The Contribution of Faith and Ego Strength
to the Prediction of GPA among High School Students

by

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Dissertation submitted to the Faculty of the
Virginia Polytechnic Institute and State University
In partial fulfillment of the requirement for the degree of

Doctorate of Philosophy
in
Human Development

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December 18, 2001
Blacksburg, Virginia

Keywords:  Ego Strength, Psychosocial Development, Adolescents, Faith, Academic Achievement
The primary purpose of this study was to investigate the extent to which measures of ego strength, as conceived by Erikson (1963a) and operationalized by Markstrom, Sabino, Turner and Berman (1997), contribute to the prediction of academic achievement of high school students. At issue was whether the ego strength variables enhance prediction beyond that provided by selected demographic variables and two measures of religiosity: faith participation and faith importance.

Participants included 121 Black and 131 White students of Virginia. They were in the ninth through twelfth grades and were attending a single high school in the Tidewater area of Virginia. They were administered a questionnaire that included several demographic questions, two questions regarding religion in their lives, and five subscales from the Psychosocial Inventory of Ego Strength (PIES) developed by Markstrom et al. (1997). These variables were used in a series of hierarchical regression analyses to predict grade-point-average (GPA) which was obtained from the permanent school records of each student.

Significant relationships were found between and among the five psychosocial ego strengths. Several relationships were found between students' psychosocial ego strength attributes and parents' educational levels. A positive significant relationship was found between the total ego strength and academic
achievement. Some differences were found between race and the Hope subscale, faith participation, and faith importance. Race was also found to be a significant influence on the predictive relationships between psychosocial total ego strength and academic achievement. Total ego strength was found to be a significant predictor of academic achievement.

The essential finding of the study was that ego strength measures explained approximately 10% of the variance in GPA above that already accounted for by the demographic variables and the two religiosity variables. The items measuring the importance of faith and participation in faith activities did not contribute to the prediction of GPA, except for faith participation among Black students.
DEDICATION

This dissertation is dedicated to Dominique, the inspiration that provided a search for a model of excellence in positive youth development.
ACKNOWLEDGEMENTS

I will always be grateful for the opportunity to have had Dr. Cosby S. Rogers as my major professor. Her sincere patience and persistence were invaluable during this project. She was my inspiration of Hope when “uprootedness” occurred over the past few years. I also sincerely appreciate the members of my committee, Dr. Michael Sporakowski, Dr. Lawrence Cross, Dr. Janet Sawyers, and Dr. Gloria Bird for their valuable insights and direction. I could not have chosen a more cohesive group of people to guide me through this process.

My sincere thanks also go to Mr. Larry Thomas, the faculty, and the students at Nandua High School for allowing me to enter their school and gather such valuable information. Without their trust and cooperation, this project would have been far less meaningful and relevant.

I would also like to thank the administration, faculty, and staff of Virginia Cooperative Extension. Their support as colleagues, but more importantly as friends, helped to sustain me as I undertook this project. Their gentle words of encouragement, and helping with my many computer problems were invaluable. I shall be forever grateful to have you in my life.

After all that has been done by those I have mentioned to guide me to this point, I recognize that I owe my most profound gratitude to my family. As a nineteen-year old, eldest child of Nannie and James McCargo, I can still see my parents and my five siblings (James, Calvin, Annette, Roosevelt, and Willie) when they wished me well with college life. They were elated, but they also
knew that the expenses of higher education would be difficult on all of us. However difficult the cost, those seven individuals have always remained my “rock” of support, love, and acceptance. Thank you for being there—I will honor your trust. Any praise and honor that could possibly be given me in this life cannot compare to the joy and satisfaction that I find in my relationship with each of you and your families.

Finally, I express my thanks to my Heavenly Father, my savior, Jesus Christ, and the Holy Spirit for a life filled with joy and peace, for the love and support of family and friends, and for the promise of a bright future.
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CHAPTER I

Introduction

This study was motivated by the hopelessness, low esteem, and lack of ego resilience demonstrated by an incarcerated adolescent who had failed to develop positive psychosocial traits in spite of many protective factors present in his life. Speaking of “The Game of Life” he wrote,

People on the grind everyday trying to master a skill, school, job, or hustling; Everyone wants the almighty dollar. People kill, steal, and sell to get paid.

It’s today’s perception of Life, to get paid.

People wanting power and will knock people down to raise themselves. Kids are killing kids. People are still looking at color. No one trusts each other, only because it’s hard to trust and no one wants to be hurt. Look how hard it is to find happiness; pain and misery are so easy to find.

It’s today’s perception of life, pain and misery.

No one wants to help. No one wants to love. First, of course you have to love yourself, but sometimes that’s harder to do, than it is to say it. We lie to each other and scared to trust.

It’s today’s perception of life, no love.

The game of life is always being played and always will be until the end. Someone needs to ask for a helping hand to win the game of life. Because staying in grief and sorrow, you will always lose…

Dominicique (personal communication, Jan. 1999)

Demoralization is the term Damon (1995) used to describe this state of today’s youth. He described a “legacy of many young people which includes a cynical attitude toward moral values and goals; a defeatist attitude toward life; and a lack of hope in the future; a thinning of courage; and a distrust of others as
well as the self” (p.18). He suggested that too many adolescents show an absence of purpose, dedication, commitment, and a belief of spirit.

This study was initiated to better understand the link between psychosocial factors and one important outcome—academic success as measured by grades. Specific factors of interest were faith importance, faith involvement, and ego strength. The study was designed to measure the relative contribution of ego strength and faith to the prediction of academic achievement among a group of high school students.

Ego Strength” refers to virtues through which “human beings steer themselves and others though life” (Erikson, 1964, p. 115). In his psychosocial stage theory Erikson (1964) identified strengths as outcomes of successful stage resolutions. (2) Faith Development includes two aspects, i.e. the frequency of participation in faith related activities and the level of importance respondents attributed to faith.

Statement of the Problem

Adolescence marks the critical passage from childhood to adulthood. During the teenage years, young people begin to separate from their families, align themselves with peers, make decisions on their own, develop intimate relationships, and experience feelings of sexuality. As young people learn to connect future consequences with present action, most experiment with behaviors they believe are part of adult life. As they strive to become grown-ups, many feel invincible or immune from harm. Feelings of invulnerability and a
moderate propensity for risk-taking are normal for most adolescents. Yet, some young people are vulnerable to excessive behavior and mistakes that can harm their health and development, their families, and their communities (Dryfoos, 1989).

One in four adolescents, approximately 7 million young people between the ages of 10 and 17, is in jeopardy of serious, long-term consequences stemming from risk taking behavior (Carnegie Council on Adolescent Development, 1989). These young people tend to be isolated from their families, schools, and communities. Many have been arrested or have committed delinquent offenses, dropped out of school or fallen behind in their grade level.

Risky behaviors by adolescents have fostered an array of prevention and intervention activities in recent years. Unfortunately, few of these efforts have yielded measurable decreases in youth deviant behavior (Lerner, 1995). In a meta-analysis on evaluation results from 143 adolescent risk prevention programs, Tobler (1986) “seriously challenges the concept that knowledge changes will lead to attitude changes with corresponding behavior changes” (p. 560). Research is needed to determine other means to achieve desirable adolescent outcomes. This study was designed to examine the factors that have potential for influencing dispositional states known to be associated with positive adolescent development.

William Damon (1995) suggested that too many children, the affluent and poor alike, are drifting through their childhood years without finding the skills,
virtues, or sense of purpose that they will need to sustain a fruitful life. He contends that "all the commonly accepted standards for young people’s skills and behavior have fallen drastically. Less is expected of the young, and in turn less is received. Either as a cause or as a result, instruction, discipline, the very fostering of competence and character in the young are fast becoming lost arts" (p. xiii).

As mentioned above, Damon suggested that competence in our young is becoming a lost art. This concept seems to be reflected in the constant attention given to Standards of Learning (SOL) in our modern society. One cannot look at any media form without hearing how poorly our school systems are doing because a certain percentage of youth did not pass the SOL battery of tests. According to a document published by Kids Count in Virginia (1999):

“one of the most fundamental indicators of a child’s future well-being is education. A good education provides a path to personal growth, responsible citizenship, and economic welfare. Global competition and the growing demand of the workplace make the benefits of education a necessity of each child and the key to our future.

(p.11)

If our young people are at-risk of academic failure, what is it then that motivates them to change this behavior? Are there factors beyond intellectual
ability that encourage and enhance academic achievement in our youth? Huang and Waxman (1995) suggested that this academic motivation is “the extent to which students feel the intrinsic desire to succeed and earn good grades” (p. 211). An even more comprehensive picture was drawn by Schunk (1995) who wrote that academic ‘self-regulation” includes motivational process such as setting performance goals, holding positive beliefs about ability, valuing learning, and being proud of one’s efforts. This last definition hints strongly at the richness of motivation, suggesting that it is a combination of personal beliefs, values, and skills. Thus, the question becomes, can processing ego strengths also become known as motivators, personal beliefs, values and or skills that contributes to the prediction of GPAs in high school students?

Regardless of risk factors in which many adolescents engage, all adolescents have basic human needs that are enduring and that are crucial to healthy growth into adulthood. Hamburg (1990) has suggested that these basic needs include “the need to be a valued member of a group that provides mutual support and caring relationships; the need to become a socially competent individual who has the skills to cope successfully with everyday life; and the need to believe in a promising future with real opportunities” (p. 2). She further suggested that “providing adolescents with the basis for making informed and wise decisions about their futures and building supportive social networks in every community can enhance the motivation, skills, and aspirations for young people to invest in their education, to protect their health and enhance their life options” (p.2).
If ego strength is found to be predictive of school success, then it might point to factors that could be tested in intervention programs aimed at enhancing academic success.

Scales and Leffert (1999) stated: “When adults talk about youth, they talk mostly about problems such as alcohol and other drugs, adolescent pregnancy, and academic failure. The result is that many Americans have both a distorted, negative view of young people and an imbalanced, inaccurate picture of what they need to succeed…. we focus instead on youth assets, the positive relationships, opportunities, skills, and values that help young people grow up healthy” (p. 1) and successfully acquire academic achievement. The current study was focused on determining the degree to which selected psychosocial variables predicted academic achievement.

**Theoretical Background.** Erikson (1968) commented that “the descriptions and analysis of what is most sick and most depraved in individuals and conditions has developed into a style of critique, both in textbooks and in fiction…For as the young see themselves, as it were, negatively glorified in the mass media, their sense of identity can only make the most of the power they seem to wield at least as living symptoms” (p. 232). Thus, Erikson asked, “what may be the balance to the psychopathology which we have learned to recognize, and what may be the positive goals built into each developmental stage” (p. 232)? He named these positive goals or strengths “basic virtues” to indicate that without them “all other values and goodness lack vitality” (p. 232). These basic
virtues are known as hope, will, purpose, competence, fidelity, love, care, and wisdom. This study was designed to assess contributions these virtues might make to school performance.

The literature on resilient children, that is, “those who recover from or adjust easily to misfortune or sustained life stress” (Werner, 1984, p. 68) echoes Erikson’s (1963a) theoretical notions regarding the eight stages of human psychosocial development. For example, Erikson (1963a) emphasized the importance of maternal care during the first years for establishing a basic sense of trust. Werner (1986) noted that “more of the resilient children had received a great deal of attention from their primary caregiver during the first year of life” (p. 37). The resilient children described by Werner were in situations that were conducive to successful resolutions of Stage 1 in Erikson’s paradigm. Resilient children are known to exhibit pronounced autonomy (autonomy is associated with Stage 2 in Erikson’s model); they “seek out novel experiences, lack fear, and are quite self-reliant” (Werner, 1984, p. 69). In addition, resilient children “often find a refuge and a source of self-esteem in hobbies and creative interest (initiative is the crisis of stage 3 in Erikson’s model); …such activities…gave them a reason to feel proud. Their hobbies, and their lively sense of humor, became a solace when things fell apart in their lives” (Werner, 1984, p. 69). While relating resilience to Stage 4 of Erikson’s model, industry versus inferiority, Werner further noted:
In middle childhood and adolescence resilient children are often engaged in acts of required helpfulness...many adolescents took care of their younger siblings. Some managed the household when a parent was ill or hospitalized; others worked part time after school to support the family. Resilient children are apt to like school and to do well in school, not exclusively in academics, but also in sports, drama, or music. (p. 70)

Clearly, the characteristics of the resilient children described by Werner parallel Erikson’s description of healthy psychosocial development. Erikson (1963a) asserted that successful resolution of the first four stages facilitates resolution of Stage 5 (identity versus role confusion) during adolescence and young adulthood. Conversely, inadequate or faulty resolution of earlier stages will hinder identity development as well as successful resolution of stages that follow: (a) Stage 6-intimacy versus isolation and the ego strength of love; (b) Stage 7 generativity versus stagnation and the ego strength of care; and (c) Stage 8 integrity versus despair and the ego strength of wisdom. Hence, Erikson (1964) may have identified not only eight core factors of identity formation, but also eight core factors for resiliency. The question then becomes, can these eight factors of resiliency have a positive effect on academic achievement?

Bernard (1995) suggested that we are all born with an innate capacity for resilience, by which we are able to develop social competence, problem-solving skills, a critical consciousness, autonomy, and a sense of purpose. Bernard’s
view aids our understanding of resiliency and its connection to Erikson's psychosocial theory.

… Autonomy is having a sense of one’s own identity and an ability to act independently and to exert some control over one’s environment….Lastly resilience is manifested in having a sense of purpose and a belief in a bright future, including goal direction, educational aspiration, achievement, motivation, persistence, hopefulness, optimism, and spiritual connectedness. (Bernard, 1995, p. 1)

Ego Strengths

The ego strengths are underexamined components of Erikson's broader psychosocial theory of human development. The absence of scholarly discussion on this topic is significant because, theoretically, the ego strengths should provide evidence of successful psychosocial stage resolutions.

The ego strength of hope emerges from the successful resolution of trust vs. mistrust in infancy. Will emerges from autonomy versus shame/doubt while purpose results from successful resolution of initiative versus guilt in early childhood. Competence emerges from industry versus inferiority during latency; fidelity emerges from identity versus identity confusion in adolescence; love emerges from intimacy versus isolation in young adulthood; care emerges from generativity versus stagnation in middle adulthood; and wisdom emerges from
integrity versus despair in later adulthood. Like the psychosocial stages, the ego strengths are thought to be sequential, invariant, and hierarchical.

**Hope: The Most Basic Virtue.** Erikson (1968) maintained that hope is the most basic of the virtues. Thus trust, the crisis from which hope emerges “is the cornerstone of a vital personality” (p. 97). Hope, is seen as “the enduring predisposition to believe in the attainability of primal wishes in spite of anarchic urges and rages of dependency” (Erikson, 1968, p.106). It is an "expectant desire, …a vague instinctual driveness undergoing experiences that awaken some firm expectations (Erikson, 1997, p. 59). Erikson (1997) also suggested that hope “bestows on the anticipated future a sense of leeway inviting expectant leaps, either in preparatory imagination or in small initiating actions, and …it must count on basic trust such as that nourished by maternal care” (p.60). In summary, according to Erikson, hope is associated with a sense of future and perceived attainability of goals.

Snyder (1995) suggested that hope provides the cognitive energy and pathways for goals. Higher hope, therefore, reflects an elevated sense of mental energy and pathway(s) to goals. He has contended that hope is powerful in the sense that it typically assures the person success in reaching goals, recovering from physical injury, or having greater happiness and less distress.

Using a large school district as a sample, Snyder, Hoza, Rapoff, Ware, Danovsky, Highberger, Rubinstein, ans Stahl (1997) found that hope was related to psychological adjustment in several ways. High-hope was positively
correlated with perception of scholastic competence, social acceptance, athletic ability, and physical appearance. Furthermore, high-hope students reported that they focus on success rather than failure while pursuing goals, and they rely on adaptive coping strategies in pursuing goals, even in the face of significant obstacles.

