significantly impact the
outcome variables of locus of control, coping style, and self-esteem would be current
mental status, levels of religiosity, and ethnic identity. These are three main areas that
would make notable contributions of future research in furthering the knowledge base
associated with these variables.

Future studies may evaluate the preferential sequence of these types of coping
strategies to evaluate in what order coping behaviors are the most effective. For example,
the emotion-focused coping behavior of venting to a friend serves a therapeutic purpose
of lessening one’s tension. If this individual eventually chooses to address the nature of
the stressor by becoming more goal-oriented and employing a strategy such as seeking
professional support, the individual is striving to help oneself and take responsibility for
the eventual outcome, which only further perpetuates an adaptive sense of internal
control and self-esteem that remains constant across situations and reactions to stressful
life events.

Lastly, a future research effort that would build upon the present study may
include a measure that does not rely solely on self-report, as the current study did.
Although this complicates the research design and may be too cumbersome depending
upon the scope of the study, corroboration in the form of some type of input from parents, teachers or peers, may lend credibility to data obtained singularly from the individual.

Summary and Conclusions

In conclusion, the results of this study provided some significant findings related to the adolescent female community and how they are functioning differentially in the areas of locus of control, coping style, and self-esteem. Racial differences were evaluated on each of these variables as a point of comparison. This study’s findings suggest that overall, these female adolescents are coping well, with the utilization of problem-focused coping strategies occurring in conjunction with emotion and appraisal-focused-coping strategies. This seems to be the case for all of the racial groups included in this sample.

While emotion-focused strategies have been identified as being problematic in their lack of focus and goal-oriented behavior, they do serve the primary function of managing the tension associated with a stressful or upsetting event (Patterson & McCubbin, 1987). The issue consequently becomes that the employment of emotion-focused strategies is problematic only when it occurs exclusively without another coping strategy following it or existing simultaneously, such as a problem or appraisal-coping behavior.

The results of this study suggest that the females in this sample seem to be engaging in effective combinations of coping strategies, which are positively impacting their overall sense of internal control and self-esteem. These findings are generally
consistent across racial groups. The implications and significance of the current study are best understood by analyzing the developmental time period of adolescence and its unique challenges with regard to personality formation. Given that there are unique developmental processes taking place during this time period, it presents itself as an opportune period of time, albeit challenging, in which those interacting with this population, such as parents, teachers and mental health professionals, may succeed in assisting these individuals by providing support, understanding, and encouragement throughout the maturation process.

The limitations of the present study and implications for future research discussed earlier in this chapter identify the areas where methodological concerns would necessitate a conservative interpretation of the study findings. Further, these sections provide suggestions for how to specifically build upon the foundation of research that informed this study’s hypotheses. Future research efforts can elucidate how those interacting with the adolescent population can most effectively understand and intervene with the inevitable challenges that this population contends with throughout this period of development, giving careful consideration to how these variables function across gender and ethnic classification.
References


Appendix A

Recruitment Letter
Dear Parents and Students,

My name is Jennifer Butler-Sweeney and I am a fourth year doctoral student in Counseling Psychology at Seton Hall University in South Orange, NJ. I am inviting 9th and 10th grade female students to participate in a study to find out whether the way adolescents cope with stress is affected by how they feel about themselves and how much they feel in control of their lives. I also want to know if this varies by cultural group. This data will be collected and analyzed as my doctoral dissertation.

The information yielded by this study will help those working with female high school students so they can better assist these students when they are faced with stressful situations. Therefore, at the conclusion of the study, I will share a summary of my results with school administration as well as with psychologists interested in how adolescents cope with stress.

Students who decide to participate will be asked to complete four questionnaires. The first is a Demographic Questionnaire that will briefly ask for information concerning age, cultural group, participation in which lunch program at the school, and involvement in extra-curricular activities. The second questionnaire asks about the student’s feelings of control. The third questionnaire assesses ways you address difficult situations. The last questionnaire assesses levels of self-esteem. A copy of all of these measures will be given to the Principal. All parents are welcome to review these measures at the school, should they wish to prior to granting consent.

