

VARIABLES THAT PREDICT DEVELOPMENT OF PURPOSE IN TRADITIONAL-AGED  
COLLEGE STUDENTS

by

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(Under the Direction of Rosemary E. Phelps)

ABSTRACT

This study explored developing purpose in traditional-aged college students utilizing Chickering and Reisser's (1993) theory of student development as the theoretical framework. Research has examined developing purpose, involvement, and career indecision separately, with minimal attention paid to the ways in which these constructs interact. The purpose was to examine the relationship among involvement, career indecision, and specific demographic variables as related to developing purpose. This research sought to determine which constellation of variables could serve as predictors of developing purpose.

Five research questions were studied: To what extent do specific demographic and background variables help explain the development of purpose? What is the joint contribution of involvement and career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables? What is the unique contribution of career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables and involvement? What is the unique contribution of involvement in explaining variation in developing purpose over and beyond what is explained by specific demographic and background variables and career

indecision? What variables appear to be most important in explaining development of purpose?

The Student Developmental Task and Lifestyle Assessment, College Student Experiences Questionnaire, Career Decision Scale, and a demographic information questionnaire developed by the researcher were administered to 295 juniors and seniors at two institutions.

A stepwise multiple regression was performed on the data. Results of the study indicated that the Developing Purpose construct is part of a constellation involving other variables (career indecision, involvement, race, major, and class level) rather than a single independent variable. The optimal regression equation for the sample at Institution I, a Predominantly White Institution, included: career indecision, involvement, race, and major. At Institution II, a Historically Black University, the regression equation included: career indecision, involvement, race, major, and class level. These results were significant at the  $p = .05$  level.

This dissertation makes specific recommendations for interventions, programs and services that can assist student affairs professionals and other educators with promoting the development of purpose in traditional-aged college students.

**INDEX WORDS:** College students, Student development, Psychosocial theories, Developing purpose, Involvement, Career indecision

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## DEDICATION

This dissertation is dedicated to the following persons whose unconditional love and unwavering faith in me provided the mental and emotional support that necessarily sustained me throughout my academic and professional pursuits to date:

To my parents, the late Eli and Bessie K. Prince who laid the foundation and paved the way for me to accomplish my dreams and goals, big and small. Though you were not able to be with me in body as I tarried on this long and arduous journey, your spirits rested on my shoulders all the way. Your unwavering love, the indelible memories of the moments we shared, the values and principles you instilled in me (of which your lives bore testimony), and knowledge of the sacrifices you made to ensure my success, all gave me the much needed staying power to finish the race. Your efforts were not made in vain.

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## CHAPTER 1

### INTRODUCTION

Student development literature suggests that the transition from adolescence to adulthood for traditional aged-college students represents a dynamic period in their cognitive and affective development. Although cognitive development is often acknowledged as the primary focus of student learning and development, many college students claim the most significant gains from their collegiate experiences are obtained outside of the classroom. Indeed, psychosocial development during the college years has as much if not more to do with success in college and in later life than what is learned solely in the classroom (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005).

Psychosocial development refers to the process by which 18–24 year olds resolve biological and psychological changes and simultaneously adjust to environmental and sociocultural influences. Psychosocial theorists explore the content of development, the central concerns individuals address as they go through the life cycle such as self-concept, relationships with others, and life's goals and purposes (Evans, Forney, & Guido-DiBrito, 1998). These theories give attention to the developmental challenges faced by individuals as their lives progress. In the college setting, knowledge of psychosocial theories helps faculty and administrators offer educational experiences that are appropriate to students' level of development and that foster further growth (Evans et al.).

One of the most widely recognized theories of psychosocial development in college students was originally postulated by Arthur Chickering in 1969 in his groundbreaking text,

*Education and Identity*. In this model, Chickering described seven major developmental dimensions which contribute to the formation of identity during the college years. He termed these dimensions developmental vectors. Chickering used the term vectors because he viewed each developmental task as having both direction and magnitude. In 1993, Chickering and Reisser provided a revised version of Chickering's (1969) theory in a second edition of *Education and Identity*. This revised theory incorporated significant research findings from the time of Chickering's original theory and attempted to make it more applicable to diverse populations (Chickering & Reisser, 1993; Evans et al., 1998; Torres, Howard-Hamilton, & Cooper, 2003).

Chickering and Reisser (1993) delineated seven vectors of college student development: Developing Competence, Managing Emotions, Moving Through Autonomy Toward Interdependence, Developing Mature Interpersonal Relationships, Establishing Identity, Developing Purpose, and Developing Integrity. They describe these vectors as conceptual lenses that assist in determining students' current and future levels of development. Movement along these vectors may vary from student to student; however, all college students will eventually face the developmental challenges described in the seven vectors. For the typical traditional-aged college student the seven vectors generally follow a pattern similar to the class levels where freshmen and sophomore students grapple with the first three vectors, while junior and senior students may be more concerned with vectors four, five, and six. Individuals continue to work through the later vectors throughout their life and will revisit issues within a vector as they develop and age.

According to Chickering and Reisser (1993), Vector Six, Developing Purpose, is one way in which students determine their place in society. They reasoned that "a plan becomes a map for

moving from the current situation to a more desirable one, for altering status quo, for composing a life” (p. 210). They concluded that developing purpose requires establishing a plan of action that integrates vocational plans, avocational and personal interests, and interpersonal and family commitments.

Developing Purpose has been identified as a significant construct in psychosocial development in college students. Although specific researchers have studied this vector (e.g., Flowers, 2002; Foubert, Nixon, & Sisson, 2007; Molasso, 2006; Moran, 2001), further study concerning the predictors of development of purpose is needed. The examination of factors which might serve as predictors for Developing Purpose is necessary to discern whether the construct is part of a constellation involving other variables or is independent of other variables. This form of inquiry could enhance the ability of student affairs professionals to promote the development of purpose in traditional aged-college students.

There are numerous variables that have been examined in relation to the psychosocial development of college students. Two of these variables have been selected for this study. These variables are involvement and career indecision.

Level of involvement in a variety of activities in the college environment is a good predictor of development of purpose in traditional-aged college students (Astin, 1984; Chickering & Reisser, 1993; Pascarella & Terenzini, 2005). Indeed, Chickering & Reisser acknowledge that educational environments exert powerful influences that either accelerate or delay developing purpose. The overarching idea is that an appropriate campus environment will facilitate students’ gradual exploration and solidification of a unique identity, and that this, in turn, will lead to an increased focus on vocational, avocational, and interpersonal and family commitments (Chickering & Reisser, 1993).

Students learn best in the academy by becoming involved in the college or university environment (Astin, 1977, 1984; Chickering & Reisser, 1993). Astin (1984) defines involvement as “the amount of physical and psychological energy that the student devotes to an academic experience” (p. 297). This leads one to ascertain that involvement could influence other outcomes of the college/university experience including cognitive and affective development (Pascarella & Terenzini, 2005). Studying and identifying the relationship between involvement and developing purpose in this study may: (a) lead to greater understanding of the Developing Purpose vector of student development, (b) provide a better empirical and theoretical basis for faculty, administrators, and policy makers to improve the effectiveness of policy and practice, and (c) help students who are developing a sense of purpose decide where and how to focus their energy and time in the college environment.

One of the most significant problems faced by college students is the developmental task of deciding on a major and career (Chickering & Reisser, 1993; Gordon, 1998; Kelly & Pulvar, 2003). This developmental task is an important one as it can lead to high levels of personal, professional, and financial satisfaction. Some students, however, are unable to select and commit to a career choice. They often experience difficulty with resolving this major developmental task. These students are experiencing career indecision as noted in the career development literature (Gordon, 1998).

Osipow (1999) defined career indecision as a normal developmental and temporary phase marked by an individual’s need to choose a career path. Career indecision among college students has commanded the attention of student affairs professionals and researchers over the years. Retention concerns and the steady rise in the numbers of students who experience career indecision have led to continued attention in the last decade to this area.

The impact of career indecision on the development of purpose for traditional aged-college students may be significant and warrants further study and attention. A review of the career development literature would suggest that, from both theoretical and empirical perspectives, several person-and environmental-related factors impact the career decision-making processes of college students (Gordon, 1998; Gordon & Meyer, 2002; Guerra & Braungart-Rieker, 1999, Kelly & Pulvar, 2003).

Theories of career indecision and psychosocial development share a number of commonalities. For example, forming a career identity is a central component of both theories. Both are concerned with choice of career and determining the role that career plays throughout one's life. Both theories suggest that choosing a career is a critical task for healthy development. In addition, both theories often include stages which focus on developmental periods such as adolescence and the college years. Given these similarities it seems that studying and identifying the relationship between career indecision and developing purpose may lead to greater understanding of Developing Purpose.

#### Statement of the Problem

Developmental theorists have long asserted that a primary challenge for traditional-aged college students is to develop a sense of purpose by selecting a career (Chickering & Reisser, 1993; Super, 1990). College students themselves have also reported that a primary reason for attending college is to prepare for a career (Pascarella & Terenzini, 2005; Sax, Astin, Korn, & Mahoney, 2000). In another study published in the *Chronicle of Higher Education* indicated that 52% of the freshmen surveyed indicated that "Searching for Meaning/Purpose in Life" was one of their top reasons for deciding to go to college (Freshmen Survey, 2006). Developing purpose



then is one area of psychosocial development where colleges and universities have both an opportunity and an obligation to promote student development.

In a review of the literature, it is interesting to note that relatively few studies have examined the Developing Purpose vector. Also noticeable is the lack of studies examining career indecision, involvement, and developing purpose. Given the importance of the Developing Purpose vector in healthy development of college students, additional research seems warranted.

#### Purpose of the Study

The purpose of this study is to contribute to the understanding of the development of purpose by identifying and studying the relationship among specific variables purported to promote the development of purpose as conceptualized by Chickering and Reisser (1993) and measured by the Student Developmental Lifestyle Assessment Purpose (SDTLA—PUR) in traditional-aged junior and senior level college students. Specific variables to be examined in this study include involvement as conceptualized by Astin (1985) and measured by the 7 subscales of the College Student Experiences Questionnaire (CSEQ); career indecision as measured by the Career Decision Scale (CDS); and select demographic variables. The intended outcome of the study is to inform student affairs professionals so that they might be more intentional when designing interventions and facilitating student learning.

#### Significance of the Study

Theoretically, all college students work through developmental tasks that include: developing and strengthening a set of personal competencies in order to master their environment, forming an identity separate from their family and community, learning to nurture interpersonal and intimate relationships, forming a set of beliefs and behaviors consistent with their values and moral and ethical standards, forming career and life goals, and discovering a

vocational path (Chickering & Reisser, 1993). Student affairs professionals are often available to assist students with the challenge of resolving a major developmental task during the college years--developing a sense of purpose.

Despite the importance of developing purpose during the maturation process, the variables associated with the development of purpose have not been adequately discerned in order to provide empirically grounded developmental interventions. The results of this study may help identify indicators that are more important in the development of purpose in traditional-aged students. Potentially, this research will provide a way to identify low or delayed development of purpose among junior and senior students. Early identification of individuals who may have low development of purpose may lead to earlier intervention and assistance. Targeting students who need more assistance with developing purpose will allow student affairs professionals to take either a more proactive approach or a more well-delineated remedial approach in working with students.

### Research Questions

The following research questions will guide this investigation:

- RQ1: To what extent do specific demographic and background variables help explain the development of purpose?
- RQ2: What is the joint contribution of involvement and career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables?
- RQ3: What is the unique contribution of career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables and involvement?

RQ4: What is the unique contribution of involvement in explaining variation in developing purpose over and beyond what is explained by specific demographic and background variables and career indecision?

RQ5: What variables appear to be most important in explaining development of purpose?

### Operational Definitions

The following terms will be used throughout the body of this work:

*Career Indecision:* According to Osipow (1999) career indecision is “a developmental phase which comes and goes over time as a decision is made, is implemented, grows obsolete, and eventually leads to the need to make a new decision (producing a temporary phase of indecision)” (p. 147).

*Developmental Task:* “A developmental task is an interrelated set of behaviors and attitudes that a culture specifies should be exhibited at approximately the same age by a given age cohort in a designated context such as higher education” (Winston, Miller, & Cooper, 1999b, p. 4).

*College Environment:* Any characteristic of the college that constitutes a potential stimulus capable of changing the student’s sensory input. This can include individuals as well as environmental dimensions. For example, teachers, administrators, counselors, peers can stimulate change. Social activities, clubs and organizations, time spent studying, time spent in the library can also impact a student (Astin, 1968).

*Developing Purpose:* Development of purpose requires formulating plans and priorities that integrate avocational and recreational interests, vocational plans, and lifestyle considerations. “Developing purpose entails an increasing ability to be intentional, to assess

interests and options, to clarify goals, to make plans for action” (Chickering & Reisser, 1993, p. 50).

*Junior:* For the purposes of this study, a junior is defined as a student who has earned between 60 and 90 semester hours and is between the ages of 19 and 24.

*Senior:* For the purposes of this study, a senior is defined as a student who has earned 90 or more semester hours and is between the ages of 18 and 24.

*Student Development:* Denotes a process by which traditional-aged college students mature, grow, and develop psychologically and psychosocially (Rodgers, 1990).

*Student Involvement* is defined as:

The amount of physical and psychological energy that the student devotes to the academic experience. . . . [It requires the] investment of physical and psychological energy in various objects...occurs along a continuum [and] has both quantitative and qualitative features. . . . The amount of student learning and personal development associated with any educational program is directly proportional to the quality and quantity of student involvement in the program (Astin, 1984, pp. 297-298).

*Traditional-Aged College Student:* For this study, this group is defined as college students between the ages of 18-24.

#### Limitations of the Study

Limitations in the design of this study relate to the institutions involved, sample, and administration of the instruments.

1. The participants in the study attended a private Historically Black Doctoral/Research Intensive University in the southeast or a public Predominately White Doctoral/Research Intensive University in the Midwest. These

- institutions have an identified culture. Generalizations to other institutions and students attending those institutions cannot be made.
2. The results of the study may be influenced by the fact that students volunteered to be part of this study.
  3. Students may not have been honest in completing the instruments. Participants may have responded in a socially desirable manner.
  4. Data collection occurred during different semesters. Thus, the administration of the instruments being done at a different time may have influenced the results.

#### Delimitations of the Study

The following delimitation of this study is noted:

1. The sample consisted of juniors and seniors. Freshmen and sophomores were not included in the study; thus, data for all classification levels were not collected.

#### Assumptions

This study was designed based on several broad assumptions. The following assumptions were made:

1. Developing purpose is a complex, multidimensional construct that can be measured using self-report instruments.
2. The selected instruments used in the study will adequately measure developing purpose, career indecision, and involvement.

#### Chapter Summary

Student development theory and practice play an important role in the mission of higher education. The literature on student development and college experience suggests that students change in many positive ways during college. Chickering and Reisser's (1993) seven

developmental tasks have been the subject of numerous studies. Until now; however, very little research has been available in the literature concerning the Developing Purpose vector.

Involvement and career indecision are two constructs that may contribute to the achievement of the development of purpose in traditional-aged college students. This study focuses on these two variables in predicting developing purpose.

## CHAPTER 2

### REVIEW OF THE LITERATURE

This study is intended to examine the relationship among involvement, career indecision, and demographic variables in predicting Developing Purpose, Vector Six of Chickering & Reisser's (1993) theory. This chapter provides a review of the literature and it is divided into four sections. The first section provides a synopsis of several key psychosocial theories. The second section provides detailed information on Chickering and Reisser's Developing Purpose vector. Impact models with a focus on Astin's Theory of Involvement are discussed in the third section. The final section addresses career choice and career indecision theories.

#### Psychosocial Theories

Chickering and Reisser's (1993) theory of psychosocial development in college students was heavily influenced by the work of the prominent psychosocial theorist, Erik Erikson (Foubert, Nixon, Sisson, & Barnes, 2005; Torres, Howard-Hamilton, & Cooper, 2003). Erikson's concepts of identity development in young adults formed a starting point for Chickering & Reisser's (1993) theory (Pascarella & Terenzini, 2005). According to Chickering & Reisser, the developmental dimensions put forth in their conceptualization can be subsumed under the general classification of identity formation, and the development of identity should be considered the major task for young adults (Chickering & Reisser, 1993).

The term psychosocial has two components. The first, "psycho," refers to those psychological aspects of an individual that predispose the person to act and respond to stimuli in certain ways. The second, "social," refers to the individual's relationship with the external world

and the relationship between the person and society (Pascarella & Terenzini, 2005). Prominent psychosocial theories include Erikson (1959, 1968); Chickering (1969); Marcia (1966); Cross (1971); Heath (1969, 1978); Levinson, 1978; Josselson (1987, 1996); and Chickering & Reisser (1993).

Psychosocial development theories concentrate on the whole person. They view human beings as capable of developing and learning life skills as a result of social, cultural, and environmental interactions. Psychosocial development theories describe behaviors that are associated with growth, and they explain *how* developmental changes occur. Specifically, psychosocial theories describe “what” behaviors are evident as a result of the developmental process.

In higher education, psychosocial development refers to the process by which traditional-aged college students resolve biological and psychological changes and simultaneously adjust to environmental and sociocultural influences. From a student development perspective, psychosocial theory explores the developmental issues, tasks and events that occur throughout the lifespan and identifies patterns of resolution of these issues and tasks.

The stages and their associated tasks tend to occur in sequence; however, the existence and order of stages and tasks can vary based on cultural and gender-related influences. How people resolve the tasks of a given stage has a cumulative effect on their ability to resolve the tasks of future stages. Moreover, successful task resolution leads to happiness and success with later tasks, while failure to resolve tasks may lead to unhappiness in the individual, disapproval by society, and difficulty with later tasks (Erikson, 1959, 1968).