**Faith, Hope, and Resilience.** Erikson (1997) noted that the incorporation of trust and hope in infancy serves as building blocks to fidelity in adolescence and faith in adulthood. Religion is one factor that may facilitate this process. Religion is the oldest and most lasting institution that facilitates the emergence of fidelity and faith. Fidelity is regarded as an expression of faith in adolescence and reaches ascendance in the self with successful resolution of the identity crisis.

Religious involvement is associated with diminished potential for involvement in behavioral problems (Booth & Martin, 1998). Thomas and Carver (1990) conducted a review of the literature on religiosity in adolescence and reported negative relations between religious involvement and the frequency, intensity, and duration of antisocial behaviors. They also reported positive relations between various aspects of social competence and religious involvement. Religious involvement appeared to provide skills and abilities that generalized to other settings.

Many of the constructs used to assess resilience are psychosocial in nature and some are proposed for this study, e.g. ego strengths. Vaillant (1993)
linked resilience with faith and hope stating, “Hope and faith are simple words, but they encompass an essential facet of resilience…hope…the psychic balm on which resilience depends” (p. 314). While research on religion in the psychosocial paradigm is limited, there is some indication that religiosity is related to resiliency in adolescence. One aim of this study was to explore further the relationship between faith and psychosocial factors known to be linked to resilience and to determine the contribution of these variables to academic achievement.

**Measuring Ego Strengths.** A measurement of ego strengths offers an indicator of psychosocial health. An ego strength score reflects its degree of ascendance in an individual, as well as the degree to which other ego strengths are operative at that life stage (Markstrom et al., 1997). Ego strengths seem to imply inherent and internal strengths characteristic of healthy individuals.

Even though Erikson implied that ego strengths are inherent and internal, he also implied that ego strengths must be nurtured in order for an individual to develop these healthy characteristics. It seems that environmental factors including socioeconomic status (SES) would contribute to the development of ego strengths such as competence, the fourth ego strength. Therefore, it would be appropriate to measure competence (measured in adolescence by school achievement) as an indicator of the ascendance of ego strengths. For example, Erikson (1963b) suggested that "as the school child makes methods his own, he also permits accepted methods to make him their own. To consider as good only
what works, and to feel accepted only if things work, to manage and to be managed, can become his dominant delight and value" (p. 2). Accordingly, if the school child fails to make the culture's norms and expectation his own, he becomes at risk of not meeting man's need "to combine technological pride with a sense of identity: a double sense of personal self-sameness slowly accrued from infantile experiences and of shared sameness experienced in encounters with a widening part of community " (Erikson, 1963b, p. 2). Since, Erikson would contend that meeting the cultural norms and expectations for competence is expected of our young people, then it would be appropriate to examine school achievement as an outcome of positive development.

School achievement has been shown to be "strongly associated" with SES (Lee & Smith, 1993). Dowson and McInerney (1998) in a study of 602 middle school students found that age, gender, cultural background, and socioeconomic status were strongly related to differences in relations between students' academic motivation, cognition, and achievement. The finding suggests that studies of academic achievement should take these aforementioned demographic variables into account.

**Rationale.**

Erikson (1964) has suggested that the ego strengths include the "rootedness" of dealing with difficult times, or when one is feeling uprooted, or living in a diverse society. He seemed to suggest that these ego strengths of hope (manifest itself into religiosity), will, purpose, competence, and fidelity
provide a sense of personal control and support in times of uprootedness, including fear of academic failure. The significance of these factors in developing resilient adolescents motivated for academic achievement is best described in Erikson’s (1964) own works when he wrote "...the emergence of basic virtues seems indispensable to an appraisal of the process man partakes in, of the stuff he must work with, and the strength he can count on, as he attempts to give a more unified direction to his future course". (p. 157)

Academic achievement, as measured by grade-point-average, is well known for positioning adolescents’ future course. Likewise, academic failure is also well known for positioning youth to be at risk for negative outcomes. In summary, extensive research points to the expectation that academic achievement is an expectation of our young people. It is one factor of “competence” that Erikson suggests that adolescents must successfully resolve if as stated above, “he attempts to give a more unified direction to his future course” (p. 151). Hence it would be appropriate to examine the relative contribution of faith and ego strength on academic achievement.

Purpose of Study

The purpose of this study was to examine the relative contributions of faith involvement, faith participation, and ego strength to the prediction of GPA among a group of high school students. Respondents’ race, age, gender, parental educational levels, and socioeconomic status (measured by whether or not the
students received free or reduced lunch) as well as academic achievement was assessed.

Ego strengths were defined as scores on various subscales of the Psychosocial Inventory of Ego Strengths (PIES) (Markstrom et al., 1997). In addition, overall ego strength was measured by summing five of the eight psychosocial subscales: hope, will, purpose, competence, and fidelity.

The research questions were:
1. To what extent do the demographic variables of sex, grade level, race and SES predict GPA?
2. To what extent do the religiosity items enhance the prediction of GPA beyond that provided by the demographic variables?
3. To what extent do the ego strength measures enhance the prediction of GPA beyond that provided by the demographic and religiosity variables?
4. What hierarchical regression model involving variables of interest best predicts academic success?

Definition of Terms

The following terms are used throughout this study. Definition for each term as used in this investigation is outlined below.

(1) **Ego Strength** - a term used interchangeably with virtue to imply instinctual, inherent, and internal strengths gained by healthy individuals. The presence of strengths including as hope, will, purpose, competence, and fidelity provides evidence of psychosocial stage resolutions (Markstrom et
The ego strengths were measured using the subscales of the Psychosocial Inventory of Ego Strengths.

(2) **Faith Importance** - a term used by Booth and Martin (1998) to determine the level of meaning or significance placed on religiosity. Faith Importance was measured by the question, “How important is the faith of your choice in your life”. Four response options were provided: (a) not at all, (b) somewhat, (c) moderately and (d) very.

(3) **Faith Involvement** – a term used by Markstrom (1999) to determine the extent of which religiosity was a necessary feature, consequence, or part of living. Faith Involvement was measured by the question, "How often do you participate in an activity related to the faith of your choice?" Five response options were provided: (a) at least once a week, (b) at least once a month, (c) only on most important holidays related to my faith, (d) rarely, and (e) never.

(4) **GPA** - is a term used to describe the accumulation of grades of students from one year to the next on a 1 to 5 point scale which result in a final average at end of high school tenure. The grade-point-average was measured for this study using actual school records.

**Limitations of the Study**

(1) This study sample was limited to students attending a single high school in Accomack county, Virginia.
(2) All data were collected using a questionnaire completed during regularly scheduled class times and one cannot be sure all students were diligent in providing candid responses to the items.

(3) The regression model included only a modest number of the many variables known to be predictive of GPAs. By limiting attention to these few predictors, it is not possible to ascribe a causal relationship between ego strength and GPA.

**Significance of the Study**

In his psychosocial theory of human development, Erikson (1964) introduced a conception of ego strengths or ego virtues. However, these constructs are under-examined components of Erikson’s broader theory. Recognizing that ego strengths and psychosocial crisis are interdependent, it is important to assess the degree to which adolescents have obtained these strengths as they negotiate each crisis and in turn to understand how these are related to one of the most frequently used measures of successful development, i.e. school success.

Poverty, crime, teenage pregnancies, sexual abuse, drug abuse, and low educational attainments are among the factors known to be related to unhealthy psychosocial development. This study contributes to the current body of knowledge related to adolescent development by describing the statistical relationships between race, gender, grade levels, SES, faith importance, faith involvement, ego strength and academic achievement in adolescents.
CHAPTER II

Literature Review

Introduction

The literature reviewed for this study encompassed the theoretical work of Erik H. Erikson and the empirical research related to the psychosocial variables (ego strengths and faith development). The review will includes:

1. The psychosocial theory of Erik H. Erikson as it pertains to ego strengths.

2. The definition and operationalization of the constructs of (a) ego strengths (also called virtues), and (b) faith development.

3. Empirical studies on factors that are known to be related to these constructs, either as predictors of developmental outcomes or concurrent relationships.

4. Outcome variables associated with faith involvement and faith importance.

Theoretical Framework

The present study was conducted within Erik H. Erikson's (1963a, 1964, 1997) psychosocial framework. Since, Erikson's theory grew out of his psychoanalytic work with Sigmund Freud, a brief background on the relationship between Freud's and Erikson's views provides a better understanding of the context for the study.

Freudian Perspective. Freud (1933) proposed that several different mental structures comprise the human personality. One of these, the superego arises
out of the resolution of the oedipal conflict. Another, termed the “id” contains the libido (a term Freud assigned to the available energy of the Eros which are basic instincts of sex, self-preservation, love, life forces, and striving toward unity). The id functions in accordance with the “pleasure principle.” In addition to the superego and the id, Freud described the ego that deals with reality. The ego structure of personality was, according to Freud, formed as a result of the pull between the id, with its physiological drives and passions, and a reality which fails to gratify it consistently. The ego was a rational force that keeps the id from seeking gratification indiscriminately. Individual identity was defined by the inner conflict between id, ego, and superego and the outward behaviors and expressions that emerge from this conflict. According to Freud, these internal factors influence both a sense of self (personal identity) and self in relation to others (social identity).

**Erikson’s Psychosocial Perspective.** Erikson (1959) developed an approach to human development based on psychoanalytic principles. He accepted many of Freud’s ideas, such as the tripartite mind (id, ego, and superego) and psychosexual stages. While Freud (1933) focused on the contribution of the id to development, Erikson focused on the ego. Erikson recognized the need for psychological development within the social environment and thus his theory describes patterns of psychosocial development. This perspective led Erikson toward an emphasis on the role of society in determining
what the ego must do to fulfill its function of adapting to the demands of reality, a
reality which is shaped and textured by one’s society.

**Erikson’s Views on Ego Development.** Erikson (1963a) described ego
capabilities as progressing through eight psychosocial stages. He believed that
the time one has to spend at each stage is fixed by a maturational “ground plan”
for development. Within each stage a particular capability of the ego must
develop if it is to meet the adjustment demands placed on it by society. Each
stage is a critical one since development proceeds in spite of whether the
capability is developed. If one does not develop adequately within the time limits
imposed by the maturational ground plan, development will proceed but that part
of the ego (that capability) will be diminished.

According to Erikson (1985), existence is the organization of three
processes—the biological process (soma), the psychological process (psyche)
and the communal process or one in relations to the other world (ethos).
Although each of these processes is separate in its unique organization, all are
interdependent. Erikson (1985) stated: “to approach human behavior in one of
these processes always means to find oneself involved in the other, for each item
that proves relevant in one process is seen to give significance to, as it receives
meaning from, items in the other” (p. 26). By making this statement, he spoke to
the wholeness of human existence. The physical (soma) and psychological
(psyche) person evolves in relation to the social environment (ethos) and, in turn,
the social environment is constructed by the collective interaction of individuals.
The interaction of the individual's biological maturation and psychological set with the requirement and expectations of significant others and societal institutions serves as the driving force behind development in each psychosocial stage. These stages, identified by Erikson (1963a) as “The Eight Ages of Man,” each have their own soma, psyche, and ethos determinants that push the individual toward psychosocial crises or turning points. The timing and sequence of these crises are defined by a predetermined plan for development known as epigenesis.

**Erikson’s Epigenetic Principle.** E. H. Erikson was the first to apply the epigenetic principle to the study of ego development. Erikson (1968) described epigenesis as follows:

> Whenever we try to understand growth, it is well to remember the epigenetic principle which is derived from growth of organism in utero. Somewhat generalized this principle states that anything that grows has a ground plan and out of this ground plan the parts arise, each having its time of special ascendancy, until all parts have arisen to form a functioning whole. (p. 92)

According to Erikson (1956), childhood is seen as a “gradual unfolding of the personality through phase-specific psychosocial crises” (p. 74). Each one of these developmental phases is characterized by a phase-specific developmental task or crisis which must be resolved during its period of ascendancy (Erikson, 1968). Erikson (1997) further described the epigenetic principle as
...a progression through time of a differentiation of parts...each part exists in some form before its decisive and critical time normally arrives and remains systematically related to all others so that the whole ensemble depends on the proper development in the proper sequence of each item. Finally, as each part comes to its full ascendance and finds some lasting solution during its stage it will also be expected to develop further under the dominance of subsequent ascendancies and most of all, to take its place in the integration of the whole ensemble. (p. 29)

Erikson’s notion of epigenesis places emphasis on the existence of all of the psychosocial issues throughout life, allowing each of these issues to have its own special time of importance or crisis which defines the stage, “but they all must exist from the beginning in some form, for every act calls for an integration of all” (Erikson, 1963a, p. 271).

For an individual to move to the next developmental stage in the life cycle, the crisis of the previous stage needs to be resolved. Perfect and absolute resolution is not a necessity. However, for a healthy personality to result the resolution must be predominantly positive. The personality component of the crisis then becomes a fairly permanent personality characteristic. With the successful resolution of all eight psychosocial crises throughout the life cycle, a healthy personality results (Erikson, 1956).
Resolution of a series of crises that are integrated by the ego constitute the major tasks representing Erikson’s eight psychosocial stages. The resolution of each of these crises is influenced by significant relationships. Each stage is defined by a dichotomy between the syntonic and dystonic elements. For example, both autonomy and shame are essential developments. These opposing forces are not absolute; rather, they are a description of a bipolar continuum (Waterman & Whitbourne, 1982). Together they constitute a crisis only in the sense that the syntonic should systematically outweigh the dystonic (Erikson, 1984). To understand this crisis effect, a review of each psychosocial stage is provided for understanding the dichotomy between the syntonic and dystonic elements.

**Stage I – Trust vs. Mistrust.** Infants begin to define the world around them through their relationships with mothers and other primary caregivers. The consistency and continuity of the care provided determine the quality of this experience. The world presents infants a variety of experiences and nurtured infants are helped to regulate their world through familiarity of experience that is accompanied by a sense of inner goodness and comfort. This sense of inner goodness and comfort leads to the development of trust when infants’ basic needs are met. When needs are not met, mistrust develops.

The resulting outcome or ego strength of trust is Hope, the sense that needs and desires will be fulfilled. This sense of Hope is a feeling that the world is right. Void of this consistency, and continuity provided by the caregiver, infants
approach life with uncertainty and fear, hindering their quest for full involvement in activities and relationships (Erikson, 1963a).

**Stage II - Autonomy vs. Shame and Doubt.** Children with a sense of Trust enter toddlerhood undertaking new activities and adventures. They assert control of self and the environment in their struggles with the wishes and demands of parental figures. Erikson (1963a) described the theme of this stage as that of balancing between the two modalities of “holding and letting go.” In his words, “This stage therefore, becomes decisive for the ratio of love and hate, cooperation and willfulness, freedom and self expression and its suppression” (p.254).

The ego strength resulting from self-control without loss of self-esteem is Will. Will is the determination to exercise free choice and restraint in spite of shame or doubt. The lack of determination for self-control and dominance by others results in a lasting sense of shame and doubt (Erikson, 1963a, 1968).

**Stage III – Initiative vs. Guilt.** The preschooler’s new sense of autonomy and determination serves as the impetus for the vigor of early childhood. Excited by new motor and mental abilities, children are anxious to be involved in a variety of activities and experiences. The ego strength resulting from this active involvement is Purpose. Purpose is the pursuit of goals guided by conscience that is not overly burdened by guilt. When conscience is too great, activity and instrumentality are hindered by a sense of guilt (Erikson, 1963a, 1968).
Stage IV – Industry vs. Inferiority. In the last of the childhood stages, school age children channel initiative and purpose into selective activities in hopes of finding their own talents and potential. The school and the community becomes the new social barometer, moving from a parental or family centered perspective to one which encompasses the opportunities and expectations of institutions and their memberships.

The ego strength found in participation and productivity outside the home is Competence – the free exercise of skills and intelligence in a variety of tasks. Failure to identify those skills that complement the child’s talents and capabilities results in feelings of inadequacy and inferiority (Erikson, 1963a, 1968).

