Parenting Styles Influence on Locus of Control, Self-Efficacy and Academic Adjustment in College Students

by

Kimberly Tracey Mills

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Approved by

Jamie Carney, Chair, Professor of Special Education, Rehabilitation, Counseling/School
Psychology
Annette Kluck, Assistant Professor of Special Education, Rehabilitation, Counseling/School
Psychology
Chippewa Thomas, Assistant Professor of Special Education, Rehabilitation, Counseling/School
Psychology

Abstract

The purpose of this study was to investigate the relationship between perceived parenting style, locus of control, self-efficacy, and student outcome (i.e. academic performance, GPA) in a sample of college students. The relationship among gender and ethnicity were also examined across these variables. There were 100 participants in this study, including 78 females and 22 males from a university in the Southeastern United States. All participants were between the ages of 19–23. Respondents were asked to supply their demographic information as well as self-report on their academic performance. Additionally, participants completed three questionnaires, including the Parental Authority Questionnaire, Adult Nowicki-Strickland Internal-External Control Scale, and the General Self-Efficacy Scale. Regression analysis was used to analyze the data.

In sum, findings in the current study suggested that overall, parenting style and student outcome were not significantly related; self-efficacy did not moderate the relationship between parenting style and student outcome; locus of control did not moderate the relationship between parenting style and student outcome; parenting style and gender were not significantly related; self-efficacy and gender were significantly related; locus of control and gender were not significantly related. Implications for parents, college counselors, counselor educators and future research are discussed.

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CHAPTER 1. INTRODUCTION

The developmental stage between adolescence and young adulthood encompasses a significant transitional period. Individuals will be faced with developing competence among biological, psychosocial, and cognitive factors (Austrian, 2008). Adolescence is marked by change and renegotiation in almost every arena-biological, social, and cognitive development; identity development; changes in peer relations and friendships; a renegotiation of family relationships, especially the parent-adolescent relationship; and school transitions (Hill, Bromell, Tyson & Flint, 2007, p. 367)

According to Havighurst, the successful completion of life tasks will lead to healthy development and achievement factors, whereas failure may result in disapproval from others and difficulty in accomplishing later tasks (as cited by Salkind, 2004). Various theorists have contributed to the literature regarding adolescent development. Based on Erikson's (1977) framework of psychosocial development the primary task of the adolescent is to structure his or her own personal identity based on self ideals. Role confusion may appear, however, when the youth is unable to integrate the views of society into this self-appraisal. "Adolescence never occurs in a social vacuum, it is critically affected by the structure of society in which the individual is raised" (Austrian, 2008, p.134). Based on this realization, Erikson urges society to be responsible for the messages it sends to these youth (as cited by Wright, 1982). "The process of identity formation depends on the interplay of what young persons at the end of childhood

have come to mean to themselves and what they now appear to mean to those who become significant to them" (p. 106).

Piaget's model (1972) offers an understanding of cognitive and affective determinants involved in adolescent development. According to his framework, individuals are active participants in creating a sense of homeostasis in their lives. Throughout their development, children create beliefs about their experiences with the world. They create constructs about how their behaviors are received by the environment (Salkind, 2005). As they mature, adolescents begin to involve themselves in more adult-like thinking. Piaget used the term *formal-operational* to describe a cognitive process that consists of logical, abstract, and hypothetical reasoning (Crain, 2005). Adolescents can engage in problem-solving based on theories and reflect upon the outcome (Wadsworth, 1996). Given this new information, the adolescent can continually adapt and respond to his or her environment (Salkind, 2005).

Chickering (1993) extended the literature on psychosocial development in his theory of stages. According to this author, students must progress through the phases of competence, autonomy, maintaining relationships, managing emotions, identity, purpose and integrity. Within the college setting, developing *competence* includes the ability to use one's mind to master content, learn communication skills and participate in competitive and creative experiences. *Autonomy* reflects the capacity to develop self-sufficient behaviors and participate in critical thinking, resulting in independent problem-solving. The ability to *manage one's emotions* includes the competency of using appropriate channels to deal with various affective states. *Maintaining relationships* includes the ability to reach out to significant others.

Development of *identity* includes forming a sense of self within physical, social, and cultural domains. The construct of *purpose* entails the ability to practice intentionally in the areas of

vocation, personal interests and interpersonal commitments. The final stage of *integrity* involves the capability to practice values in a congruent manner when faced with different life scenarios. For the college student, these tasks become more realistic as they leave their parents' home and embrace life for the first time on their own. The successful completion of each developmental stage may depend on both external and internal factors (Taub, 2008).

Individuals progress through the various stages according to their own unique patterns. Several theorists indicate that parenting behaviors offer the primary foundation of supporting or deterring a child's development (Austrian, 2008). In their review of developmental theories, Barber and Rollins (1990) identified basic generalizations regarding the implementation of positive and negative parenting behaviors. They posited that positive parenting behaviors support psychological maturity. These include the constructs of acceptance, limit-setting, independence-training, behavioral expectations, and the encouragement of self-expression. Furthermore, negative parenting behaviors inhibit psychological maturity. These include constructs such as hostility, restrictiveness, systemic rigidity, rejection and emotional distance. Maccoby (1980) further discusses the parental role of socialization as, "the process whereby children acquire the habits, values, goals, and knowledge that will enable them to function satisfactorily when they become adult members of society" (p. 5).

Parenting Styles

The most notable model in conceptualizing the parent-adolescent relationship was developed by Baumrind (2005) in her framework of parental control. In this typology, parenting behaviors are based on the implementation of *responsiveness* and *demandingness*.

Responsiveness refers to the ability of the parent to attend to their adolescent's needs through supportiveness and warmth. When provided with this condition, the adolescent is fostered with a

sense of independence and individuality. Demandingness describes the parent's ability to enforce standards and supervision in order to offer structure to the adolescent. An individual raised in this environment learns to adapt to societal rules and prohibitions (Baumrind, 2005). Although the dimensions of responsiveness and demandingness are two separate constructs, they combine together to form unique parent behaviors.

Baumrind (1966) identified three types of parenting styles within the parent-child interaction, including *permissive*, *authoritarian*, and *authoritative* parenting. The permissive style of parenting is represented by low demandingness and responsiveness. Children raised in these homes are given freedom to make their own decisions with little or no guidance. They are encouraged to regulate their own activities and fulfill their impulses and desires. The authoritarian style of parenting is characterized by high demandingness and low responsiveness. These parents value obedience and structure. Children reared in this environment are not encouraged to express opinions. The authoritative style of parenting reflects both high demandingness and responsiveness. This interaction offers reciprocity of mutual respect among the parent and adolescent. Parents implement rules but are flexible in communicating policy issues. Children raised in these homes are encouraged to achieve their goals based on independent thinking and guidance from parents (Baumrind, 1966).

Locus of Control

Locus of control refers to the prediction that certain outcomes will occur based on either internal influences or external factors (Rotter, 1971). Individuals who believe that results are based on their own skill or effort are considered to have an internal locus of control. Others, who believe that outcomes are related to luck or fate, are considered to have an external locus of control (Rotter, 1982). One's belief can shape future experiences in such a way that the

expectations of future performance is based on current or past successes or failures (Kirsch, 1999). According to Maddux (1995), those who perceive that an outcome was related to their own ability become more resistant to terminating certain behaviors. "Children develop a set of expectations concerning which events lead to which other events. These correlations among events are learned by direct experience, by instruction from others, and by observing others" (Miller, 1993, p. 199).

Self-Efficacy

Self-efficacy judgments are developed from the regulation of one's behavior. During the childhood years, children's high regard for their parents and yearning to be like them leads them to perform certain behaviors (Salkind, 2004). As adolescents mature, the external world continues to influence development as internal influences begin to appear. By reflecting on their abilities and successes, adolescents are able to assess their own behaviors through the formation of self-efficacy appraisals (Crain, 2005). Behavioral self-efficacy refers to one's belief in his or her capability to complete specific actions in developing certain skills. Cognitive self-efficacy refers to the belief that an individual can manage and control his or her own thoughts. Emotional self-efficacy is defined as the belief in the ability to complete actions that impact one's emotions (Maddux, 1995). Through the developmental process, adolescents begin to act more intentionally. Although the social world is still a significant influence, adolescents learn that they can influence the environment as well (Salkind, 2004).

Purpose of the Study

Much of the previous research on parenting styles has focused on the developmental periods of childhood and early adolescence. Several authors have investigated the relationship between perceived parenting style and psychological well-being among children and adolescents.

While these researchers have explored various constructs of functioning, they have all provided support to the idea that authoritative parenting leads to the most positive outcomes for child and adolescent development. Simons and Conger (2007) investigated behavioral adjustment in a sample of eighth-grade students. These researchers found that the lowest levels of delinquency and depression and greater school commitment were found among those raised in authoritative homes. In their study of middle and high school students, Lamborn, Mounts, Steinberg and Dornbusch (1991) found that adolescents who perceived their parents as authoritative reported higher levels of psychosocial competence and lower levels of psychological and behavioral dysfunction. Using a sample of eighth and ninth grade students, McClun and Merrell (1998) found that children raised in authoritative homes reported a more internal locus of control and higher self-concept ratings than those raised in authoritarian and permissive homes. To extend upon the research using college samples, this design investigated the role of parenting styles using university students.

The purpose of the present was to quantitatively explore the relationship among parenting styles, locus of control, self-efficacy and student outcome (i.e. academic performance, GPA) in a sample of college students. The measures used in this design included the Parental Authority Questionnaire (PAQ), the General Self-Efficacy Scale (GSE) and the Adult Nowicki-Strickland Internal-External Control Scale. Students also self-reported on their academic performance and recorded their current GPA. In addition, students' gender and race were examined as factors in the relationship between parenting styles, locus of control, and self-efficacy.

Significance of the Study

Various factors will influence how each student adjusts to the college experience.

Increasing the social support students have may affect how successful each student is in

adjusting to this phase of life. Part of this individual dynamic includes the parenting style each student was raised with. Depending on the level of *demandingness* and *responsiveness* provided to the adolescents, individuals will develop different ways of reacting to the world. As observed by Taub (2008), students who are afforded opportunities to tackle their own problems with minimal parental intervention develop greater competence within intellectual, interpersonal and manual domains.

Additionally, they develop the perspective that they are in control of their own academic pursuits (Gifford, Briceno-Perriot, & Mianzo, 2006). Those individuals who receive an equal amount of support and discipline may be better well prepared to deal with college stressors than those who received more permissive, authoritarian styles of parenting. It will be important for counselors to understand the reasons why some college students are able to transition and endure the college curriculum successfully with minimal stress while others become overwhelmed, sometimes leading to attrition behaviors.

As counselors interact with these students and families, they may consider designing programs that focus on promoting resilience. For example, mentorship programs and counseling services could help improve student expectations and belief systems. If students feel more empowered about their own abilities, they may be more likely to endure the challenge of the academic world. Furthermore, counselors should incorporate parent participation in designing orientation programs that promote an understanding of this transitional period.

Research Questions

The following research questions were examined as a part of the study.

1) What is the relationship between parenting style and student outcome?

- 2) What is the extent to which self-efficacy moderates the relationship between parenting style and student outcome?
- 3) What is the extent to which locus of control moderates the relationship between parenting style and student outcome?
 - 4) Does parenting style differ by student gender and race?
 - 5) Does self-efficacy differ by student gender and race?
 - 6) Does locus of control differ by student gender and race?

Operational Definitions

Adult Nowicki-Strickland Internal-External Control Scale (ANS-IE): The assessment includes 40 items used to measure generalized expectancy. The participants indicated whether internal factors or external factors influenced the outcome of given scenarios (Nowicki & Duke, 1974).