The development of a clear sense of identity is most pronounced during the college years when individuals must establish a sense of personal identity and struggle with the difficulties of



assuming both a social and career role. Achievement in these areas during these years requires an assessment of personal strengths and weaknesses and a determination of how to marshal them. To complete the search for self, college students must ask the question “Who am I?” and develop an orientation toward the future. While the college years are important, a person’s identity does not become fully established until adulthood—choosing someone with whom to live and love, selecting and working in one’s chosen career, and developing an internally and coherent set of values—in short a beginning philosophy in life.

### *Erikson’s Model of Psychosocial Development*

Erikson defined identity as a set of “comprehensive gains which the individual, at the end of adolescence, must have derived from all of his pre-adult experience in order to be ready for the tasks of adulthood” (Erikson, 1959, p. 101). Identity is who we are as individuals as well as who we are as members of a group (or groups) and how we equip ourselves (or are equipped) to deal with our past, present, or future environments. Although identity is being shaped and formulated from the time of birth, it is most significantly shaped and stabilized during late adolescence and young adulthood (Chickering & Reisser, 1993; Erikson, 1959). Central to Erikson’s theory is the development of ego (that part of the personality that brings order out of our experiences) (Torres, Howard-Hamilton, & Cooper, 2003). Our identity is the outward expression of our ego. According to Erikson, the process of developing identity involves a linear process in which individuals develop ego “strengths” to successfully complete a developmental task (or stage) in order to move to the next task. Stages of development require a resolution of prior stage tasks before the next stage is mastered.

Erikson (1959) was the first to emphasize the importance of environmental factors (e.g., social groups) in the process of psychosocial development. A healthy personality or identity is

established during a series of significant developmental stages and interactions. While the number and quality of interactions vary from culture to culture, healthy personality or identity development is governed by a proper and sequential rate of experiences by the person with his or her environment (Erikson, 1968). In other words, in order to develop a healthy personality, an individual must have a series of positive cognitive experiences as well as significant social interactions. Biological and psychological changes interact with environmental roles and other cultural expectations that result in developmental changes in the individual.

At the core of Erikson's theory is the overall objective of acquiring a positive ego identity as an individual moves from one stage to the next. Erikson traced the maturation of the individual through eight stages of human development ranging from infancy to old age. The eight stages are: trust vs. mistrust, autonomy vs. shame and doubt, initiative vs. guilt, industry vs. inferiority, identity vs. identity confusion, intimacy vs. isolation, generativity vs. stagnation, and ego identity vs. despair. Each of the stages represents a psychosocial task that must be adequately resolved for positive development to continue. Although Erikson places these psychosocial stages at certain age ranges, the chronological ages are not fixed and may vary for different individuals. Moreover, individuals can and do recycle through the stages (Miller & Winston, 1990).

Society makes certain emotional demands on individuals, involving a "normative set of stresses and strains" at each stage of development (Erikson, 1980). For example, the traditional-aged college student in the identity versus identity confusion stage seeks to answer the question, "Who am I"? According to Erikson, this question can only be answered with an individual's understanding and comfort with sexuality, ideology, and vocational direction. Although identity theoretically develops in various areas including politics and religion, the career domain might

be the most pertinent to adolescent identity development (Erikson, 1968). According to Erikson, “In general it is the inability to settle on an occupational identity which disturbs young people” (1968, p. 132).

### *Chickering’s Model of Psychosocial Student Development*

Building on the work of Erikson (1959), Arthur Chickering published his landmark book *Education and Identity* in 1969. In it, he sought to clarify the concept of identity and to move it toward greater specificity and concreteness. The second edition of *Education and Identity* (1993), co-authored with Linda Reisser, sought to make the theory more current. Revisions were made in accordance with findings gleaned from over 20 years of research examining the Chickering (1969) model, and a strong effort was made to make the theory more relevant to today’s diverse student population (Chickering & Reisser, 1993). The Chickering and Reisser theory served as the framework for psychosocial development in this study.

It is important to address the modifications made in the Establishing Identity vector between the 1969 and 1993 theories because changes in this vector are based on some of the significant research findings that are addressed later in this chapter. In the 1993 theory, the complexity of the Establishing Identity vector is noted, and research findings on differences in identity development for various student groups was included. For example, a study of identity development in African American college students found many similarities to the patterns of development described in Chickering’s original theory, but also found key differences. Branch-Simpson (1984) conducted interviews with 40 African American college seniors at Ohio State University. Findings indicated an emphasis on *Developing Competence* throughout the college years, the importance of the religious and spiritual dimension to the development of African American students, the achievement of identity through the continuance of relationships with the

extended family, and the selection of African American humanitarian figures or family members as role models (Rodgers, 1990).

Chickering and Reisser's (1993) model described student psychosocial development along seven vectors, which provide a specific and comprehensive outline of the processes a traditional-aged college student must undergo to resolve several developmental issues and arrive at a sense of identity. The seven vectors of college student psychosocial development are: (a) Developing Competence, (b) Managing Emotions, (c) Moving Through Autonomy Toward Interdependence, (d) Developing Mature Interpersonal Relationships, (e) Establishing Identity, (f) Developing Purpose, and (g) Developing Integrity. In their view, the vectors have stood the test of time as conceptual lenses for understanding the major constellations of psychosocial development that occur during college.

Vector One, Developing Competence, describes three kinds of competence that students develop in college. These include intellectual competence, physical and manual competence, and interpersonal competence. Chickering & Reisser (1993) believed that students' overarching sense of competence "increases as they learn to trust their abilities, receive accurate feedback from others, and integrate their skills into a stable sense of self-assurance" (p. 46).

Development along Vector Two, Managing Emotions, results in students acquiring increased ability to control their emotions. Chickering and Reisser (1993) focused on four "toxic feelings," which have implications for student life both inside and outside the classroom. These feelings include: (a) fear and anxiety; (b) anger leading to aggression; (c) depression, guilt, and shame; and (d) dysfunctional sexual or romantic attraction. These toxic feelings are associated with numerous dysfunctional behaviors observed on college campuses, including date rape, violence, prejudice, and substance abuse.

Reisser (1995) stressed that “excessive anger, fear and anxiety, depression, guilt, shame, and dysfunctional sexual or romantic attraction can be disruptive and self defeating” (p. 508). Chickering and Reisser (1993) argued that age does not necessarily connect with emotional maturity. As students experience growth in this area, they develop enhanced awareness and acceptance of both positive and negative feelings. They also gain the ability to exert flexible control over their emotions and express their feelings appropriately.

Growth along Vector Three, *Moving Through Autonomy Toward Interdependence*, results in students gaining both increasing emotional and instrumental independence. Here students are learning to function with more independence and to take responsibility for pursuing their own goals and to be less compelled by the opinions of others. Eventually, progress on this dimension results in enhanced understanding of one’s interdependence with others and one’s place in the larger community.

Progress on Vector Four, *Developing Mature Interpersonal Relationships*, is characterized by increased tolerance for interpersonal and intercultural differences. Also included is a growing capacity for intimacy resulting in the ability to form lasting, nurturing relationships. A heightened ability for intimacy involves a change in the quality of relationships with a spouse, partner, or close friends. Success in this vector results in in-depth sharing and a reduced amount of clinging; more acceptance of flaws and appreciation of assets; more selectivity in choosing nurturing relationships; and more lasting relationships that endure crises, distance, and separation (Chickering & Reisser, 1993).

To some extent all of the vectors could be subsumed under the umbrella of Vector Five, *Establishing Identity*, as they all play a part in identity formation. Development of identity depends upon several factors. These factors include: (a) comfort with one’s body and

appearance, (b) comfort with one's gender and sexual orientation, (c) a sense of one's social and cultural heritage, (d) a clear idea of self and with one's role and life choices, (e) a secure sense of self in light of feedback from people who matter/are significant, (f) self-acceptance and self-esteem, and (g) personal stability and integration (Chickering & Reisser, 1993). Formulating an identity also involves reflecting upon one's family of origin and ethnic heritage, defining self as part of a religious or cultural tradition, and seeing self within a social and historical context. Furthermore, establishing identity involves finding positions and styles at work, at recreation, and at home that promote self-definition.

In describing the Developing Purpose vector, Chickering and Reisser (1993) noted that this vector "entails an increasing ability to be intentional, to assess interests and options, to clarify goals, to make plans, and to persist despite obstacles" (p. 209). This vector involves developing strategies and priorities that combine three major elements: (a) vocational plans and aspirations, (b) personal interests, and (c) interpersonal and family commitments. Individuals strong in the area of developing purpose become deliberate in their actions and persist regardless of setbacks and errors. Moreover, developing purpose involves an increasing ability to place one's own goals within the context of a larger, more meaningful purpose. Emphasis in this vector is placed on the future and the importance of career and occupation-related objectives, lifestyle, interests, and choices.

The final vector, Developing Integrity, is closely related to establishing identity and developing purpose. The focal point of this vector is the development of an ethical and moral framework that helps provide a blueprint for living. It is during this stage of development that students determine the values they wish to live by. Developing integrity encompasses the ability to fashion personal values and beliefs that were created as a result of exploring options and being

open to alternatives. Thus, growth along the seventh vector involves the clarification of personal beliefs and provides a provisional guide for behavior.

As noted earlier, the particular order of Chickering and Reisser's (1993) vectors was not meant to convey a rigid developmental sequence, but rather to suggest that development within the earlier vectors provides foundational skills and character traits, which promote healthy development throughout the later vectors. For example, they suggested that for the typical traditional-aged college student the vectors generally follow a pattern similar to the four class levels whereby freshmen and sophomore students explore the first three vectors, while junior and senior students work with vectors four, five, and six. Individuals continue to work through the later vectors throughout their life and may revisit the issues within a vector as they develop.

Chickering and Reisser's (1993) theory provides a comprehensive picture of the developmental tasks college students face. This theory is appealing to student affairs professionals because it allows them more easily to grasp and apply their knowledge and understanding of college student development (Evans, 2003). It has been widely used and studied by both student development theorists and practitioners (Pascarella & Terenzini, 2005) and is considered the most useful psychosocial theory in student affairs practice (Evans et al., 1998), particularly in the area of programming, research, and campus environments.

Although Chickering and Reisser's (1993) theory has been widely accepted and applied by student affairs professionals this does not mean the theory is flawless. One major criticism suggests that while Chickering and Reisser's (1993) theory is empirically grounded and comprehensive; it lacks specificity and precision (Pascarella & Terenzini, 2005). In describing the vectors, Chickering and Reisser globally lay out the types and patterns of change. Detailed consideration is not given to the processes underlying change on each of the vectors.

Another major criticism relates to the applicability of Chickering and Reisser's (1993) theory to diverse student populations (i.e., race, gender, ethnicity, sexual orientation). Evans, Forney, and Guido-DiBrito (1998) noted that psychosocial development is culture specific and "it may not be possible to develop a theory that is totally valid for everyone." (p. 51). As a result, "theorists have attempted to look at diverse student populations through a slightly different lens that expands the notions of the earlier theorists" (Torres, Howard-Hamilton, & Cooper, 2003, p. 14). The next section examines various theories and research on the psychosocial development of African Americans in more detail.

Finally, some researchers feel that Chickering and Reisser's (1993) theory requires more research to test its validity (Evans et al., 1998). A review of the literature indicates that much of the current research is correlational and investigates one, two, or at most, three vectors. Suggestions regarding future research directions included longitudinal research on the factors that influence development; the interrelationships among age, gender, sexual orientation, race, culture, and aspects of psychosocial development; and the development of reliable and valid assessment tools to study various aspects of the theory.

### Psychosocial Theories of African Americans

#### *Racial Identity Development and Psychosocial Development in African Americans*

Since the introduction of Cross's (1971) model of Black identity development, the importance of racial identity as a contributing factor to psychosocial wellness in African American students has been well-documented in the literature (Torres, Howard-Hamilton, & Cooper, 2003). According to Chickering and Reisser (1993), racial identity is an important variable to consider when examining the psychosocial development of students of color. When explorations of psychosocial development in students of color fail to address issues of racial and



ethnic identity, the cultural context for their development is ignored, and the findings are less accurate (Pope, 1998).

Helms (1990) defined racial identity as “a sense of group or collective identity based on one’s perception that he or she shares a common racial heritage with a particular racial group (p. 3). Many foundational studies on Black identity development suggested a movement along various stages in which individuals progress from a lack of awareness and understanding about the implication of their race to an in-depth exploration process leading to a more secure sense of self that comfortably crosses cultural boundaries (Cross, 1971, 1991, 1995; Thompson & Carter, 1997; Vandiver, Fhagen-Smith, Cokley, Cross, & Worrell, 2001; Vandiver, Cross, Worrell, & Fhagen-Smith, 2002). Cross’s original model (1971) consisted of five stages, and his revised model (1995) contains the following four stages: Pre-Encounter, Encounter, Immersions-Emersion, and Internalization.

In the Pre-Encounter stage, individuals exhibit a lack of interest in their race or the race of others and often embrace colorblindness and a race-neutral notion of humanity. During the Encounter stage, persons experience an incident or dissonance of some sort that awakens consciousness of their race, which in turn ignites feelings of anger, frustration, shame, or confusion. The third stage, Immersion-Emersion, is characterized by strong, positive feelings for the Black race (a pro-Black stance—“Everything in Black culture is positive or good”) and disinterest in Whiteness (an anti-White stance—“I dislike every aspect of White culture; all White people are evil”). The exploration of ethnic history, the pursuit of knowledge about the oppression of Black people in America and elsewhere, and the collection of artifacts pertaining to Black culture are common for those at this stage. In the Internalization stage, African Americans begin to come to terms with their newfound sense of selves, accept the implications

of their Black identities, and develop an inner peace and holistic understanding of what it means to be Black in a multicultural society. According to Evans et al. (1998), “relationships with White associates and people from other ethnic groups are renegotiated as internalization of the new Black identity takes hold” (p. 76). Persons at this stage also readily identify with, develop compassion for, and sometimes seek justice on behalf of others who experience social oppression and disenfranchisement (e.g., women, gay and lesbian persons, and members of religious minority groups).

Though Cross’s (1995) model provides a backdrop for making sense of the complex developmental challenges facing African Americans, its stage-wise progression is limited in that it indicates a hierarchical process through which people must advance in order to reach the higher levels of racial identity development. Unlike Cross’s theory, Robinson and Howard-Hamilton’s (1994) Africentric Resistance Modality Model included seven non-hierarchical principles in which African Americans can engage independently or simultaneously as a means of fostering a positive, secure sense of racial identity. Among the principles are Ujima, which stands for unity with other Black people that transcends gender, sexual orientation, and other socially constructed differences, as well as value placed on collective work in the quest to eradicate social inequities that disadvantage African Americans. Vandiver et al. (2001) also expanded Cross’s (1995) model to include nine identity clusters. One of the major differences between the two models is that Vandiver et al. (2001) added a Multiculturalist Inclusive cluster to the Internalization stage, which pertains to a person’s ability to bridge differences and understand the connections between multiple forms of oppression.

Cokley’s (1999) distinction between racial awareness and racial ideology illuminates the importance of not focusing exclusively on stage-like theories of racial identity development:

Racial awareness can be thought of as how often one appreciates, values, and is aware of one's racial and cultural heritage, whereas racial ideology has more to do with a set of beliefs one has about how members of one's racial group should act. (p. 237)

Taub and McEwen (1992) examined the relationship between racial identity development and psychosocial development. They explored whether development of autonomy and interpersonal relationships tasks varied according to the development of racial identity attitudes. In a sample of 218 Black and White female undergraduates enrolled at a large, public, mid-Atlantic university, a negative relationship was found between psychosocial development and racial identity development for Black Women; while for White women, a positive relationship was found. It was concluded that for Black women, racial identity development and psychosocial development are separate and distinct processes; while for White women, racial identity development is more similar to psychosocial development. These findings suggested that differences exist in the relationship between psychosocial development and racial identity development in Black and White women. The researchers suggested that Black women may be pulled in one direction by their psychosocial development in the areas of autonomy and interpersonal relationships, and in another direction by their development of racial identity. They also proposed that psychosocial development for Black women attending Predominately White institutions may be delayed as they develop their Black identity in a White environment (Taub & McEwen).

Jones (1997) conducted a study which specifically examined the multiple dimensions of identity development in women college students. She found that the multicultural group of women she interviewed dealt with many issues previously unaddressed in the literature on women's development. Among those issues were: (a) the multiple ways in which race mattered;

(b) the multiple layers of identity; and (c) the intersection of gender and identity with other dimensions of self. Moreover, the more dimensions of identity that the women perceived, the more complex became their negotiations between their personal and societal worlds. The ability to self-define one's identity was critical as these women sought ways to live peacefully with multiple dimensions of identity.

Jones and McEwen (2000) extended the study by Jones (1997) and investigated how dimensions of identity interacted with each other among 10 college women of varying races and ethnicities. They found that "both privilege and difference mediated the connection with relative salience of various dimensions of identity" (p. 410). In short, college students of color emphasized race as a predominant theme of their overall self-concept; whereas, White college students rarely included race as a salient dimension. The authors also noted the interrelations of identity dimensions based on social group memberships e.g., race and gender with personal identity.

Based on their findings, they developed a conceptual model of multiple dimensions of identity. Theoretically, the model addresses the myriad ways that personal self-definitions and differing contexts dynamically interact with the development of socially constructed identities. Significantly, the model demonstrated that it was possible to live comfortably with multiple identities.