Stage V – Identity vs. Role Confusion. This crisis serves as a transitional stage, bridging childhood and adulthood. The identity crisis moves adolescents toward self-examination and the evaluation of childhood experiences and identifications. In this stage, adolescents must identify values, ideas, beliefs and career and lifestyle decisions that define them in light of social standards and expectations. During this stage, the adolescent is in search for a fit between the demands of significant others and society and the inner self. Adolescents seek to feel at home with choices that they make and the ideologies they profess. The adolescent’s peer group plays a critical role in self-exploration; from peers they need to receive confirmation of their choices. Often, the adolescent finds temporary definition through involvement in cliques and the acceptance of stereotyped preference, ideas, and beliefs (Erikson, 1968).
The resulting ego strength of the identity crisis is Fidelity—the fulfillment of goals in a way that allows for commitment and genuineness with both self and significant other. Continued searching and the inability to define and to commit to decisions, ideas, and beliefs that the adolescent can call his or her owns leads to role confusion and a diffused self.

The process of developing a sense of identity begins at birth and continues throughout the life span; however, it is during adolescence that society expects young people to become a “whole people in their own right” (Erikson, 1968, p.87). The expected result of developing this sense of identity is to provide one with the resources to address issues of genuine intimacy, generativity, and integrity in the adult years of life. And it is the satisfactory resolution of issues of basic trust, autonomy, initiative, and industry during infancy and childhood that enables one to grapple with the identity formation process of adolescence.

Erikson (1968) identified occupational, ideological, and sexual values as the primary avenues through which young people come into relationship with society. These issues demand negotiation and meaningful resolution of choices. The process includes the identification of and unconscious incorporation into one’s personality the characteristics of other persons. Identity formation occurs when the individual selects from these images and identifications in accordance with personal beliefs, interest, and talents (Kroger, 1989). Erikson (1963a) represented the Identity versus Identity confusion stage as involving a conflict between the need to attain a sense of self-integration (ego identity) and the need
to meet the diffuse external demands of society and to determine one’s place within it (identity diffusion) (Durkin, 1995).

Adolescence is a period of psychosocial moratorium during which the individual asks, "Who am I?", "Where am I going?", and “What am I going to do with my life?” (Erikson, 1968). Erikson (1963a) first used the term ego identity as he sought to describe the central means by which an individual comes to experience a sense of being "at home" in the self. This includes being at home in one's bodies, with one's unique blends of psychological drives and defenses, and in one's own cultural and societal neighborhood. Further, the concept included recognizing and being recognized by others “who count.” Thus, ego identity, for Erikson, is a tripartite entity, an interaction of biological givens, idiosyncratic personal biography, and societal response within a broader historical frame that optimally gives coherence, meaning, and continuity to one’s life and to one’s life experiences (Kroger, 1989).

Stage VI Intimacy versus isolation. For Erikson, intimacy in young adulthood encompasses the ability to fuse one's identity with someone else’s without fear of losing yourself. Intimacy involves the desire to commit oneself to a relationship, even when such commitment may call for personal sacrifice or compromise. To Erikson, genuine intimacy is not possible until issues of identity are resolved. Drawing upon the concepts of Martin Buber’s ‘I’ and ‘Thou’, Moustakas (1974) captures the character of genuine intimacy in the following passage:
Growth of the self requires meetings between I and Thou, in which each person recognizes the other as he is; each says what he means and means what he says; each values and contributes to the unfolding of the other without imposing or manipulating. And this always means some degree of distance and independence. It does not depend on one revealing to another everything that exists within, but requires only that the person be who he is, genuinely present. (p. 92)

The ego strength resulting from this deep engagement with another is Love—devotion and commitment to self and partner, calling for sacrifice and compromise. Avoidance of contacts that allows for intimacy leads to isolation from others. An ideal balance between intimacy and isolation results through a relationship that allows time for both withdrawal and communion between partners (Kroger, 1989).

**Stage VII Generativity versus Stagnation.** Taking the strength found in love and intimacy, at this stage adults are driven by the need to be needed. They invest their energy in society at large by caring for offspring, making social contributions, and providing for future generations. Erikson did not imply that generativity could be accomplished only through parenting. “It resides also in the desire of an autonomous ‘I’ as part of an intimate ‘we’ to contribute to the present and future well being of other life cycles” (Erikson, cited in Evans 1967, p. 52).

The counterpart of generativity is stagnation or self-absorption, whereby personal comfort becomes the primary motivator for action. When this resolution
occurs, individuals often begin to indulge themselves as if they were their own, one and only child. Therefore, a balance between generativity and self-absorption is necessary; the ratio needs to favor the more positive pole for healthy development to proceed (Kroger, 1989).

**Stage VIII Integrity versus Despair.** The final act of the psychosocial stages requires facing the developmental task of balancing integrity with despair. Erikson (1963a) poses that this resolution occurs in old age. More difficult to define than preceding stages, integrity “is the acceptance of one’s one and only life cycle as something that had to be and that, by necessity, permitted of no substitution….In such final consolidation, death loses its sting” (Erikson 1963a, p. 268). An old age favoring integrity has as its ego strength Wisdom. This involves wisdom of mature judgement and a reflective understanding of one’s own place in the scheme of things.

The potential for despair is the counterpoint to integrity. A life culminating in despair finds remaining time too short to locate a different path toward a more satisfying conclusion. This may result in elderly individuals who show senile symptoms of depression, hypochondria, and paranoia; rationalized bitterness and disgust can mask that despair (Kroger, 1989).

This brief review serves not as a definitive explication of Erikson’s theory, but to provide foundations to understanding the concepts of ego strengths and their contributions of adolescent development.
Psychosocial Ego Strengths

Erikson first investigated the “virtues” while examining the developmental roots and later the evolutionary rationale of certain basic human qualities. He contended that the term “virtue” suggests strength, restraint, and courage. In defining virtue, Erikson (1964) asked:

What ‘virtue goes out’ of human being when he loses the strength we have in mind, and ‘by virtue of’ what strength does man acquire that animated or spirited quality without which his moralities become mere moralism and his ethics feeble goodness?”. (p. 113)

Thus, virtue became defined as certain human qualities of strength, which are related to that process by which ego strengths may be developed from stage to stage and imparted from generation to generation. Hope, Will, Purpose, and Competence are considered the rudiments of virtues developed in childhood. Fidelity is considered the adolescent virtue, and Love, Care, and Wisdom are the central virtues of adulthood. Erikson (1964) suggested that these qualities depend on each other, and each virtue in the schedule of all virtues is vitally interrelated to other aspects of human development, including the psychosocial crises and the steps of cognitive maturation. Yet, this component of Erikson’s broader psychosocial theory has received minimal attention. The absence of scholarly discussion on this topic is significant because, theoretically, the ego strengths should provide evidence of psychosocial stage resolution (Markstrom, et al., 1997).
Erik Erikson (1964) postulated that ego virtues or ego strengths are instinctual, inherent, and internal strengths gained by healthy individuals. He contended that all ego strengths are present throughout every stage of life. The potential for each strength to become fully actualized heightens toward the end of the corresponding life stage and provides evidence of successful stage resolutions. Erikson (1964) asserted that there are eight distinct and essential ego strengths throughout the life cycle and that each strength demonstrates an ascendance in association with positive resolution of its corresponding psychosocial crisis. The eight strengths are Hope, Will, Purpose, Competence, Fidelity, Love, Care, and Wisdom.

**Hope.** Hope, the ego strength that emerges from trust, is fundamental to life and living, and provides the individual with an instinctive feeling of certainty in the social context (Erikson, 1968). Hope emerges from a trustworthy relationship with the first love object, and is verified through trustworthy others and experiences (Erikson, 1964). Hope is necessary to envision a positive, worthwhile future, and to develop a particular kind of faith associated with adulthood (Erikson, 1968). It includes a degree of personal confidence in oneself, in others, and in one’s environment. An extreme sense of trust results in maladaptive tendency toward sensory over-stimulation such as “psychotic character” (Erikson, 1963a, p. 221).

A predominance of mistrust is characterized by a sense of deprivation or abandonment and a tendency toward withdrawal (Erikson, Erikson, & Kivinick,
Withdrawal, the antipathy of trust and hope, is likely associated with the absence of cognitive and emotional anticipation (Erikson, 1985). Erikson (1968) emphasized that a proper sense of trust, trustworthiness, and hope is a pervasive need across the life span. He wrote, “I am what hope I have and give” (p. 114).

**Will.** Like hope, will is fundamental to life and to the ego’s ability to remain intact (Erikson, 1964). This ego strength emerges from a successful resolution of autonomy vs. shame and doubt, which can occur as early as age 2 or 3 years. A successful completion of stage two will produce an increased sense of self-control, cooperation, willpower, and freedom of self-expression. Will is not the same as "willfull", but rather is defined as "the unbroken determination to exercise free choice as well as self-restraint" (Erikson, 1964, p. 119). This ego strength is maintained through the knowledge that one has both sustained and controlled drive and determination. Compulsivity and impulsivity are the antipathy of autonomy and will, and have the potential to paralyze will when "aggravated and interlocked" (Erikson, 1985, p. 78). The failure to gradually release the child to autonomy heightens the possibility of antipathy and compulsive behavior. The resolution of autonomy versus shame and doubt is vital to identity development in that “the question is always whether we remain the masters… by which things become more manageable or whether the rules master the ruler” (Erikson, 1968, p. 112).
**Purpose.** Initiative yields to purpose, the third ego strength to mature. It becomes relevant between the ages of 4 to 7 years when a child is becoming capable of building upon a sense of autonomy and trust. Initiative is constructed through opportunities to begin and follow through on tasks. It is reflected in purposefulness, ambition, and self-will. Purpose is defined as "the courage to envisage and pursue valued goals uninhibited by the defeat of infantile fantasies, by guilt and by foiling fear of punishment" (Erikson, 1964, p. 122).

**Competence.** Industry becomes salient during the grade school years when children are expected to learn and to incorporate basic skills to bring a task to completion. A sense of industry contributes to the ego strength of competence. This ego strength allows the child to freely utilize abilities and intelligence in task completion, without hindrance from the fear of failure (Erikson, 1964). Erikson argued that competence will become workmanship in adulthood, and that workmanship is necessary to maintain the ego's power. Exposing the child to meaningful components of culture and its technologies provides preparation for cooperative participation in the social environment (Erikson, 1968). Without competence, the three previous ego strengths cannot fully prepare the child for adult roles and responsibilities. An extreme excess of industry results in a tendency toward narrow virtuosity. A lack of industry results in inertia, which is the antipathy of industry and competence. It brings a sense of failure and presents a danger in curtailing productivity (Erikson, 1985). Erikson
(1968) wrote that a sense of industry is vital to identity development in that a person believes, “I am what I can learn to make work” (p.127).

**Fidelity.** In the transition from adolescence to adulthood, fidelity, defined as "the ability to sustain loyalties freely pledged in spite of the inevitable contradictions of value systems" (Erikson, 1964, p. 125), characterizes the successful resolution of the identity crisis. Loyalty and commitment, two hallmark traits of fidelity, can be observed in older adolescents' affiliations with ideological sources, such as social concerns groups, political movements, and religious organizations. Indeed, Markstrom-Adams, Hofstra, and Dougher (1994) found that measures of ideological identity commitment (as an indicator of fidelity) were related to membership in certain religious organizations. Fidelity is conceived as a form of energy that is attached to ideological institutions provided by society (Erikson, 1963b). Society must provide ideological institutions and, in return, aging institutions benefit from the energy and change brought by youths' revisions and advancements of tradition, technology, and other components of a cultural era (Erikson, 1964; 1968).

The opposite of fidelity is role repudiation, which is observed in diffidence and defiance (Erikson, 1985). Diffidence is characterized by hesitance or reluctance to select and commit to identity alternatives, as well as being observed in lack of self-confidence, insecurity, and timidity. Defiance refers to a preference toward a negative identity (an undesirable identity according to social standards).
Love. Love, the sixth ego strength to reach maturity, evolves from the establishment of intimacy in early adulthood. Erikson (1964) defined love as “the greatest of human virtues, and, in fact, the dominant virtue of the universe” (p. 127). He stated that love is "the mutuality of mates and partner in a shared identity, for the mutual verification through an experience of finding oneself, as one loses oneself, in another….For this reason, love in its truest sense presupposes both identity and fidelity” (p. 128). Fidelity establishes that the individual is capable of making and maintaining commitments to ideological sources. With love, the ability to commit is transferred to mutual, reciprocal, and meaningful relationships between equals (Kroger, 1989). The opposite of intimacy and love is exclusivity (Erikson, 1964).

Care. Care, the ego strength to emerge from generativity in adulthood, is love that has widened from young adulthood. Erikson (1964) suggested that “care is the widening concern for what has been generated by love, necessity, or accident; it overcomes the ambivalence adhering to irreversible obligation” (p.131). Erikson contended that care is expressed as one transmits hope, will, purpose and competence to household and communities. It seems that as people transmit strengths, they also impart meanings to the child’s experiences and convey logic much beyond the literal meaning of the words. Gradually the caring person outlines a particular world image and style of leadership such as when an elder mentors a young person. Rejectivity is the opposite of generativity.
and care, and is defined as an unwillingness to care about others or to not take care of others (Erikson, 1964).

**Wisdom.** Wisdom is the ego strength that emerges from integrity and signifies an appreciation of accumulated knowledge and experience within the contexts of life’s impending closure (Erikson, 1964, 1985). In many ways, wisdom is a particular form of faith that is a recapitulation of hope—it maintains and conveys the integrity of experience, in spite of the decline of bodily and mental function. Hence, Erikson (1985) called wisdom the “last possible form of hope” (p. 62). The opposite of wisdom is disdain, which is defined as “a reaction to feelings (and seeing others) in an increasing state of being finished, confused, helpless” (Erikson, 1985, p.61).

**Ascendance of Ego Strengths**

Ego strengths that develop in the early years continue to develop in connection with later ego strengths (Erikson, 1985) and contribute to successful accomplishment of later psychosocial crises. An ego strength’s ascendance begins when an individual is physiologically, cognitively, and emotionally equipped. When the appropriate psychosocial crisis has been successfully resolved, there is greater potential that the corresponding ego strength will flourish. Ascendance of ego strengths occurs with internal preparedness and successful completion of associated psychosocial crises; it also requires a unique interdependence between the individual and the surrounding social environment (Erikson, 1965). Erikson (1964) referred to this process as “socio-gentic
evolution.” He purported that “all basic virtues can arise only in interplay of a life stage with the individuals and the social forces of a true community” (p. 3).

Faith Involvement

Erikson (1997) noted that the development of trust and hope in infancy serves as building blocks to fidelity in adolescence and faith in adulthood and he regarded religion as one factor that facilitates this process (Erikson, 1968). He regarded fidelity as an expression of faith in adolescence that reaches ascendance with successful resolution of the identity crisis.

Religious and or faith involvement contributes to a positive identity since it is associated with diminished potential for involvement in behavioral problems (Booth & Martin, 1998). Thomas and Carver (1990) conducted a review of the literature on religiosity in adolescence and reported a negative relation between religious involvement and frequency, intensity, and duration of antisocial behaviors. They also reported positive relations between social competence and religious involvement.

Vaillant (1993) linked resilience with faith and hope by stating, "Hope and faith are simple words, but they encompass an essential facet of resilience...hope... the psychic balm on which resilience depends" (p.314). In a study on religious involvement and adolescent psychosocial development, Markstrom (1999) found that the highest levels of hope were associated with males who were in a Bible study group and the lowest levels of hope were found among female who were not in Bible study group. In respect to religious
attendance, Markstrom (1999) also found that more frequent attendance was associated with higher ego strengths. The findings from this study were consistent with Erikson’s (1964) observation that hope is a precursor to adult faith and to Vaillant’s (1993) assertion that resilience depends on hope.

Benson, Donahue, and Erickson (1989) linked faith with gender and race. In a literature review on adolescence and religion from 1970 to 1986, the researchers reported a decline in religiosity as adolescents increased in age from 10 to 18, but that females, Hispanic males, and Blacks of both genders tended to stay higher in their religiosity with increasing age.