Authoritarian Parenting Style: Parenting behaviors which attempts to shape, control and evaluate the behavior and attitudes of the adolescent in accordance with a set standard of conduct (Baumrind, 1966, p. 890).

Authoritative Parenting Style: Parenting behaviors which attempt to direct the adolescent's activities in a rational, issue-oriented manner. Parent enforces own perspective, while respecting their adolescent's opinions (Baumrind, 1966, p. 891).

General Self-Efficacy Scale (GSE): The assessment includes 10 items used to measure perceived self-efficacy. The participants indicated their level of self-efficacy in response to 10 scenarios (Jerusalem & Schwarzer, 1979).

Late Adolescent: Undergraduate students currently enrolled in a 4-year college program (Beyers & Goosens, 2007).

Locus of Control: *Internal*: The expectancy one has that an event is contingent upon his or her own behavior (Rotter, 1982, p. 171). *External*: The expectancy one has that an event is the result of luck, fate, chance or powerful others (Rotter, 1982, p. 171).

Parental Authority Questionnaire (**PAQ**): The assessment includes 30 items used to measure the three parenting styles including authoritarian, permissive, and authoritative. Students were instructed to complete the inventory based on which type most closely reflected their family dynamics during their childhood-adolescent years (Buri, 1991).

Parenting Styles: Parenting behaviors observed by late adolescents during their upbringing with parents/guardians (Baumrind, 1966).

Permissive Parenting Style: Parenting behaviors which allows the late adolescent to regulate his/her own activities. Represented by minimal control and nonpunitive discipline (Baumrind, 1966, p. 889).

Self-Efficacy: A set of beliefs regarding a person's competence to formulate and carry out a particular course of action (Jackson, 2002, p. 243).

CHAPTER 2. REVIEW OF THE LITERATURE

Cognitive Theory and Adolescent Development

According to Piaget's model of cognitive and affective development, individuals gather knowledge through their interaction with the environment (Wadsworth, 1996). Beginning with the childhood years, one learns to create concepts through the use of social arbitrary knowledge. Through their interaction with significant others, children strive to understand themselves, the world and others. They begin to examine their surroundings in such a way that "actions are interiorized and become representations" (Piaget, 1972, p. 41). By creating mental images in their mind, children are able to offer explanations of their observations (Kirsch, 1999). Through the eyes of others, children learn which behaviors are socially desirable and which ones receive disapproval. These messages in turn are stored and retrieved for future situations. As children construct mental representations in their mind, they develop perceived rules, laws and values of their sociocultural surroundings (Wadsworth, 1996).

Piaget termed the adolescent period as one in which individuals reach the formal operational stage of development (Crain, 2005). During this phase, individuals learn to transform constructs into meanings. Cognitively, representational schemas expand and individuals increase their potential for abstract and hypothetical reasoning (Crain, 2005). Adolescents become capable of considering assumptions and evaluating outcomes as they increase their ability to manipulate principles and ideas (Crain, 2005; Salkind, 2004). Affectively, schemas work to increase one's potential to appraise life events on an emotional

level (Kirsch, 1999). Adolescents are able to expand upon their view of situations in terms of their sentiments and feelings (Wadsworth, 1996). Considering their newly adopted constructs, individuals are able to begin thinking about the future while hypothesizing potential realities (Piaget, 1972).

Adolescents become active shapers of their future as they allow their aspirations to guide behavior. As they begin to visualize their transition into adulthood, individuals must develop autonomous behaviors that are aligned with their future objectives. At the same time, adolescents will continue to receive messages from their sociocultural surroundings. When these mental concepts are communicated by parental figures, adolescents learn to adopt "behavioral standards which thereby become internalized" (Hill, Bromell, Tyson & Flint, 2007, p. 370). Given their own self-knowledge and information from the external world, adolescents engage in the practice of selecting significant information and choosing their individual paths. This process of self-regulation includes "setting personal goals and using self-reflection, planning, and regulation in the pursuit of their goals" (Maddux, 1995, p. 39). The self-regulatory process can be enhanced when adolescents are provided with favorable conditions for growth. Self-regulation may be deterred without the acceptance and support of significant persons. Verbal exchanges with others, discussions, criticisms, and support may affect the development of formal operations (Piaget, 1972).

College Student Development

Cognitive theory offers a framework in describing the changes in how a student organizes and structures his or her thoughts (Chickering, 1993). Although much of one's early learning was and continues to be influenced by parental figures, college students enter a world in which they are introduced to new authority role models (i.e. professors). Perry (1962) offers a

framework of cognitive development that considers the specific experiences of college students. In his model, individuals journey through the phases of six distinct positions. Within the first position, basic dualism, students adopt the perspective that knowledge is divided into the polarities of good and bad or right and wrong. As the new learner, the student believes it is his or her responsibility to obey and conform to the rule of authority in order to receive the absolute truth. Students can successfully master this stage by acknowledging that the world does allow for alternative opinions. During the second position, *multiplicity prelegitimate*, students continue to remain loyal to previous authority figures but also reach out to new learning mentors as well. They may experience emotional stress once they realize that prior knowledge may be no longer evident. Students can successfully resolve this dilemma by understanding that authority figures are fallible and that there are additional points of view related to specific issues. The third phase, multiplicity legitimate but subordinate, refers to the perspective that rightness does not have to be the ultimate standard. Students who wish to conquer this phase, should understand that uncertainty is sometimes unavoidable. During phase four, *late multiplicity*, students accept that different worldviews are legitimate. They become more aware of diversity, ambiguity, and different viewpoints. Students entering this phase will learn to think more critically and independently. At position five, relativism, the college student begins to make sense out of their experience by analyzing and evaluating their own perspectives. During the final phase, commitment in relativism, students become more aware of their personal choices and are able to formulate commitments (as cited by New Directions for Student Services, 1999).

In a similar framework, Magolda (1992) also offered a conceptualization of cognitive development among college students. The six principles included in the model offer an interpretation of how students organize knowledge. During the first phase, *absolute knowing*,

students assume that the total truth lies with authority figures. For some college students, this will deter them from constructing new knowledge. Instead they will rely on role models for all of the correct answers. At the second phase, *transitional knowing*, individuals seek feedback from others in confirming their own individual thoughts and ideas. During the third stage, *independent knowing*, individuals become independent thinkers and realize that they have a right to their own opinions. Some college students are able to consider the views of others and adapt their current viewpoint, while others will remain loyal to their original worldview. At the final stage of development, *contextual knowing*, students are able to consider the context of events before formulating opinions. Furthermore, they no longer accept the ideas of others' or their own without first analyzing (as cited by Bock, 1999).

Psychosocial Theory and Adolescent Development

In Erikson's psychosocial developmental model, a framework is offered to highlight the tasks involved throughout one's lifespan. In considering the period of adolescence, Erikson has defined the major role as *identity vs. role confusion* (Erikson, 1977). This period is described as one in which adolescents learn to integrate their own identifications while relying less on the expectations of others. During their "entrance into adulthood", adolescents must make selections regarding future objectives and career plans (Salkind, 2004, p. 148). As they are faced with these choices, they deal with unlimited potentialities which may be overwhelming in structuring future directions (Erikson, 1977). They may also be faced with sorting through the information received from significant others. Addressing societal demands while establishing his or her own sense of identity can either enhance development or lead to role confusion for the developing student (Crain, 2005). Concerning the parent-adolescent relationship, adolescents who are

fearful about choosing their own options, may overidentify with what significant others want for them (Erikson, 1968).

Developmental theories consider the adolescent-parent relationship in terms of the person-in-context interaction. Adams and Marshall (1996) offered propositions of identity formation as an extension of Erikson's original writings. According to these authors, adolescents interact within a social system in which they waiver between operating as autonomous agents and establishing congruity with others. Both of these interactions are based upon cognitive operations which allow one to construct and reconstruct an understanding of the self. Someone with low integration and overidentification with others may inhibit their own sense of personal uniqueness and individuality.

Mattanah, Hancock, and Brand (2004) made the observation that students who develop a stronger sense of their identities are better equipped to respond to the requirements of the college transitional period. In order to differentiate themselves from the "internalized image" of their parents, adolescents must practice exploring their own interests and making commitments based on their own choices (Beyers & Goosens, 2008). Furthermore, Grotevant and Cooper (1985) suggests that the developmental process is best accomplished when adolescents can balance practicing autonomous behaviors while maintaining ongoing support from their parents as needed (as cited by Mattanah, Hancock, & Brand, 2004).

Chickering (1993) also contributed to the literature regarding psychosocial development. In his model, the author describes a set of phases in which students interact with environmental influences in the development of social competencies. *Developing competence* refers to the acquiring of transferable skills while increasing capabilities in the area of problem-solving.

Autonomy toward independence describes the tasks of weighing the need for parental

reassurance, affection, and approval with the objective of becoming self-sufficient and goaloriented. *Managing one's emotions* incorporates the ability to identify emotions while finding
appropriate behaviors to deal with them. *Maintaining relationships* involves the capacity to
increase tolerance and healthy intimacy in relationships with family and peers. As students reach
the *identity development* and *establishing purpose* phases, they develop mastery and ownership,
while clarifying their personal goals. As the final stage, *integrity* involves adhering to personal
values and beliefs in guiding behavior. In considering the various developmental models,
Erikson underscored the necessity for students to develop a sense of *fidelity*, thereby allowing
them to transfer the need for guidance from parental figures to mentors within the academic
setting (Erikson, 1997). "So for the identity-seeking youth, there must be an assurance of the
relatedness of past and future, and the trust that those he leaves behind, as well as those about to
receive him are reliable" (Wright, 1982, p. 73).

College Student Development

In his article, Orbe (2008) outlines the developmental stages of first-generation college students. During the first stage, students experience tensions between *individual and social identity*. The overall goal at this phase is for students to construct their personal identities within the social environment. For the college student who resides at home, this may mean creating physical distance from parental figures, while maintaining a cohesive bond. Students who venture off to the dormitory life struggle with creating their own identities while becoming a part of the communal group. During the second phase, *similar versus different*, students expand their identity to include a definition beyond that of just being a college student. At the third stage, *stability versus change*, college students will seek to provide consistency in their lives while embracing novelty and change as they continue to learn about themselves. During the fourth

stage of development, *certainty versus uncertainty*, the college student may struggle with feelings of low self-confidence. At the fifth stage, *advantage versus disadvantage*, students deal with the social expectations and pressures to please supportive others in their lives. During the final stage, *openness versus closedness*, individuals make decisions concerning the need to share their personal identities with others.

As students venture through their individual stages of development, various constructs of personality may be influenced. For the college student, both self-efficacy and locus of control have been associated with academic outcomes. Self-efficacy refers to the belief that one has the personal agency to accomplish tasks and deal with adversity, while locus of control refers to the ability to attribute responsibility for outcome to internal or external factors (Luszczynska, Gutierrez-Dona, & Schwarzer, 2005). "It is theorized that an internal locus of control should support self-directed courses of action, whereas an external locus of control should discourage them" (Zimmerman, 2000, p. 85). College students must become more responsible for their own achievement. Those who establish an internal sense of control will be more likely to set forth the initiative to succeed (Stupnisky, 2007).

Parenting Styles

Parenting interactions play a crucial role during the adolescent developmental process.