These measures will take approximately 45 minutes to complete. Once concluded, students will be dismissed and will proceed to their next period class. This study will take place during a study hall period so that academics are not disrupted. Data collection is tentatively scheduled for Friday, May 26, 2006.

Participation in this study is completely voluntary. If at any time a student wishes to stop taking any of the surveys, she is welcome to do so.

Please be assured that participant’s confidentiality and anonymity will be protected in various ways. First, the enclosed forms indicating your agreement to participate in the study will be sent directly to the Principal. The Principal will ask students who have returned these forms to report to the cafeteria to participate, so that I will not have access to student names. Secondly, I ask that students do not put their names on any of these questionnaires. Student’s names will not be included in any computer files used for this study, and results of the study will be reported based on group data only.
All data will be stored in a locked cabinet maintained at Seton Hall University by Dr. Pamela Foley, my faculty advisor. Computer files for data analysis will not include any information regarding the identity of any study participant. No one outside myself and Dr. Pamela Foley will have access to this data and any information identifying participants by name will be destroyed at the completion of this study.

Enclosed you will find two copies of the Parent Informed Consent Form as well as the Student Assent Form. Should you agree to allow your daughter to participate in this study, and if your daughter would also like to participate, please sign the Parent Informed Consent Form and have your child sign the Student Assent Form. Please then mail these signed copies to the Principal in the addressed, stamped envelope provided in this packet. Please retain an additional copy of these forms for your records. I ask that you return these forms to the school no later than **Friday, May 19, 2006**

If you have any questions regarding the research process or would like to have a copy of the results, please contact Jennifer Butler-Sweeney at (908) 963-5814 or at butlerja@shu.edu

Thank you very much for your time and participation in this project.

Sincerely,

Jennifer Butler-Sweeney, MA, MS  
Doctoral Student  
Seton Hall University  
Department of Professional Psychology and Family Therapy

Pamela Foley, Ph.D.  
Faculty Advisor  
Seton Hall University  
Department of Professional Psychology and Family Therapy
Appendix B

Parent Consent Form
Parent's Informed Consent for
Student Participation in Research

1. Researchers' Affiliation

I am inviting 9th and 10th grade female students at XXXXXXXX to participate in a study to find out whether the way adolescents cope with stress is affected by how they feel about themselves and how much they feel in control of their lives. I also want to know if this varies by cultural group. I am a student in the Counseling Psychology Ph.D. program and this research project is my doctoral dissertation.

2. Purpose and Duration of Study

The purpose of this study is to explore certain personality characteristics among female adolescents. Specifically, locus of control, which refers to whether or not individuals feel in control of their lives. Secondly, coping style, which refers to the way in which difficult situations are handled, and finally, self-esteem, which refers to a person's feelings of self-worth. This study will also look at how these things vary by cultural group. The information yielded by this study is important to assist all those interacting with female high school students so that they can better understand how females in this age group react when they are confronted with stressful situations.

3. Procedures

If you agree to your child's participation in this study, please sign both copies of this form, and keep one for your records. Please understand that by signing this form, you are giving permission for me to approach your child on the day of data collection to ask for her voluntary participation. She will be reminded on the day of data collection that her participation is voluntary and entirely up to her. Even if you have granted permission, she will be reminded that that she can opt not to participate if she wishes.

Please return this form, as well as a copy of the Student Assent Form signed by your child in the provided stamped, addressed envelope to the Principal. Once the Principal receives these forms and confirms your eligibility, your daughter's name will be placed on a list of students who will be asked to report to the cafeteria for participation in this study. This data collection day is tentatively scheduled for May 26, 2006 and will take place during a study hall so that regular academics are not disrupted. Students will be asked to complete four questionnaires. The first is a Demographic Questionnaire that will briefly ask for information concerning, age, cultural group, participation in lunch program at the school, and involvement in extra-curricular activities. The second questionnaire asks questions concerning the student's feelings of control. The third questionnaire assesses ways of addressing difficult situations. The last questionnaire assesses levels of self-esteem. These measures will take approximately 45 minutes to
complete. Once concluded, students will proceed to their next period class. A copy of these four questionnaires will be on file with the principal and made accessible to any parent who wishes to see them before giving consent for their child to participate or at any other time. On the day of data collection, only those students who have returned this form to the principal will be asked to report to the cafeteria for study participation. Both this form and the Student Assent Form will be kept separate from the rest of the data.