Hanson and Ginsburg (1988) followed 30,000 sophomores for two years and reported that “values” had a significant impact on later achievement, in part by affecting student effort. Those values reflected parent’s educational expectations for their children, students’ feelings of control over their future, and for Black youth, young people’s values about the importance of religion. Together those “values” were twice as important as family socioeconomic status in explaining the students’ current performance, and 50% stronger than SES in predicting two-year changes in academic performance in Hanson and Ginsburg’s study.

**Importance of Faith in One’s Life**

There is an indication that religiosity is also related to resilience. In Emmy Werner’s longitudinal study on resilience in at-risk children in Kauai, low-income resilient youth did draw on numerous sources of support, including faith (Werner
Religion was identified in several studies as a protective factor used by at-risk youth that likely fostered resilient outcomes (Clark, 1995; Leigh & Bechtold, 1997). For example, Lorch and Hughes (1885) reported that religion's importance to youth was a more important predictor of their alcohol and other drug use than was attendance at religious services.

Benson and Donahue (1989) re-analyzed the data from roughly 50,000 high school seniors in each of several "Monitoring the Future studies" in the late 1970s and mid-1980s. They found that the degree of importance placed on religion was the second most significant predictor (after the number of nights spent out having fun) of young people's alcohol use, other drug use, and of school truancy.

In a review of the research, Benson et al. (1989) concluded that adolescents for whom religion was an important life influence were consistently less likely to engage in sexual intercourse or use drugs. They were also somewhat less likely to engage in delinquent behavior, and consistently more likely to be altruistic in their attitudes and behavior than youth for whom religion was not important. More recently, Resnick, Bearman, Blum, Bauman, Harris, Jones, Tabor, Beuhring, Sieving, Shew, Ireland, Bearinger, and Udry (1997) reached similar conclusions in their study of 12,000 U.S. adolescents. Juhasz and Sonnenshein-Schneider (1987) found that, for 13-19 year-olds, the more religious adolescents were, the more importance they placed on the opinions of
their parents, friends, and religious authorities about whether to have sexual intercourse.

Finally, Donahue and Benson (1995) analyzed data from more than 34,000 6th through 12th graders and reported that the importance of religion had modest positive correlations (mid-.20s) with altruistic values and behaviors. They also reported negative correlations with risky behaviors such as alcohol and other drug use and early sexual intercourse. Perhaps more important, they reported that the impact of acts of having religion was much stronger on influencing positive outcomes (increasing altruistic attitudes and behavior) than on influencing negative outcomes (risky behavior). They speculated that religion exerts its influence because of its socialization pressure to avoid health-compromising behavior and to engage in prosocial behavior such as caring for or serving others.

Historically, some groups have exhibited resilience in the face of change, and some have identified spiritual connectedness as a major source of strength. In particular, research has demonstrated the importance of strong religious affiliation as a source of resilience. For example, Brody and Flor (1998), using structural equation modeling, found that greater maternal religiosity was directly linked with more maternal use of “no nonsense” parenting, more harmonious mother-child relationships, and more maternal involvement in the child’s school activities. Indirect effects between religiosity and children’s self-regulation also emerged through former association with each of the proximal parent-child
variables (game playing, storytelling, and model-building behavioral tasks). These impressive results surely indicate that a study of religion is necessary in adolescent development.

**Academic Achievement**

A variety of personal variables have been shown to affect young people’s academic achievement. These include gender, SES, race, and age and grade and psychosocial factors such as self-esteem.

Jessor, Van Den Bos, Vanderryn, Costa, and Turbin (1995) reported that higher levels of commitment to learning in the 7th through 9th grades are related to lower levels of problem behavior three years later in the 10th through 12th grades. An important conclusion from this work was that protective factors such as expectancies for success and a positive orientation to school outweighed the negative effect of also having early risk factors. For students who had high levels of protective factors, even added risk in their lives only minimally increased the chance of later problem behavior. In short, these specific assets may be more powerful than risks, if young people have assets at high level. This last finding lends credence to considering the ego strength as assets that contributes to academic success.

The basic virtue, which arises out of life’s interplay and the social forces of a true community according to Erikson, is “competence”. One socially accepted definition of competence among adolescents is intellectual development that manifests itself in grade-point-averages. Williams and McGee (1991), in a study of
960 adolescents found that a more positive perception of personal strengths related to higher academic achievement. Further, Hay (1993) in a study of gifted students, found that higher academic achievement is related to increased goal setting, positive expectations for success, personal control, and skills in managing stress. The findings from these studies were consistent with Erikson’s hypothesis that ego strength is a psychosocial factor that should be considered in a study related to predictors of academic achievement.

**Gender.** Despite the well documented gaps between adolescent females and males in math and science achievement (Eccles, 1997), females overall have more positive attitudes toward achievement in school. Lee and Smith (1993) suggested that females seem to be more interested and engaged in schools than males. In a study of a diverse sample of 7th graders followed through the 8th grade, Roeser and Eccles (1998) found that females valued education more than did males and African Americans of both genders valued education significantly more than did White adolescents.

**Socioeconomic Status (SES).** Achievement has been shown to be “strongly associated with SES (Lee & Smith, 1993). However, researchers look at the relative impact of SES compared to other variables, the role of SES seems to diminish. For example, in a sample of socioeconomically diverse Australian adolescents, Marjoribanks (1996) found that parents’ educational aspirations for their children were three times more important than SES in affecting the adolescents’ own educational aspiration. In the United States, Wilson-Sadberry,
Winfield, and Royster (1991), in a large study of Black high school seniors followed for four years, reported that the effect of having plans for postsecondary education was three times stronger than the effect of SES on actual enrollment in college. Clearly, it appears that SES by itself does not doom young people to academic failure. Therefore, the question becomes "What beyond SES contributes to academic achievement what is the extent of the relative contribution of these variables to the prediction of grade-point-average?"

**Race.** Some racial and ethnic differences in academic achievement have been reported. For example, Fuligni (1997) reported consistent differences between foreign-born recent immigrants and native students across ethnic groups. An ethnically diverse sample of more than 1,000 8th and 10th grade students that adolescents from immigrant families valued academic success more than did native students do and they had higher educational aspirations. Huang and Waxman (1995) reported that Asian American middle school students had higher levels of achievement motivation and parent involvement than did White students. Similar to Asian American parents, White and Hispanic American parents have more influence than do African American parents on their adolescent children’s academic success. Moreover, for White students, parents and peers often converge in supporting school achievement, whereas for Black students, parental support for school success is often countered by peers’ lack of support or even hostility to success (Steinberg, Lamborn, Dornbusch, & Darling, 1992).
Age and Grade. Elmen (1991) concluded that there is a curvilinear relationship between age and social concerns about academic achievement. Anxiety about the social consequences of academic success, conformity to peer pressure not to work hard for school success, and gender role ideology about achieving at school are thought to be more intense during early adolescence and then drop in later adolescence (Scales & Leffert, 1999). During early adolescence, there are numerous physical and emotional changes that have an impact on achievement motivation, particularly as mediated through gender.

In summary, the literature points to the expectation that ego strength and faith development can be expected to impact the attainment of indicators of success in life. One important criterion of performance on success among high school students is academic achievement. This study was designed to examine the relative contribution of faith and ego strength on academic achievement.
CHAPTER III

Methodology

High school students in a county selected for its racial and economic diversity were invited to complete a self-report instrument designed to measure the variables of interest. Grade-point- average was obtained from the school records and served as the outcome or dependent variable of interest in the study.

Sample Description

Participants

The study was conducted in Accomack, Virginia, a county that has approximately 32,000 residents, including 1320 youth between the ages of 15 to 17 (Kids Count in Virginia, 1999). In 1999, there were 633 Whites, 663 Black, and 24 others between the ages of 15 and 17 years in Accomack county. Gender is nearly equally distributed with approximately 638 females and 682 males.

Accomack county is economically diverse but overall has a low-per capita income ($17,861 in 1996). The unemployment rate for Accomack was 9.5% in 1997 compared to the Virginia average of 4%. Approximately 58% of Accomack county’s children live in poverty (Kids Count in Virginia, 1999). Related to this is a high number of teenage parents; approximately 51.8% of the children in the county are born to single mothers. In a calendar year, fifty-three babies are born
to every 1000 Accomack teens between the ages of 15-17 (Kids Count in Virginia, 1999).

Accomack county has a school dropout rate that is high. In 1997, 10% of the 9th to 12th graders dropped out of school compared with a statewide rate of 5%. Kids Count of Virginia, which reports its data based on 1 as low and 135 as high, reported that Accomack county was ranked number 111 in school suspension. It was listed as having one of the highest suspension rates in the State of Virginia (Kids Count in Virginia, 1999).

Additional variables that are related to this study of psychosocial development include the rates of child abuse, violent crime, and delinquency. In Accomack county there were approximately 12 confirmed cases of child abuse or neglect per 1000 children reported in 1997. The county ranked number 109 of 135 counties, cities and townships who reported child abuse and neglect cases. They ranked number 128 out of 135 in violent death rates among teens aged 15-17 and number 95 in juvenile intake cases involving delinquency among youth ages 12-17. Finally, Accomack County School Division ranked number 103 of 135 school divisions with incidents of students possessing weapons in school, and 89th out of 135 for juveniles arrested for violent crimes (Kids Count in Virginia, 1999).

In general, Accomack county can be described as predominately a low income rural community that has many young parents who dropped out of school. Because of its racial and economic diversity, and because it has several
risk indicators that are linked to important psychological outcomes for youth, Accomack was selected as a suitable community for the proposed study.

There are three high schools in Accomack county. Nandua High School mirrored the diversity of the county, thus it was chosen as the selected site. There were 600 students enrolled in the high school. There were 168 Black females, 141 Black males, 136 White females, 139 White males, and 16 others.

Data Collection

Data included students’ reports of behaviors and perceptions on a self-report instrument that was designed to measure (1) importance of faith; (2) involvement in faith related activity; (3) ego strength (hope, will, purpose, competence, fidelity); and (4) cumulative grade-point-average. Subjects also completed Snyder, Harris, Anderson, Holleran, Irving, Sigmon, Yoshinobu, Gibb, Langelle, and Harney’s (1991) Future’s scale, to be used for future research.

Accomack county has three high schools with one located in a remote island. Of the remaining two schools, the one chosen for this research was centrally located and contained a diverse population. The sample mirrored the county’s high school population with a race comparative sample of 47% Black and 51% White (2% missing data). Likewise, the gender representation of the sample was 41% male and 58% female (1% missing data). The county’s racial breakdown was 50% (Black), 48% (White), and 2% other. Broken down by gender the county’s population is 48% female and 52% male.
All youth enrolled in this school were potential participants in this study. Since all students were expected to take English, a random selection of English classes was invited to participate in order to sample the school population. Since all students were enrolled in English classes for one semester in each grade level, and since no student could be enrolled in two English classes simultaneously, all English classes in session during the semester (in which data was gathered) were invited to participate in the study. If all male and female students had participated, this would have resulted in a sample of approximately 600 subjects. Although students of all racial/ethnic in each randomly selected class were invited to participate, only data from Black and White participants were retained. Twelve questionnaires were not included in the data analysis because the respondents were of a racial/ethnic group other than Black or White.

**Selection Process**

In early 2001, the principal of Accomack County High School initiated a plan to study the impact of psychosocial development on academic achievement. He was interested in conducting research that would enable the school to better meet the academic needs of its students. The author developed a research design, visited with the principal of the high school and presented the research plan. He presented the plan to the county’s School Administrative office for review and for their approval to conduct the research.

A letter of acceptance of the research design was obtained from the high school and then submitted to Virginia Tech’s Human Subjects Committee for
approval. Following University’s Human Subjects Committee approval, several steps were taken to obtain the data.

1. The researcher held an administrative meeting with the principal, guidance counselors, and teachers to provide a description of this study and documentation of permission to analyze the data as part of her doctoral dissertation.

2. The guidance counselor invited all available classes to participate in the study. In this school, a class that all students were required to complete each year was English. Hence, English classes were used as the sampling base and as the setting for participants to complete the instruments.

3. The researcher held a meeting with instructors of the classes to explain the project, to answer questions, to make arrangements to collect data in their classes, and to schedule data collection sessions.

4. The researcher contacted all instructors whose classes were participating in the study one-week prior to their scheduled data collection sessions to remind them of the approaching date and time of these sessions.

5. The principal of the school sent “Parent’s Permission Letters” and the “Informed Consent for Parent/Guardians of Student Participants” information home with the student informing parents of the project and giving them the opportunity to “opt-out” their child. The parents’ information was sent home one week prior to the scheduled data collection session.
6. On the day of the data collection session, the author met with the instructors to answer questions, to give them the questionnaires, and to be available if there were questions during the day.

7. The instructors distributed and collected the questionnaires from the students. The researcher was not available in these sessions. At the beginning of each data collection session, potential participants were invited to participate and they were informed of the confidentially of information they would provide.

8. Those individuals willing to participate in the study received instructions regarding the completion of the questionnaire forms.

9. Those individuals willing to participate completed the instrument as instructed.

10. Those individuals completing the questionnaire detached an index card that had been pre-coded to match a code number in order to match data on grade-point-averages with the questionnaire responses. The card requested the individual’s name. The classroom teacher gave the card to the guidance counselor. Using school records, the guidance counselor provided the cumulative grade-point-average with the appropriate individual. Once the grade-point-average was matched with the student’s card, the guidance counselor transferred the questionnaire number and its matched grade-point-average to a separate report form.

9. Answers to questions were kept confidential and questionnaire forms identified by the randomly assigned subject code number only. The principal
selected the guidance counselor, the only person that had access to both the names and code numbers to record/GPA with questionnaire forms.

Variables of Interest

The following section describes the instrument selected to measure the variables of interest. The instrument, presented in Appendix H, will be described in terms of the following dimensions: (a) the construct being measured; (b) content and scoring; and (c) psychometric properties.

Independent Variables

Personal characteristics. Participants were asked to complete a series of questions relating to various background characteristics: gender, age and grade level, race, whether they had free or reduced lunch status, and the highest level of parents' education.

Involvement in Faith Activities. Following procedures used by Markstrom (1999), respondents were asked, "How often do you participate in an activity related to the faith of your choice?" Five response options were provided: (a) at least once a week, (b) at least once a month, (c) only on most important holidays related to my faith, (d) rarely, and (e) never.

Perception of Importance of Faith. Following the procedure used by Booth and Martin, (1998) participants were asked to index the or respond to the question: "How important is the faith of your choice in your life." Four response options were provided: (a) not at all, (b) somewhat, (c) moderately and (d) very.
Ego Strengths. The Psychosocial Inventory of Ego Strengths (Markstrom et al., 1997) was selected to measure ego strengths. The subscales of Hope, Will, Purpose, Competence, and Fidelity were used.

The Psychosocial Inventory of Ego Strengths (Markstrom et al., 1997) was created out of the need to develop a valid and reliable measure to be used among adolescents and adults as an overall indicator of those ego strengths described by Erikson. These subscales included hope, will, purpose, competence, and fidelity, love, care, and wisdom. In this study only the first five ego strengths were examined. Each ego strength is measured by eight questions within the subscale, for a total of 40 items. The self-report items were arranged on a Likert-type scale with responses that range from 5 (describes me very well) to 1 (does not describe me well).

Cronbach’s alpha of the subscales of the revised PIES ranged, developed and normed by Markstrom et al. (1997), ranged from .52 for will to .75 for fidelity. Overall, Cronbach’s alpha for the 64-item measure was .94.

Dependent Variable

The dependent variable of interest in this study was grade-point-average (GPA). A school staff member collected the grade-point-average from school records.

Data Analysis

The data were analyzed the Statistical Package for the Social Sciences (SPSS) for Windows (1998) computer program. Reliability for all measures were
assessed via Cronbach’s alpha. The means and standard deviations were computed on all independent variables (faith involvement, faith importance, and ego strength) and broken down by grade, race, gender, and socioeconomic status (free or reduced lunch) to determine the distribution of scores.