"Although university students venture out on their own, previous experiences with their parents seem to continue to affect the students' success in college" (Turner, Chandler, & Heffer, 2009, p. 344). Darling and Steinberg (1993) offered a conceptualization of two distinct parenting factors. According to these authors, parenting behaviors include both the constructs of parenting practices and parenting styles. *Parenting practices* refer to techniques used by parents to shape their child's socialization, whereas *parenting style* refers to the actual climate in which

socialization takes place. Both are guided by the goals and values that parents ascribe to which are thereby communicated to children. "A primary way parents socialize their children is by communicating the goals they want their children to attain, the aspirations they want their children to fulfill, and the values they want their children to internalize" (Spera, 2005, p. 130). Through their interactions with the maturing adolescent, parents structure an environment which lends support to or forestalls the college transition. The bond with parents communicates a sense of acceptance to the adolescent which allows him or her the freedom to try on new roles and to begin to make independent choices and decisions while still maintaining a sense of comfort in the knowledge that parents are there to support this behavior (Beyers & Goosens, 2008, p. 167).

The most well known typology of parenting styles was formulated through the work of Baumrind. In her model, the author identifies three differentiated childrearing techniques including permissive, authoritarian and authoritative. The *permissive* style is categorized by techniques which offer little demands and no control. *Authoritarian* parents communicate the conservation of order while restricting autonomy. The *authoritative* parenting style includes a balance of discipline and self-directed autonomy within the parent-adolescent relationship (Baumrind, 1966). As defined by Darling and Steinberg (1993), authoritativeness refers to "a constellation of parent attributes that includes emotional support, high standards, autonomy granting, and clear bidirectional communication" (p. 487). Additionally, the authoritative style endorses "autonomous self-will" (Baumrind, 1966, p. 891).

Various authors have concluded that authoritative parenting leads to the most optimal emotional and behavioral well-being in adolescents (Kim & Chung, 2003; Smith, 2006). The ability for students to adopt autonomous behaviors is beneficial for adolescents as they practice independence needed for college success. Core components of autonomous behaviors include

self-efficacy and agency. Students who develop these constructs exercise individuation which allows them to become self-determining (Baumrind, 2005). Individuation in late adolescence occurs in the context of ongoing relationship security, adolescents who feel isolated or cut off from supportive others are likely to flounder emotionally and have difficulty adjusting during important developmental transitions, such as the entrance into college (Mattanah, Hancock, & Brand, 2004).

One aspect of authoritative parenting that promotes positive interaction is a parent's ability to teach their adolescent how to reflect upon and adapt his or her behavior through self-regulation (Huang & Prochner, 2004). "The goals of parents are to help children move along the internalization continuum from external regulation, which requires prompts and pushes from parents, to self-regulation, in which the child willingly engages in the behavior because of his or her own goals" (Groinick, 2003, p. 55).

Several authors have investigated the relationship between perceived parenting styles and psychological well-being among college students. While these researchers have explored various constructs of functioning, they have all provided support to the idea that authoritative parenting leads to the most positive outcomes for adolescent development (Baldwin, McIntyre, & Hardaway, 2007; Spera, 2005). Smith (2006) explored the relationship among parenting styles and adjustment to college. Results indicated that students raised in authoritative homes were more assimilated to college than those raised in authoritarian and permissive settings. The same author investigated emotional and behavioral adjustment in a sample of newly transitioned college students. Results revealed that students raised within authoritative homes had the highest levels of self-efficacy. Additionally, they experienced less homesickness and were more well-adjusted than those raised within authoritarian homes (Smith, 2007).

In their study of parenting styles, Edwards and Price (2007) found an association with hope in college students. There was a significant positive relationship between hope and authoritative parenting and a negative relationship with hope and authoritarian parenting. In a similar study, researchers found that authoritative parenting was associated with higher levels of optimism (Baldwin, McIntyre & Hardaway, 2007). Gunty and Bury (2007) also found that students raised in positive family environments (i.e. authoritative) reported higher levels of optimism than those raised in negative environments (i.e. authoritarian).

McKinney and Renk (2007) found that students raised in authoritative families reported higher levels of family cohesion, increased adaptability in the family environment, and lower levels of family conflict. Students from authoritative families also appeared to benefit psychologically. These students reported higher levels of adjustment such as lower levels of depression and anxiety as well as better self-esteem as compared to students raised in authoritarian and permissive home environments. Patock-Peckham and Morgan-Lopez (2009) found similar results. In their study, the authors examined the relationship among perceived parenting styles and the internalization of symptoms among college students. Among the sample of participants, male students who reported being raised by an authoritarian father reported experiencing increased levels of depression and lower levels of self-esteem. These students also indicated an increased potential to use alcohol. Those raised by authoritative fathers reported decreased levels of depression and alcohol use.

Among these males, those who perceived their mothers' to be authoritarian experienced lower levels of self-esteem, whereas those raised by authoritative mothers reported decreased symptoms of depression. Within this sample, female students experienced similar results in regards to their perceived perception of their father's parenting. There was no link reported for

maternal parenting styles. For women raised by authoritarian fathers, there were higher levels of depressive symptoms and alcohol use. Additionally, those raised by authoritative parents reported low levels of depressive symptomatology and alcohol related behaviors.

To extend the research on parenting styles, several authors have included samples using other cultural groups. Kim and Chung (2003) studied the relationship among parenting behaviors and self-perception. These authors found that students raised in authoritative homes demonstrated higher academic competence. In their study of Taiwanese students, Gau, Chen, Tasi, Lee, and Chiu et al. (2008) found that adolescents raised in less affectionate and authoritarian homes were at higher-risk for suicidal ideation than those raised in more affectionate and less controlling homes.

Parenting Styles and Cognitive Determinants

Parenting behaviors may impact various cognitive factors among the developing adolescent, including perceptions of locus of control and self-efficacy. The social interactions that occur within the parent-adolescent relationship may foster or deter the development of these factors. The "parenting style conveys to the child the parent's attitude toward the child" (Darling & Steinberg, 1993, p. 493). During one's early development, through the "me observing the I, the individual develops expectations concerning his or her interests, aptitudes, preferences, and so forth" (Leahy, 1985, p. 224). Based on their own self-knowledge, adolescents will begin to appraise their abilities and personal power. Such competencies may further affect one's ability to self-regulate and direct their behavior.

As suggested by Bandura (as cited by Flavell & Ross, 1981), adolescents have the task of approaching life through accepting responsibility for themselves. Those that believe they have little influence over the environment may adopt passive, unmotivated behaviors. Bandura

indicates that the task for individuals is to become active agents in directing their life pursuits (2001). As defined by Martin (2004), agency refers to "the capability of individual human beings to make choices and to act on these choices in ways that make a difference in their lives" (p. 135). Such a commitment requires the individual to be intentional and proactive about their behaviors (Bandura, 2001). "People act on their beliefs about what they can do as well as their beliefs about the likely outcomes of their performance" (Bandura, 1999, p. 29).

Locus of Control

An individual's perceived sense of control can best be depicted under the framework of social learning theory. Social learning theory assumes that persons interact within the context of the social environment. Individuals are concerned with how their behaviors affect other people. "Behavior is influenced and shaped by other people and by what the individual expects others to think, feel, and do in response to their behavior" (Kirsch, 1999, p. 21). Locus of control is the cognitive belief that one's behavior will lead to certain outcomes. The primary factor guiding one's perception of control is the predictability of behavior (Maddux, 1995). Rotter suggests that all behavior is directional and serves to achieve a specific goal (Rotter, 1982). "An individual responds with those behaviors that he has learned will lead to the greatest satisfaction in a given situation" (Rotter, 1971, p. 58). The measurement of behavior is obtained through the evaluation of behavior potential, expectancy, psychological situation, and reinforcement value.

Behavior potential refers to the likelihood that a specific behavior will occur in the presence of additional alternatives. *Expectancy* is the probability that an outcome will occur based on a particular behavior (Rotter, 1982). *Psychological situation* refers to one's past performance in specific circumstances. Successes and failures may deter or promote the continuance of certain behaviors (Rotter, 1971). *Reinforcement value* considers the significance

an individual places on a specific outcome (Rotter, 1982). Students perform certain academic tasks with the belief that their behaviors will lead to certain outcomes. Those individuals who perceive that the result was related to their direct influence are categorized as having an internal locus of control. Those students who believe that the reinforcement was rewarded due to luck or outside forces, are classified as having an external locus of control (Fazey, 2001; Rotter, 1982).

Similar to self-efficacy, perceived control begins to develop during the early childhood years. Within the family environment, the authoritative parenting style incorporates the use of supportive behaviors, thereby promoting self-assertion and autonomy in children (Baumrind, 2005). As offered by Maccoby (1980), "infants and young children develop a sense of being in control when their parents are responsive" (p. 286). "An important element in the development of the sense of being a separate self is children's realization that they can make decisions-can make things happen or refuse to let them happen" (Maccoby, 1980, p. 281).

Other researchers have investigated the relationship among locus of control and race. Past researchers have speculated that minority groups such as Latino and African-American children may be more likely to develop an internal locus of control due to adaptation needs. In order to succeed in society, these students have effectively conquered barriers such as racism and discrimination and have adopted a more internal sense of agency (Suizzo & Soon, 2006). Consequently, minority individuals who are able to establish an internal sense of control may lead them to be more self-efficacious as well (Sue & Sue, 2008).

Locus of Control and College Student Adjustment

As the college student begins to maneuver the academic setting, his or her perception of control may have some impact on learning and achievement factors. Various authors (Alden & Ramey, 1983; Platt & Eisenmann, 1968; Wilhite, 1990) have supported the idea that the way

students perceive the amount of control they have in academic outcomes may have some influence in their resulting school performance. More specifically, college students who demonstrate an internalized locus of control have the most beneficial outcomes in areas such as course grades, motivation, and achievement factors (as cited by Sterbin & Rakow, 1996). Additionally, college students with an internal framework are able to adjust more readily to new learning situations (Pascarella, Edison, Hagedorn, Nora, & Terenzini, 1991). In more recent reviews, several authors (Bursik & Martin, 2006; Gifford et al., 2006) have concluded that among the college population, students with an internal locus of control were much more likely to remain persistent in completing their education while those with an external framework were at a higher risk of dropping out of the curriculum (as cited by Smith & Mihans, 2009).

Parenting styles have been found to have some influence on adolescent development in the area of causality. Ross and Broh (2000) proposed that academic achievement may be more obtainable for students "...who feel in control of important outcomes in their lives, who think that their efforts shape outcomes and that their successes and failures are a consequence of their own actions" (p. 271). An authoritarian style may communicate to adolescents that they have no control over what occurs in their lives. Similarly, adolescents who have a lack of discipline as associated with permissive parenting, have very little opportunity to take responsibility for their behaviors. Authoritative parents, on the other hand teach children to learn to fix their mistakes by acting independently, thereby instilling self-reliance (Marsiglia, Walczyk, Buboltz & Griffith-Ross, 2007). In a recent study, researchers examined the relationship among parenting styles and locus of control. Results revealed that students who were raised in authoritative homes were more internalized than those raised in permissive and authoritarian homes. Additionally, authoritative parenting and internal locus of control were associated with psychosocial success

over permissive parenting. More specifically, those students with an internalized nature showed greater progress in the areas of autonomy, initiative and identity (Marsiglia, Walczyk, Buboltz & Griffith-Ross, 2007).

Using a phenomenological approach, researchers investigated the factors involved in student success. In their sample of first-generation college students, Hand and Payne (2008) found that locus of control was a primary influence affecting academic achievement. Interview responses were obtained from students who reported having an internal locus of control. These students indicated that they were responsible for their own progress. Furthermore, these students were more likely to participate in goal-setting and self-evaluations. Cortes-Suarez and Sandiford (2008) examined the relationship among locus of control and test performance. Students who received passing test scores reported their performance to be an attribution of internal causality, whereas students in the failing group cited an external locus of control.