4. Voluntary Nature of Participation
   Participation in the study is completely voluntary. If your daughter decides not to participate after reviewing the study materials, she is under no obligation to continue. Further, if your daughter begins the study and at any time decides to discontinue her participation, she is free to do so and return to class.

5. Anonymity
   Please be assured that your child's confidentiality and anonymity will be protected in various ways. First, this Informed Consent Form and the Student Assent Form will be sent directly to the Principal, who will ask students to report to the cafeteria to participate, so that I will not have access to student names. Secondly, I ask that students do not put their names on any of these questionnaires. Students names will not be included in any computer files used for this study. Results of the study will be reported based on group data only.

6. Confidentiality of Data
   All data will be stored in a locked cabinet maintained at Seton Hall University by Dr. Pamela Foley. Computer files for data analysis will not include any information regarding the identity of any study participant.

7. Access to Research Records
   Only myself and my faculty advisor, Dr. Pamela Foley, will have access to this data. No one else will have access to the demographic information or the other questionnaires. All records identifying participants by name or location will be destroyed at the completion of the study.

8. Anticipated Risks
   It is not expected that participation in this study will involve significant risk or discomfort.

9. Anticipated Benefits
   It is not expected that this study will benefit participants directly. However, at the conclusion of this study, results and analysis will be shared with school administration. It is expected that through expanding the knowledge of the personalities and behaviors of
this age group, this study may contribute to increasing awareness among those interacting with this population, such as parents, teachers, and other professionals so that they can better assist them when they are confronted with stressful situations.

10. Procedures to Follow in Case of Distress
   As stated above, it is not expected that this study will involve significant risk or discomfort. However, if your child does experience significant distress, a representative form the guidance department will be available to discuss these feelings with your child and assess the situation. You will be informed by this guidance counselor via the phone should this occur.

11. Alternative Procedures
   This study does not involve any clinical treatment; therefore, there are no relevant alternative procedures.

12. Whom to Contact for Additional Information
   If you have any questions regarding the research process or would like to have a copy of the results, please contact Jennifer Butler-Sweeney at (908) 963-5814 or by email at butlerja@shu.edu, Dr. Pamela Foley at 973-275-2742, or the Institutional Review Board of Seton Hall University at 973-313-6314.

13. Video- or Audio-taping
   This study does not involve video or audio-taping.

14. Your Right to a Copy of This Form
   You are entitled to a copy of this Informed Consent Form. If you choose to sign it, please sign both copies, and keep one for your records.

15. Participant’s Informed Consent
   I have read the material above and have had all questions answered to my satisfaction. I agree to participate in this exercise and realize that I may withdraw at any time, without prejudice or penalty.

   Child’s Name ____________________________

   ________________________________________  Date

   Parent’s Signature  ________________________________________  Date

Please return one signed copy of this form to the Principal in the envelope provided by May 19th, 2006 and keep the other one for your records.
Appendix C

Student Assent Form
Student Assent to Participate in Research

1. Researchers' Affiliation

I am inviting 9th and 10th grade students at XXXXXX to participate in a study to find out whether the way adolescents cope with stress is affected by how they feel about themselves and how much they feel in control of their lives. I also want to know if this varies by cultural group. I am a student in the Counseling Psychology Ph.D. program and this research project is my doctoral dissertation.

2. Purpose and Duration of Study

The purpose of this study is to explore certain personality characteristics among female adolescents. Specifically, locus of control, which refers to whether or not individual feels in control of their lives. Secondly, coping style, which refers to the way in which difficult situations are handled, and finally, self-esteem, which refers to a person’s feelings of self-worth. This study will also look at how these things vary by cultural group. The information yielded by this study is important to assist all those interacting with female high school students so that they can better understand how females in this age group react when they are confronted with stressful situations.