Bivariate correlations (Pearson's $r$) were computed to determine the strength of the linear relationships between grade-point-average and the psychosocial development scores of ego strength, faith involvement, faith importance, and background variables of gender, race, grade, mother’s education, father’s education, and socioeconomic status (free or reduced lunch). The descriptive statistics were used to compare the various characteristics of the Black adolescents from those of the White adolescents.

Finally, the data was analyzed using linear regression with block entry. Three blocks were entered (background, faith, and ego strength variables) on the criterion grade-point-average. The introduction of each group of variables in an additional step allowed the design to show the contribution of these variables to in the prediction of grade-point-average.
CHAPTER IV

Results

Grade-point-average (GPA), a key indicator of academic success, was the dependent variable or criterion in this study. The independent variables or predictors of GPA included ego strengths, faith involvement, faith importance, and the background variables of (1) race (Black, White), (2) gender, (3) social status as indicated by whether students received free or reduced lunch status (yes, no), (4) grade in school (9, 10, 11, 12), (5) mother’s educational level and (6) father’s educational level.

The independent variables of primary interest (ego strengths) included five of the eight subscales of the Psychosocial Inventory of Ego Strengths (PIES) (Markstrom et al., 1997). They were hope, will, purpose, competence, and fidelity. These three sets of independent variables were entered into a series of hierarchical regression models as the primary means of analysis in this study. This chapter presents the results of the data analysis for each research question as well as data describing the respondents.

Description of the Sample

High school students in a rural county in Southeastern Virginia were invited to participate in the study. The school’s guidance counselor invited eight English teachers to have their classes participate in the study. Students in these classes were given letters about the project to take home to their parents. The letter from
the principal explained the research project and asked parents to return a consent form if they did not want their child to participate in the project. Only one parent returned the letter taking their child out of the project. However, each potential participant was given the option of not completing the instrument. Three hundred and twenty-five questionnaires were given to eight teachers to distribute to members of their classes. One teacher elected to not distribute the questionnaire, indicating that students in his classes were not interested in completing the instrument. Of a possible 325, two hundred and seventy-three questionnaires were completed representing an 84% return rate. Two of the 273 returned questionnaires were not completed and another two were eliminated because their GPA was not provided. All but 12 of the questionnaires were completed by Black or White students. These 12 questionnaires were excluded from the data analysis in order to facilitate comparison between the two dominant racial groups. Table 1 presents a profile of the sample broken down by race. As shown, females outnumbered males across both racial groups and comprised of 59% of the entire sample. The educational levels of Black parents were lower on average than for White parents and this was true for both mothers ($\chi^2 = 18.225, p = .001$) and fathers ($\chi^2 = 16.358, p = .01$). The difference was more pronounced for mothers. The number of students receiving free lunch differed significantly across racial groups ($\chi^2 = 122.354, p = .001$). As shown in Table 1, 74% of the Black students were on free or reduced lunch in contrast to only 12% of the white respondents. The importance of faith to the respondents also differed significantly by race ($\chi^2$
### Table 1

**Demographic Characteristics by Race**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Category</th>
<th>n = 121 Black (0)</th>
<th>n = 131 White (1)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Males (0)</td>
<td>45 37%</td>
<td>58 44%</td>
<td>103 41%</td>
</tr>
<tr>
<td></td>
<td>Females (1)</td>
<td>76 63%</td>
<td>73 56%</td>
<td>149 59%</td>
</tr>
<tr>
<td>Grade</td>
<td>9</td>
<td>39 32%</td>
<td>44 34%</td>
<td>83 33%</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>19 16%</td>
<td>27 21%</td>
<td>46 18%</td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>39 32%</td>
<td>33 25%</td>
<td>72 29%</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>24 20%</td>
<td>27 21%</td>
<td>51 20%</td>
</tr>
<tr>
<td>Mother’s Education</td>
<td>Did not complete High School</td>
<td>25 22%</td>
<td>7  5%</td>
<td>32 13%</td>
</tr>
<tr>
<td></td>
<td>Completed High School</td>
<td>38 33%</td>
<td>38 30%</td>
<td>76 31%</td>
</tr>
<tr>
<td></td>
<td>Completed some College</td>
<td>25 22%</td>
<td>32 25%</td>
<td>57 23%</td>
</tr>
<tr>
<td></td>
<td>Completed College</td>
<td>28 24%</td>
<td>52 40%</td>
<td>80 33%</td>
</tr>
<tr>
<td>Father’s Education</td>
<td>Did not complete High School</td>
<td>22 21%</td>
<td>16 13%</td>
<td>38 16%</td>
</tr>
<tr>
<td></td>
<td>Completed High School</td>
<td>56 52%</td>
<td>51 40%</td>
<td>107 46%</td>
</tr>
<tr>
<td></td>
<td>Completed some College</td>
<td>17 16%</td>
<td>19 15%</td>
<td>36 15%</td>
</tr>
<tr>
<td></td>
<td>Completed College</td>
<td>12 11%</td>
<td>41 32%</td>
<td>53 23%</td>
</tr>
<tr>
<td>Free Lunch</td>
<td>Yes (0)</td>
<td>89 74%</td>
<td>11  9%</td>
<td>101 40%</td>
</tr>
<tr>
<td></td>
<td>No (1)</td>
<td>32 26%</td>
<td>119 91%</td>
<td>151 60%</td>
</tr>
<tr>
<td>Faith Participation</td>
<td>Never</td>
<td>5  4%</td>
<td>14 11%</td>
<td>19  8%</td>
</tr>
<tr>
<td></td>
<td>Rarely</td>
<td>23 19%</td>
<td>34 26%</td>
<td>57 22%</td>
</tr>
<tr>
<td></td>
<td>Only on most important holidays</td>
<td>11  9%</td>
<td>7  5%</td>
<td>18  7%</td>
</tr>
<tr>
<td></td>
<td>At Least once a month</td>
<td>23 19%</td>
<td>22 17%</td>
<td>45 18%</td>
</tr>
<tr>
<td></td>
<td>At least once a week</td>
<td>58 48%</td>
<td>53 41%</td>
<td>111 44%</td>
</tr>
<tr>
<td>Faith Importance</td>
<td>Not at All</td>
<td>0  0%</td>
<td>16 12%</td>
<td>16  6%</td>
</tr>
<tr>
<td></td>
<td>Somewhat</td>
<td>15 13%</td>
<td>37 29%</td>
<td>52 21%</td>
</tr>
<tr>
<td></td>
<td>Moderately</td>
<td>26 23%</td>
<td>37 29%</td>
<td>64 26%</td>
</tr>
<tr>
<td></td>
<td>Very</td>
<td>77 65%</td>
<td>40 31%</td>
<td>117 47%</td>
</tr>
</tbody>
</table>

=44.775, p = .001). More than twice as many Blacks as Whites indicated that faith was “very important” to them.

Table 2 presents the means and standard deviations of the scores on the total subscales of the ego strength questionnaire (PIES) broken down by race.

The responses to all 40 questions in the PIES ranged from 1 (minimum) to 5
(maximum). The 40 questions comprised five subscales (eight questions in each subscale). The means for the five subscale variables ranged from 3.71 to 3.84 for the Black sample and 3.62 to 3.80 for the White sample. Blacks in this sample were above the population mean with the ego strength of hope and purpose; whites were above the population means with competence. The means for both the Black and White samples were about equal for the ego strengths of will and fidelity.

**Table 2**

**Means and Standard Deviations of Ego Strength Variables By Race**

<table>
<thead>
<tr>
<th>Ego Strength Variables</th>
<th>n = 121 Black</th>
<th>n = 131 White</th>
<th>n = 252 Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Hope</td>
<td>3.82</td>
<td>.69</td>
<td>3.62</td>
</tr>
<tr>
<td>Will</td>
<td>3.75</td>
<td>.65</td>
<td>3.77</td>
</tr>
<tr>
<td>Purpose</td>
<td>3.84</td>
<td>.66</td>
<td>3.76</td>
</tr>
<tr>
<td>Competence</td>
<td>3.71</td>
<td>.65</td>
<td>3.80</td>
</tr>
<tr>
<td>Fidelity</td>
<td>3.78</td>
<td>.52</td>
<td>3.78</td>
</tr>
<tr>
<td>Total Ego Strength</td>
<td>3.78</td>
<td>.54</td>
<td>3.75</td>
</tr>
</tbody>
</table>

**Bivariate Correlations Among all Variables**

Pearson product-moment correlations (r) were calculated between all variables (Table 3).
No surprises were found among any of the background variables and their relationships to gender, grade, free lunch status, and race, except the negative correlations between race and faith participation (-.132) and faith importance (-.388) which, as noted above, indicated that Blacks placed more importance on faith and participated more frequently in religious activities than did White students. As has been shown on numerous occasions, GPA has a high correlation with SES and race (e.g., Lee & Smith, 1993) and parents' educational levels (Brooks-Gunn, Guo, & Furstenberg, 1993). Five subscales regarding ego strength were drawn from PIES (Markstrom et al., 1997). The complete PIES instrument appears in the Appendix H. The forty questions used in the scale were answered using a 5-point Likert scale. A response of “5” meant the item described the respondent “very well”, while a score of “1” meant the item described the respondent “not at all.” High numbers on each subscale were indicative of possessing that strength. Each subscale contained eight items and, as shown in Table 3, the subscales correlated highly with each other. The total scores across all five subscales were found to have a Cronbach’s alpha of .89. The reliability estimates for the subscales are shown in the last row of Table 3.

Ego strength subscales were each found to be significantly correlated with GPA. The relationships between GPA and subscales of Competence ($r = .430$, p = .001), and Will ($r = .412$, p = .001) were higher than for Hope, Purpose and Fidelity. All of the ego strengths were significantly related to GPA, i.e., students whose responses to the questionnaire yielded higher scores for ego strength
Table 3

Bivariate Correlations (r) among Demographic Variables and GPA

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Gender (male=0; female =1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
<tr>
<td>2 Race (Black=0; White=1)</td>
<td>-0.072</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Grade</td>
<td>0.049</td>
<td>-0.030</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Mother’s Education</td>
<td>-0.056</td>
<td>0.246**</td>
<td>0.016</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Father’s Education</td>
<td>0.036</td>
<td>0.242**</td>
<td>0.080</td>
<td>0.535**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Free Lunch (yes=0; no=1)</td>
<td>-0.074</td>
<td>0.664**</td>
<td>-0.023</td>
<td>0.386**</td>
<td>0.319**</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Faith Participation</td>
<td>0.027</td>
<td>-0.132*</td>
<td>0.108</td>
<td>0.053</td>
<td>0.049</td>
<td>-0.084</td>
<td>1.000</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>8 Faith Importance</td>
<td>0.052</td>
<td>-0.388**</td>
<td>-0.032</td>
<td>0.060</td>
<td>-0.039</td>
<td>-0.205**</td>
<td>0.529**</td>
<td>1.000</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>9 Hope</td>
<td>0.092</td>
<td>-0.137*</td>
<td>0.085</td>
<td>0.130*</td>
<td>0.131*</td>
<td>-0.087</td>
<td>0.167**</td>
<td>0.224**</td>
<td>1.000</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>10 Will</td>
<td>0.032</td>
<td>0.022</td>
<td>0.089</td>
<td>0.141*</td>
<td>0.144*</td>
<td>0.054</td>
<td>0.090</td>
<td>0.166**</td>
<td>0.640**</td>
<td>1.000</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11 Purpose</td>
<td>0.083</td>
<td>-0.067</td>
<td>0.070</td>
<td>0.128*</td>
<td>0.185**</td>
<td>0.048</td>
<td>0.086</td>
<td>0.157**</td>
<td>0.612**</td>
<td>0.626**</td>
<td>1.000</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>12 Competence</td>
<td>0.065</td>
<td>0.071</td>
<td>0.094</td>
<td>0.233**</td>
<td>0.291**</td>
<td>0.107</td>
<td>0.059</td>
<td>0.082</td>
<td>0.606**</td>
<td>0.676**</td>
<td>0.696**</td>
<td>1.000</td>
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</tr>
<tr>
<td>13 Fidelity</td>
<td>0.121</td>
<td>0.005</td>
<td>0.087</td>
<td>0.055</td>
<td>0.099</td>
<td>0.059</td>
<td>0.145*</td>
<td>0.235**</td>
<td>0.547**</td>
<td>0.542**</td>
<td>0.609**</td>
<td>0.605**</td>
<td>1.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Ego Strength</td>
<td>0.093</td>
<td>0.030</td>
<td>0.102</td>
<td>0.168**</td>
<td>0.203**</td>
<td>0.038</td>
<td>0.131*</td>
<td>0.207**</td>
<td>0.834**</td>
<td>0.838**</td>
<td>0.849**</td>
<td>0.862**</td>
<td>0.774**</td>
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<td></td>
</tr>
<tr>
<td>15 GPA</td>
<td>0.103</td>
<td>0.411**</td>
<td>0.188**</td>
<td>0.365**</td>
<td>0.331**</td>
<td>0.409**</td>
<td>0.090</td>
<td>-0.089</td>
<td>0.280**</td>
<td>0.412**</td>
<td>0.276**</td>
<td>0.430**</td>
<td>0.286**</td>
<td>0.404**</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Mean 3.69 3.14 3.72 3.76 3.80 3.75 3.78 3.76 2.23
SD 1.42 .96 .73 .62 .63 .53 .42 .87
rxx .76 .64 .66 .70 .45 .89

p < .05,  p < .01
N’s range from 252 to 256 since some students omitted answers from the questionnaire
tended to have higher grade-point-averages than those with lower ego strength scores.

Gender, grade in school, and the free lunch status did not show significant correlations to any of the ego strength subscales. Race was found to be significantly negatively correlated with hope ($r = - .137$, $p = .030$), that is, Blacks indicated a higher sense of hope. As indicated in Table 3, both mother’s and father’s educational level showed significant correlations with all of the ego strength variables except fidelity. Parents with more education had children with higher ego strength scores. However, higher parental educational levels did not contribute statistically to higher development of fidelity (the ability to care about self and others) in these respondents.

The faith variables (Importance and Participation) did not yield positive correlations with GPA. However, they did have positive correlations with some of the PIES variables. Both faith participation and faith importance showed positive correlations with hope and fidelity. This suggests that those respondents who more actively participated in their faith expressed higher levels of hope and fidelity. Though moderate in size, this finding lends credence to Erikson’s theory (1968) that hope manifests itself in infancy and is necessary to envision a positive, worthwhile future, and to develop a particular kind of faith associated with adulthood, which he called fidelity.

Hierarchical Regression Analysis for Total Sample. Three blocks were used in the analysis. The first block was the demographic variables that included
gender, race, grade, mother’s education, father’s education, and free or reduced lunch. Because of the high correlation between father’s education and mother’s educational levels, these two variables were averaged to obtain a single index of parental educational level. The second block included the faith participation and faith importance variables. The third and final block included the ego strength (PIES) variables. Two analyses were run; one using the ego strength subscales of hope, will, purpose, competence, and fidelity; and another run using total ego strength. The hierarchical regression with GPA as the dependent variable is summarized in Table 4.