Pope (1998) explored the relationship between racial identity of Black college students and their levels of psychosocial development. A sample of 250 Black, traditional-aged undergraduate students enrolled at 44 colleges and universities completed the Student Developmental Task and Lifestyle Inventory (SDTLI) (Winston & Miller, 1987), the Racial Identity Attitudes Scale-B (RIAS-B) (Parham & Helms, 1981), and a personal data form (Pope,

1988). The results indicated a significant relationship among the Internalization subscale and the Establishing and Clarifying Purpose and Developing Mature Interpersonal Relationships tasks. This relationship was stronger for the Establishing and Clarifying Purpose task than for Developing Mature Interpersonal Relationships task. There was no significant relationship between the Academic Autonomy task and racial identity. It was concluded that although racial identity appeared to influence psychosocial development, the nature of the relationship between the two constructs is not yet clear (Pope).

More recently, scholars have called attention to the inappropriateness of treating African American students as a monolithic group in higher education research and practice (Fries-Britt, 2002; Fries-Britt & Turner, 2001; Torres, Howard-Hamilton, & Cooper, 2003). They noted several important within-group variations in the experiences of African American undergraduate students and called for a more intensive and disaggregated study of different sub-populations within the race.

Taken together, studies that have explored the relationship between racial identity development and psychosocial development seem to suggest that a relationship does exist between these two constructs; however, this relationship is not clearly defined. Some of the findings appear to indicate that higher levels of racial identity development are associated with higher levels of development on certain developmental tasks, such as Developing Purpose and Developing Mature Interpersonal Relationships. It is also advised that researchers and professionals should be careful to consider within-groups variations in the experiences of African American students when writing about and working with this population of students. Both of these factors are important when conceptualizing and conducting research with African

American students at both Historically Black Colleges and Universities (HBCUs) and Predominately White Institutions (PWIs).

*Psychosocial Development of African American Students at Historically Black Colleges*

The psychosocial development and experiences of students enrolled in Historically Black Colleges and Universities (HBCUs) have received research and theoretical attention in the higher education literature. Since publication of Fleming's (1984) often-cited qualitative research that found African American students attending HBCUs to be better adjusted psychologically and academically than African American students attending Predominately White institutions, it has been a commonly held assumption that African American students would also fare better developmentally at such institutions. As such, studies have examined the psychosocial development of African American students enrolled at HBCUs. For example, Jordan-Cox (1987) explored the differences in psychosocial development among students attending three types of HBCUs: one men's college, one women's college, and one co-educational liberal arts college. Female students scored higher than male students on all 12 tasks and subtasks on the Student Developmental Task and Lifestyle Inventory (SDTLI) (Winston, Miller, & Prince, 1987). It should be noted that the SDTLI is based on Chickering (1969) and thus has some validity issues when considered today. These scores were significantly higher on the Developing Autonomy and Developing Purpose tasks; and on the Emotional Autonomy, Interdependence, Mature Life-Style Plans, Intimate Relationships with Opposite Sex, Mature Relationships with Peers, and Tolerance subtasks. Seniors scored higher than freshmen on all 12 tasks and subtasks. All these findings were significantly higher except the Mature Lifestyle Plans and Interpersonal Relationships with Opposite Sex subtasks. Upon entry, freshmen at the three institutions differed significantly from each other on all 12 indices except Instrumental Autonomy, Appropriate

Educational Plans, and Mature Career Plans. However, by senior year, significant differences remained among students at the three institutions only in the Mature Interpersonal Relationships area. The researcher concluded that women in this sample had mastered more developmental tasks than the men, particularly in the area of interpersonal relationships, and although the three colleges enrolled students who were significantly different from each other as freshmen, most of these differences diminished over time. Jordan-Cox attributed the reduction in differences to interaction within very similar collegiate environments during the college years.

Several researchers have compared various dimensions of the undergraduate experience at Historically Black Colleges and Universities (HBCUs) to the African American student experience at Predominantly White Institutions (PWIs). For instance, Cheatham, Slaney, and Coleman (1990) hypothesized that African American students attending Historically Black Colleges and Universities (HBCUs) would be more advanced in the development of racial consciousness, personal and academic development, and more career-decided than African American students attending Predominately White Institutions (PWIs). The sample included 250 African American students enrolled in either a HBCU or a PWI in the same northeastern state. The results did not indicate that the African American students enrolled at HBCUs were more developmentally advanced. Cheatham et al. (1990) concluded that their findings did not support the common notion that HBCUs are better at facilitating psychosocial development in African American students than PWIs. This is not consistent with Fleming's (1984) findings. However, since the students participating in the study were enrolled in only one HBCU and one PWI, the results cannot be assumed to be applicable to all such institutions.

Other research in this area has been conducted (e.g., Cokley, 1999; Desousa & Kuh, 1996; Flowers & Pascarella, 1999) and general findings indicate that HBCUs offer better

learning environments and support mechanisms for African American undergraduates, which in turn positively affects African American student development. While research examining African American students at HBCUs and PWIs is increasing, more studies of the psychosocial development of African American students attending these types of institutions are needed to further understand the impact of these institutions on psychosocial development.

Although mentioned earlier in the chapter, the Developing Purpose vector is discussed more fully here because it is a central component of the study.

### Vector Six: Developing Purpose

#### *Background*

Various works have guided our conceptualization of the construct of Developing Purpose. The early works of Gordon Allport (1955); Viktor Frankl (1959, 1979, 1984, 1997); and Erik Erikson (1964) all shed some light on this area. Gordon Allport, one of the most influential American psychologists of the first two-thirds of the 20<sup>th</sup> century, was among the first to address the development of a sense of purpose (Heyduk & Fenigstein, 1984). He introduced a principle of mastery and competence and asserted that individuals must do their best to determine their place in the world and create a unique sense of purpose. From this he developed a model of motivation that differentiates deficiency and growth in humans along several factors. Growth motives include long-range purpose and striving toward distant goals in the future. Allport (1961) stated,

The core of the identity problem of the adolescent is the selection of an occupation or other life goal. The future, he knows, must follow a plan, and in this respect his sense of selfhood takes on a dimension entirely lacking in childhood...long range purposes and distant goals add a new dimension to the sense of selfhood. (p. 126)



Viktor Frankl's (1959, 1979, 1984, 1997) explained that people strive "to fulfill as much meaning in their existence as possible, and to realize, as much value in their life as possible" (1984, p.161). Frankl believed that people who have purpose in life possess an individual sense of personal meaning in regard to their own existence. When one fails to find a unique meaning and purpose in life, one experiences an "existential vacuum," which is a state of emptiness, boredom and hopelessness. According to Frankl (1992), purpose in life is *the* central motivator for human existence.

Erik Erikson provides the first definition of "developing purpose". Erikson (1964) said "[P]urpose then, is the courage to envisage and pursue valued goals uninhibited by the defeat of infantile fantasies, by guilt, and by the foiling fear of punishment" (p. 122). Erikson (1959) also told us that the "inability to settle on an occupational identity" (p. 132) is the primary crisis for young people. It is Arthur Chickering (1969), however, who historically provided us with a definition and process for the development of purpose in traditional-aged college students. Moran (2001) pointed out that student development models and research on purpose in life suggest that "many of the constructs related to purpose in life are directly or indirectly related to aspects of identity development as well as to physical and psychological well-being and may be descriptive of an identity type that is conducive to college success" (p. 2).

#### *Chickering's Vector Six*

The five vectors of Chickering and Reisser's (1993) model reflect various tasks associated with exploring the question "Who am I"? They also provide a foundation for the last two tasks which deal with planning for the future in a way that is consistent with the developing self. Students begin to focus on "Who am I going to be"? and "Where am I going"? when developing purpose. Developing purpose then involves the integration of vocational plans and

aspirations, personal interests and interpersonal and family commitments into priorities, and a plan of action. According to Chickering and Reisser, this integration of plans, aspirations, interests and commitments, provides the mechanism for students to develop a map that leads them to “a sense of [their] place in the larger whole” (p. 234).

The primary task of the Developing Purpose vector is vocational planning. Vocational planning is often accomplished as students identify those activities that not only give them pleasure but also utilize their skills and abilities. It is important to note here that Chickering and Reisser (1993) considered the term “vocation” to mean much more than just paid work. They suggest that a student’s true vocation is developed “by discovering what we love to do, what energizes and fulfills us, what uses our talents and challenges us to develop new ones, and what actualizes our potentials for excellence” (p. 212).

While the primary task of this vector is vocational in nature, it also involves an increased clarification of avocational interests (Chickering & Reisser, 1993). Avocational purpose develops as students determine which activities they will commit their time to. Students at any given moment of their college day can explore and participate in a variety of activities. As a result, students must decide where and how to focus their energy and time on a daily basis.

Finally, considerations of lifestyle and family are integral aspects of developing purpose as students attempt to clarify goals in the midst of increasing intimacy in relationships. The lifestyle component of this vector involves consideration of relationship, family, and other lifestyle plans. It also refers to the integration of these preferences with vocational plans. For example, students often make choices about long-term relationships, future geographic locations, and graduate education while in college. “When friendships and the intimate exchanges that

accompany them are valued and promoted, identity and purpose become clearer” (Chickering & Reisser, 1993, p. 396).

Thus, Chickering and Reisser’s (1993) Developing Purpose vector included a focus on vocational development as well as other significant factors that influence vocational development, all leading to a sense of purpose for the future. One’s sense of purpose for the future, however, does not have to remain constant throughout the lifespan, nor does it need to be absolutely clear. Rather, developing a sense of purpose requires that students “go beyond what is merely interesting and find an anchoring set of assumptions about what is true, principles that define what is good, and beliefs that provide meaning and give us a sense of our place in the larger whole” (Chickering & Reisser, 1993, p. 234).

While the importance of developing purpose is understood and documented, research studies on Chickering and Reisser’s (1993) Developing Purpose vector are sparse in the literature. A review of the research yielded four published articles which studied the development of purpose in college students. In one of these studies, Moran (2001), in a review of clinical psychological research related to purpose in life, called on student affairs professionals to give greater attention to the value of purpose in life for the students with whom they work. She noted four ways in which purpose in life affects college students: (a) values orientation, (b) connectedness with the campus community, (c) degree of risk-taking behaviors, and (d) overall well-being and satisfaction. Flowers (2002) conducted a study to determine whether significant differences existed between freshmen and senior college students on the development of purpose. Using the Iowa Vocational Inventory he found that seniors self-reported significantly higher levels of vocational purpose in college than freshmen did. His finding is consistent with

other research that indicates that college seniors will report higher levels of development of purpose than freshmen (Chickering & Reisser, 1993; Hood & Zerwas, 1997).

### College Impact Theories

While the student development theories presented earlier are concerned with the sources of change in fundamental and hierarchical structures, the more applied “impact” models presented in this section seek to identify sources of change over which higher education institutions have some programmatic or policy control. Examples of college impact theories include Pace (1979); Feldman and Newcomb (1969); Bowen (1977); and Astin (1977, 1993).

#### *Astin’s College Impact Theories*

*I-E-O Model.* One of the earliest college impact models was offered by Astin (1970), and was known as the “input-process-output model.” In a 1990 survey, it was reported that Astin’s *Four Critical Years* (1977), in which the I-E-O model was used, was the most frequently cited work in the higher education literature (Astin, 1993, p. xix). Drawing on his experience as a clinical and counseling psychologist, Astin became convinced early in his research career that “any educational assessment project is incomplete unless it included data on student inputs, student outcomes, and the education environment to which the student is exposed.” The findings from his earlier studies led him to develop the Inputs (I)—Environments (E)—Outcomes (O) model.

Inputs are those personal qualities that students bring with them to the higher education environment. Examples of student inputs include demographic variables (e.g., race/ethnicity, age, socioeconomic status, gender); educational background; political orientation; and degree aspirations.

Environments are those events, activities, and factors occurring on college and university campuses that might impact a student's development. Examples of environmental factors include programs; curricula; relationships with faculty, staff, and peers; institutional climate; and living arrangements; amount of time devoted to educational and cocurricular activities, and participation in student organizations (Astin, 1993).

Outcomes are student characteristics that develop after one's exposure to and time spent on college and university campuses. Examples of outcomes include indicators such as grade point average, degree completion, satisfaction with the college experience, and employment in major field. In this framework, "outcomes" are thought to be influenced both by: (a) "inputs," or student characteristics before and at the time of entry to college, and (b) "environments," or various programs, policies, faculty, peers, and educational experiences that students come into contact with while in college (Astin, 1993).

Based on his I-E-O research, Astin has discerned two types of outcomes— affective and cognitive. His research makes clear that college can and does affect a wide array of student outcomes both psychologically and behaviorally. His research also addresses the question, "How are these outcomes affected by different college environments and people at different stages of development?"

### Involvement

Astin (1984) proposed another college impact theory, a "theory of involvement," to explain the dynamics of how students develop. Specifically, Astin's theory of student involvement referred to the degree of cognitive and physical energy students dedicate to their academic and extracurricular experiences. He emphasized that students learn and develop when they become active in the collegiate experience. Therefore, the more students are involved, the

more they gain from college (Astin, 1993; Tinto, 1993). Astin (1984) established five “basic postulates” that characterize involvement, all of which refer to the quantifiable nature of involvement and its relationship to learning. These postulates provide a framework for examining student involvement. The postulates are as follows:

1. Involvement requires the investment of physical and psychological energy in various activities. For example, such investments would include forming relationships with teachers, other students, administrators, and counselors; participating in school social activities, clubs, and organizations; and spending time studying and preparing for classes.
2. Involvement occurs on a continuum. In this way, involvement is seen as a continuous concept: different students will invest varying amounts of energy in different activities. For example, some students spend more energy in social activities whereas others may spend more energy in academic activities. The degree of effort that students expend in either area depends on the students’ abilities, interests, background, goals, and commitments.
3. Involvement can be measured both quantitatively and qualitatively. The College Student Experiences Questionnaire, the Withdrawing/Nonreturning Student Survey, and the Student Involvement Questionnaire are some of the instruments that have been used to quantitatively and qualitatively measure student involvement in the college academic and social environment.
4. The amount of student learning and personal development is directly proportional to the quality and quantity of student involvement.

5. The effectiveness of any educational policy or practice is directly related to its capacity to increase student involvement.

Astin (1993) arrived at three principal findings from his years of research. First, "...the student's peer group is the single most potent source of influence on growth and development during the undergraduate years" (p. 398). Second, next to the peer group "the faculty represents the most significant aspect of the student's undergraduate development" (p. 410). Third, "most effects of institutional type are indirect; that is they are mediated by faculty, peer group, and involvement variables" (p. 413).

It is important to note that Astin's (1984) theory was based on a much broader definition of "involvement" than simply a person joining extracurricular activities or attending student organization events. According to Astin, a highly involved student is one who devotes considerable energy to studying, participates actively in student organizations and interacts with faculty members and student peers. Conversely, a low involved student neglects her/his studies, stays away from extracurricular activities, and has infrequent contact with faculty members or student peers.

High involvement in campus life implies student participation in a wide variety of purposeful and meaningful academic and non-academic activities. At most American colleges and universities opportunities abound for students to participate in various intellectual and social activities. As a result, students are required to decide where and how to focus their time and energy throughout their college years. To become involved or not is a choice each student must make, and that choice has an impact on one's development.

### *Impact of Involvement*

*Student learning and personal development.* A review of the literature on the impact of involvement is unequivocal: learning and personal development during the undergraduate years occur as a result of student involvement in both academic and non-academic activities, inside and outside the classroom (Astin, 1975, 1977, 1993; Chickering & Reisser, 1993; Pascarella & Terenzini, 2005). Given this, it is important to systematically examine involvement trends to determine: (a) who is involved, (b) in what and activities, and (c) differences that exist among various student subgroups at different institutions.

Several researchers have found that active involvement, both inside and outside of the classroom, positively affects a wide range of student outcomes, including cognitive and intellectual skill development (Pike, 2000); college adjustment (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999); moral and ethical development (Jones & Watt, 1999); psychosocial development and positive images of self (Chickering & Reisser, 1993); and persistence rates (Berger & Milem, 1999; Braxton, Bray, & Berger, 2000; Peltier, Laden, & Matranga, 1999). Pascarella and Terenzini (2005) found that student involvement enhances self confidence, interpersonal and leadership skills, educational aspirations, bachelor's degree attainment, as well as graduate school attendance. There is also a substantial body of research that indicates students' high level of involvement in their educational experiences (whether in or out of the classroom) results in student success (Pascarella & Terenzini). Information contained in the following section will highlight some variables that have been examined with student involvement.

*Student involvement and development of purpose.* Chickering and Reisser (1993) have suggested that the college environment can either accelerate or inhibit the development of



purpose. They specifically identified institutional objectives, size of institution, faculty-student relationships, curriculum, and friendships and student communities as important environmental factors in the development of purpose. In addition, they also outlined three principles that underscore these environmental factors. They are integration of work and learning, recognition and respect for individual differences, and acknowledgement of the cyclical nature of learning and development. The idea is that the appropriate campus environment will facilitate students' gradual exploration and solidification of a unique identity, and that this, in turn, will lead to an increased focus on vocational, avocational, and interpersonal and family commitments (Chickering & Reisser, 1993; Evans, Forney, & Guido-DiBrito, 1998).