Gifford, Briceno-Perriot and Mianzo (2006) explored the relationship among locus of control and academic success. Along with ACT scores, locus of control was also a significant predictor of student success. Students who scored lower on the locus of control measures (i.e. internal locus of control) received superior cumulative GPA's than those who obtained higher scores (i.e. external locus of control). In a similar study, Kirkpatrick, Stant, Downes, and Gaither (2008) examined the relationship between locus of control and academic performance. Students who exhibited an internal locus of control outperformed those students with an external framework on academic measures in the areas of semester grades and cumulative GPA. Additionally, locus of control has been found to have some influence in the area of executive processing skills. Hall (2001) explored the association between internal and external orientations and metacognitive behaviors including, planning strategies and task effort. The results of the

study revealed that those individuals with an internal locus of control demonstrated an enhanced ability to successfully acquire metacognitive skills over those with external orientations.

A new research focus has expanded the examination of control to include specific disciplines within the university setting. In their study of undergraduate nursing students, Karayurt and Dicle (2008) found that first and second year students had lower internal scores on locus of control measures and experienced higher rates of mental health problems compared to juniors and seniors. In a similar study, Wood, Saylor and Cohen (2009) investigated the relationship between locus of control and academic performance among a diverse group of undergraduate nursing students. The researchers found a negative relationship between external locus of control and semester grades. Students with a higher level of external orientation had lower grades in medical-surgical coursework.

In his investigation among first-semester introductory writing students, Jones (2007) also found an association between locus of control and student achievement. Over additional variables such as previous academic performance, locus of control was the best predictor of achievement as defined by course grade and writing proficiency. In a recent study, Hume and Smith (2006) explored ethical decision-making and locus of control among college business students. The results indicated that students with an internal locus of control demonstrated a higher level of ethical responsibility than those with an external framework.

To further explore the relationship among locus of control and student achievement, authors have included additional variables in their research designs. In a recent study, investigators examined the relationship among self-esteem, locus of control, and academic performance. Although self-esteem did not affect academic progress, locus of control was a significant predictor of college students' GPA (Stupnisky, et al., 2007). Carden, Bryant, and

Moss (2004) conducted a study to investigate the relationship among locus of control, test anxiety, academic procrastination, and achievement. Students with an externalized locus of control demonstrated more difficulty in the areas of procrastination, test anxiety, and academic achievement than those with an internalized orientation. In their study, Brownlow and Reasinger (2000) examined the relationship among locus of control, extrinsic motivation and external attributional styles. The results concluded that all three variables were predictive of the likelihood to procrastinate. Students identified as having an external locus of control were much more likely to postpone school tasks than those with an internal orientation.

Much of the previous research has explored the relationship between locus of control, psychosocial adjustment, and achievement. The current research focus was extended to include what these factors would mean for overall student success rates. Hall, Smith, and Chia (2008) examined the effect of cognitive and affective factors related to degree attainment. The results indicated that students with an internal locus of control were more likely to complete their degree program within a timely manner than those with an external orientation. Nordstrom and Segrist (2009) conducted a study with upperclassman to explore the likelihood of pursuing a postbaccalaureate degree. Results of the study concluded that locus of control predicted graduate school intentions more so than GPA and educational mentality. In his study, Dollinger (2000) explored the association between student incidental learning and locus of control. Results of the study revealed that students with an internal locus of control were more resourceful in assimilating to aspects of their learning environment than students with an external locus of control. More specifically, those with an internal framework were more likely to seek out information that would lead to student success such as the professor's office hours and specifics regarding grading evaluations.

Self-Efficacy

An individual's sense of self-efficacy can be conceptualized within the framework of social learning theory. According to Bandura's triadic reciprocal causation model, individuals receive and interpret information through environmental influences, interpersonal factors and behaviors (1999). Although all persons are socially situated, they are both producers and products of their environment. Individuals can exercise self-influence and mold how they interact with the sociocultural atmosphere (Bandura, 1997). If one is to demonstrate self-efficacy, he or she must be able to assess his or her abilities across three dimensions. *Magnitude* refers to the hierarchal steps an individual must take to complete a desired behavior. *Strength* incorporates the amount of conviction one has in their ability to achieve an outcome. *Generality* considers whether successful experiences can extend to other situations (Maddux, 1995).

Overall, self-efficacy reflects one's belief in his or her capabilities to perform specific behaviors given various conditions (Bandura, 1997).

The external environment makes a presentation within the early years of life and continues to impact the young adult's development (Maccoby, 1992). "In addition to the current relationships between college students and their parents, early parent-child interactions may influence the way in which college students respond currently to academic-related stress" (Smith & Renk, 2007). During the college years, the shaping of self-efficacy beliefs continues to be influenced by these sociocultural experiences. "As children strive to exercise control over their surroundings, their first transactions are mediated by adults who can either empower them with self-assurance or diminish their fledgling self-beliefs" (Pajares, 2002, p. 120). The internalization of information within the environmental sphere thereby interacts with the interpersonal and behavioral realms.

The development of these influences occurs through different areas of learning.

Knowledge derived from *performance experiences* occur when an individual achieves success or failure at a given task. *Vicarious experiences* are those in which individuals learn through watching and modeling others. Persons will then assess their own potential for completing this same behavior whereby they may eventually imitate the observed task. *Imaginal experiences* refer to the act of visualizing an anticipated action that is influenced by one's own wishful thinking. *Verbal persuasion* occurs when individuals are prompted by others to complete a task. Both *physiological* and *emotional* factors can influence self-efficacy when one has aversive reactions to an event which may lead to self-doubt about performing a behavior. Additionally, having a positive affect can intensify one's efficacy in completing a task. *Distal* and *proximal* sources form from the combination of the factors. Past successes or failures and one's current emotional state may impact an individual's ability to accomplish a goal (Bandura, 1997; Maddux, 1995).

The personal construct is represented by cognitive and affective variables such as goals and self-efficacy. The behavioral component is comprised of tasks such as motivation and learning (Schunk, 1999). The resulting reciprocal interaction between the domains may impact one's overall psychological functioning (Bandura, 1999). For instance, self-efficacy may impact the tasks one chooses to participate in as well as the effort an individual will exert on an activity. "If a young person can look critically at his or her own actions and effectiveness, he or she may then be able to make more accurate predications about which goals can be acquired" (Gestsdottir & Lerner, 2008, p. 215). Furthermore, individuals with diminished self-efficacy may be prone to experience stress and anxiety about performing certain responsibilities (Pajares, 2002).

Although certain aspects of one's sociocultural environment are pre-determined, social cognitive

theory assumes that people are active agents in creating their response to the world, self, and others (Maddux, 1995). Because humans are capable of self-reflection and self-regulation, they are able to "construct thoughts about future courses of action to suit ever-changing situations" (Bandura, 1999, p. 23).

Self-Efficacy and College Student Adjustment

The role of self-efficacy within the academic setting affects the "forethought," performance, and self-reflection" of college students (Schunk & Ertmer, as cited by Pajares, 2002, p. 117). From the early phases of the college experience and throughout, students must make decisions about courses of study and career aspirations. As they make these choices, students are better able to visualize what might be a good fit for their future career goals. "The work role which we begin to envisage for ourselves at the end of childhood is, under favorable conditions, the most reassuring role of all, just because it confirms us in skills and permits us to recognize ourselves in visible works (Erikson, 1977). Within the academic setting, those students who are able to endure challenges on their own will develop the intellectual, interpersonal, and physical competence to succeed (Taub, 2008). The task of college instructors and mentors will be to encourage students to develop independent work ethics and study skills that will propel them toward achievement without constant guidance (Hawkes, 1995).

The belief that one has in their ability to visualize and implement goals will impact their academic development in the areas of course selection, study skills, and coping abilities (Pajares, 2002). "Unless people believe that they can produce desired effects by their actions, they have little incentive to act or to persevere in the face of difficulties" (Bandura, 1999, p. 28). Cognitively, individuals make determinations regarding their own capabilities and willingness to pursue specific courses of action (Morris, 2004). "Individuals engage in a behavior, interpret the

results of their actions, use these interpretations to create and develop beliefs about their capability to engage in subsequent behaviors in similar tasks and activities and behave in concert with the beliefs created" (Pajares, 2002, p. 116).

The interest of self-efficacy in college student research has significance in areas concerning academic achievement and overall adjustment. According to Pajares (1996) much of the past research regarding college students has revolved around self-efficacy beliefs within specific areas of coursework and career self-efficacy. Overall, researchers have found that self-efficacy beliefs were associated with motivation factors, academic choices, achievement and other self-beliefs. In his review of academic development, Bandura (1993) offered several assumptions of self-efficacy thoughts that have relevance with the college student population. In considering the *framing of feedback*, Bandura suggests that the evaluations regarding one's performance (i.e. within the academic setting) can influence his or her own self appraisals. Additionally, in considering *motivation*, students set goals and implement courses of actions based on their beliefs about their abilities. Although much of the current research has extended to include more global measures of self-efficacy, students with higher levels seem to adjust more favorably to the college environment than those with lower self-efficacy scores.

Various studies have been conducted to explore the relationship between self-efficacy scores, academic progress and emotional well-being. In their study, Ramos-Sanchez and Nichols (2007) explored the relationship between self-efficacy, generational status, academic performance, and adjustment in college students. Although traditional college students did have significantly higher levels of self-efficacy than nontraditional college students, generational status did not play a role in overall adjustment. For both groups, higher levels of self-efficacy at the beginning of the year led to higher levels of adjustment at the end of the year in the areas of

academics, social adjustment, personal-emotional adjustment, and goal attainment. In another study, researchers examined the factors involved in achievement and academic performance.

Along with other social-cognitive constructs, the authors found that self-efficacy was associated with college persistence (Nauta & Kahn, 2008).

In a similar study, researchers investigated which academic factors led to cognitive engagement in students. Along with motivational influences, Walker, Greene, and Mansell (2005) found that self-efficacy was a strong predictor of meaningful cognitive processing. Fields (2005) also explored the relationship among self-efficacy and cognitive abilities. In her study, the researcher examined the abilities of college students to locate information and conduct research within a library setting. All students were described as having acceptable levels of self-efficacy. The results indicated that all students were capable of using information to build new knowledge. Additionally, self-efficacy has been considered in the context of specific subject areas. Hoffman and Spatariu (2008) found that students with higher levels of self-efficacy excelled in the area of mathematical computation over students with lower levels.

Using an experimental design, Jackson (2002) found that self-efficacy beliefs were related to higher exam scores. For his study, the researcher placed students into an experimental group and a control group. Those in the experimental section received positive efficacy affirmations from the instructor before taking an exam. The control group participants received neutral messages. Results concluded that students who received efficacy messages had higher exam scores than those who received neutral messages. In their study, researchers examined various psychosocial and study skill factors associated with college achievement. Along with academic goals, self-efficacy demonstrated a moderate relationship with retention. Along with achievement motivation, self-efficacy was a good predictor of GPA (Robbins, et al., 2004).

Other authors have extended the research on self-efficacy across cultural demographics. Luszczynska, Gutierrez-Dona, and Schwarzer (2005) explored the effect of self-efficacy with college students among five countries. High self-efficacy scores were positively associated with optimism, self-regulation, and self-esteem. Negative associations were found with depression and anxiety scores. Zajacova, Lynch, and Espenshade (2005) investigated the difference among traditional and nontraditional minority students. The researchers explored the effect of self-efficacy and stress on academic success in a sample of immigrant college students. Overall, academic self-efficacy and stress were negatively correlated. Additionally, academic self-efficacy had a positive effect on credits earned and cumulative GPA.