In Step 1, the demographic variables explained 31% of the variance in GPA with race and parents’ education levels contributing the most. It should be noted that multicollinearity of the demographic variables could possibly be an issue since they are highly correlated with each other; race and parents’ education levels were the highest contributors, not surprisingly. As shown in Table 4, students whose parents had higher educational levels had higher GPAs. The faith variables (Importance and Participation), entered in Step 2, did not contribute significantly to the model. When the ego strength subscales were entered into the model in Step 3a, the Will subscale was the only subscale that was found to be a significant predictor of GPA, yet the whole block contributed an additional 12% to the variance in GPA. However, the fact that only “Will” was significant suggests that collinearity is a problem when judging the individual contribution of the ego strength subscales to the prediction of GPA. When the
total ego strength scale was used to replace the ego strength subscales and

Table 4
Summary of Hierarchical Regression Coefficients (Betas) for Variables Predicting GPA (n = 256)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Step 1</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>p</td>
<td>Beta</td>
<td>p</td>
<td>Beta</td>
<td>p</td>
</tr>
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<td>Demographic</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Gender (male=0; female=1)</td>
<td>.157</td>
<td>.005</td>
<td>.155</td>
<td>.006</td>
<td>.127</td>
<td>.014</td>
</tr>
<tr>
<td>Race (Black= 0; White=1)</td>
<td>.228</td>
<td>.002</td>
<td>.229</td>
<td>.004</td>
<td>.230</td>
<td>.002</td>
</tr>
<tr>
<td>Free Lunch (Yes=0; No=1)</td>
<td>.164</td>
<td>.034</td>
<td>.167</td>
<td>.030</td>
<td>.180</td>
<td>.013</td>
</tr>
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<td>Grade Level</td>
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<td>.003</td>
<td>.150</td>
<td>.008</td>
<td>.140</td>
<td>.007</td>
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<tr>
<td>Parents’ Education</td>
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<td>.001</td>
<td>.269</td>
<td>.001</td>
<td>.185</td>
<td>.002</td>
</tr>
<tr>
<td>Faith</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation</td>
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<td>.064</td>
<td>.112</td>
<td>.069</td>
<td>.112</td>
<td>.070</td>
</tr>
<tr>
<td>Importance</td>
<td>-.034</td>
<td>.635</td>
<td>-.093</td>
<td>.168</td>
<td>-.085</td>
<td>.206</td>
</tr>
<tr>
<td>Ego Strength</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Hope</td>
<td>.079</td>
<td>.302</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Will</td>
<td>.259</td>
<td>.001</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Purpose</td>
<td>-.070</td>
<td>.379</td>
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<td></td>
<td></td>
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<tr>
<td>Competence</td>
<td>.120</td>
<td>.166</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fidelity</td>
<td>.005</td>
<td>.942</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Ego Strength</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
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<td></td>
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<td>.332</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td>.001</td>
</tr>
<tr>
<td>R squared</td>
<td>.311***</td>
<td>.323</td>
<td>.444***</td>
<td>.421***</td>
<td>.421***</td>
<td>.421***</td>
</tr>
</tbody>
</table>

***p < .001

entered into Step 3b, it contributed 10% to the prediction of variance in GPA. This model accounted for 42% of the variance in these students’ GPAs.

Regression Analyses by Race. Hierarchical regression analyses were used to estimate the same model separately for White and Black students. The independent variables were the same as before with race serving as comparison groups. Table 5 displays the results of these hierarchical regression models.
In Step 1, parents’ educational level contributed significantly, as was the case in the total sample. The significant betas for sex within the Black sample indicate significantly higher GPA for the girls. The demographic variables accounted for twice the variance (28%) in GPA among Black students as it did for the White students (14%). For neither Black or White students did free lunch status contribute significantly to GPA when controlling for gender, grade and parents’ education.

**Table 5**

**Hierarchical Regression Coefficients (Betas) of White (n = 131) and Black (n = 121) Students**

<table>
<thead>
<tr>
<th>Variables</th>
<th>White Step 1</th>
<th>White Step 2</th>
<th>White Step 3</th>
<th>Black Step 1</th>
<th>Black Step 2</th>
<th>Black Step 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (male=0; female=1)</td>
<td>.088</td>
<td>.272**</td>
<td>.083</td>
<td>.252**</td>
<td>.051</td>
<td>.212**</td>
</tr>
<tr>
<td>Grade</td>
<td>.166*</td>
<td>.197*</td>
<td>.166*</td>
<td>.169**</td>
<td>.163*</td>
<td>.140*</td>
</tr>
<tr>
<td>Parents’ Education</td>
<td>.250**</td>
<td>.344****</td>
<td>.248**</td>
<td>.292**</td>
<td>.145</td>
<td>.251**</td>
</tr>
<tr>
<td>Free Lunch (yes=0; No=1)</td>
<td>.115</td>
<td>.140</td>
<td>.111</td>
<td>.158*</td>
<td>.120</td>
<td>.139*</td>
</tr>
<tr>
<td>Faith Participation</td>
<td>-.009</td>
<td>.267**</td>
<td>.005</td>
<td>.210*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faith Importance</td>
<td>.044</td>
<td>-.060</td>
<td>-.035</td>
<td>-.077</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Ego Strength</td>
<td>.137**</td>
<td>.278****</td>
<td>.139</td>
<td>.335*</td>
<td>.234****</td>
<td>.467****</td>
</tr>
</tbody>
</table>

*R squared

*p < .05   **p < .01   ***p < .001

The faith variables were not significant predictors for the White respondents. However, faith participation did contribute significantly, adding 6% beyond the demographic variables, to the variance to GPA of the Black respondents, indicating that those Black students who participated in their faith were more likely to have higher GPAs.
In Step 3, the total ego strength scores raised the $R^2$ significantly for both White and Black students and the beta weights were comparable in magnitude (.337 vs. .378). The associated beta weights suggest, as before, that those students who expressed greater ego strengths had higher GPAs. At this point in the analyses, the demographic variables were generally, no longer significant for the White sample, but sex, educational levels of parents, and free lunch status remained significant for the Black sample. In contrast, the only significant predictor for the White students was grade in school (those in higher grade levels had higher grades possibly because less successful students dropped out of school with increasing grade level), while the only non-significant predictor for the Black students was faith importance. Total ego strength contributed an additional 13% to Black students' variance in GPA and 9.1% for the White Students (see Table 5). The full model accounted for 23% of the variance for White respondents and 42% of the variance for Black respondents.

**Hierarchical Regression by Sex.** Table 6 presents the hierarchical regression analysis models that were used to estimate the same model separately for males and females. In Step 1, the demographic variables contributed significantly for both sexes and the R-squared was comparable among the two groups (.323 for females vs. .341 for males). Grade levels contributed the most for females' and very little for the males. But this seems to suggest that females in higher-grade levels have higher GPAs.

In contrast, free or reduced lunch status seems to contribute the most for male students, but does not contribute significantly to GPA of female students.
In this sample, males who were not on free or reduced lunch had higher grade-point-averages. For females in this sample, free or reduced lunch status was not significantly correlated to GPA. Surprisingly, race, does not seem to be

**Table 6**

**Hierarchical Regression by Sex: Female (n = 149) and Male (n = 105) for Variables Predicting GPA**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Females</th>
<th>Males</th>
<th>Females</th>
<th>Males</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade</td>
<td>.279***</td>
<td>.029</td>
<td>.252**</td>
<td>.029</td>
<td>.239**</td>
<td>.009</td>
</tr>
<tr>
<td>Parents' Education</td>
<td>.333***</td>
<td>.222*</td>
<td>.334***</td>
<td>.207*</td>
<td>.265***</td>
<td>.111</td>
</tr>
<tr>
<td>Free Lunch (yes=0; No=1)</td>
<td>.087</td>
<td>.296*</td>
<td>.094</td>
<td>.294*</td>
<td>.066</td>
<td>.336**</td>
</tr>
<tr>
<td>Race (Black = 0; White =1)</td>
<td>.224*</td>
<td>.201</td>
<td>.208*</td>
<td>.237</td>
<td>.242**</td>
<td>.248*</td>
</tr>
<tr>
<td>Faith Participation</td>
<td>.196*</td>
<td>.050</td>
<td>.198*</td>
<td>.028</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faith Importance</td>
<td>-.115</td>
<td>.059</td>
<td>-.189*</td>
<td>.030</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Ego Strength</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.317***</td>
<td>.381***</td>
</tr>
<tr>
<td>R Squared</td>
<td>.323***</td>
<td>.341***</td>
<td>.347</td>
<td>.348</td>
<td>.434***</td>
<td>.481***</td>
</tr>
</tbody>
</table>

*p < .05  **p <0.01 ***p <.001

significant for males in Step 1, but it is significant for females. This may be an artifact of the sample or it may be evidence of multicollinearity. The demographic variables contributed to the prediction of GPA differently for males and females. Specifically, grade level and parent educational levels contribute significantly to the prediction of GPA for girls, whereas for boys the best prediction is whether or not they are on free or reduced lunch.
In Step 2 the only significant beta coefficient was for faith participation among females. In Step 3, the inclusion of total ego strength scores in the model significantly increased $R^2$ for both sexes. Total ego strength accounted for an additional 9% of the variance in female GPAs and 13% for males. The full model accounted for 43% of the variance in the females’ GPAs and 48% of the males’

At this point in the analyses, parents’ educational level is no longer significant for the male sample, but all the demographics, except free lunch status, were significant for the female sample.

Hierarchical Regression by Grade Levels. Table 7 presents the hierarchical regression analysis models that were used to estimate the same variables separately for grade levels 9, 10, 11, and 12. In Step 1, the statistical significance of the demographic variables varied for each grade level. Parents’ educational levels were significant for the 9th, 10th, and 12th grades, but not for the 11th grade. Free lunch status was significant for only the 9th grade sample. Gender was the only significant predictor for the 10th grade sample. Even though each grade level yielded different factor of significance, each predictor in Step one contributed significantly to the variance in GPA as indicated by the $R$-squared of 37% for both 9th grade and 10th grade samples, 27% for the 11th grade sample, and 36% for the 12th grade samples. The demographic variables contributed equally for three of the grade levels, with a lower contribution of variance in the prediction of GPA for the 11th grade students.
Table 7

Hierarchical Regression by Grade Levels of 9th, 10th, 11th, and 12th Grade for Variables Predicting GPA

<table>
<thead>
<tr>
<th>Grade Levels</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
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<tr>
<td>n</td>
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<td>73</td>
<td>51</td>
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</table>

<table>
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<th>Characteristics</th>
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<th>Step 3</th>
</tr>
</thead>
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<td>Gender</td>
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<td>-.061</td>
<td>-.080</td>
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<tr>
<td></td>
<td>.144</td>
<td>.186</td>
<td>.083</td>
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<tr>
<td></td>
<td>.346**</td>
<td>.337**</td>
<td>.276**</td>
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<td>.222</td>
<td>.182</td>
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<td>.349*</td>
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<td>Importance</td>
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*p < .05  **p < 0.01  ***p < .001
In Step 2, the faith variables (Participation and Importance) did not contribute significantly to any of the grade levels’ variance in the prediction of GPA. However, at this point in the analyses, the demographic variables were no longer significant for the 10th and 12th grade samples, but parents’ educational levels and free lunch status for the 9th grade, and gender and race (not significant in Block 1) remained significant for the Block 2 sample.

In Step 3, the inclusion of ego strength scores and their associated Beta weights suggested, as before, that those who had higher ego strength scores had higher GPAs. The beta weights were comparable in magnitude for grades 9, 10, and 11, respectively presented as .299, .373, and .529. However, the beta weight for the 12th grade level was not significant.

The full regression model was significant for each grade level, except the 12th. It is interesting to note that even though total ego strength scores contributed differently for each grade level, the full regression model contributed about the same percentage of variance in the prediction of GPA for the 9th, 10th, and 11th grades.
Chapter V
Conclusions and Discussion

This study was conducted to assess the relative contribution of psychosocial ego strengths and the intervening variables of faith participation and faith commitment to academic achievement of high school adolescents in grades 9, 10, 11, and 12. The study focused on five concerns: (1) the interrelationships among ego strengths (hope, will, purpose, competence, and fidelity) as measured by The Psychosocial Inventory of Ego Strengths (PIES); (2) the relationships between the five psychosocial ego strengths and GPA; (3) the relationship of the intervening variables of faith participation and faith importance to ego strengths and subsequently GPA; (4) the predictive nature of the total ego strength to GPA; and, (5) the influence of race, gender, and grade levels on total ego strengths and GPA.

Previous research on ego strengths has been limited to two studies. The first concerned the development and validation of a measure of ego strengths (Markstrom et al., 1997) which involved undergraduates in Canada. The second study examined three methods of religious involvement in relation to ego strength (Markstrom, 1999) among a sample of Blacks and European Americans in the 11th grade. The present study extended the previous work by examining the relationship of these variables to academic success and by including a broader range of ages (adolescents in grades 9 through 12).
All inter-relationships among the subscales measuring psychosocial ego strengths were significant. Erikson described eight ego strengths that are present in some form at every age. Most research on Erikson’s theory examines one construct or psychosocial issue, typically within its age/stage of dominance. The strong intercorrelations among all strengths raise the question as to whether the ego strengths comprise multiple constructs or a single construct. Future research needs to review clinical cases to determine whether some individuals stagnated at specific levels and how this might impact academic performance. For example, two important constructs to consider would be initiative that ascends in the preschool years and industry that ascends during the school age years. Initiative and its consequent ego strength, purpose, continue to be important throughout academic pursuits in high school as well as college and beyond. Industry and its consequent strength, competence, reflect one’s success in mastering the crafts valued by society, academic success is a key indicator of having mastered skills that are important to society.

The significant relationship among the five psychosocial ego strengths provides research support for Erikson’s (1963a) assertion that each psychosocial dimension is linked to all others. Erikson asserted that all psychosocial issues exist in some form from the beginning of life. Each has its own time of ascendance and is a continued re-integration under the dominance of the then current psychosocial crisis and its corresponding outcome, or “ego strength.” The results of this study are congruent with the validation study on PIES.
(Markstrom et al., 1997). Markstrom reported high, consistent and positive intercorrelations among all of the ego strengths.

Erikson (1963a) proposed a special relationship between hope in infancy and fidelity in adolescence. Specifically, he indicated that fidelity in adolescence would manifest in faith. In the present study significant inter-correlations were found among each of the ego strengths, including, of course, hope and fidelity. Therefore, it is difficult to determine whether these are more strongly related. A different instrument or longitudinal studies might be needed to look more deeply at that hypothesized relationship. However, of special relevance is the fact that faith participation measured in terms of frequency of attendance at faith-related activities was significantly correlated with hope and fidelity but not to the other ego strengths. This seems to support Erikson's ideas. However, longitudinal study would be needed to determine the developmental course of these relationships.

At least for the Black students in this sample, faith participation and faith importance seem to be values that are important to them; the White students placed less importance on the faith variables. This corroborates prior research in which Benson et al. (1989) reported that studies tended to show a decline in religiosity as adolescents increased in age from 10 to 18, but that females, Hispanic males, and Blacks of both genders, tended to stay higher in their religiosity with increasing age.

In this study, faith participation and faith importance had small to moderate but significant correlations with total ego strength scores. Students with higher
faith participation and those who attributed more importance to faith had higher ego strength scores. This finding confirms a related study by Hanson and Ginsburg (1988) in which they followed 30,000 sophomores for two years and reported that “values” had a significant impact on later achievement, in part by affecting student effort. Those values reflected parent’s educational expectations for their children, students’ feelings of control over their future, and for Black youth, young people’s values about the importance of religion. Together those “values” were twice as important as family socioeconomic status in explaining the students’ current performance, and 50% stronger than SES in predicting two-year changes in academic performance in Hanson and Ginsburg’s study.

The total ego strength scores of this study predicted grade-point-average. This suggests that academic achievement is affected not only by the well-known demographic variables such as education levels of parents, but also by the intra-individual psychosocial factors. Behavioral and clinical psychologists and educators have long attempted to explain and to influence the variance in adolescents’ academic achievement. In addition to basic intellectual ability, a variety of social demographic factors and intra-individual traits have been found to affect academic achievement. The interest in enhancing academic achievement is due, in part, to its link to desirable outcomes in terms of human capital. For example, youth with higher academic achievement have less risk of anti-social behaviors (Kasen, Cohen, & Brooks, 1998), increased goal setting, positive expectancies for success, personal control, and skills in managing stress
(Hay, 1993), and more positive perception of personal strengths (Williams & McGee, 1991).

While a plethora of studies have identified “risk factors” in youth, few quantitative studies have attempted to explain how things “go right” in youth development. Most studies on youth development focus on evaluating outcomes of intervention programs for “at risk” youth. The current research stands in contrast to the tracking of undesirable outcomes such as school dropout or substance abuse (Kids Count of Virginia, 1999) and presents protective psychosocial factors that contribute to the positive outcomes of academic achievement.