*Student involvement and African American students.* Studies have documented the beneficial effects of involvement in student organizations and cocurricular activities on identity development, retention, and other outcomes for African American college students (Cokley, 2001; Evans, Forney, & Guido-DiBrito, 1998; Fries-Britt, 2000; Harper, 2004, 2006; Howard-Hamilton, 1997). Other studies indicate neutral and less than positive effects of involvement for African American students. White (1998) described pressures that are often placed on African American students by their peers to participate in Black student organizations; some participants in her study joined these organizations merely to keep their Black identities unquestioned. According to Sutton and Terrell (1997), many African American students at PWIs choose to develop their leadership skills within the African American community instead of in larger, mainstream campus organizations. However, because many of the clubs and student organizations in which African American students choose to participate are not seen as mainstream, administrators often fail to notice when some African American students are actively involved on campus (Cokley, 2001; Harper, 2006). Moreover, traditional

conceptualizations of leadership that focus on an individual model rather than a collective model coupled with the accusations of “acting White” that are sometimes associated with involvement in mainstream campus organizations, explain in part, why African American students may find mainstream organizations unappealing (Fries-Britt, 2000; Howard-Hamilton, 1997).

King and Howard-Hamilton (2000) made clear the significance of constructing learning opportunities outside of the classroom that facilitate identity development among racial/ethnic minority students. McEwen, Roper, Bryant, and Langa (1990) indicate that firsthand recognition of the social inequities on their campuses that disadvantage African Americans compels some African American students to become catalysts for change. This sense of social activism is consistent with Mitchell and Dell’s (1992) claim that various stages of Cross’s (1995) Black identity model can stimulate African American students’ participation in campus organizations.

*Impact of institutional type on African-American student involvement.* Involvement-related gains and student satisfaction have been widely studied across two institutional types (Historically Black College and Universities [HBCUs] and Predominantly White Institutions [PWIs]). Many HBCU/PWI comparative studies have considered the effects of involvement on African American student outcomes. Research findings on the effects of institutional type on African American students’ involvement are not conclusive. Some research indicates that African American students are significantly more involved in college experiences and gain significantly more in cognitive and personal development from a HBCU rather than a PWI (DeSousa & Kuh, 1996; Flowers, 2002; Flowers & Pascarella, 1999). The reason most frequently cited for different levels of involvement and learning gains is the “chilly climate” faced by African American students at PWIs (DeSousa & Kuh, 1996; Lewis, Chesler, & Forman, 2000; Sedlacek, 1999). Indeed, several studies have attributed increased levels of student

learning to the supportive environment nurtured by HBCUs (Flowers, 2002; Harper, Carini, Bridges, & Hayek, 2004). Flowers & Pascarella (1999) stated that it is rarely institutional type that affects student learning but rather the supportive social-psychological context manifested by the institution. A supportive social-psychological context included a strong faculty emphasis in teaching and student development, a common valuing of the life of the mind, high academic expectations, and frequent interactions in and outside the classroom between students and faculty (Flowers & Pascarella, 1999). The qualities that contribute to a supportive social-psychological context overlap extensively with the mission of HBCUs. In a study that examined the overall level of caring reported by students from different kinds of schools, data showed caring was reported highest at HBCUs (Goethals, Hurshman, Sischy, Winston, Zhelev, & Zimmerman, 2004).

HBCU/PWI comparative studies also consistently suggest that HBCUs offer a wider array of culturally appealing venues for African American student involvement and increase self concept. For instance, Berger and Milem (1999) found that HBCU students offered significantly higher self-ratings in three domains of self-concept—psychosocial wellness, academic self-efficacy, and achievement orientation—than their same-race peers attending PWIs. Reportedly, African American students at HBCUs also devote more effort to academic activities; experience more significant gains in intellectual development, critical thinking, and cultural awareness; and enjoy greater personal and social benefits than African Americans at PWIs (DeSousa & Kuh, 1996).

The other body of research indicates that institutional type does not significantly affect African American students' level of involvement or cognitive and personal development (e.g., Flowers & Pascarella, 1999). For example, Kim (2002) found no difference between students at

HBCUs and PWIs in overall academic, writing, and math ability when controlling for institutional factors such as mean pretest of students at the institution, selectivity, average family income, and single-sex college status.

Although research seems to be divided on the effect of institutional type on levels of involvement in educationally purposeful activities and cognitive and personal development for African American students, perhaps institutional type does serve as a way to begin understanding the complex construct manifested within the institution.

*Student involvement and cocurricular involvement.* Cocurricular involvement is a broad term that encompasses many forms of involvement. For example, in various research studies, cocurricular involvement has included such activities such as attending student organization meetings (Cooper, Healey, & Simpson, 1994) or relaxing or studying in the student union lounge (Kuh, Hu, & Vesper, 2000). Cooper, Healey, and Simpson (1994) explored changes due to holding leadership positions in student organizations and being members of student organizations. The Student Developmental Task and Lifestyle Inventory (SDTLI) was administered to students upon entering the university as freshmen and administered again to the same students during their third year of college. In addition to completing the SDTLI during their third year, respondents participated in an interview and completed a supplementary questionnaire that focused on use of campus programs and services including involvement in student organizations and holding leadership roles.

For those students who were involved in student organizations on campus, in comparison to students not involved in student organizations, some significant differences were found for subtasks that can be classified as leadership outcomes. For the Developing Purpose, Lifestyle Planning, Life Management, and Cultural Participation subtasks, members showed significantly

more growth than nonmembers when controlling for entering scores (Cooper et al., 1994). Involvement in a student organization was the variable associated with the most significant change over the three years of all the variables in the study.

A study by Kimbrough and Hutchenson (1998) focused on the impact of participation in Black Greek-letter Organizations (BGOs) on students' leadership development and involvement on campus. The study compares students who were and were not affiliated with BGOs at Historically Black Colleges and Universities (HBCUs) and Predominantly White Institutions (PWIs). The sample consisted of 387 Black students from 12 institutions. Results of the study indicated that regardless of institutional type, and when controlling for high school involvement, students involved in BGOs were more involved on campus through campus activities and organizations than Black students who were not members of BGOs. Additionally, BGO members indicated higher levels of confidence than BGO nonmembers in their ability to perform leadership tasks and skills. The researchers suggested that BGO involvement provides students an opportunity to practice and develop leadership skills.

In summary, numerous studies have assessed the effect of involvement in student organizations on student development. The results of these studies suggest that involvement in student organizations does have a positive effect on student development and learning.

#### Career Indecision Theories

The student development theories presented earlier focused primarily on developmental outcomes (the "what") of student development, while the impact models presented previously focused primarily on developmental outcomes (the "how") of student development. The career indecision theories presented in this section focus on both the content (the "what") and the process (the "how") of career choice and development.

### *Historical Foundations of Career Indecision*

There has long been a continuing interest on the part of student affairs professionals and researchers in understanding the dynamics of undecided students. Studies have shown that between 20% and 60% of students entering college are undecided about an academic major or career choice (Hayes, 1997). Osipow (1999) indicated that career indecision may now be of even greater concern because of the increased frequency of events that require people to revise and change their career decisions over their lifespans.

Initially, career indecision studies focused primarily on the differences between decided and undecided students (Osipow, 1983; Sepich, 1987). Leona Tyler (1961) was one of the first theorists to attempt to clarify the experience of college students uncommitted to an educational or vocational choice. She sought to draw a distinction between indecision as a state, and indecisiveness as a trait. According to Tyler, the signs of a state of vocational indecision included the following four factors: (a) influence emanating from family and friends which cause values conflict; (b) aspects of an occupational role may be both desirable and undesirable; (c) an individual may be suited for several occupations and find it difficult to choose among them; and (d) reality may prevent implementation of a plan and there may not be an alternative. Tyler described indecisiveness, on the other hand, as resulting from developmental immaturity, unresolved personal problems, or self-defeating attitudes and habits. A further explanation regarding the disruptive nature of career indecision was offered by Goodstein (1965). He analyzed in detail the part anxiety plays in career indecision, both as an antecedent and a consequence.

Other researchers hypothesized that career indecision was probably not dichotomous, but had multiple dimensions. Holland and Holland (1977) categorized vocationally undecided

persons according to reasons, ranging from the lack of appropriate career information to, possession of an indecisive personality.

In a different description of indecision, Holland and Holland (1977) asserted that the state of being undecided is normal and common—desirable in many circumstances. Often a person is undecided because he/she lacks information to make a sound decision. They noted that “a large proportion of undecided students are doing what intelligent adults do—delaying some decisions until reality arrives” (p. 412).

Salomone (1982) also argued that researchers need to differentiate between the developmentally appropriate “undecided” construct and the personality disposition of “indecisiveness”. He strongly believed that defining or labeling young adults under 25 as indecisive is wrong. Because youth develop in vastly different ways and at different rates, young adults he felt should be given the benefit of the doubt and allowed to have time to make a decision without being labeled indecisive.

During the past two decades, research on career indecision has shifted in emphasis (Gordon, 1998). The study of career indecision has evolved by first moving from a dichotomy to a unidimensional continuum and then to a multidimensional concept (Savickas, 1989). Instead of attempting to isolate variables causing indecision, researchers described multiple sets of variables which identified heterogeneous subtypes of undecided students based upon their level of decision status and the description of their characteristics or traits (Gordon, 1995).

The concern of college students’ indecision regarding their future career is well documented in the career psychology literature. Despite the amount of literature in this area, there are various definitions and ways to describe indecision. Tokar, Withrow, Hall, and Moradi (2003) defined career indecision as “the inability to select, and commit to a career choice” (p. 3).

Based upon a review of fifteen studies, Gordon (1998) identified three general types of career decided student and four types of undecided students. Using decision status to make the comparisons and to determine common threads running through the studies, Gordon identified seven general career decidedness subtypes—“...very decided, somewhat decided, unstable decided, tentatively undecided, developmentally undecided, seriously undecided, and chronically indecisive” (p. 392) Gordon describes the developmentally undecided group as those in need of a better understanding of themselves and also desiring heightened awareness of their career possibilities. For student affairs professionals as well as career counselors and advisors, Gordon (1998) noted the importance of becoming familiar with the different types of components of career indecision to be work with students who are at varying points of the decision-making process.

In an effort to validate existing literature on types of undecided students, Kelly and Pulver (2003) conducted a study using 566 undecided college students enrolled in a career exploration course. Career indecision types were identified using measures of career indecision, personality, and ability. The first type, well adjusted information seekers, demonstrated a strong need for career information and self-knowledge, and low negative affect. The second type, neurotic indecisive information seekers, included those students whose level of decision making distress extended well beyond that of career indecision. The third type, low ability information seekers, was made up of those students with low SAT verbal and math scores, and who had a need for career information and need for self-knowledge. The final type, uncommitted extraverts, comprised those students who, unlike any other previously identified type in the research, reported a significantly lower need for self-knowledge than is expected to accompany career indecisive students. The authors noted the importance of career counselors and advisors



becoming more familiar with the different types of components of career indecision to be better equipped to apply the appropriate “differential intervention strategies” when working with students who are at varying points of the decision making process. They reiterated the sentiment of other researchers who indicated the importance of career guidance and intervention for both decided and undecided students, noting that “many so-called decided students need as much assistance with academic and career planning as the admittedly undecided student” (p. 390).

Gordon and Meyer (2002) conducted a study of career indecision among prospective university students. Using a sample of 84 high school students ranging in age from 16 years to 19 years, they examined aspects of career maturity which underlie career indecision. These aspects included “self information, decision-making, career information, integration of self-information and career information, and career planning” (p. 42). Results revealed a prevalence of career indecision (50% among this group). In relation to the underlying elements of career indecision, Gordon and Meyer found that this group of prospective students required decision making, career information, and career planning skills improvement. Findings further revealed that students who reported well defined and differentiated interests demonstrated significantly higher levels of self information, more developed decision making skills, and were better able to integrate the information about self and careers than their counterparts with less defined and differentiated interests. There were no significant correlations between gender and career indecision in this group of pre-college students (Gordon & Meyer, 2002).

### *Influences on Career Choice*

*Family role influence.* Using 169 undergraduate students, Guerra and Braungart-Rieker (1999) conducted a study to determine whether students’ identity formation and their perception of parental acceptance and encouragement of independence were predictors of career indecision.

Based on the theoretical linkages between identity development and career decision making (Lucas, 1997) and identity development and family influences (Marcia 1983), Guerra and Braungart-Rieker (1999) sought to predict career indecision status using perceptions of parental acceptance and encouragement of independence. Additionally, career decision status was examined using Marcia's (1966) phases of identity status. Results indicated that students whose mothers encouraged independence in childhood reported lower levels of career indecision than their counterparts whose mothers were overprotective. Additionally, ego identity status was reportedly predictive of career decision status.

In their study of the relationship among psychological separation, attachment, and career indecision in college populations, Tokar et al. (2003) proposed that these variables would be negatively related to vocational self-concept crystallization mediating the effect of separation and attachment security on career indecision. Using correlations and structural modeling to analyze the responses of 350 college students this study sought to measure parental separation and conflictual independence, attachment styles, vocational self-concept crystallization, and career indecision. The researchers found support for their hypothesis that higher levels of attachment and separation would be significantly related to career indecision and vocational self-concept crystallization. Tokar et al. (2003) found that students who reported lower levels of indecision and higher levels of vocational self-concept crystallization experienced greater psychological separation from their mothers. The opposite was true for students who experienced psychological separation from their fathers, in that students experiencing psychological separation from their fathers reported less vocational self-concept crystallization. Of particular interest is the finding that attachment anxiety emerged as the strongest predictor of career indecision in the study.

*Gender influence.* Another central issue of career decision-making is the observed gender difference in career choices. Researchers have become more aware of how the career development process differs between the genders (Gati, 1995). Significant differences exist in the structure of men's and women's career development that may lead to significant gender differences in the career decision-making process and result in different problems in career decision-making. The primary difference in the structure of men's and women's career development is the isolated decision presented to men, as opposed to the dichotomous decision presented to women (Smulyan, 2004). Men are socialized primarily to be the family financial provider, a role expressed through career endeavors. Consequently, men's family and career obligations run parallel except where there may be a conflict between career and the secondary nurturant-expressive role. Research indicates that women tend to engage in a small range of occupations that are traditional, female sex-stereotyped, and in the lower occupational levels where salary levels are usually relatively low. Some investigators have concluded that although women's career choices are still heavily affected by sex role and stereotypes, these choices are less traditional than they were formerly (Smulyan, 2004; Zeldin & Pajares, 2000).

*Racial influence.* Race affects the way individuals are socialized, their perception of the role of work in their lives, the role interests may play in career choice, and the way that interest may develop. Race also influences how one is perceived in the United States and the extent to which individuals experience discrimination or perceive that work opportunities may be limited for them (Fouad, Harmon, & Borgen, 1997; Kerka, 2003). All of these factors can influence a person's vocational interest and development.

Day and Rounds (1998) suggested that people in this country share similar structures of interest. This included both young people who have not yet begun careers and established adult

workers from different ethnic/racial groups. People of different ethnicities hold the same cognitive map of the world of work when the structures of their preference are examined (Day & Rounds, 1998). Further, they found that men and women in the United States who described themselves as Caucasian, Native American, Asian American, Mexican American, and African American all responded to activities in the same patterns, expressed likes and dislikes for pursuits grouped according to Holland's types (Realistic, Investigative, Artistic, Social, Enterprising, and Conventional).

*Developing purpose.* Career decision-making has been shown to have an impact on the psychosocial development of college students. Foubert, Nixon, Sisson, and Barnes (2005) found that significant developmental change occurred along the Developing Purpose task between the beginning of the first year and the end of the sophomore year. The findings from these two studies lend support to the interconnected nature of psychosocial development and career decision tasks for college students. Based on the research, it appears that students who are clear about their purpose in life—and increasingly able to make conscious choices based on a defined set of values and beliefs—will also be more persistent in reaching all of their goals, including those specific to their career.

Students face numerous challenges and decisions that will influence the life they will lead after completing college. Those who have progressed further in developing purpose are better able to plan and persist despite the inevitable obstacles. Similarly, those who have a defined set of personal goals and values are in a better position to be motivated, actively involved in their career development process, and more confident in their actions. Yet, there are very few studies in the literature that specifically link career indecision theories and developing purpose.

## Chapter Summary

Human development theories, though often ambiguous, “remain the best guidelines we have in our journey toward fuller understanding of the marvelously complex maturation process of the self” (Drum & Lawler, 1988, p. 26). Just as human development theories offer a number of opportunities they also provide a number of challenges. For example, while Chickering and Reisser’s (1993) theory provides a “roadmap” and framework from which to understand the construct of Developing Purpose, it lacks the specificity required for practical application. Even after reading Chickering and Reisser’s discussion one still wonders: What variables contribute to the prediction of development of purpose? How does one measure development of purpose? Involvement and career indecision appear to be useful variables to consider when studying the Developing Purpose construct. However, no empirical research has been published that compares the relative contribution of involvement and career indecision toward the prediction of developing purpose. Understanding which variables hinder and help the development of purpose is an integral part of guiding student development. This study hopefully will provide some answers as to how involvement and career indecision interact in the prediction of the development of purpose.

## CHAPTER 3

### METHODOLOGY

This chapter contains information on the research design of the study and is organized into four sections. The first section provides information on participants and sample size. The second section describes the recruitment and data collection procedures. The third section describes the instrumentation used in the study. The fourth section describes the methods used in analyzing the data.

#### Participants and Sample Size

The research participants ( $n = 295$ ) in this study were junior and senior traditional-aged college students (18-24 years) enrolled in two higher education institutions. Institution I is a large public Predominately White Doctoral/Research-Intensive institution in the Midwest. Established in the early 1900s to educate teachers, it ranks as the 14<sup>th</sup> largest producer of teachers in the country. It has an enrollment of nearly 21,000 students, 17% of whom are graduate students. In terms of student demographics at Institution I, women comprise 56% of the student body and men comprise 43%. White students represent 86% of the students, while Black students represent 5% of the student body. The average G.P.A. is 2.9. Institution I is a residential campus with nearly 325 student organizations including 40 fraternities and sororities, and a recreation center.