When paired with other variables, self-efficacy continues to demonstrate significance in academic and adjustment factors. Chemers, Hu, and Garcia (2001) examined the influence of self-efficacy and optimism on academic performance and personal adjustment in college students. The researchers proposed that students who were highly efficacious and optimistic would demonstrate enhanced coping skills, and better academic and personal adjustment. Results of the study revealed that students who scored high on self-efficacy measures also received high scores on optimism measures. These students demonstrated enhanced coping perceptions in evaluating their ability to deal with the demands of college. Highly efficacious and optimistic students reported higher academic expectation in achieving future academic success. They also demonstrated better academic performance than those with lower scores. Regarding personal adjustment, those students with high self-efficacy and optimism scores reported low levels of stress and health problems.

In another design, Turner, Chandler and Heffer (2009) investigated the relationship among motivation, self-efficacy academic performance and parenting styles. Students raised in

authoritative homes performed better in areas of academic achievement. Furthermore higher self-efficacy and intrinsic motivation were positively correlated with performance. Klomegah (2007) examined the association among goal-efficacy factors including self-set goals and self-efficacy. Results revealed that high-school GPA and self-efficacy were strongly correlated with academic performance among undergraduate college students. In a similar study, Hsieh, Sullivan, and Guerra (2007) explored the relationship between self-efficacy, goal orientation and academic performance. Students with high self-efficacy adopted a more positive approach to accomplishing goals. Additionally, they received higher GPA scores than students with low self-efficacy.

In their study, DeWitz and Walsh (2002) explored the relationship between general self-efficacy, social self-efficacy, college self-efficacy and student satisfaction. Overall self-efficacy scores were related to student satisfaction, with college self-efficacy having the most significance. Seo (2008) investigated the relationship between self-efficacy, perfectionism, and academic procrastination. Results of the study concluded that perfectionism had a significant positive influence on self-efficacy and a negative association with academic procrastination.

Additionally, self-efficacy mediated the relationship between perfectionism and procrastination.

Much of the previous research has explored the relationship between self-efficacy, psychosocial adjustment, and achievement. The current research focus was extended to include what these factors would mean for overall student success rates. Devonport and Lane (2006) investigated self-efficacy, coping, and student retention among undergraduate students. Results indicated that the ability to cope with stress was correlated with specific self-efficacy factors. Additionally, students who withdrew from the curriculum scored lower on self-efficacy measures.

CHAPTER 3. METHODOLOGY

Introduction to the Study

In this current study the researcher explored the relationship between parenting styles self-efficacy, locus of control and student outcome (i.e. academic performance, GPA) in college students. The researcher investigated whether perceived parenting behaviors would have an effect on an individual's perception of self-efficacy, locus of control and student outcome. The relationship among the research variables across gender and race were also examined.

Research Questions

The following research questions were used to guide the study:

- 1. What is the relationship between parenting style and academic adjustment?
- 2. What is the extent to which self-efficacy moderates the relationship between parenting style and academic adjustment?
- 3. What is the extent to which locus of control moderates the relationship between parenting style and academic adjustment?
 - 4. Does parenting style differ by student gender and race?
 - 5. Does self-efficacy differ by student gender and race?
 - 6. Does locus of control differ by student gender and race?

Participants

The study population included a non-random sample of students from a large Southeastern university between the ages of 19–23. Of the 112 research packets that were

distributed, 108 were returned; 8 were missing crucial data and were not included in the data analysis. Responses for 100 students were included in the data analysis. Participation was voluntary and no identifying data was collected so that all data remained anonymous.

Measures

Demographic Survey

Participants completed a demographic questionnaire in which they provided information regarding age, gender, and ethnicity. Students also reported on their family dynamics and transitional status

Included in the demographic survey were two questions used to assess academic outcome based on the *Perceived Academic Performance Scale* (Macan, Hoff, Dipboye, Phillips & Peek, 1990) (see Appendix A). The Perceived Academic Performance Scale included 2 items in which students self-reported on their own progress based on their individual performance and their performance compared to others. The scale was rated on a seven-point Likert-type scale in which students responded "very poor" to "very good".

Parenting Styles

To evaluate perceived parenting styles, students completed the *Parental Authority Questionnaire* (PAQ) (see Appendix B) developed by Buri (1991). The assessment included 30 items used to measure the three parenting styles including authoritarian, permissive, and authoritative. Students were instructed to complete the inventory based on which type of parenting style was most reflective of family dynamics during their childhood-adolescent years. The participants were asked to identify the combined parenting style that resembled the one reflected in their home environment. Authoritarian parenting refers to a highly directive, obedient parenting style (Buri, 1991). Permissive parenting is characterized as a non-controlling

form of childrearing which promotes freedom (Buri, 1991). The authoritative style of parenting is expressed by providing clear direction while supporting verbal give and take (Buri, 1991). The questionnaire was rated on a 5-point Likert scale (1 = Strongly Disagree through 5 = Strongly Agree). The PAQ included 3 subscales (authoritarian, permissive, authoritative) with 10 items each. Subscale scores were obtained by summing each of these subscale items. The subscale score with the highest rating reflected the overall perceived parenting style practiced within the home.

Acceptable levels of reliability and validity have been reported for the PAQ (Buri, 1991). Of the 48 original items, 36 met criterion validity with 10% agreement among judges. Items accurately reflected constructs of permissiveness, authoritarianism, and authoritativeness. Cronbach's alpha coefficients for mother ratings were .85, .75, and .82 respectively and father Cronbach's alpha coefficients were .87, .74, and .85 respectively. Two-week test-retest reliability estimates yielded the following reliabilities for authoritarianism, permissiveness, and authoritativeness. Cronbach's alpha coefficients for mother ratings were .86, .81, and .78 respectively and father Cronbach's alpha coefficients were .85, .77, and .92 for fathers respectively (Buri, 1991).

Locus of Control

To assess locus of control, students completed the *Adult Nowicki-Strickland Internal-External Control Scale (ANS-IE)* (see Appendix C). The assessment included 40 items used to measure generalized expectancy. The participants indicated whether internal factors or external factors influenced the outcome of given scenarios. Internal factors refer to the idea that reinforcements occur as a result of one's own behaviors. External factors indicate that outcomes occur due to the influence of factors beyond one's control such as chance or fate. The

questionnaire was rated using a "yes" or "no" format. Total scores were obtained by summing each of these items. High score ratings indicated that an individual has high expectations of control for the indicated scale. Low scores indicated that the individual does not believe the particular scale to be an influence in the outcome.

The Locus of Control scale has demonstrated suitable results in areas of reliability and validity. A test-retest reliability of .83 was obtained over a six week period. Split-half reliability ranged from .74 to .86 (Nowicki & Duke, 1974).

Self-Efficacy

To assess self-efficacy, students completed the *General Self-Efficacy Scale* (GSE) developed by Jerusalem and Schwarzer (1995) (see Appendix D). The assessment includes 10 items used to measure perceived self-efficacy. The participants indicated their level of self-efficacy in response to 10 scenarios. The questionnaire was rated on a 4-point scale (1 = Not true at all through 4 = Exactly True). A composite score was obtained by summing the 10 items. High scores were indicative of a high level of self-efficacy.

Using a sample from 23 countries, Cronbach's alphas reported coefficients ranging from .76 to .90 (Jerusalem & Schwarzer, 1979). Validity measures have demonstrated positive correlations among favorable emotions, including optimism and work satisfaction. Negative correlations have been obtained with unfavorable emotions such as depression, anxiety, and stress.

Student Outcome

To assess student outcome, students recorded their current academic GPA and responded to items listed in the *Perceived Academic Performance Scale*. The academic scale included two items used to assess individual academic performance and performance as compared to other

students. For each item, participants recorded a score from 1 "very poor" to 7 "very good". The academic scale has been used in prior studies and has a reported alpha reliability of 0.89 (Macan et al., 1990).

Procedure

The current study included a non-experimental, correlational design used to explore the relationship between variables: perceived parenting styles, self-efficacy, locus of control, and student outcome (i.e. academic performance, GPA). Once the proposal was approved by the Institutional Review Board (IRB) (see Appendix E), the investigator began recruitment of the sample population. The researcher contacted instructors within undergraduate classes within the Special Education, Rehabilitation and Counseling/ School Psychology department. Once granted permission, the researcher scheduled to meet with students at the beginning of class sessions to inform them about the current study. Students were given information regarding the purpose of the study as well as the procedures and possible risks involved. They were informed that their participation was voluntarily. No identifying information was collected so participation was anonymous. Participants were unable to withdraw data from the study after it had been collected. Participants were also informed that their consent to participate would be implied by their decision to complete the provided survey measures. Packets including the research questionnaires (i.e. Adult Nowicki-Strickland Internal-External Scale, General Self-Efficacy Scale, Demographic Questionnaire, Perceived Academic Performance Scale and Parental Authority Questionnaire) and consent forms were left with the students to be completed when the researcher left the room. Students were thanked for their willingness to hear the presentation and decided whether or not to participate. Packets were collected once completed. Collected data

were keyed into the Statistical Package for the Social Sciences (SPSS 18.0) for scoring and analysis.

Data Analysis

The data analysis for the current study included descriptive statistics of demographic variables. A moderated regression analysis was used to determine how accurately the dependent variable was predicted by each independent variable. Significance tests were conducted to evaluate whether the independent variable would be useful in predicting the dependent variable. Effect size statistics of R (multiple correlation), R² (squared multiple correlation), and R²change were evaluated to assess how well the linear combination of predictor variables in the regression analysis predicted the criterion variable.

CHAPTER 4. RESULTS

Introduction

The purpose of the present study was to quantitatively explore the relationship among parenting styles, locus of control, self-efficacy and student outcome in a sample of college students. To collect the research data, the Parental Authority Questionnaire (PAQ; Buri, 1991) was used along with the General Self-Efficacy Scale (GSE; Jerusalem & Shwarzer, 1979) and the Adult Nowicki-Strickland Internal-External Control Scale (Nowicki & Duke, 1974). In addition, students responded to the two items on the Perceived Academic Performance Scale (Macan et al., 1990) and reported on their GPA for student outcome measures. The relationship among the research variables across gender and race were also examined.

The PAQ was used to measure the three parenting styles including authoritarian, permissive, and authoritative. This assessment instrument was selected based on the specific constructs it was designed to measure and the strength of its reliability and validity. The study intended to show a positive relationship between perceived parenting styles and student outcome (i.e. academic performance, GPA). Secondarily, the study intended to provide evidence that other relationships are capable of moderating the affects of perceived parenting styles. The results of the data analysis are presented in this chapter. Additionally, information related to the participants involved in the study, the methodologies used, and the results of the statistical analysis are presented in this chapter.

Participants

Responses for 100 students were included in the data analysis. The students were of junior and senior standing attending a university in the Southeastern United States. The participants were asked to indicate their gender, race, family dynamics, transitional status, and academic performance. Of the 100 participants, 78 were female and 22 were male; regarding race, 9 were African American, 2 were Hispanic or Latino, 1 was Native American, 1 was Native Hawaiian, 2 were two or more races, and 85 were White or Caucasian. Regarding family dynamics, 82 participants indicated being raised in a home with both parents, 11 were raised in a single family home and 7 were raised by other relatives. Regarding transitional status, 49 students have been living away from home for 1 year or less, 24 reported being away for 2 years or less, 14 have moved from home 3 years or less while 13 have moved away 5 years or less, with a mean of 20.73 months. Regarding academic performance, 49 students reported a GPA score of 2.0 or above; 46 reported a score of 3.0 or above; 3 reported a score of 4.0 or above and 2 reported a score of 1.0 or below, with a mean GPA of 2.91 for females and 2.76 for males. All students who participated in the study were between the ages of 19–23, with a mean age of 19.96 for females and 19.96 for males. Demographic information gathered is provided in Table 1.