Recently, Larson (2000) acknowledged “that developmental psychology has neglected the positive. Development, after all, is a process of growth and increasing competence. In the important subdomain of social and emotional development, we are often more articulate about how things go wrong than how they go right.” (p. 170). Therefore, findings related to the total ego strength and academic achievement is an important contribution to supporting the positive development of young people.

**Generalizability.** A strength of this study was the use of a heterogeneous sample from a single school. This was important because risky behaviors are usually an artifact of the community rather than the individual (Sampson & Morenoff, 1997). A diverse community of youth who reflected the ethnic, gender, socioeconomic status of the community was needed. The sample in the current study was representative of the community since the sampling population was
representative of the diversity of the community. The socioeconomic, educational and racial diversity, and GPAs of the students in this locality provides sufficient variability to increase our confidence that the results are at least somewhat generalizable.

**Background Variables.** Findings related to race, socioeconomic status, and parents’ educational level were as expected. The White students in this sample had significantly higher GPAs than did the Black students. Achievement has been shown to be “strongly associated” with SES and “moderately” related to minority status (Lee & Smith, 1993). When researchers have looked at the relative impact of SES compared to other variables such as having plans for postsecondary education, the role of SES diminishes (Brooks-Gunn et al., 1993).

**Ego Strength.** One purpose of this study was to determine the relationship of ego strength to academic achievement. It is widely accepted that psychosocial attributes affect both academic achievement and motivation (“the extent to which students feel the intrinsic desire to succeed and earn good grades”) (Hay, 1993, p. 211) and hence academic success. But, the data to support the assertion continue to be important.

Parents’ educational levels correlated significantly, but in the low to moderate range, with each ego strength, except fidelity. These findings make a contribution to the literature on psychosocial development since very little previous research focused on ego strengths and their relationships to parents’ educational levels. This finding may suggest that parents with higher educational levels engender or empower their children with more hope, will, purpose, and
competence, but not fidelity. However, it could be an artifact of the time of ascendance as professed by Erikson (1963a). By this I mean, Erikson postulated that fidelity develops in late adolescence. Since, late adolescence is thought to extend into the low 20’s, fidelity may be in its infancy with this sample, and thus would not have been fully developed. This may concur with prior research that has indicated that the interest parents show (trust = hope), and encouragement they offer (autonomy = will), their expectation of success (industry = competence), and the capability they communicate (initiative = purpose) to their children all have profound effects on children’s readiness to learn and to work at learning. These expectations and supports may be more important than socioeconomic influences in explaining school success. Regardless of whether they live in poverty or in crime-ridden neighborhoods, youth whose parents, friends, and neighbors provide positive expectations and support can succeed in learning (Scales & Leffert, 1999) and thus in obtaining higher GPAs. Hence, this research would support recommendations that parents and community workers should be concerned with enhancing hope, will, purpose, competence, and even fidelity in their children if they wish to develop the psychosocial as well as the academic success of youth.

Hierarchical Regression Analyses

Total ego strength was found to be a significant predictor of GPA. This is a new contribution to the literature on prediction of academic success since ego strength has not been studied as a predictor of academic success prior to this research project.
The results of this study support past findings that gender, race, socioeconomic status, grade in school, and parents’ educational levels are significantly related to academic achievement. However, this study contributes to the literature by showing that the total ego strength variable is a significant predictor of students’ GPAs.

Specifically with a criterion variable of GPA, all-demographic variables and total ego strength scores, contributed to the model. This same hierarchical pattern did not appear for the faith-related variables (faith participation and faith importance) or for the PIES subscales, except “will.” In these cases, and when any hierarchical analysis yields a non-significant model, it does not mean that the subsequently entered variables are unimportant. Rather, it is the relative importance of that variable and whether it is important in the model.

**Race.** Few differences appeared for Black and Whites beyond what has been reported in prior research. The impact of the demographic variables on GPA of Black students was twice as strong as for the White students. Blacks reported more faith participation than Whites. Despite these differences, the model explained twice the amount of variance in GPA for Black students than it did for the White students. In the future research will need to explore the meaning behind the different results for Black and White gender issues and faith participation.

**Gender.** It is interesting to note that with bivariate analysis there were no significant gender related findings for any of the variables in the study. These findings are in contrast with several earlier studies. Previous research has
suggested that females, even those who may be considered “at-risk” of school failure, still have higher academic achievement including higher grades and test scores (Browne & Rife, 1991; Lee & Smith, 1993) than do males.

Another goal of the present study was to determine whether different patterns appeared for each gender in hierarchical analysis. Each model accounted for approximately the same amount of variance. Therefore, implications may be somewhat gender-specific. The hierarchical regression analysis was fully specified for females (including both faith participation and faith importance), with free lunch being the only variable not significant. Males presented quite a different picture. For males, SES, race, and total ego strength were significant in the model. Males and females reported different patterns in the model, but the regression analysis yield minimal differences in the total contribution to the prediction of academic achievement. Therefore, it does seem that the psychosocial factors of total ego strengths are highly important in academic achievement for the males in this sample. Further research will need to explore the meaning behind the different patterns for males and females.

Grade Levels. Implications become more challenging when considering how to best interpret students’ GPA via grade levels. The only consistent predictor variable for each grade level in the study is total ego strength and even though it did not add statistically significant variance for the 12th grade students, it predicted GPA in 9th, 10th, and 11th grade levels. The hierarchy here, though it explains a different model for each grade level, provides preliminary evidence that different factors are important at different age levels.
Limitations

Several limitations must be addressed when considering the interpretation of both the reported findings and the lack of findings. Despite the statistical significance found for most of the analyses, the percentage of some of the variance is quite modest indicating it is worthwhile to continue research in this area to uncover variables with greater explanatory variance. For example, future research needs to be conducted with the faith variables especially since it contributed significant variance beyond the demographic variables for females of both races and for Black male students. Further research might examine why faith contributed to the prediction of GPA for the females and the Black males of this sample, and why it did not contribute to total ego strength cannot be firmly established in this study.

Another limitation of this research was the unequal proportion of students by grade levels. There were low numbers of 10th and 12th grade students that may have affected the results. However, the sample was typical of and therefore generalizable to numerous high schools and their communities.

Future research must continue to search for factors which maximally impact children and adolescent development. Total ego strength scores of this study predicted grade-point-average. This suggests that academic achievement is affected, not only by the well-known demographic variables such as education levels of parents, but also by the intra-individual psychosocial factors. Parents, as well as prevention and intervention programs should not underestimate the contributions of ego strengths in the development of children and adolescents.
Reflections

As said by Erikson (1964), virtues or ego strength “seem to point to principles of cohesion as well as to defects in the ‘fiber’ of generations and institution” (p. 140). Interestingly, the individual strengths in the bivariate correlations and in the hierarchical analyses were not significant, yet together they contributed significantly to academic achievement; this picture seems to support the concept of cohesion (a mutual attraction by which parts are held together). Was Erikson suggesting that each ego strength depends on a greater whole? Indeed he was, as it is evident below.

Joint survival demands that man visualize new ethical alternatives fit for newly developing as well as over-developed systems and identities. A more universal standard of profession will mediate more realistically between man’s inner and outer worlds than did the compromises resulting from the reign of moral absolutes; it will acknowledge the responsibility of each individual for the potentialities of all generations and of all generations for each individual, and this in a more informed manner than has been possible in past systems of ethics. As we have seen, the individual ego can be strong only through a mutual guarantee of strength given to and received by all whose life cycle intertwine. (Erikson, 1964, p. 141)
REFERENCES


APPENDICES
Appendix A

IRB Approval

MEMORANDUM

TO: Dorothy McCargo Freeman
Human Development 0419

FROM: David M. Moore

DATE: 7 May, 2001

SUBJECT: Expedited Approval — "The Contribution of Faith and Ego Strength to the Prediction of GPA among High School Students" — IRB #01-254

This memo is regarding the above-mentioned protocol. The proposed research is eligible for expedited review according to the specifications authorized by 45 CFR 46.110 and 21 CFR 56.110. As Chair of the Virginia Tech Institutional Review Board, I have granted approval to the study for a period of (12) months, effective today.

Approval of your research by the IRB provides the appropriate review as required by federal and state laws regarding human subject research. It is your responsibility to report to the IRB any adverse reactions that can be attributed to this study.

To continue the project past the 12-month approval period, a continuing review application must be submitted (30) days prior to the anniversary of the original approval date and a summary of the project to date must be provided. My office will send you a reminder of this (60) days prior to the anniversary date.

cc: file
Faculty Advisor: Cosby Rogers
Departmental Reviewer: Joyce Ardetti
Appendix B

Letter Granting Permission
To Conduct Project

May 7, 2001

Dorothy McCargo Freeman
115 Hutcheson Hall, VA Tech
Blacksburg, VA 24061-0419

Dear Ms. Freeman:

Thank you for sharing the proposal to study psychosocial development and its effect on grade point average. I found the concept of looking at ego strength (a composite of hope, will, purpose, competence, and fidelity) to be of value to Nandua High School.

I presented the proposal to the School Board Office. Thus, we would therefore be willing to co-sponsor the study. As agreed we would utilize informed consent procedures normally used by our school. This includes giving the parents the option of opting-out their child, as well as, giving the student the option of not taking the survey without penalty.

Sincerely,

Larry A. Thomas
Principal, Nandua High School
Appendix C

Participants' Recruitment Letter

115 Hutcheson Hall, VA Tech
Blacksburg, VA 24060-0419
May 15, 2001

Dear Teacher and Students of Nandua High School:

My name is Dorothy Freeman. I am a graduate student completing a Ph.D. in child development in the Department of Human Development at Virginia Tech. As part of my degree requirement, I am conducting a project on the relations between social and emotional strengths, faith, and GPA. I have met with your school officials about conducting this project and they have agreed to co-sponsor my project. I have assured your school officials that we will maintain the confidentiality of those involved in this project.

I encourage each of you to participate in this project. I will be asking the teachers to distribute and collect the questionnaire forms, while asking you to complete the questionnaire. It is a 20-minute pencil and paper questionnaire with simple questions regarding social and emotional strengths, commitment to faith, and background information. At no time will you be asked questions about deeply personal issues, such as sexuality, substance abuse, or criminal history. In addition, students are in no way obligated to participate in this project and are free to discontinue participation at any time.

Before we can have you complete the questionnaire, we will need to have parents' permission for you to be in the project. We are therefore, asking you to take this form home to your parent(s) or guardian to read. If parent(s)/guardian don't object to the questionnaire, they would simply not have to return this form. On the other hand, if they object to the questionnaire, the signed form would need to be returned to your homeroom teachers.

Within 10 school days, the questionnaire will be distributed during your English class. I hope you will participate in this project. The information you provide will help us build a model that others can follow to learn more about the development of young people.

Sincerely,

Dorothy McCargo Freeman
Graduate Student
College of Human Resources and Education, VA Tech
Appendix D

Parent’s Permission Letter

May 15, 2001

Dear Parents:

We will be conducting a project designed to look at how social and emotional strengths affect adolescents’ grade point average. I request permission for your child to participate. The study consists of answering survey questions that will take approximately 20 minutes to complete.

Your child’s English teacher will give out the survey. Each survey will be coded to match also coded index cards. The index card will request the child’s name to be used to collect the grade point average. Once the index card is completed it would be given along with the survey to the teacher. To preserve confidentiality, the survey and the card will be separated. The survey will be given to the researcher and the index card will be given to a school official. The school official, selected by me, will look at the school’s records in order to obtain your child’s grade point average.

Your decision whether or not to allow your child to participate will in no way affect your child’s standing in his or her English class. If you wish for your child to opt-out of taking this survey, please sign the form and send back to the school. At the conclusion of the study, a summary of group results will be made available to all interested parents and teachers. Should you have any questions or desire further information, please call me at 787-4514, or the researcher Dorothy Freeman at (540) 231-6372.

Thank you in advance for your cooperation and support.

Sincerely,

Larry A. Thomas
Principal
Appendix E

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Informed Consent for Parent/Guardians of Student Participants

Title of Project: The Contribution of Faith and Ego Strength to the Prediction of GPA among High School Students
Investigator(s): Dorothy McCargo Freeman

Purpose of this Research/Project. Your child is invited to participate in a project that strives to examine how hope, will, purpose, competence, fidelity, and commitment or involvement with their faith affect their grade-point-average. Your child, if he or she and you choose to participate in this study, will be asked to respond to questions regarding their personal sense of hope, will, purpose, competence, fidelity, faith and, provide some background information such as age, race, and gender. In addition, 200 other students in the school are participating in this project.

Procedures. Students involved in the project are 9th, 10th, 11th, and 12th grade students. Particularly, we wish to compare how different age students respond to the questions. Your teenager will be asked to fill out a questionnaire with 55 questions. Students’ GPA, will be gathered and matched with their questionnaire number. To collect the GPA, students are asked to write their name on a separate index card that has been pre-coded to match the number on his/her questionnaire. The index card will be separated from the questionnaire and given to a school employee to match the GPA with the questionnaire number. This procedure honors your child’s confidentiality.

Risks. There are no known risks associated with your child’s participation in this project. Your child’s involvement and performance in this project will have no bearing on any grades or school records.

Benefits of this Project. There are benefits for your child’s participation in this project. First, your child may become aware of his or her own sense of hope, will, purpose, competence and fidelity, and their commitment and dependence on faith when times get tough. Second, the student may also become aware of how certain factors have affected their life. Finally, the student may be aware that information they provide by participating in this project may benefit researcher, teachers, school administrators, counselors, and other professional with valuable insights into the lives of those they serve. This may very well lead to further research and improve services to students in the future.

Extent of Anonymity and Confidentiality. No one other than the investigator and the school principal will have access to the information provided by the student. Your teenager’s participation is totally voluntary and he/she may discontinue participation at any time. All answers to questions will be kept confidential and identified by a randomly assigned subject code number only. However, in order to match your teenager’s grade-point-average with his/her questionnaire, a separate card pre-coded to match the questionnaire will ask for the student’s name or I.D. number. The card will be given to a paid recorder who is an employee of the high school and has been selected by the principal. The recorder will be the only person who will have both the student’s identification number or name and code number. Once the grade-point-average is identified and placed on a separate form with the student’s questionnaire code, the grade-point-average card will be shredded. Otherwise, any presentation of this project will replace the
student’s name and those of other participants, with anonymous codes and will report information learned in summarized forms only. The completed questionnaires will be kept under lock and key within the researcher’s house and will be destroyed upon completion of the dissertation and graduation of the student.

Compensation. There is no monetary compensation for your teenager’s participation in this project.

Freedom to Withdraw. You are free to withdraw your teenager from this study at any time without question. The student’s participation in this project is strictly voluntary; therefore they are also free to withdraw at any time.

Approval of Research. This research has been approved by the Institutional Review Board for Research Involving Human Subjects at Virginia Polytechnic Institute and State University (VA Tech), the Department of Human Development in the College of Human Resources and Education at VA Tech, the Central Office of Accomack County School Administration, and the Principal of Nandua High School.

Subject’s Responsibility. There are no responsibilities for you or your teenager beyond the participation outlined above.

Parent’s Permission to opt-in (no signature required). I have read or have had read to me and understand the Informed Consent document and conditions of this project. I have had all my questions answered. I hereby acknowledge the above and give my voluntary consent for my teenager’s participation in this school sponsored project.

Parent’s Permission to opt-out (signature required). In accordance with normal practice of my school system, if I prefer to opt-in my child to this project, I understand I do not have to return this form. Likewise, if I choose to opt-out my child, I will return this signed form indicating my desire for my child not to participate in this project. If I participate, I may withdraw my child at any time without penalty. However, this is a school-sponsored project and I agree for my child to complete the questionnaire and the attached index card in order to match their grade-point-average with the questionnaire. But, I will keep this form for future reference and for usage if I decide to opt-out my child from this project at a later date. If you wish for you teenager to opt-out of this project, please return the form by May 29, 2001.