Institution II is a small private Historically Black Doctoral/Research-Intensive institution in the southeastern United States. It is church affiliated and is the largest of the United Negro College Fund Institutions, with an enrollment of nearly 3700 students 24% of whom are graduate

students. In terms of student demographics at Institution II, women comprise 71% of the student body and men comprise 29%. African American students represent 93 % of the population, while White students represent 0.1% of the student body. The average G.P.A. is 3.1. The campus is a largely commuter campus with 80 registered student organizations, including five historically Black fraternities and sororities.

G\*Power statistical power analysis software (Buchner, Erdfelder, & Faul, 1997) was used to determine that a sample size of 153 is needed given the effect size, alpha level, and power value.

#### Recruitment and Data Collection Procedures

The Chief Student Affairs Officers (CSAOs) on both campuses were contacted to secure assistance with recruiting faculty as contacts who would help identify participants for the study. Once faculty were identified by the CSAOs, the researcher secured each faculty member's name, telephone, and email address from the CSAOs and made direct contact with faculty member via telephone or email. The purpose, procedures, and uses of the study were discussed with faculty members prior to asking them to assist in identifying potential participants. A copy of the dissertation prospectus, research packet, and IRB approval were given to each faculty member upon her/his request.

Test administration date and times were discussed with each faculty member. Prior to the test administration dates, potential participants were asked by the faculty members to participate in the study on a voluntary basis. The researcher administered all instruments in a classroom, group, or individual setting. During the test administration session, the researcher explained the purpose of the study and gave informed consent forms to potential participants to read and sign (See Appendix A). Packets, which included the *Multi Domain Developing Purpose Inventory*

and a computer scantron sheet were distributed. The *Multi Domain Developing Purpose Inventory* consisted of an instruction sheet, demographic questionnaire, Form 2.99 of the *Student Developmental Task and Lifestyle Assessment* (SDTLA) (Winston, Miller, & Cooper, 1999a); seven scales (Experiences with Faculty; Student Acquaintances; Clubs and Organizations; Personal Experiences; Relationships with Faculty; Relationships with Administrative and Personnel Offices; and Relationship with Other Students) of the *College Student Experiences Questionnaire* (CSEQ) (Pace & Kuh, 1998); and the *Indecision Scale* of the *Career Decision Scale* (CDS) (Osipow, Carney, Winer, Yanico, & Koschier, 1987).

Test administration took approximately 45-70 minutes. All responses were anonymous, since no personal identifying information was elicited from respondents at any time.

#### Instruments

Four instruments were used in this study to obtain data: (a) Form 2.99 of the *Student Developmental Task and Lifestyle Assessment* (SDTLA) (Winston et al., 1999a), (b) the fourth edition of the *College Student Experiences Questionnaire* (CSEQ), (Pace & Kuh, 1998), (c) the third edition of the *Career Decision Scale* (CDS) (Osipow et al., 1987) (CDS)-Indecision Scale, and (d) a demographic information questionnaire developed by the researcher. All four instruments were combined for ease of administration into a single document called the *Multi Domain Developing Purpose Inventory*.

#### *Student Developmental Task and Lifestyle Assessment*

The *Student Developmental Task and Lifestyle Assessment* (SDTLA) (Winston et al., 1999a) is the fourth in a series of developmental task assessment instruments. Specifically, the SDTLA is a revision of the SDTLI. These instruments were developed by researchers at the University of Georgia and were based on Chickering and Reisser's (1993) theory of student



development. Form 2.99 of the SDTLA, a 153-item measure, is composed of three of Chickering and Reisser's developmental task areas: Establishing and Clarifying Purpose (PUR), Developing Autonomy (AUT), and Developing Mature Interpersonal Relationships (MIR). Each developmental task is further comprised of subtasks. For the purposes of this study only the Establishing and Clarifying Purpose (PUR) scale will be used.

The PUR scale consists of four subtasks: Career Planning (CP), Lifestyle Planning (LP), Cultural Participation (CUP), and Educational Involvement (EI). Winston et al. (1999b, p. 10) define the four subtasks of PUR:

1. Career Planning (CP): the extent to which students are able to formulate specific vocational plans, make a commitment to a chosen career field, and take the appropriate steps necessary to prepare themselves for employment);
2. Lifestyle Planning (LP): the degree to which students are able to establish a personal direction and orientation in life that includes personal, ethical, and religious values; future family planning; and educational and vocational objectives;
3. Cultural Participation (CUP): the extent to which students are actively involved in a wide variety of activities and exhibit an array of cultural interests and a sense of aesthetic appreciation; and
4. Educational involvement (EI): the degree to which students have well-defined educational goals and plans, are actively involved in the academic life of their school, and are knowledgeable about campus resources;

A sample item from the Educational Involvement subtask is, "I am uncertain about possible majors and am a long way from a decision." The Career Planning subtask items such as "Considering beginning-level positions in business, industry, government, or education for

which I would be eligible when I complete my education, I... ” A sample item from the Lifestyle Planning subtask is, “My plans for the future are consistent with my personal values (for example, importance of service to others, religious beliefs, importance of luxuries, desire for public recognition)” and from the Cultural Participation subtask is “Over the past year I have frequently participated in cultural activities.”

Item responses are given different weights when scored. Scores are calculated by assigning weights using the scoring key. A total score for the Establishing and Clarifying Purpose task is obtained by summing all the items. High scores on the Establishing and Clarifying Purpose task suggest that respondents have:

A well-defined and thoroughly explored educational goals and plans and are active, self-directed learners; a synthesized knowledge about themselves and the world of work into appropriate career plans, both making emotional commitment and taking steps now to allow realization of career goals; established a personal direction in their lives and made plans for their futures that take into account personal, ethical, and religious values, future family plans, and vocational and educational objectives; and exhibit a wide range of cultural interests and active participation in both traditional and non-traditional cultural events. (Winston et al., 1999b, p.10)

The reliability and validity of the SDTLA was reported by Winston et al. (1999b) using a sample of 1822 students from 32 colleges and universities in the United States and Canada. Winston et al. (1999b) reported that the Establishing and Clarifying Purpose task has adequate temporal stability (test-retest correlations range from .79 to .84) and internal consistency (coefficient alphas ranging from .76 to .84). Test-retest correlations of .89 (Career Planning), .80 (Lifestyle Planning), .79 (Educational Involvement), .79 (Cultural Participation), and .84

(Establishing & Clarifying Purpose) were found over a four-week period for a subset of the sample on which it was normed ( $n = 52$ ). Internal consistency estimates for the four subscales were .84 (Career Planning), .81 (Lifestyle Planning), .82 (Educational Planning), .76 (Cultural Participation), and .81 (Establishing and Clarifying Purpose) ( $N=1822$ ).

### *The College Student Experiences Questionnaire*

The *College Student Experiences Questionnaire* (CSEQ) (Pace & Kuh, 1998) assesses the quality of effort students devote to educationally purposeful activities. The CSEQ was chosen for this study for its appropriateness for assessing the environmental and experiential factors that Chickering and Reisser (1993) proposed were important in the development of purpose.

The fourth edition of the CSEQ (Pace & Kuh, 1998) is made up of 166 items divided into four sections. For the purposes of the present study, only items from the first, second, and fourth sections will be used. The first section (18 items) asks for information about the student's background (e.g., age, year in school, major field, parents' education), how many hours per week are spent studying and working off campus, and how the student's education is paid for.

The second section includes 111 items divided into 13 college activity scales that measure the amount of time and energy (quality of effort) students devote to various activities. The response options for these items are 1 (*never*), 2 (*occasionally*), 3 (*often*), 4 (*very often*). This section also includes two questions about the amount of reading and writing student do.

In the third section, 10 items measure student perceptions of the extent to which the institution's environment emphasizes important conditions for learning and personal development. Student responses are scored on a 7-point scale ranging from 1 (weak emphasis) to 7 (strong emphasis). Two additional questions measure student satisfaction

In the final section students estimate the extent to which they have made progress since starting college in 25 areas that represent desired outcomes of higher education. Response options are: 1 (*very little*), 2 (*some*), 3 (*quite a bit*), and 4 (*very much*).

Questions on the CSEQ assess student behaviors that are highly correlated with desired learning and noncognitive outcomes. Students who score high on the CSEQ scales have more involvement in those experiences provided by the college environment.

The psychometric properties of the CSEQ indicate it is reliable (Kuh, Vesper, Connolly, & Pace, 1997). Pike (1995) found that student reports of their experiences using the CSEQ were positively correlated with relevant achievement test scores. Based on their review of the major college student research instruments, Ewell and Jones (1996) concluded that the CSEQ has excellent psychometric properties and high to moderate potential for assessing student behavior associated with college outcomes.

For the purposes of this study, only those scales that address the topics related to psychosocial development and the development of purpose will be used. These include the following scales: Experiences with Faculty; Student Acquaintances; Clubs and Organizations; Personal Experiences; Relationships with Faculty; Relationships with Administrative and Personnel Offices; and Relationship with Other Students.

#### *Career Decision Scale*

The *Career Decision Scale* (CDS) (Osipow et al., 1987) was developed to identify barriers which interfere with individuals making career decisions. The scale is intended as a rapid and reliable instrument for surveying college students about their status in the decision-making process. The scale provides an estimate of career indecision and its antecedents as well

as an outcome measure for determining the effects of interventions relevant to career choice and development.

The CDS consists of 19 items (18 self-rating and one open-ended). The first 18 items are statements that the respondent answers according to a 4-point Likert-type scale with 1 = *not at all like me* to 4 = *exactly like me*. The statements on the CDS state direct thoughts and feelings that are related to confidence in career decision-making. A sample item is, "I know I will have to go to work eventually, but none of the careers I know about appeal to me." Item 19 is a free response statement, which will not be used in this study.

The instrument consists of two scales, a Certainty Scale and an Indecision Scale. The Certainty Scale, items 1 and 2, measures certainty of educational and vocational choice; the Indecision Scale, items 3 through 18, measures the antecedents of educational and vocational indecision. The sixteen item Indecision Scale was used in this study. Each item describes a state of uncertainty about an issue pertinent to career choice. Respondents indicate the degree to which each description fits their circumstances on a 4-point continuum from *exactly like me* (4) to *not at all like me* (1). Scores on this scale range from 16 to 64 with greater numbers indicating greater career indecision. High Indecision Scale scores, 38+, indicate serious levels of indecision with regard to career choice, while scores less than 23 indicate little need for intervention. Scores between 23-38 indicate student indecision and the need for further assessment.

The scale has been used extensively in research and practice, and in her review of it, Harmon (1994) suggested that if one was looking for an overall measure of career indecision for use in research or practice, one could find no better measure. Several studies have reported test-retest correlations of individual item and Indecision Scale scores. Osipow, Carney, and Barak

(1976) reported test-retest correlations of .90 and .82 for the Indecision Scale for two separate samples of college students over a 2-week interval ( $n = 50$ ,  $n = 59$ , respectively). Slaney (1981) report a six-week reliability coefficient of .70 for the total Career Decision Scale. Concurrent validity is supported by Osipow (1987) over four general areas: group comparisons measuring indecision, treatment studies, relationships with other personality variables, and relationships with demographic variables. The CDS has been used in a large number of studies which have examined, directly or indirectly various aspects of its validity. These studies generally fall into four major methodological approaches: group comparisons and correlations with instruments measuring the construct of indecision, treatment studies, relationship with other personality variables of interest, and relationships with selected demographic variables. Thus, these studies have supported the validity of the Career Indecision Scale (Slaney & Dickson, 1985).

Internal consistency of the Career Decision Scale has been consistently high with  $r$ 's in the .80s (Fuqua & Hartman, 1983). Predictive validity has been shown in a study by Herman (1985). Construct validity can be inferred because this instrument is a thoroughly researched, published measure of career indecision (Fitzgerald & Rounds, 1989), and correlates with other measures of career decision making (Osipow, 1987).

Slaney and Dickson (1985) reported that the CDS is useful for counselors, teachers, and researchers, while Herman (1985) emphasized use in research for program development. It is highly recommended as a counseling tool or as an instrument to use to evaluate programs in career counseling. It can also be utilized to compare levels of career decision-making across cultural and gender groups (Osipow & Winer, 1996).

### *Demographic Information Questionnaire*

A demographic information questionnaire was developed by the author to collect descriptive information. Questions regarding participants' gender, class standing, race, parental education, parental income, grades, major, activities related to academic work, number of hours spent worked per week, career development activities, and mentoring experiences are included. The demographic information questionnaire was modified from the College Student Experiences Questionnaire (Pace & Kuh, 1998). Demographic variables were chosen based on pertinent student development literature which suggests that these variables may be related to the development of purpose in traditional aged-college students. (Evans et al., 1998).

### Data Analysis

This study sought to identify and study the relationship among involvement and career indecision variables in an effort to determine their relative contribution toward the prediction of developing purpose. The following research questions were considered:

- RQ1: To what extent do specific demographic and background variables help explain the development of purpose?
- RQ2: What is the joint contribution of involvement and career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables?
- RQ3: What is the unique contribution of career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables and involvement?

RQ4: What is the unique contribution of involvement in explaining variation in developing purpose over and beyond what is explained by specific demographic and background variables and career indecision?

RQ5: What variables appear to be most important in explaining development of purpose?

Responses to the *Multi Domain Developing Purpose Inventory* were analyzed using a series of stepwise multiple regression analyses. Pedhazur (1982) defined multiple regression as a:

method of analyzing the variability of a dependent variable by resorting to information available on one or more independent variables. Among other things, an answer is sought to the question: What are the expected changes in the dependent variable as a result of changes (observed or induced) in the independent variables? (p. 5)

Multiple regression analysis was used to account for (predict) the variance in an interval dependent variable, based on linear combinations of interval, dichotomous, or dummy independent variables. Multiple regressions can establish that a set of independent variables explain a proportion of the variance in a dependent variable at a significant level (significance test of R square), and then establish the relative predictive importance of independent variables (comparing beta weights).

Specifically, four stepwise multiple regression analyses were conducted in this study. In the first step, all background variables were included and retained in the data analysis. In the next step, career indecision and involvement were added to the regression equation to determine their contribution to developing purpose. In this step, only those variables found to have statistically significant regression coefficients will be judged to have some relationship to developing



purpose. In the third step, data analysis proceeded in order to explicitly assess the relative contribution of career indecision to the development of purpose. Specifically, data analysis was organized so that career indecision was the last variable added to the model in order to assess its unique contribution. In the fourth step, data analysis assessed the relative contribution of involvement to the development of purpose. The results of all four regression analyses were used to understand which variables appear most important in explaining the development of purpose. In addition, the results of all four regression analyses were used to develop an equation that would permit prediction of the development of purpose for students at Institution I and Institution II. All statistical calculations were performed using *The Statistical Package for the Social Sciences* (SPSS) version 13.0 for Windows.

## CHAPTER 4

### RESULTS

The purpose of this study was to determine which specific set of variables can best predict development of purpose. The results of the data analyses are reported in this chapter and are organized into seven sections. The first section consists of participant demographics. The second section consists of the regression results for the research question: To what extent do specific demographic and background variables help explain the development of purpose? The third section reports the regressions results for the research question: What is the joint contribution of involvement and career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables? The fourth section consists of the regression results for the research question: What is the unique contribution of career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables and involvement? The fifth section reports the regression results for the research question: What is the unique contribution of involvement in explaining variation in developing purpose over and beyond what is explained by specific demographic and background variables and career indecision? The sixth section consists of the regression results for the research question: What variables appear to be most important in explaining development of purpose? The last section presents an equation that would permit estimating the development of purpose at two different types of higher education institutions (Predominantly White and Historically Black) using composites of select scales of the College

Student Experiences Questionnaire (CSEQ), Career Indecision Subscale of the Career Decision Scale (CDS), and specific demographic/background variables.

### Participant Demographics

Initially, 306 surveys were collected from participants. However, eleven of the respondents were either first or second year students. Data were analyzed on a total sample of 295 junior and senior level students from two different types of institutions. The first group (Institution I) consisted of 130 students who were enrolled in a large public Predominantly White Doctoral/Research-Intensive institution in the midwest. The second group (Institution II) consisted of 165 students enrolled in a small Historically Black Doctoral/Research-Intensive institution in the southeastern United States. Participant demographic information is provided in Table 4.1.