Table 1

Participant Demographic Information

Descriptor	Variable	Number
Gender	Female	78
	Male	22
Race/Ethnicity	White or Caucasian (not Hispanic or Latino)	85
	African American (not Hispanic or Latino)	9
	Hispanic or Latino	2
	Two or More Ethnicities	2
	Native Hawaiian or other Pacific Islander	1
	Native American/American Indian	1
	Asian (Not Hispanic or Latino)	0
	Other	0
Family Dynamics	Both parents	82
	Single parent	11
	Other relatives	7
Transitional Status	1 year	49
	2 years	24
	3 years	14
	4 years	13
GPA	2.0 or above	49
	3.0 or above	46
	4.0 or above	3
	1.0 or above	2

Reliabilities

Perceived Academic Performance Scale

Macan et al. (1990) reported an alpha reliability of 0.89. The results of the current study found similar results with a reliability score of .808. Participants were asked to respond to two items as an assessment of their perceived academic performance. For each item, participants recorded a score from 1 "very poor" to 7 "very good" based on their individual academic performance and performance as compared to other students. Scores in each scale were averaged together to form a composite performance measure (Table 2)

Table 2

Perceived Academic Performance Reliability

Cronbach's alpha	N (Items)	Mean	SD
.808	2	9.7000	1.95143

Parental Authority Questionnaire

Using a test-retest reliability measure, Buri reported correlation coefficients for mother ratings at .85, .75, and .82 for permissive, authoritarianism and authoritativeness respectively. Correlation coefficients for father ratings were .87, .74, and .85 respectively. The results of the current research support Buri's study; results indicated a full scale internal consistency reliability estimate of .76, .78, and .84 (Table 3).

Table 3

PAQ Reliability for Parenting Subscales

Parenting Subscale	Cronbach's alpha	N (Items)	Mean	SD
Permissive	.763	5	1.9520	.70043
Authoritarian	.776	6	2.9733	.76274
Authoritative	.840	10	3.0640	.69711

Participants were asked to respond to 10 items for each parenting prototype (permissive, authoritarian, and authoritative) for a total of 30 items. For each item, participants recorded a score from 1 "strongly disagree" to 7 "strongly agree". High scores on either scale reflected the dominant parenting style practiced in the home. Sums for each scale were totaled to determine an overall parenting score. Based on the factor analysis the overall measure resulted in a total of 21 items.

General Self-Efficacy Scale

Using a test-retest reliability measure, Cronbach's alpha reported coefficients ranging from .76 to .90 (Jerusalem & Schwarzer, 1979). The results of the current study support previous research; results indicated internal consistency reliability of .82 (Table 4).

Table 4

Reliability Analysis for Generalized Self-Efficacy

Cronbach's alpha	N (Items)	Mean	SD
.824	9	29.0700	3.57673

Participants were asked to respond to 10 items regarding their perceived level of self-efficacy. Based on the factor analysis, the measure resulted in a total of 8 items. For each item, participants recorded a score from 1 "not at all true" to 7 "exactly true".

Adult Nowicki-Strickland Internal-External Control Scale

Using a test-retest reliability measure, Cronbach's alpha reported coefficients of .83. Split-half reliability reported ranges from .74 to .86. The results of the current study did not support previous research. While the internal consistency reliability for the external subscale was estimated at .727, the internal subscale failed to yield acceptable internal consistency (α = .299). Therefore, the internal subscale was not used in any subsequent analysis. Participants were asked to respond to 40 items regarding their perceived level of locus of control. Based on the factor analysis, the scores from the internal subscale could not be analyzed. The total measure using the external scale only resulted in a total of 24 items. For each item, participants recorded a "yes" and "no" response (Table 5).

Table 5

Reliability Analysis for Locus of Control

LOC Subscales	Cronbach's alpha	N (Items)	Mean	SD
External	.727	24	7.0500	3.86744
Internal	.299	16	12.9200	1.69181

Statistical Analysis

Research Question One

Research question one was "What is the relationship between parenting style and student outcome? A multiple regression analysis was conducted to evaluate how well the parenting measure predicted student outcome based on the Perceived Academic Performance scale. The predictor was parenting style, while the criterion variable was academic performance. The linear combination of parenting was not significantly related to student outcome, F(1,98) = 0.620, p = 0.433. The sample correlation coefficient was .079, indicating that approximately .6% of the variance of the parenting index in the sample can be accounted for by the linear combination of academic performance.

A multiple regression analysis was conducted to evaluate how well the parenting measure predicted student outcome based on academic GPA. The predictor was parenting style, while the criterion variable was GPA. The linear combination of parenting was not significantly related to GPA, F(1,98) = 0.354, p = 0.553. The sample correlation coefficient was .060, indicating that approximately .4% of the variance of the parenting index in the sample can be accounted for by the linear combination of GPA.

Research Question Two

Research question two was "What is the extent to which self-efficacy moderates the relationship between parenting style and student outcome?" A multiple regression analysis was conducted to evaluate whether student outcome based on academic performance was predicted by self-efficacy and parenting style. The results of this analysis indicated that parenting style and self-efficacy did not account for a significant amount of the academic performance variability, $R^2 = .021$, F(2.97) = 1.032, p = 0.360. A second analysis was conducted to evaluate whether self-

efficacy moderated the relationship between parenting and student outcome. The results of this analysis indicated that self-efficacy did not moderate the relationship between parenting and academic performance, R^2 change = 0.034, F(3.96) = 1.859, p = 0.142.

A multiple regression analysis was conducted to evaluate whether student outcome based on academic GPA was predicted by self-efficacy and parenting style. The results of this analysis indicated that parenting style and self-efficacy did not account for a significant amount of the GPA variability, $R^2 = .005$, F(2,97) = .219, p = .803. A second analysis was conducted to evaluate whether self-efficacy moderated the relationship between parenting and student outcome. The results of this analysis indicated that self-efficacy did not moderate the relationship between parenting and GPA, R^2 change = .048, F(3,96) = 1.784, p = 0.155.

Research Question Three

Research question three was "What is the extent to which locus of control moderates the relationship between parenting style and student outcome?" A multiple regression analysis was conducted to evaluate whether academic performance was predicted by locus of control and parenting style. The results of this analysis indicated that parenting style and locus of control did not account for a significant amount of the academic performance variability, $R^2 = .0.025$, F(2,97) = 1.221, p = 0.299. A second analysis was conducted to evaluate whether locus of control moderated the relationship between parenting and academic performance. The results of this analysis indicated that locus of control did not moderate the relationship between parenting and academic performance, R^2 change = 0.005, F(3,96) = .986, p = 0.403.

A multiple regression analysis was conducted to evaluate whether GPA was predicted by locus of control and parenting style. The results of this analysis indicated that parenting style and locus of control did not account for a significant amount of the GPA variability, $R^2 = .023$,

F(2,97) = 1.147, p = 0.322. A second analysis was conducted to evaluate whether locus of control moderated the relationship between parenting and GPA. The results of this analysis indicated that locus of control did not moderate the relationship between parenting and GPA, R^2 change = 0.002, F(3,96) = .831, p = 0.480.

Research Question Four

Research question four was "Does parenting style differ by gender and race?" The lack of variability in race did not allow for any meaningful comparisons. Therefore, all comparisons were restricted to gender.

A one-way analysis of variance was conducted to evaluate the relationship between parenting style and gender. The independent variable, gender, included two levels: male and female. The dependent variable was parenting style. Using an alpha level of .05, Levene's test indicated that the assumption of homogeneity of variances was not violated, p = .330. The ANOVA was not significant, F(1,98) = 1.999, p = 0.161. The strength of the relationship between parenting style and gender, as assessed by η^2 , was weak, with gender accounting for 2% of the variance of the dependent variable.

Research Question Five

Research question five was "Does self-efficacy differ by gender and race?" The lack of variability in race did not allow for any meaningful comparisons. Therefore, all comparisons were restricted to gender. A one-way analysis of variance was conducted to evaluate the relationship between self-efficacy and gender. Gender acted as the independent variable in the analysis and self-efficacy as the dependent variable. Using an alpha level of .05, Levene's test indicated that the assumption of homogeneity of variances was not violated, p = .872. The ANOVA was significant, F(1,98) = 7.563, p = 0.007. The strength of the relationship between

self-efficacy and gender, as assessed by $\eta 2$, was moderate, with gender accounting for 7.2% of the variance of the dependent variable.

Research Question Six

Research question six was "Does locus of control differ by gender and race?" The lack of variability in race did not allow for any meaningful comparisons. Therefore, all comparisons were restricted to gender. A one-way analysis of variance was conducted to evaluate the relationship between locus of control and gender. The independent variable—gender—included two levels: male and female. The dependent variable was locus of control. Using an alpha level of .05, Levene's test indicated that the assumption of homogeneity of variances was not violated, p = .974. The ANOVA was not significant, F(1,98) = 0.134, p = 0.715. The strength of the relationship between locus of control and gender, as assessed by $\eta 2$, was very small, with gender accounting for one-tenth of a percent (.001) of the variance of the dependent variable.

Table 6

Comparison of Males and Females on Parenting Style, Self-Efficacy and Locus of Control

Variable	Males	Females	F	Sig.	Effect Size
	(n = 22)	(n = 78)			(Partial eta²)
Parenting Style	61.4091	57.3462	1.99	.161	.02
Self-Efficacy	30.8636	28.5641	7.563	.007	.072
Locus of Control	7.3182	6.9744	.134	.715	.001

CHAPTER 5. DISCUSSION

Since the early work of Baumrind (1966), many researchers have investigated the impact of parenting behaviors on child development. In her work, Baumrind created a classification typology to describe the interaction of parents in rearing their children. These domains were based on the amount of *responsiveness* and *demandingness* parents offered to their children. Parents who displayed a low amount of demandingness and low responsiveness were considered to reflect *permissive* parenting. High demandingness and low responsiveness best described an *authoritarian* style, while high demandingness and high responsiveness was most descriptive of an *authoritative* parenting style. Based on this typology, other researchers have concluded that the most appropriate form of parenting is expressed by the authoritative parenting style (Lee, Daniels & Kissinger, 2006).

Much of the previous research involving parenting styles has focused on the developmental period of childhood and early adolescence (Barber, Maughan, & Olsen, 2005). According to Darling (1999), perceived parenting behaviors can affect individuals from their pre-school years throughout their adult life. Implications for future research include considering the effects of parenting behaviors for late adolescents. The college experience represents a significant transitional period in which students must master various tasks. The ability to plan for the future, complete assignments, develop relationships with peers and professors, choose a major, and establish financial and emotional responsibility are just some of the tasks students must undertake during the college years (Smith & Renk, 2007).

The purpose of the present study was to quantitatively explore the relationship among parenting styles, locus of control, self-efficacy, and student outcome (i.e. academic performance, GPA) in a sample of college students. The measures used in this design included the Parental Authority Questionnaire (PAQ), the General Self-Efficacy Scale (GSE) and the Adult Nowicki-Strickland Internal-External Control Scale. Participants also provided their GPA and responded to questions regarding their academic performance as recorded in the Perceived Academic Performance Scale. In addition, students' gender and race were examined in the relationship between parenting styles, locus of control, and self-efficacy. To guide the study, the following research questions were investigated:

- 1) What is the relationship between parenting style and academic adjustment?
- 2) What is the extent to which self-efficacy moderates the relationship between parenting style and academic adjustment?
- 3) What is the extent to which locus of control moderates the relationship between parenting style and academic adjustment?
 - 4) Does parenting style differ by student gender and race?
 - 5) Does self-efficacy differ by student gender and race?
 - 6) Does locus of control differ by student gender and race?