3. Procedures

If you decide to participate in this study, please sign this form and place it in the addressed stamped envelope provided. Keep the additional copy for your records. Your Parent’s Informed Consent Letter will also be placed in this envelope. Participation in this study is completely voluntary. Even if your parent’s give permission for you to participate, you do not have to participate if you do not want to. This will be restated at the time the study is being collected. You will be asked to complete four questionnaires. The first is a Demographic Questionnaire that will briefly ask for information concerning, age, cultural group, participation in which lunch program at the school, and involvement in extra-curricular activities. The second questionnaire asks questions concerning feelings of control. The third questionnaire assesses ways of addressing difficult situations. The last questionnaire assesses levels of self-esteem. These measures will take approximately 45 minutes to complete. Once concluded, you will be dismissed and will proceed to your next period class.

4. Voluntary Nature of Participation

Again, participation in the study is completely voluntary. If you decide not to participate after reviewing the study materials, you are under no obligation to continue. Further, if you begin the study and at any time you decide to discontinue your
participation, you are free to do so, inform this researcher or a present faculty member, and return to class.

5. Anonymity

Please be assured that your confidentiality and anonymity will be protected in various ways. First, your parent's Informed Consent Form and this Assent Form will be sent directly to the Principal. The Principal will then ask students to report to the cafeteria to participate, so that I will not have access to student names. Secondly, I ask that students do not put their names on any of these questionnaires. Student's names will not be included in any computer files used for this study. Results of the study will be reported based on group data only.

6. Confidentiality of Data

All data will be stored in a locked cabinet maintained at Seton Hall University by Dr. Pamela Foley. Computer files for data analysis will not include any information regarding the identity of any study participant.

7. Access to Research Records

Only myself and my faculty advisor, Dr. Pamela Foley, will have access to this data. No one else will have access to any information obtained by this study. All records identifying participants by name or location will be destroyed at the completion of the study.

8. Anticipated Risks

It is not expected that this study will involve significant risk or discomfort.

9. Anticipated Benefits

It is not expected that this study will benefit participants directly. However, at the conclusion of this study, results and analysis will be shared with school administration. It is expected that through expanding the knowledge of the personalities and behaviors of female high school students, this study may contribute to increasing awareness among those interacting with this population, such as parents, teachers, and other professionals so that they can help these students when they are confronted with stressful situations.

10. Procedures to Follow in Case of Distress

As stated above, it is not expected that this study will involve significant risk or discomfort. However, if you do experience significant distress, a representative form the guidance department will be available during the data collection to discuss these feelings with you and assess the situation for further intervention.

11. Alternative Procedures
This study does not involve any clinical treatment; therefore, there are no relevant alternative procedures.

12. Whom to Contact for Additional Information
If you have any questions regarding the research process or would like to have a copy of the results, please contact Jennifer Butler-Sweeney at (908) 963-5814 or by email at butlerja@shu.edu, Dr. Pamela Foley at 973-275-2742, or the Institutional Review Board of Seton Hall University at 973-313-6314.

13. Video- or Audiotaping
This study does not involve video or audiotaping.

14. Your Right to a Copy of This Form
You are entitled to a copy of this Student Assent Form. If you choose to sign it, please sign both copies, and keep one for your records.

15. Student’s Informed Assent

I have read the material above and have had all questions answered to my satisfaction. I agree to participate in this exercise and realize that I may withdraw at any time, without prejudice or penalty.

______________________________  ________________
Student Signature                Date
Appendix D

Demographic Questionnaire
Demographic Questionnaire

Please provide the following information by filling in the blank or placing an X next to the category that applies to you:

1) Age: __________

2) Grade: __________

3) What is your racial and ethnic identification?

______________________________

4) Which lunch program do you currently participate in?

_______ free lunch   ______half-price lunch   _____ full-price lunch

Please list below the extra-curricular activities with which you are currently involved in the line below. (This includes, but is not limited to, organized sports for the school or your town, academic clubs, student council, performing arts, and community service.)

______________________________

______________________________

______________________________

______________________________