Table 4.1

#### *Demographic Characteristics of Participants*

<i>Variable</i>	<i>Institution I</i>		<i>Institution II</i>	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
<b>Gender</b>				
Male	48	36.9	74	44.8
Female	82	63.1	91	55.2
Total	130	100.0	165	100.0
<b>Class Level</b>				
Junior	47	36.2	103	62.4
Senior	83	63.8	62	37.6
Total	130	100.0	165	100.0
<b>Race</b>				
Black/African American	15	11.5	149	90.3
Hispanic	8	6.2	0	0.0
Asian/Pacific Islander	9	6.9	0	0.0
Native American	1	0.8	1	0.6
White	91	70.0	0	0.0
Multiracial	6	4.6	9	5.5

Table 4.1 (continued)

*Demographic Characteristics of Participants*

<i>Variable</i>	<i>Institution I</i>		<i>Institution II</i>	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
Others	0	0.0	6	3.6
Total	130	100.0	165	100.0
<b>Parental Education</b>				
No	53	40.8	57	34.5
Yes, Both	35	26.9	41	24.8
Yes, Father Only	16	12.3	18	10.9
Yes, Mother Only	24	18.5	47	28.5
Don't Know	2	1.5	2	1.2
Total	130	100.0	165	100.0
<b>Parental Income</b>				
10-30K	19	14.6	25	15.2
30-50K	40	30.8	33	20.0
50-80K	32	24.6	48	29.1
80-100K	17	13.1	32	19.4
>100K	22	16.9	27	16.4
Total	130	100.0	165	100.0
<b>Grades</b>				
A	20	15.4	55	3.6
A-, B+	55	42.3	64	38.8
B	28	21.5	46	27.9
B-, C+	21	16.2	44	26.7
C or Lower	6	4.6	5	3.0
Total	130	100.0	165	100.0
<b>Major</b>				
(1) Arts & Humanities	9	6.9	2	1.2
(2) Business	23	17.7	14	8.5
(3) Communication	9	6.9	34	20.6
(4) Ed. & Human Development	24	18.5	13	7.9
(5) Math/Science	5	3.8	9	5.5
(6) Health & Human Services	35	26.9	23	13.9
(7) Social Science	25	19.2	68	41.2
(8) Undecided	0	0.0	2	1.2
Total	130	100.0	165	100.0

Table 4.1 (continued)

*Demographic Characteristics of Participants*

<i>Variable</i>	<i>Institution I</i>		<i>Institution II</i>	
	<i>N</i>	<i>Percent</i>	<i>N</i>	<i>Percent</i>
<b>Number of Hours Per Week Related to Academic Work</b>				
<5	32	24.6	56	33.9
6-10	54	41.5	61	37.0
11-15	20	15.4	20	12.1
16-20	14	10.8	21	12.7
21-25	7	5.4	3	1.8
26-30	3	2.3	4	2.4
Total	130	100.0	165	100.0
<b>Hours Worked Per Week</b>				
None	40	30.8	65	39.4
1-10	22	16.9	15	9.1
11-20	33	25.4	35	21.2
21-30	25	19.2	33	20.0
31-40	8	6.2	12	7.3
More Than 40	2	1.5	5	3.0
Total	130	100.0	165	100.0
<b>Career Development Activities</b>				
Career Planning Course	34	26.2	33	20.0
Career Planning Workshop	14	10.8	22	13.3
Career Counseling	34	26.2	37	22.4
Computer Assisted Guidance	3	2.3	3	1.8
Internships	18	13.8	47	28.5
Co-ops	3	2.3	2	1.2
Service Learning	24	18.5	21	12.7
Total	130	100.0	165	100.0
<b>Mentoring Experience</b>				
No	70	53.8	107	64.8
Yes, Faculty Member	21	16.2	15	9.1
Yes, Staff Member	7	5.4	6	3.6
Yes, Another Type	32	24.6	37	22.4
Total	130	100.0	165	100.0

In summary, across both institutions, approximately 59% of the sample was female and 41% male. In terms of class standing, a little more than half of the respondents (50.8%) were juniors and just less than half were (49.2%) seniors. The majority of the respondents identified as Black or African American (55.6%). Additionally, 30.8% of the participants identified as White, 5.1% as Multiracial, 3.1% as Asian/Pacific Islander, 2.7 % as Hispanic, and 2% as Other.

In terms of parental education, 37.3% of the participants indicated their parents did not graduate from college. Furthermore, 24.1% of the participants indicated that their mother was the only parent to graduate from college. Parental income ranged from \$10,000 to > \$100,000, with the largest percentage in the 50-80K range (27.1%). Students' self-reported grades ranged from A to C or lower with the largest percentage of the sample (40.3%) reporting grades of A-, B+. Approximately one-third of the participants were social science majors (31.5%), 19.7% indicated majors in the areas of health and human services, 14.6% reported majors in the communication area, 12.5% reported majors in business, another 12.5% in education and human development, 4.7% indicated majors in math/science, 3.7% were arts and humanities majors, and .7% were undecided. The number of hours that respondents spent outside of class on activities related to academic work ranged from 5 hours or less a week to 30 hours per week, with 39% of the students spending 6-10 hours a week. The number of hours a week students spent working on a job for pay ranged from 0 to more than 40 hours, with the largest percentage or one-third (35.6%) of the respondents working 0 hours. Respondents were widely dispersed in a variety of career development activities ranging from career planning courses (22.7%); career planning workshops (12.2%); career counseling (24.1%), computer assisted guidance (2%), internships (22%), co-ops (1.7%), and service learning (15.3%). The majority of participants (60%) had no faculty mentor, followed by those who had another type of mentor (23.4%).

*Analyses of Participant Demographics by Institutional Type*

Comparison of survey results according to institutional type yielded several significant findings. The analysis revealed institutional type and class level were not independent of one another ( $p = .000$ , see Table 4.2). For example, with respect to class standing, 36.2% of the students were juniors at Institution I and 62.4% at Institution II. In addition, 63.8% were seniors at Institution I and 37.6% at Institution II. Regarding race, analysis indicated that institutional type and race/ethnicity were not independent ( $p = .000$ , see Table 4.2). Indeed, race was found to be entirely consistent with the demographics of each institution. For example, participants at Institution I were 11.5% Black or African American and 90.3% at Institution II. However, 70% of participants at Institution I and 0% at Institution II were White. The percentages of Multiracial students at Institution I and II were 4.6% and 5.5% respectively. With respect to grades, the analysis revealed that institutional types and grades were not independent ( $p = .001$ , see Table 4.2). For example, 15.4% of students at Institution I reported that they received grades of A, and 3.6% of students at Institution II. Moreover, 16.2% of respondents in Institution I reported that they received grades of B- or C+, and 26.7% reported the same grades at Institution II. Finally, regarding major, the analysis indicated that institutional type and major are not independent ( $p = .000$ , see Table 4.2). For example, 26.9% of participants at Institution I majored in health and human services, and 13.9% at Institution II; 19.2% were social science majors at Institution I, and 41.21% at Institution II; 8.5% indicated majors in education and human development at Institution I and 7.9% at Institution II; 17.7% were business majors at Institution I, and 8.5% at Institution II; 6.9% reported majors in communication at Institution I, and 20.6% at Institution II. Another 6.9% majored in arts and humanities at Institution I, and 1.2% at Institution II.

Table 4.2

*Chi-Square Tests of Independence*

<i>Variable Group Compared On</i>	<i>Pearson Chi-Square Value</i>	<i>p (Asymp. Sig.)</i>
Class	20.078	0.000
Race/Ethnicity	223.075	0.000
Grades	16.912	0.002
Major	46.458	0.000

Note: N = 295

Dependent Variable: Developing Purpose

$p < .05$

### Regression Results for Research Question 1

The first research question asked: To what extent do specific demographic and background variables help explain the development of purpose? To answer Research Question 1, the eleven predictor variables from the demographic questions were entered into the analysis. In order to compare the two groups, this step required that all of the demographic variables entered into the model remain in the model.

For Institution I, 26% of the total variation in developing purpose is accounted for or explained by the regression equation. The following predictors: major, race/ethnicity, parent income, and academic program hours per week were significant at the .05 level. For Institution II, 19.5% of the total variation in developing purpose was accounted for or explained by the regression equation. The predictors of major and academic program hours per week were significant at the .05 level for Institution II.



### Regression Results for Research Question 2

The second research question asked: What is the joint contribution of involvement and career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables? In the next step, career indecision and involvement were added to the regression equation containing the demographic variables. At this stage, stepwise regression was used to determine the variables that had statistically significant regression coefficients at the .05 level. A significance level of  $p < .05$  determined which predictor variables were entered and remained in the model.

For Institution I, the model with all of the demographic variables yielded a  $R^2$  value of 0.260. When the variables career indecision and involvement were added to the model already containing the demographic variables, the value of  $R^2$  increased to 0.410 and change in  $R^2$  of 0.150 which is significant (see Table 4.3). The following individual predictors: major, race, parental income, involvement, and career indecision are all significant at the .05 level.

For Institution II, the model with the demographic variables yielded a  $R^2$  value of 0.195. When the variables career indecision and involvement were added to the model already containing the demographic variables, the value of  $R^2$  increased by 0.105, which was significant (see Table 4.3). The following individual predictors: major, race/ethnicity, career indecision, and involvement were significant at the .05 level.

### Regression Results for Research Question 3

The third research question asked: What is the unique contribution of career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables and involvement? In order to perform this third regression analysis, the  $R^2$  from step two was compared to the  $R^2$  from step three to determine the

unique contribution of career indecision to the development of purpose. Since useful findings were found during steps one and two, the variable career indecision was added last to determine its unique contribution to the development of purpose.

Table 4.3

*Regression Results for Background/Demographic Variables are in Step I, Career Indecision and Involvement are added at Step 2*

Institution I			
Model	R <sup>2</sup>	R <sup>2</sup> Change	F Change
1	0.260	0.260	2.164
2	0.410	0.150	13.867
Institution II			
Model	R <sup>2</sup>	R <sup>2</sup> Change	F Change
1	0.195	0.195	1.967
2	0.300	0.105	10.791

For Institution I, the results indicated that there was a significant change in R<sup>2</sup> value ( $p = 0.002$ ) from the model with all demographic variables to the model with demographic and involvement variables. When career indecision was later added to the model with demographic variables and involvement, the change in R<sup>2</sup> is 0.087, which is also significant ( $p = 0.000$ , see Table 4.4). The individual predictors: race/ethnicity, parental income, involvement, and career indecision were significant at the .05 level.

For Institution II the results indicated that there is a significant change in R<sup>2</sup> value ( $p = 0.001$ ) from the model with all demographic variables to the model with demographic and involvement variables. When career indecision was later added to the model with the demographic variables and involvement, the change in R<sup>2</sup> is 0.046, which is also significant ( $p = 0.003$ , see Table 4.4). The individual predictors: major, race/ethnicity, involvement, and career indecision were significant at the .05 level.

Table 4.4

*Regression Results for Background/Demographic Variables and Involvement with Career**Indecision Added Last*


---

Institution I			
Model	R <sup>2</sup>	R <sup>2</sup> Change	F Change
1	0.260	0.260	2.164
2	0.323	0.064	10.331
3	0.410	0.087	15.996
Institution II			
Model	R <sup>2</sup>	R <sup>2</sup> Change	F Change
1	0.195	0.195	1.967
2	0.255	0.059	11.551
3	0.300	0.046	9.365

---

Note: N = 295

Dependent Variable: Developing Purpose

p < .05

#### Regression Results for Research Question 4

The fourth question asked: What is the unique contribution of involvement in explaining variation in developing purpose over and beyond what is explained by specific demographic and background variables and career indecision? To answer Research Question 4, R<sup>2</sup> from step three was compared with the R<sup>2</sup> in step four to determine the unique contribution of involvement to developing purpose. Since useful findings were found during steps one, two, and three the variable involvement was added last to determine its unique contribution to the development of purpose.

The results for Institution I indicated that the model with all demographic variables has an R<sup>2</sup> value of 0.260. When career indecision was added to the model R<sup>2</sup> increased to 0.334 (a change in R<sup>2</sup> of 0.075) which was significant. The change in R<sup>2</sup> with the addition of involvement as the last predictor was 0.076, which is also significant (see Table 4.5).

The results for Institution II indicated that the model with all demographic variables has an  $R^2$  value of 0.195. When career indecision was added to the model  $R^2$  increased to 0.249 (a change in  $R^2$  of 0.053) which was significant. The change in  $R^2$  with the addition of involvement as the last predictor was 0.052, which was also significant (see Table 4.5).

Table 4.5

*Regression Results for Background/Demographic Variables and Involvement and Career Indecision With Involvement Added Last*

---

Institution I			
Model	$R^2$	$R^2$ Change	F Change
1	0.260	0.260	2.164
2	0.334	0.075	12.325
3	0.410	0.076	13.958
Institution II			
Model	$R^2$	$R^2$ Change	F Change
1	0.195	0.195	1.967
2	0.249	0.053	10.299
3	0.300	0.052	10.601

---

Note: N = 295  
 Dependent Variable: Developing Purpose  
 $p < .05$

### Regression Results for Research Question 5

To answer Research Question 5, the results of all four regression analyses were used to understand which variables are most important in explaining the development of purpose.

Results for Institution I indicated that about 33% ( $R^2 = .329$ ) of the total variance in developing purpose was accounted for or explained by the regression of developing purpose with the four predictors career indecision, involvement, race/ethnicity, and major. There was a significant overall regression ( $p = 0.000$ ) using all four of these predictors. For Institution I, the estimated regression equation was:

$$Y_I = 103.44 + 0.716 (\text{Career Indecision}) + 0.295 (\text{Involvement}) - 8.163 \\ (\text{Race/Ethnicity}) - 7.137 (\text{Major}),$$

where  $Y_I$  is developing purpose for Institution I. See Tables 4.6 and 4.7.

Results for Institution II indicated that about 25% of the total variance in developing purpose was accounted for or explained by the regression of developing purpose with the five predictors involvement, career indecision, major, race/ethnicity, and class level. There was a significant overall regression ( $p = 0.000$ ) using all five of these predictors. For Institution II, the estimated regression equation was:

$$Y_{II} = 87.796 + 0.313 (\text{Involvement}) + 0.540 (\text{Career Indecision}) - 6.635 \\ (\text{Major}) + 7.527 (\text{Race/Ethnicity}) + 4.283 (\text{Class Level}),$$

where  $Y_{II}$  is Developing Purpose for Institution II. See Tables 4.6 and 4.7.

### Chapter Summary

The researcher used a number of statistical analyses to determine which specific set of variables could best predict development of purpose. The results of this study indicated that the independent variables race/ethnicity, class level, major, involvement, and career indecision all had some significant relationship to developing purpose. A discussion of the results follows in Chapter Five.

Table 4.6

#### *Regression Results for Selected Models-Model Summary*

Institution/Model	Predictor(s)	R2
Institution I		
Model		
1	Career Indecision	.144
2	Career Indecision, Involvement	.259

Table 4.6 (continued)

*Regression Results for Selected Models-Model Summary*

Institution/Model	Predictor(s)	R2
3	Career Indecision, Involvement Race	.306
4	Career Indecision, Involvement, Race, Communication Major	.329
Institution II		
Model		
1	Involvement	.140
2	Involvement, Career Indecision	.187
3	Involvement, Career Indecision, Health & Human Services Major	.209
4	Involvement, Career Indecision, Health & Human Services Major, Race	.229
5	Involvement, Career Indecision, Health & Human Services Major, Race, Class Level	.254

Note: N = 295

Dependent Variable: Developing Purpose

p &lt; .05

Table 4.7

*Regression Results for Selected Models-Coefficients*

Institution/Model	Predictor(s)	B	Sig
Institution I			
Model			
1	Career Indecision	.771	.000
2	Career Indecision	.756	.000
	Involvement	.283	.000

Table 4.7 (continued)

*Regression Results for Selected Models-Coefficients*

Institution/Model	Predictor(s)	B	Sig
3	Career Indecision	.738	.000
	Involvement	.281	.000
	Race	-8.136	.004
<b>Institution II</b>			
Model			
1	Involvement	.326	.000
2	Involvement	.307	.000
	Career Indecision	.505	.000
3	Involvement	.299	.000
	Career Indecision	.526	.002
	Health & Human Services Major	-5.513	.002
4	Involvement	.303	.000
	Career Indecision	.567	.001
	Health & Human Services Major	-6.252	0.18
	Race	6.322	.041
5	Involvement	.313	.000
	Career Indecision	.540	.001
	Health & Human Services Major	-6.635	.011
	Race	7.527	.015
	Class Level	4.283	.022

Note: N = 295

Dependent Variable: Developing Purpose

p &lt; .05

## CHAPTER 5

### CONCLUSIONS

This chapter includes a review of the study, a summary of findings, and a discussion of the findings. Suggestions for future research and implications for practice are also discussed.

#### Review of the Study

Previous research has examined developing purpose, involvement, and career indecision separately, with minimal attention paid to the ways in which these constructs interact. The current study sought to identify and study the relationship among specific demographic variables, involvement, and career indecision in an effort to determine their relative contribution toward the prediction of developing purpose. Five research questions were developed:

- RQ1: To what extent do specific demographic and background variables help explain the development of purpose?
- RQ2: What is the joint contribution of involvement and career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables?
- RQ3: What is the unique contribution of career indecision in explaining variation in developing purpose over and above what is explained by specific demographic and background variables and involvement?
- RQ4: What is the unique contribution of involvement in explaining variation in developing purpose over and beyond what is explained by specific demographic and background variables and career indecision?



RQ5: What variables appear to be most important in explaining development of purpose?

The study was designed to fill a gap in our knowledge and contribute to the body of literature on Chickering and Reisser's (1993) Vector Six, Developing Purpose. An additional goal of this study was to provide student affairs professionals with useful information regarding specific variables associated with the development of purpose. This information will allow student affairs professionals to intentionally design programs and activities that promote the development of purpose in traditional-aged college students.

Developing purpose requires formulating plans and priorities that integrate vocational plans, avocational and personal interests, and interpersonal and family considerations. Given that students differ in the development of purpose, a closer examination of the factors that influence the growth process seems to be an important step in understanding this student development construct.

The more involved college students are in the academic and social aspects of campus life, the more they benefit in terms of learning and personal development (Astin, 1993). Thus, involvement is an important variable in understanding developing purpose. Indeed, it stands to reason that as students become more involved in the campus environment and their self-knowledge increases and their identities solidify, vocational plans become more distinct.

Career indecision is another important variable in understanding developing purpose. As students become clear on their purpose and are increasingly able to make conscious choices based on a defined set of values and beliefs, they may be more persistent in reaching their goals, including those specific to their career. Perhaps this can be interpreted to mean that the

psychosocial development of students plays a major role in their readiness to engage in career decision activities (Chickering & Reisser, 1993).