Discussion of the Findings

Each of the proposed research questions focused on students' self-reported perceptions of the parenting style that was displayed in their homes. These parenting styles were used to investigate a relationship among locus of control, self-efficacy and student outcome (academic performance, GPA). The relationship among the research variables across gender and race were also examined.

Research Question One

Research question one pertains to the relationship between perceived parenting style and student outcome. As defined earlier, student outcome was assessed using reported GPA and self-rated academic performance. Previous researchers have determined a positive relationship among positive parenting styles and adolescent outcomes. Factors related to student achievement, including hope and optimism, were both found to have a positive correlation to authoritative parenting (Baldwin, McIntyre & Hardaway, 2007; Edwards & Price, 2002). Furthermore, the authoritative parenting styles have been associated with higher levels of student achievement (Spera, 2005). Therefore, it was reasonable to assume that parenting styles would reveal a similar relationship in overall student outcome. The current study did not find a correlation between parenting style and student outcome to be significant.

These findings were surprising considering the past research supporting a significant relationship between parenting styles and academic outcomes. One possible explanation for the varying results can be explained by the small sample size. As indicated earlier only half of the sample reported a GPA score of 3.0 or above. By increasing the sample size, results may be more expansive including students from average to high achievement.

Research Question Two

Research question 2 explored whether self-efficacy moderated the relationship among parenting style and student outcome. Smith (2007) speculated that parenting behaviors influence self-efficacy, which in turn may impact academic performance. Results of this previous study revealed that both mother and father authoritarian scores were associated with low self-efficacy in college students. Additionally, students with high self-efficacy scores indicated better adjustment to the college curriculum.

The findings of the current research study did not reveal a moderating relationship among self-efficacy, parenting style and student outcome. It is possible that a more conclusive parenting scale may indicate a positive relationship between the variables. As revealed in the factor analysis, the Parental Authority Questionnaire only resulted in 21 final items out of the original 30. One explanation is that the students were asked to respond to the overall parenting style expressed in the home. Some researchers suggest the need to assess individual parenting styles of the mother and father separately. McKinney and Renk (2008) found that higher emotional adjustment resulted from congruent authoritative parenting. Furthermore, incongruent parenting in which parents adopt two different styles were much more likely to result in positive outcomes when at least one parent practiced an authoritative style. Future research may include assessing the parents separately instead of the dominant style expressed in the home.

Research Question Three

Research question three explored whether locus of control moderated the relationship between parenting style and student outcome. In a recent study, Marsiglia et al. (2007) found that locus of control interacted with paternal authoritarian parenting to positively influence adjustment and with permissive parenting to lower adjustment.

In the current study, there was no significance found to support a moderating relationship among parenting style, locus of control and student outcome. The primary explanation involves the internal consistency of the current scale. During factor analysis it was determined that the internal scale could not be used due to low internal consistency. Using the external scale alone affected the reliability of the results. Those responses that included an internal nature were not included in the analysis.

Research Question Four

Research question four explored whether there were differences in perceived parenting style based on student gender and race. The lack of variability in race did not allow for any meaningful comparisons. Therefore, all comparisons were restricted to gender. Previous research has indicated differences in perceived parenting style across gender. In their research, McKinney and Renk (2007) have found that male children tend to view their mother's as more warm, yet intrusive. Sons tend to seek out their fathers for advice but find them to be distant and less warm. The current study was in contrast to past research (Baumrind, 1966; Smetana, Crean & Campione-Barr, 2005). One explanation may be the homogeneity of the sample. As previously mentioned, the demographic make-up of the sample included 78 females to 22 males. By increasing the sample size, future results may increase the reliability of the results.

Research Question Five

Research question five explored whether there were differences in self-efficacy based on student gender and race. The lack of variability in race did not allow for any meaningful comparisons. Therefore, all comparisons were restricted to gender. Past research has supported the differences among males and females in the development of self-efficacy. In his research of self-regulated learning, Pajares (2002) indicated that females were more likely to engage in goal-setting and planning strategies whereas males expressed having confidence in tasks they have not performed yet. In the current study, there was significance regarding self-efficacy and gender.

Research Question Six

Research question six explored whether there were differences in locus of control based on student gender and race. The lack of variability in race did not allow for any meaningful comparisons. Therefore, all comparisons were restricted to gender. Past research has speculated

about the differences in perceived locus of control among males and females. Merger and Eikeland (2000) found that the construct of locus of control may be developed differently in males and females. Specifically, males are more likely to receive feedback regarding their overall abilities in various domains, whereas females may be given feedback that directly relates to their academic performance. In the current study, there was no significance found among locus of control and gender. As mentioned earlier, the present findings are based on the external scale solely. Therefore, if students were more internal in nature it was not evident in this current study. Additionally, the homogeneity of the sample may have affected the generalizability. Of the 100 participants, 78 students were female.

Limitations of Study

There were several limitations found within the current study. Regarding the methodology, the research design was limited due to the homogeneity of the sample. The participants in this research design were from the same geographical region in the Southeastern United States and were similar across age, gender and ethnicity. Therefore the sample population is representative of the students associated with this university. Their responses may not be generalized to individuals outside of this geographic region.

Concerning the measures, there were some issues regarding the reliability and consistency of scoring. On the locus of control measure, the factor analysis revealed low internal consistency scores for the internal subscale. Within the research design, the investigator was limited in analyzing the results of the external scale only. The consistency numbers were so low for the internal scale that findings related to this scale were not reported. Past research has indicated the difficult nature of identifying the number of factors and their composition when analyzing dichotomous scales. Additionally, differences within the sample (i.e. culture, gender)

may account for varying organization of the factors (Watters, Thomas, & Striner, 1990).

Regarding reliability of the locus of control measure, only test-retest reliability was reported for the original scale (Nowicki & Duke, 1974). Additionally, the adult version of the scale was an adapted version of the original scale for children (Nowicki & Duke, 1973).

The parenting scale revealed three separate factors including permissive, authoritarian and authoritative styles during the analysis. Several of the items were excluded from the original scale due to a lack of fit with the other items in each category. Deleting items from the original ten in each subscale resulted in an uneven number of items. Therefore, only five items remained in the permissive subscale, seven in the authoritarian subscale, and six in the authoritative subscale, resulting in a total of twenty-one items. With a lack of total items to select, the responses may not reflect an accurate depiction of the actual parenting style practiced in the home. Additionally, the original questionnaire allowed for students to respond to the perceived parenting style of mothers and fathers separately. In the current study, the researcher investigated the overall parenting style practiced in the home. Other authors have suggested the need to investigate each parenting style separately (McKinney & Renk, 2008).

The self-efficacy revealed two factors during the analysis resulting in the deletion of only two items. The original scale included a total of ten items. Within this current study, participants responded to eight items which may have had some impact regarding the overall level of perceived self-efficacy.

Participants reported on their academic performance by notating GPA and their perception of their academic standing individually and as compared to other students. Using a self-report measure may not be reliable in assessing actual achievement. Objective measures may result in a more accurate depiction of actual achievement.

Implications

Implications for Parents

Although the current study found no significant relationship among parenting style and student outcome, strong evidence exists for the impact of parenting behaviors on college students' outcomes. Past research has linked authoritative parenting to academic competence and authoritarian and permissive parenting to lower competence (Kim & Chung, 2003).

In adjusting to the needs of their college-aged children, parents may consider increasing their knowledge regarding this developmental period. One avenue to explore may be to participate in orientations offered by the university. Additionally, parents may want to have open discussions with their son or daughters to prepare them for the roles and responsibilities needed as a college student. Parents may communicate to their adolescent what this transition means along with discussing parent provisions and student expectations (Coburn, 2006). To further respond to these needs, it may be important for parents to explore their conjoint parenting styles. Past research has indicated that having at least one authoritative parent may be a buffer against poor adjustment (McKinney & Renk, 2008).

Implications for College Counselors

Counselors within the college setting should be prepared to work with students on an individual basis as well as to address the needs of the family. From an individual perspective, students will need support in understanding the entire framework of the college atmosphere from registering to courses to understanding financial aid. The facilitation of peer mentoring programs may be useful for incoming students in learning to develop other social supports. Counselors should provide hands-on support in the beginning as students develop their own independence in structuring their college career.

In developing programs for parents, it will be necessary for counselors to help them to understand the developmental process of maturing adolescents. Through providing orientation services and periodic workshops, counselors can teach parents to assist their son or daughter in developing problem-solving skills and developing independence (Coburn, 2006).

Implications for Counselor Educators

Counselor educators are faced with the task of developing awareness and a greater knowledge base about the current issues facing college students. These professionals can then partner with other college organizations in developing programs to address pertinent issues. By working with services such as career counseling, campus safety, financial aid, and housing, counselor educators can offer consultative services in developing transitional services in each area.

Implications for Future Research

The current research study explored the relationship among parenting styles, self-efficacy, locus of control and student outcome. Although there was no significance found to support relationship among the primary variables, there was some significance found across gender. Implications for future research include increasing the sample size. Recruiting a more comparable sample of female and male participants as well as individuals from various ethnicities will reduce the homogeneity of the sample. One consideration may be to select participants from several universities across the United States.

Other implications involve the selection of instruments. The locus of control measure used in this current study lacked internal consistency for the internal locus of control scale. Future researchers may consider using a non-dichotomous scale. Additionally, the variable of student outcome was measured using self-reported GPA and perceived academic performance.

More objective measures such as midterm or final grades may result in a more accurate depiction of student performance.

Finally, the parenting scale used in this study resulted in ambiguously defined parenting styles. Future researchers may consider selecting one or more questionnaires that assess a specific dimension of parenting (i.e. parental support, parental control). Additionally, researchers may want to consider assessing the parenting styles of mothers and fathers separately.

Summary

This chapter includes a discussion of the research study and potential implications drawn from the findings. In sum, findings in the current study suggest that 1) overall, parenting style and student outcome were not significantly related, 2) self-efficacy did not moderate the relationship between parenting style and student outcome, 3) locus of control did not moderate the relationship between parenting style and student outcome, 4) parenting style and gender were not significantly related, 5) self-efficacy and gender were significantly related, and 6) locus of control and gender were not significantly related. Implications for parents, college counselors, counselor educators and future research are discussed. More research is recommended to explore how additional parenting behaviors may contribute to student outcomes.

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Appendix A

Demographic Questionnaire

Directions: Please supply the following information by checking or writing in your response.

I.	De	mographic Information		
	1.	Age:		
	2.	Gender:Male Female		
	3.	Race/Ethnic Origin:		
		Asian (not Hispanic or Latino)		
		African-American (not Hispanic or Latino)		
		Hispanic or Latino		
		Native American/American Indian		
		Native Hawaiian or Other Pacific Islander		
		White or Caucasian (Not Hispanic or Latino)		
		Two or more ethnicities		
		Other (please describe)		
	4.	How would you describe your family dynamics at the time you were living at home in terms of who		
		cared for you?		
		Single Parent (mom) or (dad)		
		Both Parents		
		Grandparent(s)		
		Other Relatives		
		Other (please describe)		
	5.	Was the majority of your childhood spent in this home? Yes No		
	6.	How long ago has it been since you have lived at home with your family?		