Student’s Name (Please Print)______________________________

Signature of the Parent/Guardian __________________________ Date_________

Should I have questions about this project or its conduct, I may contact:
Dorothy McCargo Freeman, Investigator Phone: (540) 231-6372
Cosby Rogers, Faculty Advisor Phone: (540) 231-4793
College of Human Resources & Education

David M. Moore, Chair, IRB Research Division Phone: (540) 231-5281
Appendix F

Nandua High School Assent Form

Project Title: The Contributions of Faith and Ego Strengths to the Prediction of GPA among High School Students

Investigator: Dorothy McCargo Freeman and Cosby Rogers, VA Tech

We are doing a research study to look at how social and emotional strengths affect your grade-point-average. A research study is a way to learn more about people. If you decide you want to be a part of this project, you will be asked to complete a questionnaire that has fifty-five questions. You will also be asked to provide your name and I.D. number so we can match your questionnaire number with your grade-point-average. The questionnaire will take you approximately 20-minutes.

There are some things about this study you should know. We will ask you to put your name and I.D. number on an index card. That card will be given to a school staff member who will then use school records to obtain your GPA. Your GPA will then be recorded on a summary sheet beside your questionnaire number.

Being in this study will not have direct benefits to you. But it may help teachers and others interested in adolescents understand how teenagers develop. In addition, you may learn something about your personal sense of your strengths and how these strengths affect achievement.

When we finish with this project we will write a report about what was learned. This report will not include your name or that you were in the study.

As you remember, you took a form home for your parents to have you not participate in this study. Even if your parents have not returned this form for you to opted-out, you do not have to be in this study if you do not want to. If you decide to participate in the study, you can stop at any time. Your grades will not be affected if you choice not to participate or complete the questionnaire.

If you have any questions at any time, please ask your teacher to assist you.

IF YOU SIGN THIS FORM IT MEANS THAT YOU HAVE DECIDED TO PARTICIPATE AND HAVE READ EVERYTHING THAT IS ON THIS FORM.

I, ________________________________, WANT TO BE IN THIS STUDY.

_________________________________       ______________________
(Sign your name here)                                    (Date)
Appendix G

Questionnaire Instruction Script

1. **Introduction.** Today, I will be distributing the questionnaire mentioned last week in a letter from Dorothy Freeman. Dorothy is a graduate student at VA Tech working with school officials. Please respect this woman and treat this project seriously.

   **Explanation of questions on the questionnaire.** The ego strength questions on the questionnaire look at your ideas about personal and emotional strengths. Faith questions pertain to your involvement in and commitment to the faith of your choice. The grade-point-average score will be taken from your school records. You will be asked to provide your school I.D. for a recorder to obtain this information.

   **Freedom to withdraw.** I invite each of you to participate in this study. It will take you approximately 20 minutes. At no time will you be asked questions about deeply personal issues, such as sexuality, substance abuse, or criminal history. You are in no way obligated to participate in this project and are free to discontinue participation at any time.

   **Ensure confidentially.** To ensure confidentially a randomly assigned number has been used on your questionnaire. Other general identifying information such as race, gender, and age group will not distinguish you from other students. Results of this study will be presented only as they relate to the overall group and never to individuals. The information you provide will be stored on a computer disk and will be used as part of Dorothy's school requirement. The computer disk will be kept in a locked and safe place.

2. **Pass out Informed Consent Forms.** If you are willing to participate in this study, please read the informed consent form.

3. **After all have finished reading the consent form.** If you have any questions or concerns, you are free to discuss them at this time. If there are no further question, I ask you to sign and date the consent form.

4. **Pass out questionnaire.** I want to thank all of you for your willingness to participate. Please take the index card and put your name and student identification number on it. I will be checking for this when you return the form. This card will be used to collect your grade-point-average. Dorothy will be the only person who has both the questionnaire and your grade-point-average. But, she will never have your name or I.D. number. You may now complete the questionnaire. Please read each question carefully and answer all questions. You may now begin.

5. **Collect completed questionnaire from each participant.** When each participant submits the questionnaire be sure to collect the index card and check for their name and I.D. number.

6. **Place all questionnaires in the large brown envelope provided and place index cards in the white envelope provided.**

7. I thank you for your assistance in this project.
Appendix H

Questionnaire Instrument

Nandua High School
Accomack County, VA

Assessment of Student
Personal Strengths

Questionnaire Number________________
Dear Student:

Many times in your high school career you will be and have been asked to respond to questionnaires about your academic achievement. Today, however, you are being asked to help us learn more about the development of social and emotional strengths in students like yourself.

Your answers will help teachers, principals, and others interested in youth development better plan programs to meet the needs of teenagers like yourself. The questionnaire will take approximately 20 minutes. Please take the time to complete each question. Remember that your complete participation is important.

We thank you for participating in this project.

Sincerely,

Nandua High School Administration
Part A
Below are statements that describe how teens feel about themselves. Each statement has a range of five possible choices that indicate to what degree it reflects your own thoughts and feelings. Pick one (1) "does not describe me well" to (5) "describes me very well" for each item. Check (✓) the number that reflects your opinion. Please respond to all forty items.

<table>
<thead>
<tr>
<th>Describes Me…</th>
<th>Not Me</th>
<th>Somewhat</th>
<th>Very Well</th>
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<td>1</td>
<td>2</td>
<td>3</td>
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</table>

1. I am able to follow through on a task until it is completed.
2. I know I have skills to carry out various tasks and responsibilities important to me.
3. I find I can easily be distracted even when I really need to finish a task.
4. I prefer to be free-floating without making commitments to other people or things.
5. When I think about the future, I feel optimistic.
6. I find that my opinions are frequently influenced by others.
7. I really don’t know what strengths or skills I have to offer society.
8. I am involved in a variety of activities that allow me to use my skills and abilities.
9. When things don’t go my way, I remind myself of the positive things in my life.
10. I really don’t know what I want out of life.
11. When I make a commitment to something, I stick with it.
12. In many ways, I have control over my future.
13. I don’t pretend to be something that I’m not.
14. I try to pursue my aims even when I have to take risks.
15. I hesitate to put much energy into trying to reach my goals.
16. I’m only setting myself up for disappointment by looking forward to things in the future.
17. I feel like I don’t have control over my life.
18. When I think of my future, I see a definite direction for my life.
19. Even when I have opportunity to do things I might be good at, I usually can’t get started.
20. When something doesn’t work out for me, I just look forward to doing other things.

*Denotes items to be reverse scored
Part A Continues

Below are statements that describe how teens feel about themselves. Each statement has a range of five possible choices that indicate to what degree it reflects your own thoughts and feelings. Pick one (1) "does not describe me well" to (5) "describes me very well" for each item. Check (✓) the number that reflects your opinion. Please respond to all forty items.

<table>
<thead>
<tr>
<th>Describes Me…</th>
<th>Not ME</th>
<th>Somewhat</th>
<th>Very Well</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. If there is something I choose to do, I am <strong>determined</strong> to do it</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22. I have strengths that enable me to be effective in certain situations.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*23. Sometimes I feel as if I can’t control my behavior.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24. I believe in being true to myself and others.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25. No matter how bad things get, I am confident they will get better.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*26. Fear keeps me from striving for many of my goals.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*27. I’m not really sure what I believe in.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*28. When I feel really down, I have a hard time believing that things are going to get better.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*29. I don’t care about things anymore because they usually don’t work out anyway.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. I am able to set realistic goals for myself.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*31. I have trouble accepting a particular purpose or role in life.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*32. I hardly ever initiate activities, I usually follow the crowd.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. I stand up for the people and causes that are important to me.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*34. It doesn’t matter what I do, it’s not going to change anything.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*35. When something doesn’t work out the way I had hoped, it makes me feel like just quitting everything.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36. I like to work to make things happen.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*37. Most people just seem more capable than me.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. Even though I’m sometimes afraid of failing, if there’s something I want to do, I try to do it</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39. I’m usually able to resist when I’m tempted to do something that’s not in my best interest.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*40. I avoid tasks that might require much of my time and energy.</td>
<td>1 2 3 4 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Denotes items to be reverse scored
Next, the six sentences below describe how teens think about themselves and how they do things in general. Read each sentence carefully. For each sentence, please think about how you are in most situations. Place a check under the response that describes YOU the best. For example, place a check (✓) under “None of the time,” if this describes you. Or, if you are this way “All the time,” check this space. Please answer every question. There are no right or wrong answers.

<table>
<thead>
<tr>
<th></th>
<th>None of the time</th>
<th>A little of the time</th>
<th>Some of the time</th>
<th>A lot of the time</th>
<th>Most of the time</th>
<th>All of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I think I am doing pretty well.</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I think of many ways to get the things in life that are important to me.</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I am doing just as well as other kids my age.</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. When I have a problem, I can come up with lots of ways to solve it.</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I think the things I have done in the past will help me in the future.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>6. Even when others want to quit, I know that I can find ways to solve the problem.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Part C

Finally, there are eight questions below describing your personal background. Read each question carefully. For each sentence, please circle the answer that best describe you.

1. What is your gender?
   a. Male
   b. Female

2. What is your age?
   a. 14
   b. 15
   c. 16
   d. 17
   e. 18
   f. 19
   g. 20 and above

3. Which grade are you in?
   a. 9th
   b. 10th
   c. 11th
   d. 12th

4. What is your race?
   a. Asian
   b. African American
   c. Hispanic
   d. White
   e. Other

5. How often do you participate in an activity related to the faith of your choice?
   a. At least once a week
   b. At least once a month
   c. Only on most important holidays
   d. Rarely
   e. Never

6. How important is the faith of your choice in your life?
   a. Not at all
   b. Somewhat
   c. Moderately
   d. Very

7. What is your Mother's highest education level?
   a. Did not complete high school
   b. Completed high school
   c. Completed some college
   d. Completed college

8. What is your Father's highest education level?
   a. Did not complete high school
   b. Completed high school
   c. Completed some college
   d. Completed college

9. Are you on the free or reduced lunch program?
   a. Yes
   b. No
Appendix I

Letter to use The Psychosocial Inventory of Ego Strengths

Date: Tue, 01 Feb 2000 12:17:31 -0500
From: Carol Markstrom <cmarkstr@wvu.edu>
Subject: Re: Returned mail: User unknown
X-Sender: cmark@wvnvm.wvnet.edu
To: freemand@vt.edu
X-Mailer: QUALCOMM Windows Eudora Pro Version 4.0.2

Dorothy,

You are more than welcome to use the PIES. The items and scoring appear in
the Journal of Youth and Adolescence article (let me know if you need
reference). Basically, note which items are reversed scored and the
subscales are summed. I am interested in learning of your results, and
would appreciate receiving a copy.
Best regards,

Carol Markstrom

Carol A. Markstrom, Ph.D.
Associate Professor
Division of Family and Consumer Sciences
Child Development and Family Studies
704-G Allen Hall
Morgantown, WV 26506-6124
Phone: (304) 293-3402 ext. 1775
Fax: (304) 293-2750
Email: cmarkstr@wvu.edu
Appendix J

Letter to use The Future Scale

Date: Mon, 27 Mar 2000 16:24:35 +0100
From: "C. R. Snyder" <crsnyder@eagle.cc.ukans.edu>
Subject: Re: Interested in you Research hope motivation
To: Dorothy McCargo Freeman <freemand@vt.edu>, crsnyder@kuhub.cc.ukans.edu

At 4:33 PM -0500 3/27/0, Dorothy McCargo Freeman wrote:
Dear Dr. Snyder:

This weekend there was an article in our local paper that mentioned your research on hope motivation. I am a graduate student in the college of Human Resources and Education at Virginia Tech. I am pursuing my Ph.D in Human Development. My research is on ego strengths, which includes hope. It is my understanding that you have developed an instrument on hope motivation. I am interested in reviewing it for my research. Would you be willing to tell me more about this instrument and how it has be utilized?

I thank you for your assistance.

Sincerely,
Dorothy McCargo Freeman

REPLY From Dr. Snyder
Sure. Check out the hope web page (address in my signature). If you cannot locate articles/chapters, give me your mailing address and I will send a hope care package.

Rick

C. R. Snyder, Professor and Director
Clinical Psychology Program, 305 Fraser Hall,
Psychology Dept., Univ. of Kansas
Lawrence, KS  66045-2462
Office: (785) 864-9855 * Fax: (785) 864-5696
Hope research: http://raven.cc.ukans.edu/~crsnyder
Forgiveness research: http://www.ukans.edu/~forgive

"In the struggle for existence, it is only on those who hang on for ten minutes after all is hopeless, that hope begins to dawn."

-from The Speaker 2/02/1901 * G. K. Chesterton

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Vitae

Name: DOROTHY McCARGO FREEMAN

Academic Rank: Assistant Professor

Area of Major Responsibility: Extension Specialist, 4-H Delivery Modes & Special Projects

Awarded Tenured Continued Appointment, 1999

A. Education

- Ph.D. in Family and Child Development, VPI&SU, On December 18, 2001
  Dissertation Title: The Contribution of Faith and Ego Strength in the Prediction of GPA among High School Adolescents
- Masters of Science, Adult and Continuing Education, VPI&SU, 1984
- Bachelors of Science, Home Economics, Norfolk State University, 1975

B. Previous Experience

November 1995-to present  Extension Specialist, 4-H

July 1976- October 1995  Field Agent, and Program Leader, and District Administrator, Virginia Cooperative Extension

C. Honors and Awards

1998  Initiated into Alpha Kappa Mu Honor Society, Mu Pi Chapter, VPI&SU, Blacksburg, VA
1998  Initiated into O Beta Zeta of Kappa Omicron Nu Chapter of Kappa Omicron Mu, VPI&SU, Blacksburg, VA.
1998  USDA Twenty –Year Service Award
1993  USDA Fifteen - Year Service Award
1992  Virginia Cooperative Extension Diversity Award
1990  VAE4-HA American Spirit Award
1989  Certificate of Appreciation - Chesapeake Environmental Improvement Council
1988  USDA Ten -Year Service Award
1987 Outstanding Team Award, Epsilon Sigma Phi
1986 Distinguish Service Award (DSA), National Association of Extension 4-H Agents Association

D. Membership, Major Offices in Professional Association

Virginia Association of Extension 4-H Agents

Member: 1979 to present
Officer: President, VAE4-HA, 1986

National Association of Extension 4-H Agents

Co-Chair: 2002 NAE4-HA Conference Planning
Member: 1980 to present
Officer: President, NAE4-HA, 1991 to 1992
Officer: President- Elect, NAE4-HA, 1990 to 1991
Officer: Vice President, NAE4-HA, 1989 to 1990

Virginia Extension Service Association

Member: 1979 to present

Epsilon Sigma Phi Honorary Fraternity

Member: 1984 to present

E. Major Committee

- National 4-H Strategic Direction Team, Staff and Professional Development Team, 2000
- "At the Table Research, National 4-H Council, 2000
- National 4-H Council Program Review Team, 2000
- VAE4-HA Planning Committee for NAE4-HA Conference, Norfolk, VA, 1997 to present
- USDA, Organizational Evaluation Task Force: 1995 to 1997
- National Center for Diversity Advisory Committee. Kentucky State University, Frankfort, Kentucky: 1994 to present
- National Extension Committee on Organization and Policy (PODC) Committee, 1992 and 1993
National 4-H Youth at Risk Summit I & II, Planning Committee, ESUSDA, 4-H and National 4-H Council, 1990 and 1991

F. External Funding Received

Department of Education, Brunswick County, co-authored a proposal to support the efforts of the State Strengthening Project at the county’s Merherrin-Powellton Elementary School. Amount funded: $600,000, 1998 – 2000.


Bridging the Gap of Isolation, a program of National 4-H Council, which provides technical support and training in at-risk communities. Authored the grant for the Sandy Level Community in Henry County. Value: $15,000, 1997 and 1998.

Virginia Department of Social Services. Funding for Americorp workers to provide assistance in Fairfax, Arlington, and Alexandria. Principal Investigator, 1997 and 1998, $419,000.


Virginia 4-H Youth in Action, a substance-abuse prevention program of the Office Juvenile Justice and Delinquency Prevention for Bailey’s Crossroad, Fairfax. Co-Principal Investigator, 1997, $75,000.