#### Summary of Findings and Implications for Practice

This study will have utility for student affairs professionals in that it empirically corroborates and supports information about a highly respected and well-known student development theory. Specifically, this study provided empirical evidence to support Chickering and Reisser's (1993) Developing Purpose vector. Results of the study indicated that the Developing Purpose construct is part of a constellation involving other variables (career indecision, involvement, race, major, and class level) rather than a single independent variable. This study has also shown that key factors in developing purpose differ somewhat by institutional type. For instance, at Institution I the key factors in developing purpose were career indecision, involvement, race, and major. At Institution II key factors were career indecision, involvement, race, major, and class level. The only difference found in the two institutional types is that class level was a predictor of development of purpose at Institution II but not at Institution I. In addition, it should be noted that the demographic variables found to be significant in research question one were class level, race/ethnicity, grades, and major. Ultimately, after all the models were considered the final set of demographic variables predicted to influence the development of purpose were class level, race/ethnicity, and major. These three variables will be used in the discussion on demographics that follows. The findings revealed in the current study have implications for those who work with undergraduate college students, including student affairs and academic affairs professionals, faculty, and counselors. These higher education professionals can use this information to encourage and foster future development of purpose in

students through counseling, the intentional design of programs and activities, or directions that may be helpful to the student.

The remainder of this chapter will focus on the findings of the study and implications for practice for each of the five variables (career indecision, involvement, race, major, and class level) found to have some significant relationship to developing purpose.

#### *Career Indecision Variable*

*Findings.* Results of the current study indicated that career indecision was a predictor of developing purpose. This supports the notion that career development and psychosocial development are related. Perhaps this can be interpreted to mean that the psychosocial development of students plays a role in their readiness to engage in career development activities, which could include making a career decision. This premise is supported in the literature on psychosocial development, which suggested that progress in career planning and decision-making is sequential and is closely tied to individual progress in psychosocial development (Chickering & Reisser, 1993).

*Implications for practice.* It may be beneficial for student affairs professionals and counselors to provide students with information on avenues and options in terms of not only selecting a major but what career options students can pursue with a major. Students should be reminded that because a person majors in Business, he or she does not have to pursue the customary path of being an Accountant or Manager. Other possibilities can lead students to other career paths (i.e., Agriculture, Healthcare Administration, and Actuarial Science). Furthermore, student affairs professionals and counselors must dispel the notion that students possess that a major has a limited number of career options (e.g., to become a manager a person's only option is to major in Management, or to become a lawyer a person's choice is to major in Political

Science). Student affairs professionals and counselors must reinforce in students that to attend graduate or professional schools there is not one correct way to achieve one particular goal (e.g., to attend law or graduate school a person does not have to pursue a graduate or professional degree in the same area in which the student received his or her undergraduate degree). A person can attend law or medical school and major in Business, Math, English, Education, or any other discipline as long as they have the prerequisite courses to apply. One benefit in majoring in another discipline and attending law school is a person has a background in a particular subject to specialize in when attending law school. For example, if a person majors in business or education and applies to law school, an area of specialization for business majors is (business, corporate, or patent) and for the education majors (civil or educational policy).

Furthermore, today's college students, known in the literature as *millennials*, (Coomes & DeBard, 2004) have career interests, values, and goals that are dramatically different from previous generations. Student affairs professionals can assist with educating others on campus about the unique needs of these students by providing educational seminars for faculty, staff, and job placement recruiters about the ways in which millennial students develop their sense of purpose, and their response to various career development programs, curricula, services, and job placement opportunities.

#### *Involvement Variable*

*Findings.* The current study revealed that involvement was a predictor of developing purpose. This finding provides clear evidence that involvement and developing purpose are intertwined and supports the notion that student involvement in both academic and interpersonal activities has significant positive correlations with student development (Pace, 1984, 1990). This suggests that spending more time in activities with friends, studying, exercising, attending parties

and social events, working on campus, attending lectures and plays, and participating in student activities have a positive relationship with developing purpose. One way to summarize these findings is that activities that involve students in campus life relate to developing purpose; while more isolating activities (e.g., watching TV, playing video games) are more negatively related to the construct. These findings are consistent with Astin's (1993) theory of student involvement.

*Implications for practice.* This finding supports student affairs professionals developing and encouraging student involvement opportunities, such as student organizations and groups, learning communities, and other activities as a means of promoting development of purpose (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005). The role of student affairs professionals also involves redesigning programs that currently have a negative impact on student development and learning. For example, this might mean more attention must be paid to designing student participation in Greek activities, whose current customs, practices, and traditions could be altered to provide a more positive development experience. This also means that student affairs professionals must pay attention to understanding the multiple demands placed on today's students and, most importantly, developing assessment tools and techniques that focused on isolating the specific factors or aspects of student involvement that could contribute in negative or positive ways to student learning and development.

#### *Race Variable*

*Findings.* The literature reviewed for this study suggested that race and/or racial identity may influence and perhaps even be predictive of patterns of psychosocial development and developing purpose (Pope, 1998). The results of this study support that assertion. Indeed, results suggest a relationship between the broader constructs of psychosocial development and racial identity. Specifically, the demographic variable race and/or racial identity was predictive of

development of purpose. Perhaps the connection between these constructs can be interpreted to mean that the exploration that occurs in the racial identity development process is related to the exploration that occurs in choosing a career path, and vice versa. For instance, both constructs emphasize integration of identity, life goals, and self-knowledge. Although this study does offer support for the notion that race and/or racial identity influences psychosocial development in general and developing purpose in specific the nature of that influence is not fully understood. Therefore, further research is needed to understand this relationship better.

*Implications for practice.* One consideration related to the finding of race as a significant variable in developing purpose is the importance of racial identity development. It is important for student affairs professionals to understand the perspectives, behaviors, and mindset of students at the various stages of racial identity development and how these differences may affect the psychosocial development of African American students. Given the fact that this sample consisted of students at a Historically Black College or University (HBCU) and a Predominantly White Institution (PWI), it is necessary to mention that type of institution may also serve as a critical consideration when talking about developing purpose in African American and White college students. For student affairs educators, attention to and dialogue about the mission of different types of institutions, and issues for students on those campuses due to race will be important, especially as one thinks about developing purpose. In addition, student affairs professionals and counselors need to understand that African Americans are not a monolithic people and that within-group differences do exist. Therefore, group differences must be understood and acknowledged when applying student development theories to African American students. Student affairs professionals, faculty, and counselors must continue to study and understand the ways in which race, social, cultural, and historical variables influence African

Americans, their development, and how they respond to various programs, curricula, policies and services, and higher education professionals. Care must be taken to design programs and services that suggest authentic care for their experience and development.

In addition, it has been well established in the literature that the role of race was generally ignored by career development theorists over the years (Walsh, 2001). As a result, the programs and services on college campuses that have been generated out of these racially devoid theories have been used to guide the decisions of African American and White students. However, as the profile of the labor force gradually changed to that of a more diverse entity, counselors, student affairs professionals, and researchers have faced challenges in serving the growing minority population within colleges and universities. Results of the current study can be of assistance to such professionals as they continue to face these challenges. For instance, counselors can develop career programs and services that address the unique career development needs of African American students. For example, the use of relevant role models (by encouraging students to read relevant autobiographies or utilizing bibliography) in challenging students' negative learning experiences is useful. It is also suggested that student affairs professionals develop a list of local professionals of color in various career fields as a resource that could be made available to undecided students for informational or shadowing purposes. Finally, the student affairs' professional role as advocate for this group of students cannot be overemphasized. For instance, student affairs professionals' advocacy for students relative to meaningful placement for internships and co-ops might assist in facilitating effective career decisions.

Furthermore, when working with African American students, student organizations, both predominantly Black and mainstream, should be marketed as outlets for African American

students in order for them to learn more about themselves and others, to contribute to programmatic and advocacy efforts that will improve their own quality of life as well as that of marginalized others on campus, and afford them opportunities to develop a set of cross-cultural communication skills that will prove useful in post-college careers and life. Student affairs professionals should use caution when implementing this suggestion because although Cross (1971, 1999, 1995) portrays Internalization as the optimal level of racial identity functioning, one must be cognizant of the varied backgrounds from which African American students come and therefore not assume that every African American student finds engagement in social work on behalf of disenfranchised populations on their campus appealing.

#### *Major Variable*

*Findings.* The literature on majors and student learning and development is sparse and has not yielded a consistent pattern (Porter & Umbach, 2006). The findings of this study, however, indicated that major is a predictor in developing purpose. This finding supports the generally accepted notion in higher education that major is a foundation for a career (Thompson, 2004). This suggests that students who are undecided about their major should spend more time engaged in programs, courses, and counseling and advising activities that explore both major and career decision-making issues.

*Implications for practice.* College students change their mind about majors and careers all the time. Perhaps student affairs professionals and counselors might encourage students who aren't yet sure about their career goals to major in general or liberal studies or attend a liberal arts college or university both of which would expose students to different fields representing the core areas of thought and knowledge (e.g., math, philosophy, natural sciences, languages, arts, and history). In these kinds of programs of studies and institutions the emphasis is often on



thinking skills, and the ability to gather knowledge, analyze information, identify themes and trends, and articulate a response. In other words, exploring different subjects as part of a liberal arts education can be an ideal foundation for a wide range of major and career choices.

Furthermore, higher education might consider integrating academic advising and career life planning into one office/unit (McCollum, 1998). This office or unit would be a place where all students could receive ongoing advising relative to their educational and career planning needs at any time convenient to them. Departments, student affairs professionals, counselors, advisors who have the skills to integrate the two advising processes can assist students holistically and include the total process. In addition, a Major and Career Decision-Making Lab could be created that would allow students to explore the major and career decision making process, talk with a counselor, be referred to campus resources and discuss major and career options related to their interests and abilities.

#### *Class Level Variable*

*Findings.* Another demographic variable found to influence developing purpose was class level. This finding is consistent with predictions that, in general, the vectors generally follow a pattern similar to the class levels where freshmen and sophomore students grapple with the first three vectors, while junior and senior students may be more concerned with vectors four, five, and six (Chickering & Reisser, 1993; Wachs & Cooper, 2002). Differences in psychosocial development with respect to age may reflect differences in stages of identity development as well. Erikson's theory of psychosocial development states that the first stage, identity versus identity diffusion, occurs between the ages of 12-20 (Erikson, 1968). Given that identity is formed as one examines belief systems, meaning, and purpose, it is likely that seniors may have had more opportunities to examine these areas than junior students. Moreover, family

environments or cultures differ in the degree of support they offer in individuation, sometimes discouraging development of vocational choices and personal lifestyle and impacting the extent to which students can establish their own unique identity.

*Implications for practice.* Utilizing this finding, perhaps student affairs professionals and academic affairs professionals can work together to create upper level internship courses that concentrate on opportunities for junior and senior students to consider their career choice options and that provide practical learning activities (e.g., developing electronic career portfolios, cocurricular transcripts, resumes, cover letters). In addition, service learning experience could be developed that allow students to both gain practical knowledge of a career area while at the time providing civic service to their communities.

#### Further Research

The results of this study emphasize the need for additional studies that examine our understanding of Chickering and Reisser's (1993) Developing Purpose construct. Indeed, one of the greatest criticisms of Chickering and Reisser's Model of Student Development is that the vectors lack specificity (Evans, Forney, & Guido-DiBrito, 1998; Pascarella & Terenzini, 2005). Little research has been completed to lend greater clarity to Vector Six, Developing Purpose. Exploring ways to improve students' development of purpose as measured by the SDTLA-PUR, including intervention strategies, would provide additional information to student affairs professionals as they assist the psychosocial development of their students. In particular, qualitative research on developing purpose may contribute to more of an understanding of the variables that predict development of purpose.

Research that can measure the effectiveness and appropriateness of multiple forms of career intervention within the African American college student population will be useful in

identifying existing interventions and creating new interventions that can better address the needs of this group. Replication of the current study using samples from other Historically Black Colleges and Universities (HBCUs), as well as samples of African American college students from Predominantly White institutions (PWIs), would provide an invaluable repository of data from which to draw upon the generation of racially and culturally relevant theories, interventions, and services for African American college populations.

Finally, the current study based its research design on Chickering and Reisser's (1993) assertion that Vector Six, Developing Purpose, is more of a focus at the end of students' college careers after they have progressed along the first five vectors. Contrary to this hypothesis, a recent longitudinal study of Chickering and Reisser's vectors found that growth along the Developing Purpose vector occurred throughout students' college experience, including their first year (Foubert et al., 2005). In light of this research finding, perhaps the current research study could be replicated using a multicampus study with data collected during each year of college attendance to provide a much clearer picture of the variables that promote development of purpose.

The findings described in the current study have implications for student affairs and academic affairs professionals, faculty, and counselors. The regression analyses completed in this study identify a number of factors related to developing purpose. The outcomes of these analyses can guide student affairs professionals who are interested in having a positive impact on development of purpose in students. They also have implications for racial identity, involvement, and career development and career decision-making. Ultimately, student affairs professionals can utilize information gained from this study to encourage and foster future development of

purpose in students through purposefully designing and facilitating student learning practices in the classroom as well as outside classroom settings and laboratories.

## REFERENCES

- Allport, G. W. (1955). Outlook of youth in ten countries. *Acta Psychologica, 11*, 211-212.
- Allport, G. W. (1961). *Pattern and growth in personality*. New York: Holt.
- Astin, A. W. (1968). *The college environment*. Washington, DC: American Council on Education.
- Astin, A.W. (1970). The methodology of research on college impact, part one. *Sociology of Education, 43*, 223-254.
- Astin, A. (1975). *Preventing students from dropping out*. San Francisco: Jossey-Bass.
- Astin, A. W. (1977). *Four critical years*. San Francisco: Jossey-Bass.
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel, 26*, 297-308.
- Astin, A.W. (1985). Involvement: The cornerstone of excellence. *Change, 17*(4), 35-39.
- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco: Jossey-Bass.
- Berger, J. B., & Milem, J. F. (1999). Exploring the impact of historically Black colleges in promoting the development of undergraduates' self-concept. *Journal of College Student Development, 41*(4), 381-394.
- Branch-Simpson, G. (1984). *A study of the patterns in the development of Black students at the Ohio State University*. Unpublished doctoral dissertation, Ohio State University, Columbus.

- Braxton, J. M., Bray, N. J., & Berger, J. B. (2000). Faculty teaching skills and their influence on the college student departure process. *Journal of College of Student Development, 41*(2), 215-227.
- Buchner, A., Erdfelder, E., & Faul, F. (1997). G\*Power [WWW document]. URL [http://www.psych.uni-duesseldorf.de/aap/projects/gpower/how\\_to\\_use\\_gpower.html](http://www.psych.uni-duesseldorf.de/aap/projects/gpower/how_to_use_gpower.html)
- Cabrera, A. F., Nora, A., Terenzini, P. T., Pascarella, E., & Hagedorn, L. S. (1999). Campus racial climate and the adjustment of students to college: A comparison between white students and African American students. *Journal of Higher Education, 70*(2), 134-160.
- Cheatham, H. E., Slaney, R. B., & Coleman, N. C. (1990). Institutional effects on the psychosocial development of African-American college students. *Journal of Counseling Psychology, 37*, 453-458.
- Chickering, A. W. (1969). *Education and identity*. San Francisco: Jossey-Bass.
- Chickering, A. W., & Reisser, L. (1993). *Education and identity* (2<sup>nd</sup> ed.). San Francisco: Jossey-Bass.
- Cokley, K. O. (1999). Reconceptualizing the impact of college racial composition on African American students' racial identity. *Journal of College Student Development, 40*, 235-246.
- Cokley, K. O. (2001). Gender differences among African American students in the impact of racial identity on academic psychosocial development. *Journal of College Student Development, 42*, 480-487.
- Coomes, M. D., & DeBard, R. (2004). *Serving the millennial generation*. San Francisco: Jossey-Bass.
- Cooper, D., Healy, M., & Simpson, J. (1994). Student development through involvement: Specific changes over time. *Journal of College Student Development, 35*, 98-102.

- Cross, W. E. (1971). Toward a psychology of Black liberation: The Negro-to-Black Conversion experience. *Black World, 20*, 13-27.
- Cross, W. E. (1991). *Shades of black*. Philadelphia, PA: Temple University Press.
- Cross, W. E. (1995). The psychology of Nigrescence: Revising the Cross model. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 93-122). Thousand Oaks, CA: Sage.
- Day, S., & Rounds, J. (1998). Universality of vocational interest structure among racial and ethnic minorities. *American Psychologist, 53*(7), 728-736.
- Desousa, D.J., & Kuh, G.D. Does institutional racial composition make a difference in what Black student gain from college? *Journal of College Student Development, 37*(3), 257-267.
- Drum, D. J., & Lawler, A. C. (1988). *Developmental interventions: Theories, principles, and practice*. Columbus, OH: Merrill.
- Erikson, E. H. (1959). *Identity and the life cycle*. New York: Norton.
- Erikson, E. H. (1964). *Insight and responsibility*. New York: Norton.
- Erikson, E. H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Erikson, E. H. (1980). *Identity and the life cycle*. New York: Norton. (Original work published in 1959).
- Evans, N. J. (2003). Theories of student development. In S. R. Komives, D. B. Woodard, Jr., & Associates (Eds.), *Student services: A handbook for the profession* (3<sup>rd</sup> ed., pp. 164-187). San Francisco: Jossey-Bass.
- Evans, N. J., Forney, D. S., Guido-DiBrito, F. (1998). *Student development in college*. San Francisco: Jossey-Bass.