II. Academic Information

Please indicate your rating to the following questions based on the scale provided:

1 (very poor) \rightarrow 7 (very good)

- 7. How would you evaluate your academic performance to date in college? 1 2 3 4 5 6 7
- 8. How would you evaluate your academic performance as compared to other students in college?

1 2 3 4 5 6 7

9. Please indicate your current GPA: _____

Appendix B

Parental Authority Questionnaire

Instructions: For each of the following statements, circle the number of the 5-point scale (1=strongly disagree, 5=strongly agree) that best describes how that statement applies to you and your parents. Try to read and think about each statement as it applies to you and your parents during your years of growing up at home. There are no right or wrong answers, so don't spend a lot of time on any one item. We are looking for your overall impression regarding each statement. Be sure not to omit any items.

1 = strongly disagree

2 = disagree

3 = neither agree nor disagree

4 = agree

5 = strongly agree

	I					
1	While I was growing up my parents felt that in a well-run home the children should have their way in the family as often as the parents do.	1	2	3	4	5
2	Even if their children didn't agree with them, my parents felt that it was for our own good if we were forced to conform to what they thought was right.	1	2	3	4	5
3	Whenever my parents told me to do something as I was growing up, they expected me to do it immediately without asking any questions.	1	2	3	4	5
4	As I was growing up, once family policy had been established, my parents discussed the reasoning behind the policy with the children in the family.		2	3	4	5
5	My parents have always encouraged verbal give-and-take whenever I have felt that family rules and restrictions were unreasonable.	1	2	3	4	5
6	My parents have always felt that what their children need is to be free to make up their own minds and to do what they want to do, even if this does not agree with what their parents might want.	1	2	3	4	5
7	As I was growing up, my parents did not allow me to question any decisions they had made.	1	2	3	4	5
8	As I was growing up, my parents directed the activities and decisions of the children in the family through reasoning and discipline.	1	2	3	4	5
9	My parents have always felt that more force should be used by parents in order to get their children to behave the way they are supposed to.	1	2	3	4	5
10	As I was growing up my parents did not feel that I needed to obey rules and regulations of behavior simply because someone in authority had established them.	1	2	3	4	5
11	As I was growing up I knew what my parents expected of me in my family, but I also felt free to discuss those expectations with my parents when I felt that they were unreasonable.	1	2	3	4	5

12	My parents felt that wise parents should teach their children early just who is boss in the family.	1	2	3	4	5
13	As I was growing up, my parents seldom gave me expectations and guidelines for my behavior.	1	2	3	4	5
14	Most of the time as I was growing up my parents did what the children in the family wanted when making family decisions.	1	2	3	4	5
15	As the children in my family were growing up, my parents consistently gave us direction and guidance in rational and objective ways.	1	2	3	4	5
16	As I was growing up, my parents would get very upset if I tried to disagree with them.	1	2	3	4	5
17	My parent feel that most problems in society would be solved if parents would not restrict their children's activities, decisions, and desires as they were growing up.	1	2	3	4	5
18	As I was growing up my parents let me know what behavior they expected of me, and if I didn't meet those expectations, they punished me.	1	2	3	4	5
19	As I was growing up my parents allowed me to decide most things for myself without a lot of direction from them.	1	2	3	4	5
20	As I was growing up my parents took the children's opinion into consideration when making family decisions, but they would not decide for something simply because the children wanted it.	1	2	3	4	5
21	My parents did not view themselves as responsible for directing and guiding my behavior as I was growing up.	1	2	3	4	5
22	My parents had clear standards of behavior for the children in our home as I was growing up, but they were willing to adjust those standards to the needs of each of the individual children in the family.	1	2	3	4	5
23	My parents gave me direction for my behavior and activities as I was growing up and they expected me to follow their direction, but they were always willing to listen to my concerns and to discuss that direction with me.	1	2	3	4	5
24	As I was growing up my parents allowed me to form my own point of view on family matters and they generally allowed me to decide for myself what I was going to do.	1	2	3	4	5
25	My parents have always felt that most problems in society would be solved if we could get parents to strictly and forcibly deal with their children when they don't do what they are supposed to as they are growing up.	1	2	3	4	5
26	As I was growing up my parents often told me exactly what they wanted me to do and how they expected me to do it.	1	2	3	4	5
27	As I was growing up my parents gave me clear direction for my behaviors and activities, but they were also understanding when I disagreed with them.	1	2	3	4	5
28	As I was growing up my parents did not direct the behaviors, activities, and desires of the children in the family.	1	2	3	4	5
29	As I was growing up I knew what my parents expected of me in the family and they insisted that I conform to those expectations simply out of respect for their authority.	1	2	3	4	5
30	As I was growing up, if my parents made a decision in the family that hurt me, they were willing to discuss that decision with me and to admit it if they had made a mistake.	1	2	3	4	5

Appendix C

The Adult Nowicki-Strickland Internal-External Control Scale

Directions: Please indicate your response to the following questions by circling yes (Y) or no (N). Do you believe that most problems will solve themselves if you don't fool with them? Y N Do you believe that you can stop yourself from catching a cold? Y N 3. Are some people just born lucky? Y N Most of the time do you feel that getting good grades meant a great deal to you? Y N Y Are you often blamed for things that just aren't your fault? N Y Do you believe that if somebody studies hard enough he or she can pass any subject? N Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway? Y N 8. Do you feel that if things start out well in the morning that it's going to be a good Y day no matter what you do? Ν 9. Do you feel that most of the time parents listen to what their children have to say? Y N Y 10. Do you believe that wishing can make good things happen? N Y 11. When you got punished was it usually for no good reason at all? N 12. Most of the time do you find it hard to change a friend's mind/opinion? Y Ν 13. Do you think that cheering more than luck helps a team to win? Y N Y 14. Did you feel that it was nearly impossible to change your parent's mind about anything? N Y 15. Do you believe that parents should allow children to make most of their own decisions? Ν 16. Do you feel that when you've done something wrong there's very little you can do to Y make it right? N Y 17. Do you believe that most people are just born good at sports? N

18. Are most of the other people your age stronger than you are?

Y

N

19.	Do you feel that one of the best ways to handle most problems is just not to		
	think about them?	Y	N
20.	Do you feel that you have a lot of choice in deciding whom your friends are?	Y	N
21.	If you find a four leaf clover, do you believe that it might bring you good luck?	Y	N
22.	Did you often feel that whether or not you did your homework had much to do		
	with what kind of grades you got?	Y	N
23.	Do you feel that when someone is angry at you there's little you can do to stop him or her?	Y	N
24.	Have you ever had a good luck charm?	Y	N
25.	Do you believe that whether or not people like you depends on how you act?	Y	N
26.	Did your parents usually help you if you asked them to?	Y	N
27.	Have you felt that when people were angry with you it was usually for no reason at all?	Y	N
28.	Most of the time, do you feel that you can change what might happen tomorrow		
	by what you do today?	Y	N
29.	Do you believe that when bad things are going to happen they just are going to happen		
	no matter what you try to do to stop them?	Y	N
30.	Do you think that people can get their own way if they just keep trying?	Y	N
31.	Most of the time do you find it useless to try to get your own way at home?	Y	N
32.	Do you feel that when good things happen they happen because of hard work?	Y	N
33.	Do you feel that when somebody wants to be your enemy there's little you can		
	do to change matters?	Y	N
34.	Do you feel that it's easy to get friends to do what you want them to do?	Y	N
35.	Do you usually feel that you have little to say about what you get to watch on t.v. at home?	Y	N
36.	Do you feel that when someone doesn't like you there's little you can do about it?	Y	N
37.	Did you usually feel that it was almost useless to try in school because most peers		
	were just plain smarter than you were?	Y	N
38.	Are you the kind of person who believes that planning ahead makes things turn out better?	Y	N
39.	Most of the time, do you feel that you have little to say about what your family decides to do?	Y	N
40.	Do you think it's better to be smart than to be lucky?	Y	N

Appendix D

General Perceived Self-Efficacy Scale

Directions: Indicate your response by placing a check in the appropriate box.

Behavior	Not at all true	Barely true	Moderately true	Exactly true
I can always manage to solve difficult problems if I try hard enough.				
If someone opposes me, I can find ways and means to get what I want.				
I am certain that I can accomplish my goals.				
I am confident that I could deal efficiently with unexpected events.				
Thanks to my resourcefulness, I can handle things I didn't expect.				
I can solve most problems if I make the effort.				
I can remain calm when facing difficulties because I can rely on my coping abilities.				
When I am confronted with a problem, I can find several solutions.				
If I am in trouble, I can think of a good solution.				
I can handle whatever comes my way.				

Appendix E

Auburn University Institutional Review Board (IRB) Approval Letter



The Auburn University Institutional Review Board as approved this document for use rom 21 e lo to 2151 in rotocol # ID -029 e X 1002

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INFORMATION LETTER

For a Research Study entitled

"The Influence of Parenting Styles on Locus of Control, Self-Efficacy,

And Academic Adjustment in College Students

You are invited to participate in a research study to explore the relationship among parenting styles, locus of control, self-efficacy and student adjustment. The study is being conducted by Kimberly Mills under the direction of Dr. Jamie Carney in the Auburn University Department of Special Education, Rehabilitation, Counseling and School Psychology. You were selected as a possible participant because you have some transitional experience of the college environment and are 19 years of age or older.

What will be involved if you participate? If you decide to participate in this research study, you will be asked to complete three questionnaires along with one demographic form. Your total time commitment will be approximately twenty minutes.

Are there any risks or discomforts? The risk for the breach of confidentiality may be encountered when research participants provide information that can be obtained by others. The risk for coercion may also be encountered when students believe that their academic standing is based on whether or not they choose to participate in the study. In order to protect against the breach of confidentiality, the research respondents will remain anonymous. Collected data will be returned to the investigator in a sealed envelope and stored in a locked file cabinet in the researcher's residence. In order to protect against the risk of coercion, the instructors will not have a role in recruitment or be aware of who decides to participate. Recruitment will be facilitated by the principal investigator and committee chair. Additionally, professors will be asked to leave the classroom during the administration and data collection of the research study.

Are there any benefits to yourself or others? Although there are no direct benefits to you, your input will provide information to the general public about how relationships impact outcomes with college students. We/I cannot promise you that you will receive any or all of the benefits described.

Will you receive compensation for participating? There will be no compensation received for participating.

Are there any costs? There are no costs associated with this study.

If you change your mind about participating, you can withdraw at any time during the study. Your participation is completely voluntary. Your decision about whether or not to participate or to stop participating will not jeopardize your future relations with Auburn University, or the Department of Special Education, Rehabilitation, Counseling, or School Psychology.

Any data obtained in connection with this study will remain anonymous. We will protect your privacy and the data you provide by storing the information in a locked file cabinet. Information collected through your participation may be used as the basis of a dissertation. Results may be further disseminated through presentations and publications.

If you have questions about this study, please ask them now or contact Kimberly Mills at 334-887-4154 or ktm0002@auburn.edu or my faculty advisor, Dr. Jamie Carney at 334-844-2885 or carnejs@auburn.edu at the Department of Special Education, Rehabilitation, Counseling, and School Psychology

If you have any questions about your rights as a research participant, you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or e-mail at hsubjec@auburn.edu or IRBChair@auburn.edu.

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER OR NOT YOU WISH TO PARTICIPATE IN THIS RESEARCH STUDY. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

	Kinessey X mices 2/7/10
Participant's signature Date	Investigator obtaining consent Date
	-Kimberly T. Mills
Printed Name	Printed Name
	University
	The Auburn University Institutional Review Board has approved this document for use from 210 to 57 1002 Protocol # 10-029 EX 1002

Page 2 of 2