- Ewell, P. T., & Jones, D. P. (1996). *Indicators of "good practice" in undergraduate education: A handbook for development and implementation*. Boulder, CO: National Center for Higher Education Management Systems.
- Feldman, K. A., & Newcomb, T. M. (1969). *The impact of college on students*. San Francisco: Jossey-Bass.
- Fleming, J. (1984). *Blacks in college: A comparative of students' success in black and white institutions*. San Francisco: Jossey-Bass.
- Flowers, L. (2002). Developing purpose in college: Differences between freshmen and seniors. *College Student Journal, 36*(3).
- Flowers, L., & Pascarella, E. T. (1999). Cognitive effects of college racial composition on African American students after 3 years of college. *Journal of College Student Development, 40*(6), 669-677.
- Fouad, N. A., Harmon, L. W., & Borgen, F. H. (1997). Structure of interests of employed male and female members of U.S. racial-ethnic minority and nonminority groups. *Journal of Counseling Psychology, 44*(4), 339-345.
- Foubert, J., Nixon, M., Sisson, V. S., & Barnes, A. C. (2005). A longitudinal study of Chickering and Reisser's vectors: Exploring gender differences and implications for refining theory. *Journal of College Student Development, 46*(5), 461-471.
- Freshmen Survey. (2006). This year's freshmen at 4-year colleges: Their opinions, activities, and goals [Electronic version]. *Chronicle of Higher Education, 50*, 21a.
- Frankl, V. E. (1959). *The doctor and the soul*. New York: Vintage.
- Frankl, V. E. (1979). *The unheard cry for meaning: Psychotherapy and humanism*. New York: Simon and Schuster.



- Frankl, V. E. (1984). *Man's search for meaning*. New York: Washington Square Press Pocket Books.
- Frankl, V.E. (1997). *Man's search for ultimate meaning*. New York: Insight Books.
- Fries-Britt, S. L. (2000). Identity development of high-ability Black collegians. In M.B. Baxter Magolda (Ed.), *Teaching to promote intellectual and personal maturity: Incorporating students' worldviews and identities into the learning process. New Directions for Teaching and Learning* (No. 82, pp. 55-56). San Francisco: Jossey-Bass.
- Fries-Britt, S. L. (2002). High-achieving Black collegians. *About Campus*, 7(3), 2-8.
- Fries-Britt, S. L., & Turner, B. (2001). Facing stereotypes: A case study of Black students on a White campus. *Journal of College Student Development*, 42, 420-429.
- Fuqua, D., & Hartman, B. (1983). A behavioral index of career indecision for college students. *Journal of College Student Personnel*, 24(6), 507-512.
- Gati, I. (1995). Gender differences in career decision making: The context and structure of preferences. *Journal of Counseling Psychology*, 42(2), 204-216
- Goethals, G. R. Hurshman, L. C., Sischy, A. C., Winston, G. C., Zhelev, G., Zimmerman, D. J. (2004). *Who cares? How students view faculty and other adults in US higher education*. Ann Arbor: University of Michigan Press.
- Goodstein, L. D. (1965). Behavior theoretical views of counseling. In B. Stefflre (Ed.), *Theories of counseling*. New York: McGraw-Hill.
- Gordon, V. N. (1995). *The undecided college student: An academic and career advising challenge* (2<sup>nd</sup> ed.). Springfield, IL: Thomas.
- Gordon, V. N. (1998). Career decidedness types: A literature review. *The CareerDevelopment Quarterly*, 46, 386-403.

Gordon, L., & Meyer, J. C. (2002). Career indecision amongst prospective university students.

*South African Journal of Psychology, 32*(4), 41-47.

Guerra, A. L., & Braungart-Rieker, J. M. (1999). Predicting career indecision in college students:

The roles of identity formation and parental relationship factors. *The Career*

*Development Quarterly, 47*(3), 255-266.

Harper, S. R. (2004). The measure of a man: Conceptualization of masculinity among high-

achieving male college students. *Berkeley Journal of Sociology, 48*, 89-107.

Harper, S. R. (2006). *Black male students at public universities in the U.S.: Status, trends and*

*implications for practice*. Washington, D.C.: Joint Center for Political and Economic

Studies.

Hayes, L. (1997). The undecided college student. *Counseling Today* {On-line}.

Available: <http://www.counseling.org/ctonline/archives/ct1097a3htm>

Heath, D. (1969). *Growing up in college*. San Francisco: Jossey-Bass.

Heath, D. (1978). A model of becoming a liberally educated and mature student. In C. Parker

(Ed.), *Encouraging development in college students*. Minneapolis, MN: University of

Minnesota Press.

Helms, J. E. (Ed.). (1990). *Black and White racial identity: Theory, research, and practice*.

Westport, CT: Greenwood Press.

Heyduk, R. G., & Fenigstein, A. (1984). Influential works and authors in psychology: A survey

of eminent psychologists. *American Psychologist, 39*, 556-559.

Holland, J. L., & Holland, J. E. (1977). Vocational indecision: More evidence and speculation.

*Journal of Counseling Psychology, 24*, 404-414.

- Hood, A. B., & Zerwas, S. C. (1997). The Iowa vocational purpose inventory. In A. Hood (Ed.), *The Iowa student development inventories* (2<sup>nd</sup> ed., pp. 93-108). Iowa City, IA: HITECH Press.
- Howard-Hamilton, M. F. (1997). Theory to practice: Applying developmental theories relevant to African American men. In M. J. Cuyjet (Ed.), *Helping African American men succeed in college. New Directions for Student Services* (No. 80, pp. 17-30). San Francisco: Jossey-Bass.
- Hu, S., & Kuh, G. D. (2002). Being (dis)engaged in educationally purposeful activities: The influence of student and institutional characteristics. *Research in Higher Education*, 43(5), 555-575.
- Jones, S. R. (1997). Voices of identity difference: A qualitative exploration of the multiple dimensions of identity development in women college students. *Journal of College Student Development*, 38, 376-386.
- Jones, S. R., & McEwen, M. K. (2000). A conceptual model of multiple dimensions of identity. *Journal of College Student Development*, 41(4), 405-414.
- Jordan-Cox, C. (1987). Psychosocial development of students in traditionally Black institutions. *Journal of College Student Development*, 28, 504-512.
- Josselson, R. (1987). *Finding herself: Pathways to identity development in women*. San Francisco: Jossey-Bass.
- Josselson, R. (1996). *Revising herself: The story of women's identity from college to midlife*. New York: Oxford University Press.
- Kelly, K. R., & Pulvar, C. A. (2003). Refining measurement of career indecision types: A validity study. *Journal of Counseling and Development*, 81, 445-454.

- Kerka, S. (2003). *Career development of diverse populations*. (ERIC Document Reproduction Service No. ED482536).
- Kim, M. (2002). Historically Black vs. White institutions: Academic development among Black students. *Review of Higher Education, 25*(4), 385-407.
- Kimbrough, W. M., & Hutcheson, P. A. (1998). The impact of student membership in Black Greek-letter organizations on Black students' involvement in collegiate activities and their development of leadership skills, *Journal of Negro Education, 67*(2), 96-105.
- King, P. M., & Howard-Hamilton, M. F. (2000). Using student development theory to inform institutional research. In J. W. Pickering & G. R. Hanson (Eds.), *Collaboration between student affairs and institutional researchers to improve institutional effectiveness. New Directions for Institutional Research* (No. 108, pp 19-36). San Francisco: Jossey-Bass.
- Kuh, G. D., Hu, S., & Vesper, N. (2000). They shall be known by what they do: An activities-based typology of college students. *Journal of College Student Development, 4*(2), 228-244.
- Kuh, G. D., Vesper, N., Connolly, M. R., & Pace, C. R. (1997). *College Student Experiences Questionnaire: Revised norms for the third edition*. Bloomington, IN: Center for Postsecondary Research and Planning, School of Education, Indiana University.
- Levinson, D. J. (1978). *The seasons of a man's life*. New York: Knopf.
- Lewis, A. E., Chesler, M., & Forman, T. A. (2000). The impact of "colorblind" ideologies on students of color: Intergroup relations at a predominately White university. *Journal of Negro Education, 69*(1-2), 74-91.
- Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*, 551-558.

- McCollum, V. J. (1998). Career development issues and strategies for counseling African Americans. *Journal of Career Development, 25*(1), 41-52.
- McEwen, M. K., Roper, L. D., Bryant, D. R., & Langa, M. J. (1990). Incorporating the development of African-American students into psychosocial theories of student development. *Journal of College Student Development, 31*, 429-436.
- Miller, T. K., & Winston, R. B., Jr. (1990). Assessing development from a psychosocial perspective. In T. K. Miller, & R. B. Winston, Jr. (Eds.), *Theory and practice for the 1990s* (pp. 99-126). Alexandria, VA: American College Personnel Association.
- Mitchell, S. L., & Dell, D. M. (1992). The relationship between Black students' racial identity attitude participation in campus organizations. *Journal of College Student Development, 33*, 39-43.
- Molasso, W. R. (2006). Exploring Frankl's purpose in life with college students. *Journal of College & Character, 7*, 1-10.
- Moran, C. D. (2001). Purpose in life, student development, and well-being: Recommendations for student affairs practitioners. *NASPA Journal, 38*(3), 269-279.
- Osipow, S. H. (1983). *Theories of career development* (4<sup>th</sup> ed.). Needham Heights, MA: Allyn & Bacon.
- Osipow, S. H. (1987). *Career Decision Scale Manual*. Odessa, FL: Psychological Assessment Resources.
- Osipow, S. H. (1999). Assessing career indecision. *Journal of Vocational Behavior, 55*(1), 147-154.
- Osipow, S., Carney, C., & Barak, A. (1976). A scale of educational-vocational undecidedness: A typological approach. *Journal of Vocational Behavior, 9*, 233-243.

- Osipow, S., Carney, C., Winer, J., Yanico, B., & Koschier, M. (1987). *The career decision scale* (Rev ed.). Odessa, FL: Psychological Assessment Resources.
- Pace, C. R. (1979). *Measuring the outcomes of college. Fifty years of findings and recommendations for the future*. San Francisco: Jossey-Bass.
- Pace, C. R. (1984). *Measuring the quality of college student experiences*. Los Angeles: University of California, Graduate School of Education, Higher Education Research Institute.
- Pace, C. R. (1990). *The undergraduate: A report of their activities and progress in college in the 1980's*. Los Angeles: University of California, Graduate School of Education, Higher Education Research Institute.
- Pace, C. R., & Kuh, G. D. (1998). *College Student Experiences Questionnaire* (4<sup>th</sup> ed.). Bloomington, IN: Indiana University Center for Postsecondary Research and Planning.
- Parham, T. A., & Helms, J. E. (1981). The influences of Black students' racial identity attitudes on preference for counselor's race. *Journal of Counseling Psychology*, 28, 250-257.
- Pascarella, E., & Terenzini, P. (2005). *How college affects students: a third decade of research*. San Francisco: Jossey-Bass.
- Pedhazur, E. J. (1982). *Multiple regression in behavioral research*. New York: Holt, Rinehart and Winston.
- Peltier, G. L., Laden, R., & Matranga, M. (1999). Student persistence in college: A review of research. *Journal of College Student Retention*, 1(4), 357-375.
- Pike, G. R. (2000). The influence of fraternity and sorority membership on students' college experiences and cognitive development. *Research in Higher Education*, 41(1), 117-139.

- Pope, R. L. (1998). The relationship between psychosocial development and racial identity of Black college students. *Journal of College Student Development, 39*, 273-282.
- Reisser, L. (1995). Revisiting the Seven Vectors. *Journal of College Student Development, 36*(6), 505-511.
- Rodgers, R.F. (1990). Student development. In U. Delworth, G. R. Hanson, & Associates, *Student services: A handbook for the profession* (2<sup>nd</sup> ed., pp. 117-164). San Francisco: Jossey-Bass.
- Salomone, P. R. (1982). Difficult cases in career counseling: II—The indecisive client. *Personnel and Guidance Journal, 60*, 496-500.
- Sax, L. J., Astin, A. W., Korn, W. S., & Mahoney, K. M. (2000). *The American freshmen: National norms for fall 2000*. Los Angeles: Higher Education Research Institute, UCLA.
- Savickas, M. L. (1989). Annual review: Practice and research in career counseling and development. *The Career Development Quarterly, 38*, 100-134.
- Sedlacek, W. E. (1999). Black students on White campuses: 20 years of research. *Journal of College Student Development, 40*(5), 538-550.
- Sepich, R. T. (1987). A review of correlates and measurements of career indecision. *Journal of Career Development, 14*(1), 8-23.
- Slaney, R. B., & Dickson, R. D. (1985). Relation to career indecision to career exploration with reentry women: A treatment and follow-up study. *Journal of Counseling Psychology, 32*(3), 355-362.
- Smulyan, L. (2004). Redefining self and success: Becoming teachers and doctors. *Gender Education, 16*(2), 225-245.

- Super, D. E. (1990). A life-span, life-space approach to career development. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development: Applying contemporary theories to development* (2<sup>nd</sup> ed., pp. 197-261). San Francisco: Jossey-Bass.
- Sutton, E. M., & Terrell, M. C. (1997). Identifying and developing leadership opportunities for African American men. In M. J. Cuyjet (Ed.), *Helping African American men succeed in college. New Directions for Student Services* (No. 80, pp. 55-64). San Francisco: Jossey-Bass.
- Taub, D. J., & McEwen, M. K. (1992). The relationship of racial identity attitudes to autonomy and mature relationships in Black and White undergraduate women. *Journal of College Student Development*, 36, 330-335.
- Thompson, C. E., & Carter, R. T. (1997). An overview and elaboration of Helms' racial identity development theory. In C.E. Thompson & R.T. Carter (Eds.), *Racial identity theory: Applications to individual, group, and organizational intervention* (pp. 15-32). Mahwah, NJ: Erlbaum.
- Thompson, G. (2004). *A study exploring the relationship between college majors and future careers*. Unpublished doctoral dissertation, University of Georgia, Athens, GA.
- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2<sup>nd</sup> ed.). Chicago: The University of Chicago Press.
- Tokar, D. M., Withrow, J. R., Hall, R. J., & Moradi, B. (2003). Psychosocial separation, attachment security, vocational self-concept crystallization, and career indecision: A structural equation analysis. *Journal of Counseling Psychology*, 50(1), 3-19.



- Torres, V., Howard-Hamilton, M., & Cooper, D. L. (2003). *Identity development of diverse populations: Implications for teaching and administration*. San Francisco: Jossey-Bass.
- Tyler, L. E. (1961). Research explorations in the realm of choice. *Journal of Counseling Psychology*, 8, 195-201.
- Vandiver, B. J., Fhagen-Smith, P. E., Cokley, K. O., Cross, W., & Worrell, F. C. (2001). Cross' Nigrescence Model: From theory to scale to theory. *Journal of Multicultural Counseling and Development*, 29, 174-200.
- Vandiver, B. J., Cross, W. E., Jr., Worrell, F. C., & Fhagen-Smith, P. E. (2002). Validating the Cross Racial Identity Scale. *Journal of Counseling Psychology*, 49, 71-85.
- Wachs, P. S., & Cooper, D. L. (2002). Validation of the Student Developmental Task and Lifestyle Assessment (SDTLA). *Journal of College Student Development*, 43(1), 124-129.
- Walsh, W. B. (2001). The changing nature of the science of vocational psychology. *Journal of Vocational Behavior*, 59(2), 262-274.
- White, L. S. (1998). "Am I Black enuf fo ya?" Black student diversity, issues of identity and community. In K. Freeman (Ed.), *African American culture and heritage in higher education research and practice* (pp. 91-119). Westport, CT: Praeger.
- Winston, R. B., Jr., & Miller, T. K. (1987). *Student developmental task and lifestyle inventory*. Athens, GA: Student Development Associates.
- Winston, R. B., Jr., Miller, T. K., & Cooper, D. (1999a). *Student Developmental Task and Lifestyle Assessment*. Athens, GA: Student Development Associates, Inc.

Winston, R. B., Jr., Miller, T. K., & Cooper, D. (1999b). *Student Developmental Task and Lifestyle Assessment Inventory Manual*. Athens, GA: Student Development Associates, Inc.

Zeldin, A. L., & Pajares, F. (2000). Against the odds: Self-efficacy beliefs of women in mathematical, scientific, and technological careers. *American Educational Research Journal*, 37(1), 215-246.

Walsh, W. B. (2001). The changing nature of the science of vocational psychology. *Journal of Vocational Behavior*, 59(2), 262-274.

APPENDIX A  
INFORMATIONAL LETTER

## Informational Letter

Dear Student:

I am a Doctoral Candidate under the direction of Dr. Rosemary Phelps in the Department of Counseling and Human Development Services at The University of Georgia. I invite you to participate in a research study entitled *Developing Purpose in Traditional Aged College Students*. The purpose of this study is to determine to what extent certain variables predict psychosocial development among college students.

Your participation will involve completing a questionnaire and should only take about thirty to forty five minutes of your time. Your involvement in the study is voluntary, and you may choose not to participate or to stop at any time without penalty or loss of benefits. The results of your participation will be anonymous. The results of the research study may be published, but your name will not be used. In fact, the published results will be presented in summary form only. Your identity will not be associated with your responses in any published format.

The findings from this project may provide information that helps students decide where and how to focus their energy and time in the college environment. There are no known risks or discomforts associated with this research.

If you have any questions about this research project, please feel free to call me at (770) 313-9923 or send an e-mail to pprince@uga.edu. Questions or concerns about your rights as a research participant should be directed to The Chairperson, University of Georgia Institutional Review Board, 612 Boyd GSRC, Athens, Georgia 30602-7411; telephone (706) 542-3199; email address irb@uga.edu.

By completing and returning this questionnaire you are agreeing to participate in the above described research project.

Thank you for your participation! Please keep this letter for your records.

Sincerely,

Patrice A. Prince